

Form 1 Page 1 Execution Page	U.S. SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549	Date filed (MM/DD/YY) <b>06/28/18</b>	OFFICIAL USE ONLY
<b>APPLICATION FOR, AND AMENDMENTS TO APPLICATION FOR, REGISTRATION AS A NATIONAL SECURITIES EXCHANGE OR EXEMPTION FROM REGISTRATION PURSUANT TO SECTION 5 OF THE EXCHANGE ACT</b>			

WARNING: Failure to keep this form current and to file accurate supplementary information on a timely basis, or the failure to keep accurate books and records or otherwise to comply with the provisions of law applying to the conduct of the applicant would violate the federal securities laws and may result in disciplinary, administrative or criminal action.

INTENTIONAL MISSTATEMENTS OR OMISSIONS OF FACTS  
MAY CONSTITUTE CRIMINAL VIOLATIONS

APPLICATION  AMENDMENT

- State the name of the applicant: Cboe EDGX Exchange, Inc.
- Provide the applicant's primary street address (Do not use a P.O. Box):  
400 South LaSalle Street  
Chicago, Illinois 60605
- Provide the applicant's mailing address (if different):  
\_\_\_\_\_
- Provide the business telephone and facsimile number:  
(913) 815-7000 (Telephone) (913) 815-7119 (Facsimile)
- Provide the name, title and telephone number of a contact employee:  
Anders Franzon SVP, Deputy General Counsel, Cboe EDGX Exchange, Inc. (913) 815-7154  
(Name) (Title) (Telephone Number)
- Provide the name and address of counsel for the applicant:  
Pat Sexton  
400 S. LaSalle Street  
Chicago, IL 60605
- Provide the date that applicant's fiscal year ends: December 31 **18002776**
- Indicate legal status of the applicant:  Corporation  Sole Partnership  Partnership  
 Limited Liability Company  Other (specify): \_\_\_\_\_

If other than a sole proprietor, indicate the date and place where applicant obtained its legal status (e.g. state where incorporated, place where partnership agreement was filed or where applicant entity was formed):  
(a) Date (MM/DD/YY): 11/01/07 (b) State/Country of formation: Delaware/United States of America  
(c) Statute under which applicant was organized: General Corporation Law of the State of Delaware

**EXECUTION:**

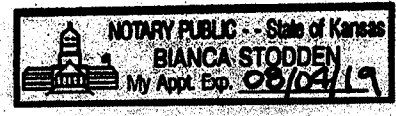
The applicant consents that service of any civil action brought by, or notice of any proceeding before, the Securities and Exchange Commission in connection with the applicant's activities may be given by registered or certified mail or confirmed telegram to the applicant's contact employee at the main address, or mailing address if different, given in Items 2 and 3. The undersigned, being first duly sworn, deposes and says that he/she has executed this form on behalf of, and with the authority of, said applicant. The undersigned and applicant represent that the information and statement contained herein, including exhibits, schedules, or other documents attached hereto, and other information filed herewith, all of which are made a part hereof, are current, true and complete.

Date: 06/18/18 Cboe EDGX Exchange, Inc.  
(MM/DD/YY) (Name of Applicant)  
By: [Signature] Anders Franzon, SVP, Deputy General Counsel  
(Signature) (Printed Name and Title)  
Subscribed and sworn before me this 28<sup>th</sup> day of June, 2018 by Bianca Stodden  
(Month) (Year) (Notary Public)  
My Commission expires 08/04/19 County of Johnson State of Kansas

This page must always be completed in full with original, manual signature and notarization.

Affix notary stamp or seal where applicable.

SEC  
Mail Processing  
Section  
JUN 29 2018  
Washington DC  
406  
2018 JUN 29 PM 2:15  
RECEIVED





June 28, 2018

**Via Federal Express**

Ms. Jeanette Marshall  
Securities and Exchange Commission  
Division of Trading and Markets  
100 F Street, N.E.  
Mail Stop 6628  
Washington, DC 20549-0001

RECEIVED

2018 JUN 29 PM 2:45

SEC / TM

SEC  
Mail Processing  
Section

JUN 29 2018

Washington DC  
406

Re: ***Cboe EDGX Exchange, Inc.  
Form 1 Amendment***

Dear Jeanette:

On behalf of Cboe EDGX Exchange, Inc. (the "Exchange"), and in connection with the Cboe Form 1 that is on file with the Securities and Exchange Commission ("Commission"), enclosed please find one original and two copies of the Execution Page to Form 1 as well as the following exhibits:

- Exhibit C<sup>1</sup> (updated to reflect list of Directors and Committee Members);
- Exhibit D (updated to provide financial statements for the latest fiscal year for each subsidiary or affiliate of the Exchange);
- Exhibit I (updated to provide audited financial statements for the latest fiscal year for the Exchange);
- Exhibit K (included as part of annual submission but no changes as compared to Exhibit on file);
- Exhibit M (included as part of annual submission but no changes as compared to Exhibit on file);
- Exhibit N (updated to provide all securities listed on the exchange, securities admitted to unlisted privileges, exempt securities and all other securities traded on the Exchange)

This amendment is filed in accordance with SEC Rule 6a-2 and is intended to replace Exhibits C, D, I, K, M, and N currently on file with the Commission. Please do not hesitate to contact me if you have any questions or require anything further.

Sincerely,

Anders Franzon  
SVP, Deputy General Counsel

Enclosures

---

<sup>1</sup> See attached Exhibit A for a comprehensive list of updates.

## **Exhibit A**

### *Summary of changes made to Exhibit C:*

- Corrected the capitalization of IndexPubs S.A.
- Updated the “description of business” for Cboe Worldwide Holdings Limited
- Name changes were made to the following entities:
  - Cboe FX Asia Pte. Limited
  - Cboe Vest Group Inc.
  - Cboe III, LLC (Delaware does not recognize the changing of uppercase letters to lowercase letters, thus there is not supporting documentation to be provided regarding this change in name)
  - Cboe, LLC (Delaware does not recognize the changing of uppercase letters to lowercase letters, thus there is not supporting documentation to be provided regarding this change in name)
  - Cboe Livevol, LLC (Delaware does not recognize the changing of uppercase letters to lowercase letters, thus there is not supporting documentation to be provided regarding this change in name)
  - Cboe Vest, LLC (Delaware does not recognize the changing of uppercase letters to lowercase letters, thus there is not supporting documentation to be provided regarding this change in name)
- Updated address for the following entities: Cboe International Holdings Limited, Cboe FX Europe Limited, Cboe Europe Limited, Cboe Worldwide Holdings Limited, Cboe UK Limited, Cboe Hong Kong Limited
- Updated the Directors and Officers Lists for The Options Exchange, Incorporated
- Updated the Directors List and all Committee Lists for Cboe Global Markets
- Reflected dissolution of the following entity: Bats Hotspot IB LLC
- Added Information in connection with the formation of the following entities: Cboe Silexx, LLC and Digital Asset Benchmark Administration, LLC

Exhibit C

**Exhibit Request:**

For each subsidiary or affiliate of the applicant, and for any entity with whom the applicant has a contractual or other agreement relating to the operation of an electronic trading system to be used to effect transactions on the exchange (“System”), provide the following information:

1. Name and address of organization.
2. Form of organization (e.g., association, corporation, partnership, etc.).
3. Name of state and statute citation under which organized. Date of incorporation in present form.
4. Brief description of nature and extent of affiliation.
5. Brief description of business or functions. Description should include responsibilities with respect to operation of the System and/or execution, reporting, clearance, or settlement of transactions in connection with operation of the System.
6. A copy of the constitution.
7. A copy of the articles of incorporation or association including all amendments.
8. A copy of existing by-laws or corresponding rules or instruments.
9. The name and title of the present officers, governors, members of all standing committees or persons performing similar functions.
10. An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association.

**Response:** Please see below responses for the following entities:

**A. Bats Global Markets Holdings, Inc.**

1. *Name:* Bats Global Markets Holdings, Inc.  
*Address:* 8050 Marshall Dr., Ste. 120, Lenexa, KS 66214
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:*  
Incorporated in Delaware under Section 101 of the General Corporation Law of the State of Delaware on June 29, 2007.
4. *Brief description of nature and extent of affiliation:* Cboe Bats, LLC owns 100% of the membership interests of Bats Global Markets Holdings, Inc. Bats Global Markets Holdings, Inc. is the Exchange's 100% owner.
5. *Brief description of business or functions:* Bats Global Markets Holdings, Inc. is an intermediate holding company.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- Ed Tilly
- Chris Concannon

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President)
- Bryan Harkins (Vice President)
- Chris Isaacson (Vice President)
- David Reynolds (Vice President)
- Derick Shupe (Vice President)
- Brian Schell (Treasurer)
- J. Patrick Sexton (Secretary)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**B. Direct Edge LLC**

1. *Name:* Direct Edge LLC  
*Address:* 8050 Marshall Dr., Ste. 120, Lenexa, KS 66214
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Formed in Delaware under Section 201 of the Limited Liability Company Act of the State of Delaware on December 31, 2014. Was converted from Direct Edge, Inc., a Delaware corporation, on December 31, 2014.
4. *Brief description of nature and extent of affiliation:* Cboe Bats, LLC owns 100% of the membership interests of Direct Edge LLC.
5. *Brief description of business or functions:* Direct Edge LLC is an intermediate holding company. Direct Edge LLC is the sole shareholder of Cboe EDGA Exchange, Inc. and Cboe EDGX Exchange, Inc.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws or corresponding rules or instruments:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- None

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President)
- Bryan Harkins (Vice President)
- Chris Isaacson (Vice President)
- David Reynolds (Vice President)
- Derick Shupe (Vice President)
- Brian Schell (Treasurer)
- J. Patrick Sexton (Secretary)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**C. Cboe BZX Exchange, Inc.**

1. *Name:* Cboe BZX Exchange, Inc.  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:*  
Incorporated in Delaware under Section 101 of the General Corporation Law of the State of Delaware on November 1, 2007.
4. *Brief description of nature and extent of affiliation:* Cboe BZX Exchange, Inc. is wholly-owned by Bats Global Markets Holdings, Inc., which is also the Exchange's 100% owner.
5. *Brief description of business or functions:* Cboe BZX Exchange, Inc. operates as a registered national securities exchange pursuant to Section 6 of the Act.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- Ed Tilly
- Bruce Andrews
- Kevin Murphy
- David Roscoe
- Jill Sommers
- Scott Wagner

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President and COO)
- Alexandra Albright (Chief Compliance Officer)
- Lawrence Bresnahan (VP, Market & Member Reg.)
- Rodney Burt (VP, Infrastructure)
- Kevin Carrai (VP, Connectivity)
- Bryan Christian (SVP, Sales US Equities)
- Paul Ciciora (VP, Systems Infrastructure)
- Catherine Clay (VP, Business Development)
- Jeff Connell (VP, Deputy Chief Regulatory Officer)
- Eric Crampton (SVP, Software Engineer)

- John Deters (EVP, Chief Strategy Officer & Head Corp Initiative)
- Laura Dickman (VP, Associate General Counsel)
- James Enstrom (VP, & Chief Audit Exec)
- Eric Frait (VP, Business Analysis)
- Anders Franzon (SVP & Deputy General Counsel)
- Todd Furney (VP, Chief Risk Officer)
- Alicia Goldberg (VP, Statistical Analysis)
- David Gray (SVP, Global Client Services)
- Bryan Harkins (EVP, Head of US Equities & Global FX)
- Mark Hemsley (EVP, President Europe)
- Gregory Hoogasian (SVP, CRO)
- Chris Isaacson (EVP, CIO)
- Jennifer Lamie (VP, Chief Regulatory Advisor)
- Stephanie Marrin Lara (VP, Deputy Chief Reg Officer)
- Andrew Lowenthal (EVP, Head of Global Derivatives)
- Marc Magrini (VP, Administration)
- Anthony Montesano (VP, TSD and Registration)
- Laura Morrison (SVP, ETP Listings)
- Mark Novak (VP, CTO Development)
- Arthur Reinstein (SVP & Deputy General Counsel)
- David Reynolds (VP, & Chief Accounting Officer)
- Bradley Samuels (VP, Systems Development)
- Brian Schell (VP, CFO, & Treasurer)
- Curt Schumacher (VP, CTO Operations)
- Derick Shupe (VP, Controller)
- J. Patrick Sexton (Executive Vice President, General Counsel & Corporate Secretary)
- Steven Sinclair (VP, Systems Development)
- Eileen Smith (VP, Systems Planning)
- William Speth (VP, Research & Product Development)
- Paul Stephens (VP, Global Client Services)
- Michael Todd (VP, OSC)
- Michael Todorofsky (VP, US Market Operations)
- Michael Trees (VP, Trading Sys Develop.)
- Aaron Weissenfluh (VP, CISO)
- Troy Yeazel (SVP, Operations)
- Vivian Yiu (VP, Product Strategy)
- Laura Zinanni (SVP, Deputy General Counsel)

Standing Committees

Executive Committee

- Ed Tilly
- Bruce Andrews



- Kevin Murphy
- David Roscoe
- Jill Sommers
- Scott Wagner

Regulatory Oversight Committee

- Scott Wagner
- Bruce Andrews
- David Roscoe

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**D. Cboe BYX Exchange, Inc.**

1. *Name:* Cboe BYX Exchange, Inc.  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:*  
Incorporated in Delaware under Section 101 of the General Corporation Law of the State of Delaware on July 31, 2009.
4. *Brief description of nature and extent of affiliation:* Cboe BYX Exchange, Inc. is wholly-owned by Bats Global Markets Holdings, Inc., which is also the Exchange's 100% owner.
5. *Brief description of business or functions:* Cboe BYX Exchange, Inc. operates as a registered national securities exchange pursuant to Section 6 of the Act.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- Ed Tilly
- Bruce Andrews
- Kevin Murphy
- David Roscoe
- Jill Sommers
- Scott Wagner

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President and COO)
- Alexandra Albright (Chief Compliance Officer)
- Lawrence Bresnahan (VP, Market & Member Reg.)
- Rodney Burt (VP, Infrastructure)
- Kevin Carrai (VP, Connectivity)
- Bryan Christian (SVP, Sales US Equities)
- Paul Ciciora (VP, Systems Infrastructure)
- Catherine Clay (VP, Business Development)
- Jeff Connell (VP, Deputy Chief Regulatory Officer)
- Eric Crampton (SVP, Software Engineer)

- John Deters (EVP, Chief Strategy Officer & Head Corp Initiative)
- Laura Dickman (VP, Associate General Counsel)
- James Enstrom (VP, & Chief Audit Exec)
- Eric Frait (VP, Business Analysis)
- Anders Franzon (SVP & Deputy General Counsel)
- Todd Furney (VP, Chief Risk Officer)
- Alicia Goldberg (VP, Statistical Analysis)
- David Gray (SVP, Global Client Services)
- Bryan Harkins (EVP, Head of US Equities & Global FX)
- Mark Hemsley (EVP, President Europe)
- Gregory Hoogasian (SVP, CRO)
- Chris Isaacson (EVP, CIO)
- Jennifer Lamie (VP, Chief Regulatory Advisor)
- Stephanie Marrin Lara (VP, Deputy Chief Reg Officer)
- Andrew Lowenthal (EVP, Head of Global Derivatives)
- Marc Magrini (VP, Administration)
- Anthony Montesano (VP, TSD and Registration)
- Laura Morrison (SVP, ETP Listings)
- Mark Novak (VP, CTO Development)
- Arthur Reinstein (SVP & Deputy General Counsel)
- David Reynolds (VP, & Chief Accounting Officer)
- Bradley Samuels (VP, Systems Development)
- Brian Schell (VP, CFO, & Treasurer)
- Curt Schumacher (VP, CTO Operations)
- Derick Shupe (VP, Controller)
- J. Patrick Sexton (Executive Vice President, General Counsel & Corporate Secretary)
- Steven Sinclair (VP, Systems Development)
- Eileen Smith (VP, Systems Planning)
- William Speth (VP, Research & Product Development)
- Paul Stephens (VP, Global Client Services)
- Michael Todd (VP, OSC)
- Michael Todorofsky (VP, US Market Operations)
- Michael Trees (VP, Trading Sys Develop.)
- Aaron Weissenfluh (VP, CISO)
- Troy Yeazel (SVP, Operations)
- Vivian Yiu (VP, Product Strategy)
- Laura Zinanni (SVP, Deputy General Counsel)

Standing Committees

Executive Committee

- Ed Tilly
- Bruce Andrews

- Kevin Murphy
- David Roscoe
- Jill Sommers
- Scott Wagner

Regulatory Oversight Committee

- Scott Wagner
- Bruce Andrews
- David Roscoe

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**E. Cboe EDGA Exchange, Inc.**

1. *Name:* Cboe EDGA Exchange, Inc.  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:* Formed in Delaware under the General Corporation Law of the State of Delaware on March 9, 2009.
4. *Brief description of nature and extent of affiliation:* Cboe EDGA Exchange, Inc. is an indirect wholly-owned subsidiary of Cboe Global Markets, Inc., the Exchange's ultimate parent.
5. *Brief description of business or functions:* Cboe EDGA Exchange, Inc. operates a registered national securities exchange pursuant to Section 6 of the Act.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- Ed Tilly
- Bruce Andrews
- Kevin Murphy
- David Roscoe
- Jill Sommers
- Scott Wagner

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President and COO)
- Alexandra Albright (Chief Compliance Officer)
- Lawrence Bresnahan (VP, Market & Member Reg.)
- Rodney Burt (VP, Infrastructure)
- Kevin Carrai (VP, Connectivity)
- Bryan Christian (SVP, Sales US Equities)
- Paul Ciciora (VP, Systems Infrastructure)
- Catherine Clay (VP, Business Development)
- Jeff Connell (VP, Deputy Chief Regulatory Officer)
- Eric Crampton (SVP, Software Engineer)

- John Deters (EVP, Chief Strategy Officer & Head Corp Initiative)
- Laura Dickman (VP, Associate General Counsel)
- James Enstrom (VP, & Chief Audit Exec)
- Eric Frait (VP, Business Analysis)
- Anders Franzon (SVP & Deputy General Counsel)
- Todd Furney (VP, Chief Risk Officer)
- Alicia Goldberg (VP, Statistical Analysis)
- David Gray (SVP, Global Client Services)
- Bryan Harkins (EVP, Head of US Equities & Global FX)
- Mark Hemsley (EVP, President Europe)
- Gregory Hoogasian (SVP, CRO)
- Chris Isaacson (EVP, CIO)
- Jennifer Lamie (VP, Chief Regulatory Advisor)
- Stephanie Marrin Lara (VP, Deputy Chief Reg Officer)
- Andrew Lowenthal (EVP, Head of Global Derivatives)
- Marc Magrini (VP, Administration)
- Anthony Montesano (VP, TSD and Registration)
- Laura Morrison (SVP, ETP Listings)
- Mark Novak (VP, CTO Development)
- Arthur Reinstein (SVP & Deputy General Counsel)
- David Reynolds (VP, & Chief Accounting Officer)
- Bradley Samuels (VP, Systems Development)
- Brian Schell (VP, CFO, & Treasurer)
- Curt Schumacher (VP, CTO Operations)
- Derick Shupe (VP, Controller)
- J. Patrick Sexton (Executive Vice President, General Counsel & Corporate Secretary)
- Steven Sinclair (VP, Systems Development)
- Eileen Smith (VP, Systems Planning)
- William Speth (VP, Research & Product Development)
- Paul Stephens (VP, Global Client Services)
- Michael Todd (VP, OSC)
- Michael Todorofsky (VP, US Market Operations)
- Michael Trees (VP, Trading Sys Develop.)
- Aaron Weissenfluh (VP, CISO)
- Troy Yeazel (SVP, Operations)
- Vivian Yiu (VP, Product Strategy)
- Laura Zinanni (SVP, Deputy General Counsel)

Standing Committees

Executive Committee

- Ed Tilly
- Bruce Andrews

- Kevin Murphy
- David Roscoe
- Jill Sommers
- Scott Wagner

Regulatory Oversight Committee

- Scott Wagner
- Bruce Andrews
- David Roscoe

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**F. Cboe Exchange, Inc.**

1. *Name:* Cboe Exchange, Inc.  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware General Corporation Law (8 Del. C. § 101, et seq), February 8, 1972.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Cboe Exchange, Inc. is a registered national securities exchange.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- Ed Tilly
- Bruce Andrews
- Kevin Murphy
- David Roscoe
- Jill Sommers
- Scott Wagner

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President and COO)
- Alexandra Albright (Chief Compliance Officer)
- Lawrence Bresnahan (VP, Market & Member Reg.)
- Rodney Burt (VP, Infrastructure)
- Kevin Carrai (VP, Connectivity)
- Bryan Christian (SVP, Sales US Equities)
- Paul Ciciora (VP, Systems Infrastructure)
- Catherine Clay (VP, Business Development)
- Jeff Connell (VP, Deputy Chief Regulatory Officer)
- Eric Crampton (SVP, Software Engineer)
- John Deters (EVP, Chief Strategy Officer & Head Corp Initiative)



- Laura Dickman (VP, Associate General Counsel)
- James Enstrom (VP, & Chief Audit Exec)
- Eric Frait (VP, Business Analysis)
- Anders Franzon (SVP & Deputy General Counsel)
- Todd Furney (VP, Chief Risk Officer)
- Alicia Goldberg (VP, Statistical Analysis)
- David Gray (SVP, Global Client Services)
- Bryan Harkins (EVP, Head of US Equities & Global FX)
- Mark Hemsley (EVP, President Europe)
- Gregory Hoogasian (SVP, CRO)
- Chris Isaacson (EVP, CIO)
- Jennifer Lamie (VP, Chief Regulatory Advisor)
- Stephanie Marrin Lara (VP, Deputy Chief Reg Officer)
- Andrew Lowenthal (EVP, Head of Global Derivatives)
- Marc Magrini (VP, Administration)
- Anthony Montesano (VP, TSD and Registration)
- Laura Morrison (SVP, ETP Listings)
- Mark Novak (VP, CTO Development)
- Arthur Reinstein (SVP & Deputy General Counsel)
- David Reynolds (VP, & Chief Accounting Officer)
- Bradley Samuels (VP, Systems Development)
- Brian Schell (VP, CFO, & Treasurer)
- Curt Schumacher (VP, CTO Operations)
- Derick Shupe (VP, Controller)
- J. Patrick Sexton (Executive Vice President, General Counsel & Corporate Secretary)
- Steven Sinclair (VP, Systems Development)
- Eileen Smith (VP, Systems Planning)
- William Speth (VP, Research & Product Development)
- Paul Stephens (VP, Global Client Services)
- Michael Todd (VP, OSC)
- Michael Todorofsky (VP, US Market Operations)
- Michael Trees (VP, Trading Sys Develop.)
- Aaron Weissenfluh (VP, CISO)
- Troy Yeazel (SVP, Operations)
- Vivian Yiu (VP, Product Strategy)
- Laura Zinanni (SVP, Deputy General Counsel)

Standing Committees

Executive Committee

- Ed Tilly
- Bruce Andrews
- Kevin Murphy

- David Roscoe
- Jill Sommers
- Scott Wagner

Regulatory Oversight Committee

- Scott Wagner
- Bruce Andrews
- David Roscoe

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**G. Cboe C2 Exchange, Inc.**

1. *Name:* Cboe C2 Exchange, Inc.  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware General Corporation Law (8 Del. C. § 101, et seq), July 21, 2009.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Cboe C2 Exchange, Inc. is a registered national securities exchange.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- Ed Tilly
- Bruce Andrews
- Kevin Murphy
- David Roscoe
- Jill Sommers
- Scott Wagner

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President and COO)
- Alexandra Albright (Chief Compliance Officer)
- Lawrence Bresnahan (VP, Market & Member Reg.)
- Rodney Burt (VP, Infrastructure)
- Kevin Carrai (VP, Connectivity)
- Bryan Christian (SVP, Sales US Equities)
- Paul Ciciora (VP, Systems Infrastructure)
- Catherine Clay (VP, Business Development)
- Jeff Connell (VP, Deputy Chief Regulatory Officer)
- Eric Crampton (SVP, Software Engineer)

- John Deters (EVP, Chief Strategy Officer & Head Corp Initiative)
- Laura Dickman (VP, Associate General Counsel)
- James Enstrom (VP, & Chief Audit Exec)
- Eric Frait (VP, Business Analysis)
- Anders Franzon (SVP & Deputy General Counsel)
- Todd Furney (VP, Chief Risk Officer)
- Alicia Goldberg (VP, Statistical Analysis)
- David Gray (SVP, Global Client Services)
- Bryan Harkins (EVP, Head of US Equities & Global FX)
- Mark Hemsley (EVP, President Europe)
- Gregory Hoogasian (SVP, CRO)
- Chris Isaacson (EVP, CIO)
- Jennifer Lamie (VP, Chief Regulatory Advisor)
- Stephanie Marrin Lara (VP, Deputy Chief Reg Officer)
- Andrew Lowenthal (EVP, Head of Global Derivatives)
- Marc Magrini (VP, Administration)
- Anthony Montesano (VP, TSD and Registration)
- Laura Morrison (SVP, ETP Listings)
- Mark Novak (VP, CTO Development)
- Arthur Reinstein (SVP & Deputy General Counsel)
- David Reynolds (VP, & Chief Accounting Officer)
- Bradley Samuels (VP, Systems Development)
- Brian Schell (VP, CFO, & Treasurer)
- Curt Schumacher (VP, CTO Operations)
- Derick Shupe (VP, Controller)
- J. Patrick Sexton (Executive Vice President, General Counsel & Corporate Secretary)
- Steven Sinclair (VP, Systems Development)
- Eileen Smith (VP, Systems Planning)
- William Speth (VP, Research & Product Development)
- Paul Stephens (VP, Global Client Services)
- Michael Todd (VP, OSC)
- Michael Todorofsky (VP, US Market Operations)
- Michael Trees (VP, Trading Sys Develop.)
- Aaron Weissenfluh (VP, CISO)
- Troy Yeazel (SVP, Operations)
- Vivian Yiu (VP, Product Strategy)
- Laura Zinanni (SVP, Deputy General Counsel)

Standing Committees

Executive Committee

- Ed Tilly
- Bruce Andrews

- Kevin Murphy
- David Roscoe
- Jill Sommers
- Scott Wagner

Regulatory Oversight Committee

- Scott Wagner
- Bruce Andrews
- David Roscoe

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**H. Cboe Trading, Inc.**

1. *Name:* Cboe Trading, Inc.  
*Address:* 8050 Marshall Dr., Ste. 120, Lenexa, KS 66214
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:*  
Incorporated in Delaware under Section 101 of the General Corporation Law of the State of Delaware on June 16, 2005.
4. *Brief description of nature and extent of affiliation:* Cboe Trading, Inc. is wholly-owned by Bats Global Markets Holdings, Inc., which is also the Exchange's 100% owner.
5. *Brief description of business or functions:* Cboe Trading, Inc. is a broker-dealer registered as such with the Securities and Exchange Commission and a member of the Financial Industry Regulatory Authority and other self-regulatory organizations. Cboe Trading, Inc. provides routing of orders from the Exchange Cboe BYX Exchange, Inc., Cboe EDGA Exchange, Inc. and Cboe EDGX Exchange, Inc. to other securities exchanges, facilities of securities exchanges, automated trading systems, electronic communication networks or other broker-dealers.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- Chris Concannon
- Chris Isaacson
- Brian Schell

Current Officers

- Troy Yeazel (President)
- Anders Franzon (Secretary)
- Bryan Upp (Chief Compliance Officer)
- Derick Shupe (FINOP, Treasurer)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**I. Omicron Acquisition Corp.**

1. *Name:* Omicron Acquisition Corp.  
*Address:* 8050 Marshall Dr., Ste. 120, Lenexa, KS 66214
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:*  
Incorporated in Delaware under Section 101 of the General Corporation Law of the State of Delaware on February 7, 2011.
4. *Brief description of nature and extent of affiliation:* Omicron Acquisition Corp. is wholly-owned by Bats Global Markets Holdings, Inc., which is an affiliate of the Exchange.
5. *Brief description of business or functions:* Omicron Acquisition Corp. is an intermediate holding company of Cboe Worldwide Holdings Limited.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- Ed Tilly
- Chris Concannon
- Mark Hemsley

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President)
- Mark Hemsley (Vice President)
- David Reynolds (Vice President)
- Derick Shupe (Vice President)
- Brian Schell (Treasurer)
- J. Patrick Sexton (Secretary)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**J. Cboe FX Holdings, LLC**

1. *Name:* Cboe FX Holdings, LLC  
*Address:* 8050 Marshall Dr., Ste. 120, Lenexa, KS 66214
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Formed in Delaware under Section 201 of the Limited Liability Company Act of the State of Delaware on May 15, 2000.
4. *Brief description of nature and extent of affiliation:* Cboe FX Holdings, LLC is wholly-owned by Bats Global Markets Holdings, Inc., which is an affiliate of the Exchange.
5. *Brief description of business or functions:* Cboe FX Holdings, LLC is an intermediate holding company of Cboe FX Markets, LLC, Cboe FX Services, LLC, Cboe SEF, LLC, and Bats Hotspot IB LLC.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- None

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President)
- Bryan Harkins (Vice President)
- David Reynolds (Vice President)
- Derick Shupe (Vice President)
- Brian Schell (Treasurer)
- J. Patrick Sexton (Secretary)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.



**K. Cboe FX Markets, LLC**

1. *Name:* Cboe FX Markets, LLC  
*Address:* 8050 Marshall Dr., Ste. 120, Lenexa, KS 66214
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Formed in New Jersey under Section 42 of the Limited Liability Company Act of the State of New Jersey on August 7, 2001.
4. *Brief description of nature and extent of affiliation:* Cboe FX Markets, LLC is wholly-owned by Cboe FX Holdings, LLC, which is wholly-owned by Bats Global Markets Holdings, Inc., which is an affiliate of the Exchange.
5. *Brief description of business or functions:* Cboe FX Markets, LLC operates an institutional spot foreign exchange market.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- None

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President)
- John Deters (EVP, Chief Strategy Officer and Head of Corporate Initiatives)
- Bryan Harkins (EVP, Head of U.S. Equities and Global FX)
- Mark Hemsley (EVP, President Europe)
- Chris Isaacson (EVP, CIO)
- Andrew Lowenthal (EVP, Head of Global Derivatives)
- Alexandra Albright (Chief Compliance Officer)
- Barry Calder (Head of Liquidity)
- Sean Cleary (VP, Sales FX)
- James Enstrom (VP, Chief Audit Executive)
- Todd Furney (Chief Risk Officer)
- Greg Hoogasian (SVP, Chief Regulatory Officer)
- Stephanie Marrin Lara (Deputy Chief Regulatory Officer)
- Paul Reidy (VP, Cboe FX COO)
- David Reynolds (VP, Chief Accounting Officer)

- Lisa Shemie (VP, Associate General Counsel and Chief Legal Officer)
- Derick Shupe (VP, Controller)
- Aaron Weissenfluh (VP, CISO)
- Brian Schell (EVP, CFO and Treasurer)
- J. Patrick Sexton (Secretary)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**L. Cboe FX Services, LLC**

1. *Name:* Cboe FX Services, LLC  
*Address:* 8050 Marshall Dr., Ste. 120, Lenexa, KS 66214
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Formed in New Jersey under Section 42 of the Limited Liability Company Act of the State of New Jersey on November 22, 2004.
4. *Brief description of nature and extent of affiliation:* Cboe FX Services, LLC is wholly-owned by Cboe FX Holdings, LLC, which is wholly-owned by Bats Global Markets Holdings, Inc., which is an affiliate of the Exchange.
5. *Brief description of business or functions:* Cboe FX Services, LLC operates an institutional spot foreign exchange market.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- None

Current Officers

- Ed Tilly (Chief Executive Officer)
  - Chris Concannon (President)
  - Bryan Harkins (Vice President)
  - David Reynolds (Vice President)
  - Derick Shupe (Vice President)
  - Brian Schell (Treasurer)
  - J. Patrick Sexton (Secretary)
10. Indication of whether such business or organization ceased to be associated with the applicant during previous year: Not applicable.

**M. Cboe International Holdings Limited**

1. *Name:* Cboe International Holdings Limited  
*Address:* 11 Monument Street, London, EC3R 8AF, United Kingdom
2. *Form of organization:* Private Company Limited by Shares.
3. *Name of state, statute under which organized and date of incorporation:*  
Incorporated in England and Wales under the Companies Act 1985 on February 5, 2015.
4. *Brief description of nature and extent of affiliation:* Cboe International Holdings Limited is wholly-owned by Cboe Worldwide Holdings Limited, which is an affiliate of the Exchange.
5. *Brief description of business or functions:* Cboe International Holdings Limited is a holding company of Cboe FX Europe Limited, Cboe FX Asia PTE. Limited, and IndexPubs S.A.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* Not applicable.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*  
  
Current Directors
  - Ed Tilly
  - Chris Concannon
  - Mark Hemsley  
Current Officers
  - Antonio Amelia (Secretary)
10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**N. Cboe FX Europe Limited**

1. *Name:* Cboe FX Europe Limited  
*Address:* 11 Monument Street, London, EC3R 8AF, United Kingdom
2. *Form of organization:* Private Company Limited by Shares.
3. *Name of state, statute under which organized and date of incorporation:*  
Incorporated in England and Wales under the Companies Act 1985 on February 5, 2015.
4. *Brief description of nature and extent of affiliation:* Cboe FX Europe Limited is wholly-owned by Cboe International Holdings Limited which is wholly-owned by Cboe Worldwide Holdings Limited, which is an affiliate of the Exchange.
5. *Brief description of business or functions:* Cboe FX Europe Limited operates an institutional spot foreign exchange market.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* Not applicable.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*  
  
Current Directors
  - Ed Tilly
  - Chris Concannon
  - Mark Hemsley  
Current Officers
  - Antonio Amelia (Secretary)
10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**O. Cboe FX Asia Pte. Limited**

1. *Name:* Cboe FX Asia Pte. Limited  
*Address:* 16 Collyer Quay, #2104, Sixteen Collyer Quay, Singapore (049318)
2. *Form of organization:* Private Company Limited by Shares.
3. *Name of state, statute under which organized and date of incorporation:*  
Incorporated in Singapore under the Companies Act (Cap. 50) on February 23, 2015.
4. *Brief description of nature and extent of affiliation:* Cboe FX Asia Pte. Limited is wholly-owned by Cboe International Holdings Limited which is wholly-owned by Cboe Worldwide Holdings Limited, which is an affiliate of the Exchange.
5. *Brief description of business or functions:* Cboe FX Asia Pte. Limited operates an institutional spot foreign exchange market.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* See attached for proof of name change.
8. *Copy of existing by-laws:* Not applicable.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- Chris Concannon
- Ng Lip Chih

Current Officers

- Chris Concannon (President)
- Pek Lay Pheng (Secretary)
- Lai Jek Ping (Secretary)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**P. Cboe Europe Limited**

1. *Name:* Cboe Europe Limited  
*Address:* 11 Monument Street, London, EC3R 8AF, United Kingdom
2. *Form of organization:* Private Company Limited by Shares.
3. *Name of state, statute under which organized and date of incorporation:*  
Incorporated in England and Wales under the Companies Act 1985 on March 28, 2008.
4. *Brief description of nature and extent of affiliation:* Cboe Europe Limited is wholly-owned by Cboe Worldwide Holdings Limited, which is an affiliate of the Exchange.
5. *Brief description of business or functions:* Cboe Europe Limited is recognized as a Recognized Investment Exchange in the United Kingdom under the Financial Services and Markets Act 2000 (“FSMA”). It operates a platform for trading of European equity securities.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* Not applicable.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- John Woodman
- Mark Hemsley
- Adam Eades
- Richard Balarkas
- Rebecca Fuller
- Julian Corner
- Kristian West
- Ted Hood

Current Officers

- Mark Hemsley (Chief Executive Officer)
- Antonio Amelia (Secretary)
- Jill Griebenow (CFO)
- Adam Eades (Chief Legal and Regulatory Officer)
- Jerry Avenell (Co-Head Sales)
- Alex Dalley (Co-Head Sales)
- Guy Simpkin (Head of Business Development)
- David Howson (COO)

Standing Committees

Audit, Risk and Compliance Committee

- Ted Hood
- Rebecca Fuller
- Richard Balarkas

Remuneration Committee

- John Woodman
- Rebecca Fuller
- Kristian West

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.



**Q. Cboe Chi-X Europe Limited**

1. *Name:* Cboe Chi-X Europe Limited  
*Address:* 10 Lower Thames Street, 6<sup>th</sup> Floor, London, UK EC3R 6AF
2. *Form of organization:* Private Company Limited by Shares.
3. *Name of state, statute under which organized and date of incorporation:*  
Incorporated in England and Wales.
4. *Brief description of nature and extent of affiliation:* Cboe Chi-X Europe Limited is wholly-owned by Cboe Europe Limited which, in turn, is indirectly wholly owned by Bats Global Markets, Inc.
5. *Brief description of business or functions:* Cboe Chi-X Europe Limited is authorized in the United Kingdom under the Financial Services and Markets Act 2000 (“FSMA”), as an investment firm. Between April 30, 2012 and May 20, 2013 it was a dormant company. Since May 20, 2013, Cboe Chi-X Europe Limited operates the smart order router that is needed for the routing strategies deployed by Cboe Europe Limited.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* Not applicable.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- Mark Hemsley
- Adam Eades
- John Woodman

Current Officers

- John Woodman (Chairman)
- Mark Hemsley (Chief Executive Officer)
- Antonio Amelia (Secretary)
- Jill Griebenow (CFO)
- Adam Eades (Chief Legal and Regulatory Officer)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**R. Cboe ETF.com, Inc.**

1. *Name:* Cboe ETF.com, Inc.  
*Address:* 8050 Marshall Dr., Ste. 120, Lenexa, KS 66214
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:*  
Incorporated in Delaware under Section 101 of the General Corporation Law of the State of Delaware on March 28, 2016.
4. *Brief description of nature and extent of affiliation:* Cboe ETF.com, Inc. is wholly-owned by Bats Global Markets Holdings, Inc., which is also the Exchange's 100% owner.
5. *Brief description of business or functions:* Cboe ETF.com, Inc. is a media company providing ETF data, news and analysis.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*  
  
Current Directors
  - Ed Tilly
  - Chris Concannon  
Current Officers
  - Ed Tilly (Chief Executive Officer)
  - Chris Concannon (President)
  - Dave Nadig (Senior Director)
  - Bryan Harkins (Vice President)
  - Chris Isaacson (Vice President)
  - Stephanie Klein (Vice President)
  - Laura Morrison (Vice President)
  - David Reynolds (Vice President)
  - Derick Shupe (Vice President)
  - Brian Schell (Treasurer)
  - J. Patrick Sexton (Secretary)
10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**S. IndexPubs S.A.**

1. *Name:* IndexPubs S.A.  
*Address:* Almagro Plaza, Ste. 508, Pedro Ponce Carrasco, E8-06 y Diego de Almagro, 170516 – Quito, Ecuador
2. *Form of organization:* Corporation (Soceidad Anonima or S.A.).
3. *Name of state, statute under which organized and date of incorporation:*  
Incorporated in Ecuador on January 15, 2008.
4. *Brief description of nature and extent of affiliation:* IndexPubs S.A. is owned 0.1% by Fernando Rivera and 99.9% by Cboe International Holdings Limited which is wholly-owned by Cboe Worldwide Holdings Limited, which is an affiliate of the Exchange.
5. *Brief description of business or functions:* IndexPubs S.A. is a media company providing ETF data, news and analysis.
6. *Copy of constitution:* No changes.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*  
  
Current Directors  
  
Current Officers
  - Dave Nadig (President)
  - Verónica Rocío Bravo (General Manager)
10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**T. Cboe SEF, LLC**

1. *Name:* Cboe SEF, LLC  
*Address:* 17 State Street, 31<sup>st</sup> Floor, New York, NY 10004
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Formed in Delaware under Section 201 of the Limited Liability Company Act of the State of Delaware on April 19, 2012.
4. *Brief description of nature and extent of affiliation:* Cboe SEF, LLC is wholly-owned by Cboe FX Holdings LLC, which is wholly-owned by Bats Global Markets Holdings, Inc., which is an affiliate of the Exchange.
5. *Brief description of business or functions:* Cboe SEF, LLC is a swap execution facility registered with the Commodity Futures Trading Association, which will soon list non-deliverable foreign exchange forwards for trading.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President and Chief Operating Officer)
- Alexandra Albright (Chief Compliance Officer)
- Sean Cleary (Vice President)
- John Deters (EVP, Chief Strategy Officer & Head of Corporate Initiatives)
- James Enstrom (Vice President & Chief Audit Executive)
- Todd Furney (Chief Risk Officer)
- Bryan Harkins (Executive Vice President, Head of U.S. Equities and Global FX)
- Mark Hemsley (Executive Vice President, President Europe)
- Gregory Hoogasian (Senior Vice President & Chief Regulatory Officer)
- Chris Isaacson (Executive Vice President & Chief Information Officer)
- Andrew Lowenthal (Executive Vice President, Head of Global Derivatives & CFE Senior Managing Director)
- Stephanie Marrin (Deputy Chief Regulatory Officer)
- Paul Reidy (Vice President)
- David Reynolds (Vice President & Chief Accounting Officer)
- J. Patrick Sexton (Executive Vice President, General Counsel & Corporate Secretary)

- Brian Schell (Executive Vice President, Chief Financial Officer & Treasurer)
- Lisa Shemie (Vice President, Associate General Counsel & Cboe SEF Chief Legal Officer)
- Derick Shupe (Vice President and Controller)
- Aaron Weissenfluh (Vice President & Chief Information Security Officer)

Managers

- Chris Concannon
- Gilbert Bassett
- Michael Gorham
- James Parisi
- Jill Sommers

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**U. Cboe Worldwide Holdings Limited**

1. *Name:* Cboe Worldwide Holdings Limited  
*Address:* 11 Monument Street, London, EC3R 8AF, United Kingdom
2. *Form of organization:* Private Company Limited by Shares.
3. *Name of state, statute under which organized and date of incorporation:*  
Incorporated in England and Wales under the Companies Act 2006 on November 9, 2016.
4. *Brief description of nature and extent of affiliation:* Cboe Worldwide Holdings Limited is wholly-owned by Omicron Acquisition Corp., which is an affiliate of the Exchange.
5. *Brief description of business or functions:* Cboe Worldwide Holdings Limited is an intermediate holding company of Cboe Europe Limited, Cboe International Holdings Limited, Cboe Hong Kong Limited, and Cboe UK Limited.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* Not applicable.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*  
  
Current Directors
  - Ed Tilly
  - Chris Concannon
  - Mark Hemsley  
Current Officers
  - Antonio Amelia (Secretary)
10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

V. **Cboe Global Markets, Inc.**

1. *Name:* Cboe Global Markets, Inc.  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware General Corporation Law (8 Del. C. §101, et seq), August 15, 2006.
4. *Brief description of nature and extent of affiliation:* Cboe Bats, LLC is a wholly-owned subsidiary of Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Holding company.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- Ed Tilly
- Frank English
- William Farrow
- Edward Fitzpatrick
- Janet Froetscher
- Jill Goodman
- Roderick Palmore
- Joe Ratterman
- Michael Richter
- Carole Stone
- Eugene Sunshine
- Jill Sommers
- James Parisi

Current Officers

- Ed Tilly (Chairman and Chief Executive Officer)
- Chris Concannon (President and COO)
- Brian Schell (EVP, CFO and Treasurer)
- Chris Isaacson (EVP and CIO)
- Mark Hemsley (EVP, President Europe)
- J. Patrick Sexton (EVP, General Counsel and Corporate Secretary)

- Bryan Harkins (EVP, Equities and FX)
- Andrew Lowenthal (EVP, Global Derivatives)
- John Deters (EVP, Corporate Strategy and Multi-Asset Solutions)
- David Reynolds (VP and Chief Accounting Officer)

Compensation Committee

- Frank English
- Janet Froetscher
- Edward Fitzpatrick
- James Parisi

Audit Committee

- William Farrow
- Carole Stone
- Michael Richter
- James Parisi

Nominating and Governance Committee

- Frank English
- Jill Goodman
- Roderick Palmore
- Carole Stone
- Janet Froetscher

Finance and Strategy Committee

- Frank English
- Jill Goodman
- Joe Ratterman
- Roderick Palmore
- Jill Sommers

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.



**W. Cboe Futures Exchange, LLC**

1. *Name:* Cboe Futures Exchange, LLC  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq),  
July 16, 2002.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of  
Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Cboe Futures Exchanges, LLC is a  
designated contract market (DCM) approved by the Commodity Futures Trading  
Commission in August 2003. Cboe Futures Exchange, LLC is a fully electronic  
futures exchange.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees  
and persons performing similar functions:*

Current Directors

- Chris Concannon
- Gilbert Bassett, Jr.
- Michael Gorham
- James Parisi
- Jill Sommers

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President)
- Alexandra Albright (Chief Compliance Officer)
- Lawrence Bresnahan (VP, Market & Member Reg.)
- Joseph Caauwe (Managing Director - CFE)
- Kevin Carrai (Vice President, Connectivity, Data & Member Services)
- John Deters (Executive Vice President, Chief Strategy Officer & Head of  
Corporate Initiatives)
- James Enstrom (Vice President & Chief Audit Executive)
- Todd Furney (Chief Risk Officer)

- David Gray (Senior Vice President, Global Client Services & CFE Managing Director)
- Bryan Harkins (Executive Vice President, Head of U.S. Equities and Global FX)
- Mark Hemsley (Executive Vice President, President Europe)
- Gregory Hoogasian (Senior Vice President & Chief Regulatory Officer )
- Chris Isaacson (Executive Vice President, Chief Information Officer & CFE Senior Managing Director )
- Jennifer Lamie (Chief Regulatory Advisor)
- Stephanie Marrin Lara (Deputy Chief Reg Officer)
- Andrew Lowenthal (Executive Vice President, Head of Global Derivatives & CFE Senior Managing Director )
- Matthew McFarland (Head of CFE Business Operations and Strategy & CFE Managing Director)
- Arthur Reinstein (Senior Vice President, Deputy General Counsel & CFE Chief Legal Officer )
- David Reynolds (VP & Chief Accounting Officer)
- J. Patrick Sexton (Executive Vice President, General Counsel & Corporate Secretary)
- Brian Schell (Executive Vice President, Chief Financial Officer & Treasurer)
- Derick Shupe (Vice President and Controller)
- Aaron Weissenfluh (Vice President & Chief Information Security Officer)
- Troy Yeazel (Senior Vice President, U.S. Electronic Trading Operations and CFE Managing Director)

Standing Committees

Executive

- Chris Concannon
- Michael Gorham

Regulatory Oversight Committee

- Michael Gorham
- Gilbert Bassett
- James Parisi
- Jill Sommers

Trading Advisory Committee

- Jay Caauwe
- Kirk Bonniwell
- Zeke Charlesworth
- Michael Dennis
- Johan Drylewicz
- Alex Gerko

- Josh Grant
- Douglas Schadewald
- Andrew Smith

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**X. CBOE Stock Exchange, LLC**

1. *Name:* CBOE Stock Exchange, LLC  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq),  
July 31, 2006.
4. *Brief description of nature and extent of affiliation:* CBOE Stock Exchange, LLC  
is a 49.96%-owned subsidiary of Cboe Exchange, Inc.
5. *Brief description of business or functions:* CBOE Stock Exchange, LLC operated  
the CBOE Stock Exchange, which acted as a trading market for securities other  
than options as a facility of Cboe Exchange, Inc. CBOE Stock Exchange, LLC  
was approved by the SEC in March 2007. CBOE Stock Exchange, LLC ceased  
trading operations on April 30, 2014.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees  
and persons performing similar functions:*

Current Directors

- Alan Dean
- James Fitzgibbons
- Jaap Gelderloos
- Andrew Lowenthal
- Tom O'Mara
- Rick Oscher
- John Deters
- Dave Reynolds
- Eric Frait
- Steve Sosnick

Current Officers

- Angelo Evangelou (Secretary)

10. *Indication of whether such business or organization ceased to be associated with  
the applicant during previous year:* Not applicable.

**Y. Cboe Building Corporation**

1. *Name:* Cboe Building Corporation  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware General Corporation Law (8 Del. C. § 101, et seq), August 8, 1980.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Owns facility used by Cboe Global Markets, Inc.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- Ed Tilly
- Chris Concannon
- Brian Schell

Current Officers

- Ed Tilly (Chief Executive Officer)
  - Chris Concannon (President)
  - Marc Magrini (Vice President)
  - David Reynolds (Vice President)
  - Derick Shupe (Vice President)
  - Brian Schell (Treasurer)
  - J. Patrick Sexton (Secretary)
10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**Z. Cboe, LLC**

1. *Name:* Cboe, LLC  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq),  
August 22, 2001.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of  
Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Cboe, LLC is a limited liability  
company member of OneChicago, LLC.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees  
and persons performing similar functions:*

Current Directors

- Ed Tilly
- Chris Concannon

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President)
- Catherine Clay (Vice President)
- David Reynolds (Vice President)
- Derick Shupe (Vice President)
- Brian Schell (Treasurer)
- J. Patrick Sexton (Secretary)

10. *Indication of whether such business or organization ceased to be associated with  
the applicant during previous year:* Not applicable.

**AA. Cboe III, LLC**

1. *Name:* Cboe III, LLC  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq),  
May 2, 2014.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of  
Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Holding company for investment in  
Tradelegs, LLC.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees  
and persons performing similar functions:*

Current Directors

- Ed Tilly
- Chris Concannon
- John Deters

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President)
- John Deters (Vice President)
- David Reynolds (Vice President)
- Derick Shupe (Vice President)
- Brian Schell (Treasurer)
- J. Patrick Sexton (Secretary)

10. *Indication of whether such business or organization ceased to be associated with  
the applicant during previous year:* Not applicable.

**BB. Cboe Bats, LLC**

1. *Name:* Cboe Bats, LLC  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq),  
September 25, 2016.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of  
Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Holding company.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees  
and persons performing similar functions:*

Current Directors

- Ed Tilly
- Chris Concannon
- Brian Schell

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President and Chief Operating Officer)
- Alexandra Albright (VP, Market and Member Regulation)
- Rodney Burt (VP, Infrastructure)
- Kevin Carrai (VP, Connectivity, Data and Member Services)
- Bryan Christian (SVP, Sales US Equities)
- Paul Ciciora (VP, Systems Infrastructure)
- Catherine Clay (VP, Business Development)
- Sean Cleary (VP, Sales FX)
- Jeff Connell (VP, Deputy Chief Regulatory Officer)
- Eric Crampton (SVP, Software Engineering)
- Pamela Culpepper (Chief HR Officer)
- John Deters (EVP, Chief Strategy Officer and Head of Corporate Initiatives)
- Laura Dickman (VP, Associate General Counsel)
- James Enstrom (VP, Chief Audit Executive)



- Angelo Evangelou (SVP, Chief Policy Officer)
- Eric Frait (VP, Business Analysis)
- Anders Franzon (SVP, Deputy General Counsel)
- Carmen Frazier Brannan (VP, Government Relations)
- Todd Furney (VP, Chief Risk Officer)
- Alicia Goldberg (VP, Statistical Analysis)
- David Gray (SVP, Global Client Services)
- Bryan Harkins (EVP, Head of U.S. Equities and Global FX)
- Mark Hemsley (EVP, President Europe)
- Gregory Hoogasian (SVP, Chief Regulatory Officer)
- Chris Isaacson (EVP, Chief Information Officer)
- Carol Kennedy (VP, Chief Communications Officer)
- Stephanie Klein (VP, Chief Marketing Officer)
- Deborah Koopman (VP, Investor Relations)
- Jennifer Lamie (VP, Chief Regulatory Advisor)
- Andrew Lowenthal (EVP, Head of Global Derivatives)
- Marc Magrini (VP, Administration)
- Stephanie Marrin Lara (VP, Deputy Chief Regulatory Officer)
- Anthony Montesano (VP, TSD and Registration)
- Laura Morrison (SVP, ETP Listings)
- Mark Novak (VP, CTO Development)
- Paul Reidy (VP, Cboe FX COO)
- Arthur Reinstein (SVP, Deputy General Counsel)
- David Reynolds (VP, Chief Accounting Officer)
- Bradley Samuels (VP, Systems Development)
- Curt Schumacher (VP, CTO Operations)
- Lisa Shemie (VP, Associate General Counsel)
- Derick Shupe (VP, Controller)
- Steven Sinclair (VP, Systems Development)
- Eileen Smith (VP, Systems Planning)
- William Speth (SVP, Research and Product Development)
- Paul Stephens (VP, Global Client Services)
- Michael Todd (VP, OSC)
- Michael Todorofsky (VP, US Market Operations)
- Michael Trees (VP, Trading Systems Development)
- Aaron Weissenfluh (VP, CISO)
- Troy Yeazel (SVP, Operations)
- Vivian Yiu (VP, Product Strategy)
- Laura Zinanni (SVP, Deputy General Counsel)
- Brian Schell (EVP, Chief Financial Officer and Treasurer)
- J. Patrick Sexton (Secretary)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**CC. Cboe Livevol, LLC**

1. *Name:* Cboe Livevol, LLC  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq),  
May 29, 2015.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of  
Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Cboe Livevol, LLC provides equity  
and index options technology for professional and retail traders, which includes  
options strategy backtesting, trade analysis and volatility modeling technologies  
and historical data.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees  
and persons performing similar functions:*

Current Directors

- Andrew Lowenthal
- John Deters
- Catherine Clay

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President)
- Catherine Clay (Vice President)
- John Deters (Vice President)
- James Enstrom (Vice President, Chief Audit Executive)
- Chris Isaacson (Vice President)
- Andrew Lowenthal (Vice President)
- David Reynolds (Vice President)
- Derick Shupe (Vice President)
- Aaron Weissenfluh (Vice President, CISO)
- Brian Schell (Treasurer)
- J. Patrick Sexton (Secretary)
- Alexandra Albright (Chief Compliance Officer)

- Todd Furney (Chief Risk Officer)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**DD. Cboe UK Limited**

1. *Name:* Cboe UK Limited  
*Address:* 11 Monument Street, London, EC3R 8AF, United Kingdom
2. *Form of organization:* Private Limited Company.
3. *Name of state, statute under which organized and date of incorporation:* England and Wales, Companies Act 2006, March 10, 2016.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Marketing and business development services.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*  
  
Current Directors
  - Dave Gray  
Current Officers
  - None
10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**EE. Cboe Vest, LLC**

1. *Name:* Cboe Vest, LLC  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq),  
December 10, 2015.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of  
Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Holding company of majority equity  
investment in Cboe Vest Group Inc.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees  
and persons performing similar functions:*

Current Directors

- Ed Tilly
- Chris Concannon
- John Deters

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President)
- Catherine Clay (Vice President)
- John Deters (Vice President)
- David Reynolds (Vice President)
- Derick Shupe (Vice President)
- Brian Schell (Treasurer)
- J. Patrick Sexton (Secretary)

10. *Indication of whether such business or organization ceased to be associated with  
the applicant during previous year:* Not applicable.

**FF. Loan Markets, LLC**

1. *Name:* Loan Markets, LLC  
*Address:* 400 S. LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq),  
May 11, 2015.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of  
Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Holding company for investment in  
American Financial Exchange, LLC.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees  
and persons performing similar functions:*

Current Directors

- Ed Tilly
- Chris Concannon
- John Deters

Current Officers

- Ed Tilly (Chief Executive Officer)
  - Chris Concannon (President)
  - John Deters (Vice President)
  - Andrew Lowenthal (Vice President)
  - David Reynolds (Vice President)
  - Derick Shupe (Vice President)
  - Brian Schell (Treasurer)
  - J. Patrick Sexton (Secretary)
10. *Indication of whether such business or organization ceased to be associated with  
the applicant during previous year:* Not applicable.

**GG. Cboe Data Services, LLC**

1. *Name:* Cboe Data Services, LLC  
*Address:* 400 South LaSalle Street Chicago, Illinois 60605
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq),  
February 21, 2006.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of  
Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Cboe Data Services, LLC sells market  
data.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees  
and persons performing similar functions:*

Current Directors

- Eric Frait
- Bryan Harkins
- Chris Isaacson
- Jim Roche
- Curt Schumacher

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President)
- Kevin Carrai (Vice President)
- Catherine Clay (Vice President)
- James Enstrom (Vice President, Chief Audit Executive)
- Bryan Harkins (Vice President)
- Chris Isaacson (Vice President)
- Andrew Lowenthal (Vice President)
- Jim Roche (Vice President)
- Derick Shupe (Vice President)
- Aaron Weissenfluh (Vice President, Chief Information Security Officer)
- Brian Schell (Treasurer)
- J. Patrick Sexton (Secretary)

- Alexandra Albright (Chief Compliance Officer)
- Todd Furney (Chief Risk Officer)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.



**HH. Signal Trading Systems, LLC**

1. *Name:* Signal Trading Systems, LLC  
*Address:* 400 South LaSalle Street, Chicago, Illinois 60605
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq),  
May 13, 2010.
4. *Brief description of nature and extent of affiliation:* Fifty percent (50%)  
subsidiary of Cboe Exchange, Inc.
5. *Brief description of business or functions:* Signal Trading Systems, LLC  
developed and markets a multi-asset front-end order entry system known as  
“Pulse”.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees  
and persons performing similar functions:* There are no directors or officers of  
Signal Trading Systems, LLC.
10. *Indication of whether such business or organization ceased to be associated with  
the applicant during previous year:* Not applicable.

**II. The Options Exchange, Incorporated**

1. *Name:* The Options Exchange, Incorporated  
*Address:* 400 South LaSalle Street, Chicago, IL 60605
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware General Corporation Law (8 Del. C. § 101, et seq), January 7, 1974.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of Cboe Global Markets, Inc.
5. *Brief description of business or functions:* The Options Exchange, Incorporated has been inactive since its incorporation.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*  
  
Current Directors
  - Chris Concannon
  - Ed Tilly  
Current Officers
  - Ed Tilly (Chairman)
  - Chris Concannon (President)
10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**JJ. Cboe Vest Group, Inc.**

1. *Name:* Cboe Vest Group, Inc.  
*Address:* 8300 Greensboro Drive, 8<sup>th</sup> Floor, McLean, VA 22102
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware General Corporation Law (8 Del. C. §101, et seq), January 2, 2015.
4. *Brief description of nature and extent of affiliation:* Majority-owned subsidiary of Cboe Vest, LLC.
5. *Brief description of business or functions:* Through its subsidiaries, provides options-based investment advisory services.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* See attached for proof of name change.
8. *Copy of existing by-laws:* No changes.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*

Current Directors

- John Deters
- Karan Sood
- William Speth

Current Officers

- Karan Sood (Chief Executive Officer)
- Jeffrey Chang (Chief Financial Officer)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable

**KK. Cboe Hong Kong Limited**

1. *Name:* Cboe Hong Kong Limited  
*Address:* 66<sup>th</sup> Floor, The Center, 99 Queen's Road, Central, Hong Kong
2. *Form of organization:* Private Company Limited by Shares.
3. *Name of state, statute under which organized and date of incorporation:* Hong Kong under the Companies Ordinance (Chapter 622 of the Laws of Hong Kong), May 29, 2017.
4. *Brief description of nature and extent of affiliation:* Cboe Hong Kong Limited is wholly-owned by Cboe Worldwide Holdings Limited, which is an affiliate of the Exchange.
5. *Brief description of business or functions:* Marketing and business development services (business expected to commence in September 2017).
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* No changes.
8. *Copy of existing by-laws:* Not applicable.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:*  
  
Current Directors
  - Dave Gray  
Current Officers
  - None
10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**LL. Cboe Silexx, LLC**

1. *Name:* Cboe Silexx, LLC  
*Address:* 400 South LaSalle Street, Chicago, IL 60605
2. *Form of organization:* Limited Liability Company
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq),  
October 16, 2017.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of  
Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Cboe Silexx, LLC operates the Silexx  
order execution management system business.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* See attached  
Certificate of Formation.
8. *Copy of existing by-laws:* Not applicable.
9. *Name and title of present officers, governors, members of standing committees  
and persons performing similar functions:*

Current Directors

- Ed Tilly
- Chris Concannon
- Brian Schell

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President)
- Catherine Clay (Vice President)
- John Deters (Vice President)
- James Enstrom (Vice President, Chief Audit Executive)
- David Reynolds (Vice President)
- Derick Shupe (Vice President)
- Aaron Weissenfluh (Vice President, Chief Information Security Officer)
- Brian Schell (Treasurer)
- J. Patrick Sexton (Secretary)
- Alexandra Albright (Chief Compliance Officer)
- Todd Furney (Chief Risk Officer)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.

**MM. Digital Asset Benchmark Administration, LLC**

1. *Name:* Digital Asset Benchmark Administration, LLC  
*Address:* 400 South LaSalle Street, Chicago, IL 60605
2. *Form of organization:* Limited Liability Company
3. *Name of state, statute under which organized and date of incorporation:*  
Delaware, Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq),  
October 17, 2017.
4. *Brief description of nature and extent of affiliation:* Wholly-owned subsidiary of  
Cboe Global Markets, Inc.
5. *Brief description of business or functions:* Digital Asset Benchmark  
Administration, LLC licenses Gemini-related data.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* See attached  
Certificate of Formation.
8. *Copy of existing by-laws:* Not applicable.
9. *Name and title of present officers, governors, members of standing committees  
and persons performing similar functions:*

Current Directors

- Ed Tilly
- Chris Concannon
- Brian Schell

Current Officers

- Ed Tilly (Chief Executive Officer)
- Chris Concannon (President)
- Mark Hemsley (Vice President)
- Catherine Clay (Vice President)
- John Deters (Vice president)
- Dave Reynolds (Vice President)
- Derick Shupe (Vice President)
- Alexandra Albright (Chief Compliance Officer)
- James Enstrom (Vice President and Chief Audit Executive)
- Todd Furney (Chief Risk Officer)
- Aaron Weissenfluh (Vice President, CISO)
- Brian Schell (Treasurer)
- J. Patrick Sexton (Secretary)

10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* Not applicable.



**NN. Bats Hotspot IB LLC**

1. *Name:* Bats Hotspot IB LLC  
*Address:* 17 State Street, 31<sup>st</sup> Floor, New York, NY 10004
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Formed in Illinois under Section 15-1 of the Limited Liability Company Act of the State of Illinois on May 23, 2003.
4. *Brief description of nature and extent of affiliation:* Bats Hotspot IB LLC is wholly-owned by Cboe FX Holdings LLC, which is wholly-owned by Bats Global Markets Holdings, Inc., which is an affiliate of the Exchange.
5. *Brief description of business or functions:* Not applicable.
6. *Copy of constitution:* Not applicable.
7. *Copy of articles of incorporation or association and amendments:* Not applicable.
8. *Copy of existing by-laws:* Not applicable.
9. *Name and title of present officers, governors, members of standing committees and persons performing similar functions:* None
10. *Indication of whether such business or organization ceased to be associated with the applicant during previous year:* As of December 2017, Bats Hotspot IB LLC ceased to exist.

## Form 1, Exhibit C Index of Attachments

- A Bats Global Markets Holdings, Inc.
- B Direct Edge LLC
- C Cboe BZX Exchange, Inc.
- D Cboe BYX Exchange, Inc.
- E Cboe EDGA Exchange, Inc.
- F Cboe Exchange, Inc.
- G Cboe C2 Exchange, Inc.
- H Cboe Trading, Inc.
- I Omicron Acquisition Corp.
- J Cboe FX Holdings, LLC
- K Cboe FX Markets, LLC
- L Cboe FX Services, LLC
- M Cboe International Holdings Limited
- N Cboe FX Europe Limited
- O Cboe FX Asia Pte. Limited (Updated)
- P Cboe Europe Limited
- Q Cboe Chi-X Europe Limited
- R Cboe ETF.com, Inc.
- S IndexPubs S.A.
- T Cboe SEF, LLC
- U Cboe Worldwide Holdings Limited
- V Cboe Global Markets, Inc.
- W Cboe Futures Exchange, LLC
- X CBOE Stock Exchange, LLC
- Y Cboe Building Corporation
- Z Cboe, LLC

- AA Cboe III, LLC
- BB Cboe Bats, LLC
- CC Cboe Livevol, LLC
- DD Cboe UK Limited
- EE Cboe Vest, LLC
- FF Loan Markets, LLC
- GG Cboe Data Services, LLC
- HH Signal Trading Systems, LLC
- II The Options Exchange, Incorporated
- JJ Cboe Vest Group Inc. (Updated)
- KK Cboe Hong Kong Limited
- LL Cboe Silexx, LLC (Updated)
- MM Digital Asset benchmark Administration, LLC (Updated)

**O Cboe FX Asia Pte. Limited**

# ACRA

ACCOUNTING AND CORPORATE  
REGULATORY AUTHORITY

## CERTIFICATE CONFIRMING INCORPORATION OF COMPANY

**Company Name** : CBOE FX ASIA PTE. LIMITED (name change effective from  
31/10/2017)

**UEN** : 201504858N

This is to confirm that the company was incorporated under the Companies Act, on and  
from **23/02/2015** and that the company is a **PRIVATE COMPANY LIMITED BY SHARES**.

The company was formerly known as:

<b>S/N</b>	<b>Company Name</b>	<b>Effective From</b>
1.	BATS HOTSPOT ASIA PTE. LTD.	23/02/2015

(Note: Only the five (5) most recent former names are listed. Any change in company name effected before 13  
Jan 2003 will not be listed)



LEE TZE MING  
ASST REGISTRAR OF COMPANIES & BUSINESS NAMES  
ACCOUNTING AND CORPORATE REGULATORY AUTHORITY  
SINGAPORE

**Dated** : 01/11/2017  
**Receipt Number:** ACRA171031113648



Authentication No. : E17028922X

**Natalie Tye Li Ping**

---

**From:** acra\_bizfile@acra.gov.sg  
**Sent:** Tuesday, 31 October, 2017 11:23 AM  
**To:** Phoebe Tan Pei Ting  
**Subject:** Notice of resolution for change in Company name is submitted

Dear Sir/Mdm,

NOTICE OF CHANGE OF NAME

Entity Name: BATS HOTSPOT ASIA PTE. LTD.  
UEN: 201504858N  
Transaction Name: Notice of Resolution  
Transaction No.: C170662603

This is to confirm that the company BATS HOTSPOT ASIA PTE. LTD. had resolved to change its name to CBOE FX ASIA PTE. LIMITED with effect from 31-OCT-17.

Thank you.

Regards,  
Accounting and Corporate Regulatory Authority (ACRA)

\*\*\*\*\*

This is a system-generated email. Please do not reply to this email.  
If you have any enquiries, please visit our interactive web service at [www.acra.gov.sg/askacra](http://www.acra.gov.sg/askacra) for more information.

## NOTICE OF RESOLUTION

NAME OF COMPANY : **Bats Hotspot Asia Pte. Ltd.**

REGISTRATION NO : **201504858N**

COPY OF SPECIAL RESOLUTION PASSED ON 18 OCTOBER 2017 BY SOLE MEMBER'S RESOLUTION IN WRITING PURSUANT TO SECTION 184G(1) OF THE COMPANIES ACT, CAP. 50, as set out below:

### **"SPECIAL RESOLUTION**

#### CHANGE OF NAME

RESOLVED That subject to the approval of the Registrar of Companies, the name of the Company be changed to "CBOE FX ASIA PTE. LIMITED" and that the name "CBOE FX ASIA PTE. LIMITED" be substituted for "BATS HOTSPOT ASIA PTE. LTD." wherever the latter name appears in the Company's Constitution."

**JJ Cboe Vest Group Inc.**




# Delaware

Page 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE RESTATED CERTIFICATE OF "CBOE VEST GROUP INC.", FILED IN THIS OFFICE ON THE TWENTY-THIRD DAY OF AUGUST, A.D. 2017, AT 9:36 O`CLOCK A.M.



  
Jeffrey W. Bullock, Secretary of State

5166699 8100  
SR# 20180640161

Authentication: 202071812  
Date: 01-31-18

You may verify this certificate online at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

**AMENDED AND RESTATED  
CERTIFICATE OF INCORPORATION OF  
CBOE VEST GROUP INC.**

CBOE Vest Group Inc., a corporation organized and existing under the laws of the State of Delaware (the "*Corporation*"), certifies that:

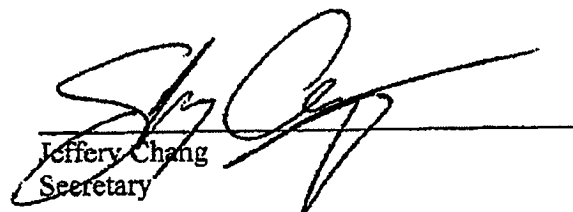
1. The name of the Corporation is CBOE Vest Group, Inc. The Corporation's original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on January 2, 2015, which was amended and restated on August 24, 2016, to change the Corporation's name from "Vest Financial Group Inc.", which was further amended and restated on January 3, 2017, to authorize two classes of common stock and to establish the rights, preferences, privileges and restrictions with respect thereto.

2. The Corporation desires to amend its Certificate of Incorporation to (i) authorize 1,340,641 shares of Class C Common Stock having the rights and privileges set forth herein; (ii) reduce the number of authorized shares of Class B Common Stock to 270,286 authorized shares; and (iii) make certain other changes.

3. This Amended and Restated Certificate of Incorporation was duly adopted in accordance with Sections 242 and 245 of the General Corporation Law of the State of Delaware, and has been duly approved by the written consent of the stockholders of the Corporation in accordance with Section 228 of the General Corporation Law of the State of Delaware, and restates, integrates and further amends the provisions of the Corporation's Certificate of Incorporation.

4. The text of the Certificate of Incorporation is amended and restated to read as set forth in EXHIBIT A attached hereto.

IN WITNESS WHEREOF, CBOE Vest Group Inc. has caused this Amended and Restated Certificate of Incorporation to be signed by Jeffery Chang, a duly authorized officer of the Corporation, on August 23<sup>rd</sup>, 2017.

  
\_\_\_\_\_  
Jeffery Chang  
Secretary

**EXHIBIT A**

**Amended and Restated Certificate of Incorporation**

P<sub>3</sub>

## ARTICLE I

The name of the Corporation is CBOE Vest Group Inc.

## ARTICLE II

The address of the Corporation's registered office in the State of Delaware is 251 Little Falls Drive, City of Wilmington, New Castle County, State of Delaware 19808. The name of the registered agent at such address is Corporation Service Company.

## ARTICLE III

The purpose of this Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.

## ARTICLE IV

The total number of shares of stock that the Corporation shall have authority to issue includes (i) 5,151,040 shares that are hereby designated Class A Common Stock having \$0.001 par value per share ("Class A Common Stock"), (ii) 270,286 shares that are hereby designated Class B Common Stock having \$0.001 par value per share ("Class B Common Stock") and (iii) 1,340,641 shares that are hereby designated Class C Common Stock having \$0.001 par value per share ("Class C Common Stock") (collectively, the "Common Stock").

## ARTICLE V

The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors. Elections of directors need not be by written ballot unless otherwise provided in the Bylaws of the Corporation. In furtherance of and not in limitation of the powers conferred by the laws of the State of Delaware, the Board of Directors of the Corporation is expressly authorized to make, amend or repeal the Bylaws of the Corporation.

## ARTICLE VI

(a) To the fullest extent permitted by the Delaware General Corporation Law, as the same exists or as may hereafter be amended, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director.

(b) The Corporation shall indemnify to the fullest extent permitted by law any person made or threatened to be made a party to an action or proceeding, whether criminal, civil, administrative or investigative, by reason of the fact that he, his testator or intestate is or was a director or officer of the Corporation or any predecessor of the Corporation, or serves or served at any enterprise as a director or officer at the request of the Corporation or any predecessor to the Corporation.

(c) Neither any amendment nor repeal of this Article VI, nor the adoption of any provision of the Corporation's Certificate of Incorporation inconsistent with this Article VI, shall eliminate or reduce the effect of this Article VI in respect of any matter occurring, or any action or proceeding accruing or arising or that, but for this Article VI, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

## ARTICLE VII

Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (A) any derivative action or proceeding brought on behalf of the Corporation, (B) any action or proceeding asserting a claim of breach of fiduciary duty owed by any director, officer, employee or agent of the Corporation to the Corporation or the Corporation's stockholders, (C) any action or proceeding asserting a claim against the Corporation arising pursuant to any provision of the Delaware General Corporation Law or the Corporation's Certificate of Incorporation or Bylaws, or (D) any action or proceeding asserting a claim governed by the internal affairs doctrine, in each case subject to said Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein.

## ARTICLE VIII

The terms and provisions of the Common Stock are as follows:

1. **Definitions.** For purposes of this ARTICLE VIII, the following definitions shall apply:

(a) "**AB Amount**" shall mean an amount equal to (i) \$4,935,196, minus (ii) the Class B Amount, plus (iii) the amount received, if any, by the Company in a Qualified Financing that results in the issuance of additional shares of Class A Common Stock after the effective date of these amended and restated articles. The AB Amount shall be allocated *pro rata* to all outstanding shares of Class A Common Stock and Class B Common Stock (subject to adjustment from time to time as set forth elsewhere herein).

(b) "**AB Ratio**" shall mean, at any given time, the number obtained by dividing (i) the sum of (x) the total number of issued and outstanding shares of Class A Common Stock and (y) the total number of issued and outstanding shares of Class B Common Stock by (ii) the total number of issued and outstanding shares of all Common Stock.

(c) "**Class A Amount**" shall mean \$30,564,804 in the aggregate which shall be allocated *pro rata* to all outstanding shares of Class A Common Stock (subject to adjustment from time to time as set forth elsewhere herein).

(d) "**Class A Ratio**" shall mean, at any given time, the number obtained by dividing (i) the total number of issued and outstanding shares of Class A Common Stock by (ii) the sum of the total number of issued and outstanding shares of (x) Class A Common Stock and (y) Class B Common Stock.

(e) **"Class B Amount"** shall mean, at any given time, the aggregate amount obtained by multiplying (i) the aggregate Class A Amount by (ii) the Class B Ratio at the time of such calculation and dividing such product by (iii) the Class A Ratio at the time of such calculation.

(f) **"Class B Ratio"** shall mean, at any given time, the number obtained by dividing (i) the total number of issued and outstanding shares of Class B Common Stock by (ii) the sum of the total number of issued and outstanding shares of (x) Class A Common Stock and (y) Class B Common Stock.

(g) **"Class C Amount"** at any given time, the aggregate amount obtained by multiplying (i) the sum of (x) the aggregate Class A Amount (as it may be adjusted from time to time), (y) the aggregate Class B Amount (as it may be adjusted from time to time) and (z) the aggregate AB Amount (as it may be adjusted from time to time), by (ii) the Class C Ratio at the time of such calculation and dividing such product by (iii) the AB Ratio at the time of such calculation. The order of payment of the Class C Amount pursuant to Article III Section 3 may be adjusted downward in the event of a qualified financing that results in the issuance equity securities of a class other than Class A Common Stock (or debt securities convertible into equity securities of a class other than Class A Common Stock).

(h) **"Class C Ratio"** shall mean, at any given time, lesser of (i) 19.83% or (ii) the number obtained by dividing (x) the total number of issued and outstanding shares of Class C Common Stock by (y) the total number of issued and outstanding shares of all Common Stock.

(i) **"Corporation"** shall mean CBOE Vest Group Inc.

(j) **"Distribution"** shall mean the transfer of cash or other property without consideration whether by way of dividend or otherwise, other than dividends on Common Stock payable in Common Stock, or the purchase or redemption of shares of the Corporation by the Corporation for cash or property other than: (i) repurchases of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation upon termination of their employment or services pursuant to agreements providing for the right of said repurchase, (ii) repurchases of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation pursuant to rights of first refusal contained in agreements providing for such right, and (iii) repurchase of capital stock of the Corporation in connection with the settlement of disputes with any stockholder

(k) **"Qualified Financing"** means the issuance of equity securities (or debt securities convertible into equity securities) of the Corporation in one or a series of related transactions, the principal purpose of which is to raise capital for the Corporation.

## 2. Dividends.

(a) **Common Stock.** In any calendar year, the holders of outstanding shares of Common Stock shall be entitled to receive dividends, when, as and if declared by the Board of Directors, out of any assets at the time legally available therefor. Any amounts available for Distribution by the Corporation shall be paid to the holders of Common Stock on a *pro rata, pari passu* basis in proportion to such Common Stock.

-5-

5347611\_2

(b) *Non-Cash Distributions.* Whenever a Distribution provided for in this Section 2 shall be payable in property other than cash, the value of such Distribution shall be deemed to be the fair market value of such property as determined in good faith by the Board of Directors.

### 3. Liquidation Rights.

(a) *Class A Amount.* In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, the holders of the Class A Common Stock shall be entitled to receive, prior and in preference to any Distribution of any of the assets of the Corporation to the holders of the Class B Common Stock and/or Class C Common Stock held by them, an amount equal to the Class A Amount. If upon the liquidation, dissolution or winding up of the Corporation, the assets of the Corporation legally available for distribution to the holders of the Common Stock are insufficient to permit the payment to such holders of the full amounts specified in this Article VIII Section 3(a), then the entire assets of the Corporation legally available for distribution shall be distributed with equal priority and *pro rata* among the holders of the Class A Common Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Article VIII Section 3(a).

(b) *Class B Amount.* Following the full payment of the Class A Amount under Article VIII Section 3(a), in the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, the holders of the Class B Common Stock, on a *pro rata* basis, shall be entitled to receive, prior and in preference to any Distribution of any of the assets of the Corporation to the holders of the Class A Common Stock (in excess of the amount distributed pursuant to Article VIII Section 3(a)) and/or Class C Common Stock held by them, the Class B Amount. If upon the liquidation, dissolution or winding up of the Corporation, the assets of the Corporation legally available for distribution to the holders of the Common Stock are insufficient to permit the payment to such holders of the full amounts specified in this Article VIII Section 3(b), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and *pro rata* among the holders of the Class B Common Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Article VIII Section 3(b).

(c) *AB Amount.* Following the full payment of the Class A Amount under Article VIII Section 3(a) and the Class B Amount under Article VIII Section 3(b), in the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, the holders of the Class A Common Stock and Class B Common Stock, on a *pro rata* basis, shall be entitled to receive, prior and in preference to any Distribution of any of the assets of the Corporation to the holders of Class C Common Stock held by them, the AB Amount. If upon the liquidation, dissolution or winding up of the Corporation, the assets of the Corporation legally available for distribution to the holders of the Common Stock are insufficient to permit the payment to such holders of the full amounts specified in this Article VIII Section 3(c)(a), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and *pro rata* among the holders of the Class A Common Stock and Class B Common Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Article VIII Section 3(c).

(d) **Class C Amount.** Following the full payment of the Class A Amount under Article VIII Section 3(a), the Class B Amount under Article VIII Section 3(b) and the AB Amount under Article VIII Section 3(c), and subject to the liquidation preference of any class of equity securities issued in connection with any Qualified Financing, in the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, the holders of the Class C Common Stock, on a *pro rata* basis, shall be entitled to receive the Class C Amount. If upon the liquidation, dissolution or winding up of the Corporation, the assets of the Corporation legally available for distribution to the holders of the Common Stock are insufficient to permit the payment to such holders of the full amounts specified in this Article VIII Section 3(d), then the entire remaining assets of the Corporation legally available for distribution shall be distributed with equal priority and *pro rata* among the holders of the Class C Common Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Article VIII Section 3(d).

(e) **Remaining Assets.** After the payment of the Class A Amount, Class B Amount, the AB Amount and the Class C Amount, the entire remaining assets of the Corporation legally available for distribution by the Corporation shall be distributed with equal priority and *pro rata* among the holders of the Class A, Class B and Class C Common Stock in proportion to the number of shares of Common Stock held by such classes.

(f) **Adjustments for Subdivisions or Combinations affecting Class A Common Stock.** In the event the outstanding shares of Class A Common Stock (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Class A Common Stock, the Class A Amount and the AB Amount shall, on a per share basis with respect to such shares of Class A Common Stock and concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Class A Common Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Class A Common Stock, the Class A Amount and the AB Amount, on a per share basis with respect to such shares of Class A Common Stock and concurrently with the effectiveness of such combination, be proportionately increased. For the avoidance of doubt, the aggregate amount of the Class A Amount or the AB Amount shall not be effected as a result of any such subdivision or combination.

(g) **Adjustments for Subdivisions or Combinations affecting Class B Common Stock.** In the event the outstanding shares of Class B Common Stock (by stock split, by payment of a stock dividend or otherwise), into a greater number of shares of Class B Common Stock, the Class B Amount and the AB Amount shall, on a per share basis with respect to such shares of Class B Common Stock and concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Class B Common Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Class B Common Stock, the Class B Amount and the AB Amount, on a per share basis with respect to such shares of Class B Common Stock and concurrently with the effectiveness of such combination, be proportionately increased. For the avoidance of doubt, the aggregate amount of the Class B Amount or the AB Amount shall not be effected as a result of any such subdivision or combination.

(h) **Adjustments for Subdivisions or Combinations affecting Class C Common Stock.** In the event the outstanding shares of Class C Common Stock (by stock split, by



payment of a stock dividend or otherwise), into a greater number of shares of Class C Common Stock, the Class C Amount shall, on a per share basis with respect to such shares of Class C Common Stock and concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Class C Common Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Class C Common Stock, the Class C Amount on a per share basis with respect to such shares of Class C Common Stock and concurrently with the effectiveness of such combination, be proportionately increased. For the avoidance of doubt, the aggregate amount of the Class C Amount shall not be effected as a result of any such subdivision or combination

(i) **Reorganization.** For purposes of this Section 3, a liquidation, dissolution or winding up of the Corporation shall be deemed to be occasioned by, or to include, (i) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions to which the Corporation is party (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any sale of stock for capital raising purposes) other than a transaction or series of transactions in which the holders of the voting securities of the Corporation outstanding immediately prior to such transaction retain, immediately after such transaction or series of transactions, as a result of shares in the Corporation held by such holders prior to such transaction, at least a majority of the total voting power represented by the outstanding voting securities of the Corporation or such other surviving or resulting entity (or if the Corporation or such other surviving or resulting entity is a wholly-owned subsidiary immediately following such acquisition, its parent); (ii) a sale, lease or other disposition of all or substantially all of the assets of the Corporation taken as a whole by means of any transaction or series of related transactions, except where such sale, lease or other disposition is to a wholly-owned subsidiary of the Corporation; (iii) an exclusive, irrevocable license of all or substantially all of the intellectual property of the Corporation to a third party taken as a whole by means of any transaction or series of related transactions, except where such exclusive, irrevocable license is to a wholly-owned subsidiary of the Corporation; or (iv) any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary.

#### 4. **Voting.**

(a) **Generally.** Except as otherwise expressly provided herein or as required by law, all holders of Common Stock shall vote together and not as separate classes.

(b) **No Series Voting.** Other than as provided herein or required by law, there shall be no series voting.

(c) **Common Stock.** Each holder of shares of Common Stock shall be entitled to one vote for each share thereof held. Fractional votes shall not be permitted and any fractional voting rights shall be disregarded. All holders of Common Stock shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of the Corporation.

**LL Cboe Silexx, LLC**

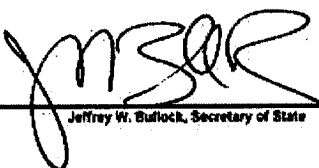
# Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF FORMATION OF "CBOE SILEXX, LLC", FILED IN THIS OFFICE ON THE SIXTEENTH DAY OF OCTOBER, A.D. 2017, AT 5:28 O`CLOCK P.M.



  
Jeffrey W. Bullock, Secretary of State

6579769 8100  
SR# 20176640256

Authentication: 203411319  
Date: 10-17-17

You may verify this certificate online at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

**CERTIFICATE OF FORMATION**

**OF**

**CBOE SILEXX, LLC**

This Certificate of Formation of Cboe Silexx, LLC (the "Company"), dated as of October 16, 2017, is being duly executed and filed by CBOE Holdings, Inc. to form a limited liability company under the Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq.).

1. The name of the limited liability company formed hereby is Cboe Silexx, LLC.
2. The address of the registered office of the Company in the State of Delaware is c/o The Corporation Trust Company, 1209 Orange Street, Wilmington, County of New Castle, Delaware 19801. The name of the registered agent of the Company at such address is The Corporation Trust Company.
3. This Certificate of Formation shall be effective upon filing.

*[Signature page follows]*

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Formation of Cboe Silexx, LLC this 16th day of October, 2017.

**CBOE Holdings, Inc.**

By:

Name: Edward T. Tilly

Title: Chief Executive Officer

Being the sole member of Cboe Silexx, LLC

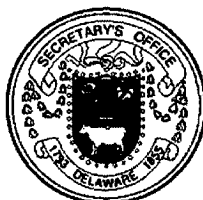
**MM Digital Asset Benchmark Administration, LLC**

# Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF FORMATION OF "DIGITAL ASSET BENCHMARK ADMINISTRATION, LLC", FILED IN THIS OFFICE ON THE SEVENTEENTH DAY OF OCTOBER, A.D. 2017, AT 11:18 O`CLOCK A.M.



  
Jeffrey W. Bullock, Secretary of State

6521366 8100  
SR# 20176650153

You may verify this certificate online at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

Authentication: 203415591  
Date: 10-18-17

**CERTIFICATE OF FORMATION**

**OF**

**DIGITAL ASSET BENCHMARK ADMINISTRATION, LLC**

This Certificate of Formation of Digital Asset Benchmark Administration, LLC (the "Company"), dated as of October 17, 2017, is being duly executed and filed by Cboe Global Markets, Inc. to form a limited liability company under the Delaware Limited Liability Company Act (6 Del. C. §18-101, et seq.).

1. The name of the limited liability company formed hereby is Digital Asset Benchmark Administration, LLC.
2. The address of the registered office of the Company in the State of Delaware is c/o The Corporation Trust Company, 1209 Orange Street, Wilmington, County of New Castle, Delaware 19801. The name of the registered agent of the Company at such address is The Corporation Trust Company.
3. This Certificate of Formation shall be effective upon filing.

*[Signature page follows]*



IN WITNESS WHEREOF, the undersigned has executed this Certificate of Formation of Digital Asset Benchmark Administration, LLC this 17th day of October, 2017.

**Cboe Global Markets, Inc.**

By: 

Name: Edward T. Tilly

Title: Chief Executive Officer

**Being the sole member of Digital Asset Benchmark  
Administration, LLC**

Exhibit D

**Exhibit Request:**

**For each subsidiary or affiliate of the exchange, provide unconsolidated financial statements for the latest fiscal year. Such financial statements shall consist, at a minimum, of a balance sheet and an income statement with such footnotes and other disclosures as are necessary to avoid rendering the financial statements misleading. If any affiliate or subsidiary is required by another Commission rule to submit annual financial statements, a statement to that effect with a citation to the other Commission rule, may be provided in lieu of the financial statements required here.**

- 
1. For the financial statements of Cboe Bats LLC, Bats Global Markets Holdings, Cboe BZX Exchange, Inc., Cboe BYX Exchange, Inc., Cboe Trading, Inc. Direct Edge LLC, Cboe EDGX Exchange, Inc., Cboe EDGA Exchange, Inc., Cboe ETF.com, IndexPubs S.A., Omicron Acquisition Corp, Cboe Hong Kong Limited, Cboe Worldwide Holdings Limited, Cboe Europe, Limited, Cboe Chi-X Europe, Ltd., Cboe FX Holdings, LLC, Cboe FX Markets, LLC, Cboe SEF, LLC, Bats Hotspot IB, Cboe FX Services, LLC, Cboe International Holdings Limited, Cboe FX Asia Pte. Ltd., Cboe Global Markets, Inc., Cboe UK Limited, Cboe Building Corporation, Cboe Livevol, LLC Cboe Vest Group, Inc., Cboe Vest, LLC, Cboe Exchange, Inc., Cboe C2 Exchange, Inc., Tradelegs LLC, Cboe Silexx, LLC, Cboe Data Services, LLC
  2. Cboe Exchange, Inc. filed, at the same time as this filing, financial statements for the year ended December 31, 2017 with the Commission pursuant to Rule 6a-2(b)(1) under the Securities Exchange Act of 1934.
  3. Cboe C2 Exchange, Inc. filed, at the same time as this filing, financial statements for the year ended December 31, 2017 with the Commission pursuant to Rule 6a-2(b)(1) under the Securities Exchange Act of 1934.
  4. Cboe BZX Exchange, Inc. filed, at the same time as this filing, financial statements for the year ended December 31, 2017 with the Commission pursuant to Rule 6a-2(b)(1) under the Securities Exchange Act of 1934.
  5. Cboe BYX Exchange, Inc. filed, at the same time as this filing, financial statements for the year ended December 31, 2017 with the Commission pursuant to Rule 6a-2(b)(1) under the Securities Exchange Act of 1934.
  6. Cboe EDGA Exchange, Inc. filed, at the same time as this filing, financial statements for the year ended December 31, 2017 with the Commission pursuant to Rule 6a-2(b)(1) under the Securities Exchange Act of 1934.

**Cboe Exchange, Inc.**

(formerly known as Chicago Board Options Exchange, Incorporated.)

Financial Statements

As of and for the Year ended December 31, 2017

(with Independent Auditors' Report Thereon)



**Deloitte & Touche LLP**  
111 South Wacker Drive  
Chicago, IL 60606-4301  
USA

Tel: +1 312 486 1000  
Fax: +1 312 486 1486  
[www.deloitte.com](http://www.deloitte.com)

## **INDEPENDENT AUDITORS' REPORT**

To the Board of Directors of Cboe Exchange, Incorporated:

We have audited the accompanying financial statements of Cboe Exchange, Incorporated (the "Company") (a wholly-owned subsidiary of Cboe Global Markets, Inc.), which comprise the balance sheet as of December 31, 2017, and the related statements of income, stockholder's equity, and cash flows for the year then ended, and the related notes to the financial statements.

### **Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditors' Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Cboe Exchange, Incorporated as of December 31, 2017, and the results of its operations and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

**Choe Exchange, Inc.**  
**Balance Sheet**  
**December 31, 2017**

(in thousands, except share amounts)	December 31, 2017
<b>Assets</b>	
<b>Current Assets:</b>	
Cash and cash equivalents	\$ 19,468
Accounts receivable—Net of allowances of \$173	61,579
Marketing fee receivable	7,116
Other prepaid expenses	2,724
Other current assets	123
<b>Total Current Assets</b>	<b><u>91,010</u></b>
<b>Investments</b>	<b><u>42,795</u></b>
<b>Property and Equipment:</b>	
Furniture and equipment	88,498
Less accumulated depreciation and amortization	<u>(73,605)</u>
<b>Total Property and Equipment - Net</b>	<b><u>14,893</u></b>
<b>Other Assets:</b>	
Due from related parties	263,693
Software development work in progress	4,482
Data processing software and other assets—Net of accumulated amortization of \$173,923	29,755
Deferred tax asset	<u>7,633</u>
<b>Total Other Assets—Net</b>	<b><u>305,563</u></b>
<b>Total</b>	<b><u>\$ 454,261</u></b>
<b>Liabilities and Stockholder's Equity</b>	
<b>Current Liabilities:</b>	
Accounts payable and accrued liabilities	\$ 63,414
Marketing fee payable	7,811
Deferred revenue and other liabilities	12,249
Post-retirement medical benefits	<u>82</u>
<b>Total Current Liabilities</b>	<b><u>83,556</u></b>
<b>Long-term Liabilities:</b>	
Due to related parties	96,573
Post-retirement medical benefits - long term	1,845
Income taxes liability	40,486
Other long-term liabilities	<u>1,014</u>
<b>Total Long-term Liabilities</b>	<b><u>139,918</u></b>
<b>Total Liabilities</b>	<b><u>223,474</u></b>
<b>Stockholder's Equity:</b>	
Common stock, \$0.01 par value: 1,000 shares authorized and outstanding	—
Additional paid-in-capital	21,855
Retained earnings	209,648
Accumulated other comprehensive loss	<u>(716)</u>
<b>Total Stockholder's Equity</b>	<b><u>230,787</u></b>
<b>Total</b>	<b><u>\$ 454,261</u></b>

See notes to financial statements

**Cboe Exchange, Inc.**  
**Statement of Income**  
**For the Year ended December 31, 2017**

<u>(in thousands)</u>	<u>Year Ended</u> <u>December 31, 2017</u>
<b>Revenues:</b>	
Transaction fees	\$ 394,657
Access fees	41,954
Exchange services and other fees	31,353
Market data fees	15,840
Regulatory fees	50,209
Other revenue	14,896
<b>Total Revenues</b>	<b>548,909</b>
<b>Cost of Revenues:</b>	
Routing and clearing	13,302
Section 31 fees	14,250
Royalty fees	75,403
<b>Total Cost of Revenues:</b>	<b>102,955</b>
<b>Revenue Less Cost of Revenues:</b>	<b>445,954</b>
<b>Operating Expenses:</b>	
Compensation and benefits	110,078
Depreciation and amortization	30,822
Technology support services	15,424
Professional fees and outside services	41,783
Travel and promotional expenses	11,479
Facilities costs	14,773
Other expenses	2,862
<b>Total Operating Expenses</b>	<b>227,221</b>
<b>Operating Income</b>	<b>218,733</b>
<b>Other Income:</b>	
Investment and other income	6,598
Net gain from investments	1,382
<b>Total Other Income</b>	<b>7,980</b>
<b>Income Before Income Taxes</b>	<b>226,713</b>
Income tax provision	85,041
<b>Net Income</b>	<b>141,672</b>
<b>Comprehensive Income - net of tax</b>	
Post-retirement benefit obligation adjustment	46
<b>Comprehensive Income</b>	<b>\$ 141,718</b>

See notes to financial statements

**Cboe Exchange, Inc.**  
**Statement of Cash Flow**  
**For the Year ended December 31, 2017**

<b>(in thousands)</b>	<b>Year Ended December 31, 2017</b>
Cash Flows from Operating Activities:	
Net Income	\$ 141,672
Adjustments to reconcile net income to net cash flows provided by operating activities:	
Depreciation and amortization	30,822
Provision for deferred income taxes	(16,037)
Stock compensation	(23,207)
Changes in assets and liabilities:	
Accounts receivable	(5,203)
Marketing fee receivable	(431)
Income taxes receivable	331
Other prepaid expenses	454
Other current assets	(13)
Due from related parties	(108,756)
Accounts payable and accrued expenses	(391)
Marketing fee payable	593
Deferred revenue	10,757
Post-retirement medical benefits	30
Income taxes liability	(5,823)
Other long-term liabilities	(1,172)
<b>Net Cash Flows provided by Operating Activities</b>	<b><u>23,626</u></b>
Cash Flows from Investing Activities:	
Capital, software in-service and other assets expenditures	(11,465)
Investments	(53)
<b>Net Cash Flows used in Investing Activities</b>	<b><u>(11,518)</u></b>
Cash Flows from Financing Activities:	
Payment of dividends	(70,301)
<b>Net Cash Flows used in Financing Activities</b>	<b><u>(70,301)</u></b>
<b>Net Decrease in Cash and Cash Equivalents</b>	<b><u>(58,193)</u></b>
<b>Cash and Cash Equivalents at Beginning of Year</b>	<b><u>77,661</u></b>
<b>Cash and Cash Equivalents at End of Year</b>	<b><u>\$ 19,468</u></b>

See notes to financial statements

**Cboe Exchange, Inc.**  
**Statement of Stockholder's Equity**  
**For the Year ended December 31, 2017**

<u>(in thousands)</u>	<u>Common Stock</u>	<u>Additional Paid-In Capital</u>	<u>Retained Earnings</u>	<u>Accumulated Other Comprehensive Loss</u>	<u>Total Stockholder's Equity</u>
January 1, 2017	\$ —	\$ 22,165	\$ 138,277	\$ (762)	\$ 159,680
Cash dividends on common stock			(70,301)		(70,301)
Tax sharing allocation with the Parent		(310)			(310)
Net income			141,672		141,672
Post-retirement benefit obligation adjustment				46	46
December 31, 2017	<u>\$ —</u>	<u>\$ 21,855</u>	<u>\$ 209,648</u>	<u>\$ (716)</u>	<u>\$ 230,787</u>



**Cboe Exchange, Inc.**  
**NOTES TO FINANCIAL STATEMENTS**  
**As of and for the Year ended December 31, 2017**

**(1) Nature of Business**

Cboe Exchange, Inc. ("Cboe" or "the Company") operates a market that offers trading of exclusive options on various market indexes (index options), as well as on non-exclusive "multiply-listed" options, such as options on the stocks of individual corporations (equity options) and options on other exchange-traded products (ETP options), such as exchange-traded funds (ETF options) and exchange-traded notes (ETN options), and certain other index options.

In October 2017, the Parent of Cboe changed its legal name from CBOE Holdings, Inc. to Cboe Global Markets, Inc. ("the Parent"), and the Company's name was changed from Chicago Board Options Exchange, Incorporated. to Cboe Exchange, Inc.

**(2) Summary of Significant Accounting Policies**

**(a) *Basis of Presentation***

The accompanying financial statements for Cboe have been prepared from the separate records maintained by the Parent and may not necessarily be indicative of the conditions that would have existed or the results of operations if Cboe had been operated as an unaffiliated company. Portions of certain income and expenses represent allocations made from the Parent applicable to Cboe.

**(b) *Use of Estimates***

The preparation of financial statements in conformity with accounting principles generally accepted in the United States ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities and reported amounts of revenues and expenses. On an ongoing basis, management evaluates its estimates based upon historical experience, observance of trends, information available from outside sources and various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different conditions or assumptions.

**(c) *Cash and Cash Equivalents***

Cash and cash equivalents include highly liquid investments with maturities of three months or less from the date of purchase. The Company places its cash and cash equivalents with highly-rated financial institutions, limits the amount of credit exposure with any one financial institution and conducts ongoing evaluations of the creditworthiness of the financial institutions with which it does business; therefore concentrations of credit risk are limited. There are no redemption restrictions on the Company's invested cash balances.

**(d) *Accounts Receivable***

Accounts receivable consists primarily of transaction and regulatory fees from The Options Clearing Corporation ("OCC"), and the Company's share of distributable revenue receivable from Options Price Reporting Authority ("OPRA"). Accounts receivable are primarily collected through OCC, and are with large, highly-rated clearing firms; therefore concentrations of credit risk are limited. The Company has no financing-related receivables.

**(e) *Prepaid Expenses***

Prepaid expenses primarily consist of prepaid software maintenance and licensing expenses which are amortized over the respective periods.

**(f) *Investments***

Investments represent investments in OCC and Signal Trading Systems, LLC ("Signal Trading").

The investment in OCC is accounted for under the cost-method of accounting for investments.

The investments in Signal Trading is accounted for under the equity method.

Investments are periodically reviewed to determine whether any events or changes in circumstances indicate that the investments may be other than temporarily impaired. In the event of impairment, the Company would recognize a loss for the difference between the carrying amount and the estimated fair value of the investment.

**(g) *Property and Equipment***

Property and equipment are carried at cost, net of accumulated depreciation. Depreciation is calculated using the straight-line method, generally over three to five years. Leasehold improvements are amortized over the lesser of their estimated useful lives or the remaining term of the applicable leases.

**(h) *Software Development Work in Progress and Data Processing Software and Other Assets***

Cboe expenses software development costs as incurred during the preliminary project stage, while capitalizing costs incurred during the application development stage, which includes design, coding, installation and testing activities. Estimated useful lives are three to five years for internally developed and other data processing software and generally are five years or less for other assets.

**(i) *Due from Related Parties***

Consists primarily of amounts owed from related parties including the Parent, subsidiaries of the Parent and other related parties.

**(j) *Due to Related Parties***

Consists primarily of amounts owed to related parties including the Parent, subsidiaries of the Parent and other related parties.

**(k) *Employee Benefit Plans***

The funded status of a post-retirement benefit plan is recognized in the balance sheet and changes in that funded status are recognized in the year of change. Plan assets and obligations are measured at year end. The Company recognizes changes in actuarial gains and losses and prior service costs in the year in which the changes occur through accumulated other comprehensive loss as well as through the income statement, as applicable.

**(l) *Commitments and Contingencies—Litigation***

Cboe accrues loss contingencies when the loss is both probable and estimable. All legal costs incurred in connection with loss contingencies are expensed as service is provided.

**(m) *Revenue Recognition***

As of January 1, 2017, the Company adopted ASU 2014-09 Revenue from Contracts with Customers - Topic 606 and all subsequent ASUs that modified ASC 606. The Company elected to apply the ASU and all subsequent ASUs retrospectively, and the implementation of the guidance had no material impact on the measurement or recognition of revenue. The statement of income presents revenue at the disaggregated level for relevant revenue streams.

Revenue recognition policies for specific sources of revenue are discussed below:

**Transaction Fees:** Transaction fees are a function of three variables: (1) exchange fee rates; (2) trading volume; and (3) transaction mix between contract type. Transaction fees are assessed on a per contract basis and are considered earned upon the execution of a trade and are recognized on a trade date basis. Transaction fees are presented net of applicable volume discounts. In the event liquidity providers prepay for transaction fees, revenue is recognized based on the attainment of volume thresholds resulting in the amortization of the prepayment over the calendar year.

**Access Fees:** Access fees represent fees assessed to Trading Permit Holders for the opportunity to trade and use other related functions of Cboe. Access fees are recognized during the period the service is provided.

**Exchange Services and Other Fees:** Exchange services and other fees include system services, trading floor charges and application revenue. Exchange services and other fees are recognized during the period the service is provided.

**Market Data Fees:** Market data fees include income from OPRA. OPRA is a limited liability company consisting of fifteen-member exchanges and is authorized by the Securities and Exchange Commission ("SEC") to provide consolidated options information. OPRA income is allocated based upon the individual exchange's relative volume of total cleared options transactions. The Company receives monthly estimates of OPRA's distributable revenue and income is distributed on a quarterly basis.

**Regulatory Fees:** Regulatory fees are primarily based on the number of customer contracts traded on all U.S. options exchanges by Trading Permit Holders and are primarily recognized on a trade-date basis. Additionally, consistent with industry practice, the fees charged to customers are based on the fee set by the SEC per notional value of the transaction executed on the Company's markets and calculated and billed monthly. These fees are recognized by the exchanges that are responsible for the ultimate payment to the SEC, the exchanges are considered the principals in these transactions. Under Cboe rules, as required by the SEC, any revenue derived from regulatory fees and fines cannot be used for non-regulatory purposes.

**(n) *Cost of Revenues***

**Routing and Clearing:** Various rules require that U.S. options trade executions occur at the National Best Bid/Offer (NBBO) displayed by any exchange. Linkage order routing consists of the cost incurred to provide a service whereby Cboe delivers orders to other execution venues when there is a potential for obtaining a better execution price or when instructed to directly route an order to another venue by the order provider. The service affords exchange order flow providers an opportunity to obtain the best available execution price and may also result in cost benefits to those clients. Such an offering improves our competitive position and provides an opportunity to attract orders which would otherwise bypass our exchanges. The Company utilizes third-party brokers to facilitate such delivery.

**Section 31 Fees:** Exchanges under the authority of the SEC are assessed fees pursuant to the Exchange Act designed to recover the costs to the U.S. government of supervision and regulation of securities markets and securities professionals. The Company treats these fees as a pass-through charge to customers executing eligible listed cash equities and listed equity options trades. Accordingly, the Company recognizes the amounts that are charged under Section 31 as a cost of revenues and the corresponding amount that is charged to customers as regulatory transaction fees revenue. Since the regulatory transaction fees recorded in revenues are equal to the Section 31 fees recorded in cost of revenues, there is no impact on our operating income.

**Royalty fees:** Royalty fees primarily consist of license fees paid by the Company for the use of underlying indexes in our proprietary products usually based on contracts traded. The Company has licenses with the owners of the S&P 500 Index, S&P 100 Index and certain other S&P indexes, the FTSE Russell, DJIA, MSCI indexes, and certain other index products. This category also includes fees related to the dissemination of market data related to S&P indexes.

**(o) *Advertising Costs***

Advertising costs, including print advertising and production costs, product promotion campaigns and seminar, conference convention costs related to trade shows and other industry events are expensed as incurred or amortized over the respective period. Advertising costs are included in travel and promotional expenses in the statement of income.

**(p) *Income Taxes***

Deferred income taxes arise from temporary differences between the tax basis and book basis of assets and liabilities. A valuation allowance is recognized if it is anticipated that some or all of a deferred tax asset may not be realized.

The Company accounts for uncertainty in income taxes recognized in its financial statements by using a more-likely-than-not recognition threshold based solely on the technical merits of the position taken or expected to be taken. Interest and penalties are recorded within the provision for income taxes in Cboe's statement of income and are classified on the balance sheet with the related income taxes liability.

The results of the Company's operations are included in the Parent's income tax returns. Income taxes are allocated to the Company using the pro-rata method. Tax accounts are settled periodically in accordance with the tax sharing agreement in place with the Parent.

### (3) Investments

At December 31, 2017, Cboe's investments were comprised of the following (in thousands):

	<u>2017</u>
Investment in OCC	\$ 30,333
Investment in Signal Trading	12,462
Investments	<u>\$ 42,795</u>

Cboe holds a 20% investment in OCC which is accounted for under the cost-method of accounting for investments because of the Company's inability to exercise significant influence. On March 28, 2017, OCC declared a dividend in accordance with the policies adopted under its new capital plan. The Company's portion of the dividend, payable following issuance of OCC's financial statements for 2017, is \$5.3 million and is recorded under investment income in the Company's statement of income.

In May 2010, Cboe acquired a 50% interest in Signal Trading from FlexTrade Systems, Inc. ("FlexTrade"). The joint venture develops and markets a multi-asset front-end order entry system, known as "Pulse," which has a particular emphasis on options trading. The Company assists in the development of the terminals and provides marketing services to the joint venture, which is accounted for under the equity method. The Company accounts for the investment in Signal Trading under the equity method due to the substantive participating rights provided to the other limited liability company member, FlexTrade. During the year ended December 31, 2017, the Company recorded contributions to and equity earnings in Signal Trading of \$1.9 million and \$1.4 million, respectively. Additionally, the Company received distributions from Signal Trading of \$3.3 million which reduced the carrying value of the investment.

### (4) Related Party Transactions

The Company also records expenses allocated from the Parent and other affiliated subsidiaries of the Parent for various operating expenses. Similar results may not be achievable on an arm's length basis. The following table presents the Company's allocation of expenses from or to the Parent and other affiliated subsidiaries for the year ended December 31, 2017 (in thousands):

	<u>2017</u>
Compensation and benefits	\$ 23,207
Facilities costs	13,189
Salaries (allocated from Cboe)	(334)

### (5) Accounts Payable and Accrued Liabilities

At December 31, 2017, accounts payable and accrued liabilities consisted of the following (in thousands):

	<u>2017</u>
Compensation and benefit-related liabilities	\$ 25,617
Royalties	17,422
Accounts payable	978
Contract services (1)	6,570
Legal	1,427
Section 31 fees payable	5,621
Market Linkage	569
Other	5,210
Total	<u>\$ 63,414</u>

(1) Reflects costs primarily for certain regulatory functions and contract programming work related to projects that are in process.

#### (6) Deferred Revenue

The following table summarizes the activity in deferred revenue for the year ended December 31, 2017.

<u>(in thousands)</u>	<u>Balance at January 1, 2017</u>	<u>Cash Additions</u>	<u>Revenue Recognition</u>	<u>Balance at December 31, 2017</u>
Liquidity provider sliding scale	\$ —	\$ 19,200	\$ (14,400)	\$ 4,800
Other, net	1,492	7,620	(1,381)	7,731
Total deferred revenue	<u>\$ 1,492</u>	<u>\$ 26,820</u>	<u>\$ (15,781)</u>	<u>\$ 12,531</u>

Liquidity providers are eligible to participate in the sliding scale program, which involves prepayment of transaction fees, and receive reduced fees based on the achievement of certain volume thresholds within a month. The prepayment of 2017 transaction fees totaled \$19.2 million. This amount was amortized and recorded as transaction fees over the respective twelve month period.

#### (7) Income Taxes

Deferred tax assets consist of the following components as of December 31, 2017 (in thousands):

Deferred tax assets:	
Accrued expenses	\$ 7,098
Deferred revenue	3,256
Equity compensation	4,481
Unrecognized tax benefits	3,977
Other	745
Total deferred tax assets	<u>\$ 19,557</u>
Deferred tax liabilities:	
Investment in affiliates	(1,164)
Property, plant and equipment	(10,288)
Other	(472)
Total deferred tax liabilities	<u>\$ (11,924)</u>
Net deferred tax asset	<u>\$ 7,633</u>

The Company provides a valuation allowance against net deferred tax assets if, based on management's assessment of historical and projected future operating results and other available evidence, it is more likely than not that some or all of the

deferred tax assets will not be realized. Management believes it is more likely than not that the deferred tax assets will be realized based upon expectations of future taxable income.

The income tax provision for the year ended December 31, 2017 consists of the following (in thousands):

Current tax expense:	
Federal	\$ 90,045
State	11,033
Total current tax expense	<u>101,078</u>
Deferred income tax (benefit) expense:	
Federal	(12,445)
State	(3,592)
Total deferred tax (benefit) expense	<u>(16,037)</u>
Income tax provision	<u>\$ 85,041</u>

The income tax provision differs from the amount of income tax determined by applying the U.S. federal income tax rate to income before income tax provision for the year ended December 31, 2017 due to the following (in thousands):

Computed "expected" tax provision	\$ 79,349	35.0 %
(Decrease) increase in income tax resulting from:		
Section 199 benefits	(4,527)	(2.0)%
State income taxes	11,747	5.2 %
Impact of federal and state rate changes, net	4,716	2.1 %
Change of unrecognized tax benefits	(1,413)	(0.6)%
Dividends received deduction	(1,723)	(0.8)%
Tax credits	(1,000)	(0.5)%
Other	(2,108)	(0.9)%
Income tax provision	<u>\$ 85,041</u>	<u>37.5 %</u>

A reconciliation of the unrecognized tax benefits for the year ended December 31, 2017 is as follows (in thousands):

Balance at beginning of year	\$ 36,994
Additions for current year tax positions	6,721
Additions for prior year tax positions	4,545
Reductions for prior year tax positions	(14,304)
Reductions related to expirations of statute of limitations	—
Adjustments for accounting policy change	139
Settlements	—
Balance at end of year	<u>\$ 34,095</u>

The Company amended its tax sharing agreement with the Parent effective January 1, 2017 to switch from the separate return to pro rata basis of allocating income tax. The impact to the Company of amending the agreement was recorded to additional paid in capital.

At December 31, 2017, the Company had \$35.3 million of unrecognized tax benefits, net of federal benefit that, if recognized, would affect the effective tax rate. The Company had accrued interest and penalties of \$6.4 million related to uncertain tax positions at December 31, 2017. Total interest and penalties decreased by \$2.6 million in 2017.

On December 22, 2017 the U.S. enacted the Tax Cuts and Jobs Act (the “Jobs Act”). The Jobs Act significantly changes U.S. corporate income tax laws by, among other things, reducing the U.S. corporate income tax rate to 21% starting in 2018. The Company expects a significant reduction in its overall effective tax rate in 2018. In 2017, the Company recorded net tax expense of \$4.5 million associated with the impact of the Jobs Act due to the re-measurement of net deferred tax assets.

The Company’s open tax years are generally 2014 through 2017. The Company is currently under a U.S. federal income tax examination for tax years 2015 and 2016 and under income tax examinations in certain states. The Company believes the aggregate amount of any additional liabilities that may result from these examinations, if any, will not have a material adverse effect on the financial position, results of operations, or cash flows of the Company.

## (8) Fair Value Measurements

Fair value is the price that would be received upon sale of an asset or paid upon transfer of a liability in an orderly transaction between market participants at the measurement date and in the principal or most advantageous market for that asset or liability. The fair value should be calculated based on assumptions that market participants would use in pricing the asset or liability, not on assumptions specific to the entity. In addition, the fair value of liabilities should include consideration of non-performance risk, including the Company’s own credit risk.

Cboe applied Financial Accounting Standards Board ASC 820, *Fair Value Measurement and Disclosure*, which provides guidance for using fair value to measure assets and liabilities by defining fair value and establishing the framework for measuring fair value. ASC 820 applies to financial and nonfinancial instruments that are measured and reported on a fair value basis. The three-level hierarchy of fair value measurements is based on whether the inputs to those measurements are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect Cboe’s market assumptions. The fair-value hierarchy requires the use of observable market data when available and consists of the following levels:

- Level 1—Unadjusted inputs based on quoted markets for identical assets or liabilities.
- Level 2—Observable inputs, either direct or indirect, not including Level 1, corroborated by market data or based upon quoted prices in non-active markets.
- Level 3—Unobservable inputs that reflect management’s best assumptions of what market participants would use in valuing the asset or liability.

The following table summarizes financial assets that are measured at fair value on a recurring basis in the balance sheet as of December 31, 2017. The Company holds no financial liabilities that are measured at fair value on a recurring basis.

(in thousands)	Level 1	Level 2	Level 3	Total
Assets at fair value:				
Cash and cash equivalents	\$ 16,968	\$ —	\$ —	\$ 16,968
Money market funds	2,500	—	—	2,500
Total assets at fair value at December 31, 2017	<u>\$ 19,468</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 19,468</u>

## (9) Commitments and Contingencies

As of December 31, 2017, Cboe was subject to the various legal proceedings and claims discussed below, as well as certain other legal proceedings and claims that have not been fully resolved and that have arisen in the ordinary course of business.

## *SIFMA*

Securities Industry Financial Markets Association (“SIFMA”) has filed a number of denial of access applications with the SEC to set aside proposed rule changes to establish or modify fees for Cboe market data products and related services. Each application is being held in abeyance pending a decision on a separate SIFMA denial of access application held before an SEC's administrative law judge (“ALJ”) regarding fees proposed by NASDAQ and the NYSE for their respective market data products. On June 1, 2016, the ALJ issued a decision rejecting SIFMA's denial of access challenge to the NASDAQ and NYSE fees at issue. On July 19, 2016, SIFMA petitioned the SEC for review of the ALJ decision. An adverse ruling in that matter or a subsequent appeal could adversely affect exchange market data fees.

## *Other*

As a self-regulatory organization under the jurisdiction of the SEC, the Company is subject to routine reviews and inspections by the SEC.

The Company is also currently a party to various other legal proceedings in addition to those already mentioned. Management does not believe that the outcome of any of these other reviews, inspections or other legal proceedings will have a material impact on the Company's financial position, results of operations or cash flows.

## **(10) Subsequent Events**

In February 2018, Cboe entered into a closing agreement with a state tax authority for the income tax examination of tax years 2007 through 2014 (the “Closing Agreement”). Pursuant to the terms of the Closing Agreement, Cboe paid additional tax and interest of \$0.8 million. At December 31, 2017, Cboe had recorded a gross liability for the related state tax uncertainties of approximately \$6.9 million. As a result of the Closing Agreement in the first quarter of 2018, Cboe recorded a net tax benefit of approximately \$4.6 million

## *VIX Litigation*

On March 20, 2018, a putative class action complaint captioned *Tomasulo v. Cboe Exchange, Inc., et al.*, No. 18-cv-02025 was filed in federal district court for the Northern District of Illinois alleging that the Company intentionally designed its products, operated its platforms, and formulated the method for calculating VIX and the Special Opening Quotation, (i.e., the special VIX value designed by the Company and calculated on the settlement date of VIX derivatives prior to the opening of trading), in a manner that could be collusively manipulated by a group of entities named as John Doe defendants. A number of similar putative class actions, some of which do not name the Company as a party, have been filed in federal court in Illinois and New York on behalf of investors in certain volatility-related products. On June 14, 2018, the Judicial Panel on Multidistrict Litigation centralized the class actions in the federal district court for the Northern District of Illinois. The cases assert causes of action for alleged violations of the Sherman Act, the Commodity Exchange Act and/or the Securities Exchange Act. Plaintiffs seek damages in an unspecified amount, and relief including treble damages, punitive damages and/or restitution, injunctive and equitable relief, pre and post judgment interest, attorneys' fees and expenses and such other relief as the court may deem just and proper. Given the preliminary nature of the proceedings, the Company is still evaluating the facts underlying the complaints, however, the Company currently believes that the claims are without merit and intends to litigate the matter vigorously. The Company is unable to estimate what, if any, liability may result from this litigation.

The Company has evaluated subsequent events through June 28, 2018, the date at which the financial statements were available to be issued and determined that there are no other events that would require disclosure in, or adjustment to, the financial statements as of and for the year ended December 31, 2017.



**Cboe C2 Exchange, Inc.**

(formerly known as C2 Options Exchange, Incorporated.)

Financial Statements

As of and for the Year ended December 31, 2017

(with Independent Auditors' Report Thereon)



**Deloitte & Touche LLP**  
111 South Wacker Drive  
Chicago, IL 60606-4301  
USA

Tel: +1 312 486 1000  
Fax: +1 312 486 1486  
[www.deloitte.com](http://www.deloitte.com)

## **INDEPENDENT AUDITORS' REPORT**

To the Board of Directors of Cboe Exchange, Incorporated:

We have audited the accompanying financial statements of Cboe Exchange, Incorporated (the "Company") (a wholly-owned subsidiary of Cboe Global Markets, Inc.), which comprise the balance sheet as of December 31, 2017, and the related statements of income, stockholder's equity, and cash flows for the year then ended, and the related notes to the financial statements.

### **Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditors' Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Cboe Exchange, Incorporated as of December 31, 2017, and the results of its operations and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

**Cboe C2 Exchange, Inc.**  
**Balance Sheet**  
**December 31, 2017**

(in thousands, except share amounts)	<b>December 31, 2017</b>
<b>Assets</b>	
<b>Current Assets:</b>	
Cash and cash equivalents	\$ 3,343
Accounts receivable	4,368
Other prepaid expenses	<u>476</u>
<b>Total Current Assets</b>	<b><u>8,187</u></b>
<b>Equipment:</b>	
Data processing hardware and other equipment	9,712
Less accumulated depreciation and amortization	<u>(8,651)</u>
<b>Total Equipment - Net</b>	<b><u>1,061</u></b>
<b>Other Assets:</b>	
Due from related parties	5,971
Data processing software and other assets (less accumulated amortization of \$12,690)	593
Deferred tax asset	2,611
Notes receivable - long-term	<u>1,000</u>
<b>Total Other Assets—Net</b>	<b><u>10,175</u></b>
<b>Total</b>	<b><u>\$ 19,423</u></b>
<b>Liabilities and Stockholder's Equity</b>	
<b>Current Liabilities:</b>	
Accounts payable and accrued expenses	\$ 2,053
Deferred revenue	<u>1,062</u>
<b>Total Current Liabilities</b>	<b><u>3,115</u></b>
<b>Total Liabilities</b>	<b><u>3,115</u></b>
<b>Stockholder's Equity:</b>	
Common stock, \$0.01 par value: 1,000 shares authorized and outstanding	—
Additional paid-in-capital	48,387
Retained deficit	<u>(32,079)</u>
<b>Total Stockholder's Equity</b>	<b><u>16,308</u></b>
<b>Total</b>	<b><u>\$ 19,423</u></b>

See notes to financial statements

**Cboe C2 Exchange, Inc.**  
**Statement of Operations**  
**For the Year ended December 31, 2017**

(in thousands)	Year Ended December 31, 2017
<b>Revenues:</b>	
Transaction fees	\$ 73,174
Access fees	2,889
Exchange services and other fees	3,625
Market data fees	2,260
Regulatory fees	6,898
Other revenue	27
<b>Total Revenues</b>	<b>88,873</b>
 <b>Cost of Revenues:</b>	
Liquidity payments	60,309
Routing and clearing	743
Section 31 fees	2,098
Royalty fees	1,117
Other	—
<b>Total cost of revenues</b>	<b>64,267</b>
<b>Revenue Less Cost of Revenues:</b>	<b>24,606</b>
 <b>Operating Expenses:</b>	
Compensation and benefits	2,256
Depreciation and amortization	2,349
Technology support services	4,032
Professional fees and outside services	7,361
Travel and promotional expenses	41
Facilities costs	365
Other expenses	22
<b>Total Operating Expenses</b>	<b>16,426</b>
 <b>Operating Income</b>	 <b>8,180</b>
<b>Other Income:</b>	
Investment and other income	8
<b>Total Other Income</b>	<b>8</b>
<b>Income Before Income Taxes</b>	<b>8,188</b>
Income tax provision	4,339
<b>Net Income</b>	<b>\$ 3,849</b>

See notes to financial statements

**Cboe C2 Exchange, Inc.**  
**Statement of Cash Flow**  
**For the Year ended December 31, 2017**

<b>(in thousands)</b>	<b>Year Ended December 31, 2017</b>
<b>Cash Flows from Operating Activities:</b>	
Net Income	\$ 3,849
Adjustments to reconcile net income to net cash flows used in operating activities:	
Depreciation and amortization	2,349
Provision for deferred income taxes	818
Stock-based compensation	94
Changes in assets and liabilities:	
Accounts receivable	(1,568)
Income taxes receivable	32
Prepaid expenses	(26)
Due to/(from) other related parties	(5,918)
Accounts payable and accrued expenses	501
Deferred revenue and other liabilities	155
Income taxes payable	(118)
Income taxes liability	3,260
<b>Net Cash Flows provided by Operating Activities</b>	<b><u>3,428</u></b>
<b>Cash Flows from Investing Activities:</b>	
Capital and other assets expenditures	(259)
<b>Net Cash Flows used in Investing Activities</b>	<b><u>(259)</u></b>
<b>Net Increase in Cash and Cash Equivalents</b>	<b><u>3,169</u></b>
<b>Cash and Cash Equivalents at Beginning of Year</b>	<b><u>174</u></b>
<b>Cash and Cash Equivalents at End of Year</b>	<b><u>\$ 3,343</u></b>

See notes to financial statements

**Cboe C2 Exchange, Inc.**  
**Statement of Stockholder's Equity**  
**For the Year ended December 31, 2017**

<u>(in thousands)</u>	<u>Common Stock</u>	<u>Additional Paid in Capital</u>	<u>Retained Deficit</u>	<u>Total Stockholder's Equity</u>
January 1, 2017	\$ —	45,000	\$ (35,928)	\$ 9,072
Tax sharing allocation with the Parent		3,387		3,387
Net income			3,849	3,849
December 31, 2017	<u>\$ —</u>	<u>\$ 48,387</u>	<u>\$ (32,079)</u>	<u>\$ 16,308</u>

See notes to financial statements

**Cboe C2 Exchange, Inc.**  
**NOTES TO FINANCIAL STATEMENTS**  
**As of and for the Year ended December 31, 2017**

**(1) Nature of Business**

Cboe C2 Exchange, Inc. ("C2" or "the Company") operates a market that offers trading of options, such as options on the stocks of individual corporations (equity options), options on other exchange-traded products (ETP options), such as exchange-traded funds (ETF options) and exchange-traded notes (ETN options), and certain other index options.

In October 2017, the Parent of C2 changed its legal name from CBOE Holdings, Inc. to Cboe Global Markets, Inc. ("the Parent"), and the Company's name was changed from C2 Options Exchange, Incorporated. to Cboe C2 Exchange, Inc.

**(2) Summary of Significant Accounting Policies**

**(a) Basis of Presentation**

The accompanying financial statements for C2 have been prepared from the separate records maintained by the Parent and may not necessarily be indicative of the conditions that would have existed or the results of operations if C2 had been operated as an unaffiliated company. Portions of certain income and expenses represent allocations made from the Parent applicable to C2 as a whole.

**(b) Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities and reported amounts of revenues and expenses. On an ongoing basis, management evaluates its estimates based upon historical experience, observance of trends, information available from outside sources and various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different conditions or assumptions.

**(c) Cash and Cash Equivalents**

Cash and cash equivalents include highly liquid investments with maturities of three months or less from the date of purchase. There are no redemption restrictions on the Company's invested cash balances.

**(d) Accounts Receivable**

Accounts receivable consists primarily of transaction and regulatory fees from The Options Clearing Corporation ("OCC"), and C2's share of distributable revenue receivable from the Options Price Reporting Authority ("OPRA"). Accounts receivable are primarily collected through OCC, and are with large, highly-rated clearing firms; therefore concentrations of credit risk are limited. The Company has no financing-related receivables.

**(e) Prepaid Expenses**

Prepaid expenses primarily consist of prepaid software maintenance which are amortized over the respective period.

**(f) Equipment**

Equipment consists primarily of data processing hardware and other equipment carried at cost, net of accumulated depreciation. Depreciation is calculated using the straight-line method, generally over three to five years.

**(g) Software Development Work in Progress and Data Processing Software and Other Assets**

C2 expenses software development costs as incurred during the preliminary project stage, while capitalizing costs incurred during the application development stage, which includes design, coding, installation and testing activities.

Estimated useful lives are three to five years for internally developed and other data processing software and generally are five years or less for other assets.

**(h) *Notes Receivable - Long-Term***

Long-term receivable due from OCC which was issued as a condition to C2 becoming and remaining a participant exchange of OCC.

**(i) *Due from related parties***

Consists primarily of amounts owed from related parties including the Parent and subsidiaries of Parent.

**(j) *Revenue Recognition***

As of January 1, 2017, the Company adopted ASU 2014-09 Revenue from Contracts with Customers - Topic 606 and all subsequent ASUs that modified ASC 606. The Company elected to apply the ASU and all subsequent ASUs retrospectively, and the implementation of the guidance had no material impact on the measurement or recognition of revenue. The statement of income presents revenue at the disaggregated level for relevant revenue streams.

Revenue recognition policies for specific sources of revenue are discussed below:

**Transaction Fees and Liquidity Payments:** Transaction fees are a function of three variables: (1) exchange fee rates; (2) trading volume; and (3) transaction mix between contract type. Transaction fees are assessed on a per contract basis and are considered earned upon the execution of a trade and are recognized on a trade date basis and recorded in revenues. The Company also pays liquidity payments to customers based on its published fee schedules which is considered consideration paid to customers and is recorded in cost of revenues.

**Access Fees:** Access fees represent fees assessed to Trading Permit Holders for the opportunity to trade and use other related functions of C2. Access fees are recognized during the period the service is provided.

**Exchange Services and Other Fees:** Exchange services and other fees include system services and application revenue. Exchange services and other fees are recognized during the period the service is provided.

**Market Data Fees:** Market data fees include OPRA income. OPRA is a limited liability company consisting of representatives of the member exchanges and is authorized by the Securities and Exchange Commission ("SEC") to provide consolidated options information. OPRA income is allocated based upon the individual exchange's relative volume of total cleared options transactions. C2 receives monthly estimates of OPRA's distributable revenue and income is distributed on a quarterly basis.

**Regulatory Fees:** Regulatory fees are primarily based on the number of customer contracts traded on all U.S. options exchanges by Trading Permit Holders and are primarily recognized on a trade-date basis. Additionally, consistent with industry practice, the fees charged to customers are based on the fee set by the SEC per notional value of the transaction executed on the Company's markets and calculated and billed monthly. These fees are recognized by the exchanges that are responsible for the ultimate payment to the SEC, the exchanges are considered the principals in these transactions. Under C2 rules, as required by the SEC, any revenue derived from regulatory fees and fines cannot be used for non-regulatory purposes.

**(k) *Cost of Revenues***

**Liquidity Payments:** Liquidity payments are directly correlated to the volume of securities traded on our markets. The Company records the liquidity rebates paid to market participants providing liquidity as cost of revenue.

**Routing and Clearing:** Various rules require that U.S. options occur at the National Best Bid/Offer (NBBO) displayed by any exchange. Linkage order routing consists of the cost incurred to provide a service whereby Cboe delivers orders to other execution venues when there is a potential for obtaining a better execution price or when instructed to directly route an order to another venue by the order provider. The service affords exchange order flow providers an opportunity to obtain the best available execution price and may also result in cost benefits to those



clients. Such an offering improves our competitive position and provides an opportunity to attract orders which would otherwise bypass our exchanges. The Company utilizes third-party brokers to facilitate such delivery.

**Section 31 Fees:** Exchanges under the authority of the SEC are assessed fees pursuant to the Exchange Act designed to recover the costs to the U.S. government of supervision and regulation of securities markets and securities professionals. The Company treats these fees as a pass-through charge to customers executing eligible listed cash equities and listed equity options trades. Accordingly, the Company recognizes the amounts that are charged under Section 31 as a cost of revenues and the corresponding amount that is charged to customers as regulatory transaction fees revenue. Since the regulatory transaction fees recorded in revenues are equal to the Section 31 fees recorded in cost of revenues, there is no impact on our operating income.

**Royalty fees:** Royalty fees primarily consist of license fees paid by the Company for the use of underlying indexes in proprietary products usually based on contracts traded. The Company has licenses with the owners of the S&P 500 Index, S&P 100 Index and certain other S&P indexes, the FTSE Russell, DJIA, MSCI indexes, and certain other index products. This category also includes fees related to the dissemination of market data related to S&P indexes.

**(l) Income Taxes**

Deferred income taxes arise from temporary differences between the tax basis and book basis of assets and liabilities. A valuation allowance is recognized if it is anticipated that some or all of a deferred tax asset may not be realized.

The Company accounts for uncertainty in income taxes recognized in its financial statements by using a more-likely-than-not recognition threshold based solely on the technical merits of the position taken or expected to be taken. Interest and penalties are recorded within the provision for income taxes in C2's statement of operations and are classified on the balance sheet with the related liability for unrecognized tax benefits.

The results of the Company's operations are included in the Parent's income tax returns. Income taxes are allocated to the Company using the pro-rata method. Tax accounts are settled periodically in accordance with the tax sharing agreement in place with the Parent.

**(3) Related Party Transactions**

The Company also records expenses allocated from the Parent and other affiliated subsidiaries of the Parent for various operating expenses. Similar results may not be achievable on an arm's length basis. The following table presents the Company's allocation of expenses from the Parent and other affiliated subsidiaries for the year ended December 31, 2017 (in thousands):

	<u>2017</u>
Stock-based compensation	\$ 94
Facilities costs	365
Salaries (allocated to C2)	334
Legal fees	83

**(4) Accounts Payable and Accrued Expenses**

At December 31, 2017, accounts payable and accrued expenses consisted of the following (in thousands):

	<u>2017</u>
Compensation and benefit related liabilities	\$ 170
Contract services	186
Royalties	294
Accounts payable	—
Section 31 fees payable	822
Market linkage	54
Other	527
Total	<u>\$ 2,053</u>

#### (5) Deferred Revenue

The following tables summarize the activity in deferred revenue for the year ended December 31, 2017.

<u>(in thousands)</u>	<u>Balance at January 1, 2017</u>	<u>Cash Additions</u>	<u>Revenue Recognition</u>	<u>Balance at December 31, 2017</u>
Options Regulatory Fee (1)	\$ 902	\$ 318	\$ (158)	\$ 1,062
Other, net	5	—	(5)	—
Total deferred revenue	<u>\$ 907</u>	<u>\$ 318</u>	<u>\$ (163)</u>	<u>\$ 1,062</u>

(1) Like nearly all of the other options exchanges, C2 assesses an Options Regulatory Fee to each Permit Holder for all options transactions executed or cleared by the Permit Holder that are cleared by OCC in the customer range, regardless of the exchange on which the transaction occurs. The fee is collected indirectly from Permit Holders through their clearing firms by OCC on behalf of C2. Under C2 rules, as required by the SEC, any revenue derived from regulatory fees and fines cannot be used for non-regulatory purposes. The amount in deferred revenue represents the fees collected that are in excess of regulatory expenses.

#### (6) Income Taxes

Deferred tax assets consist of the following components as of December 31, 2017:

Deferred tax assets:	
Organizational costs	\$ 2,567
State NOLs	71
Deferred revenue	299
Other	37
Total deferred tax assets	<u>\$ 2,974</u>
Deferred tax liabilities:	
Prepaid expenses	(148)
Property, plant and equipment	(215)
Total deferred tax liabilities	<u>\$ (363)</u>
Net deferred tax asset	<u>\$ 2,611</u>

The Company provides a valuation allowance against net deferred tax assets if, based on management's assessment of historical and projected future operating results and other available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. The Company released its valuation allowance during 2017 because management believes it is more likely than not that the deferred tax assets will be realized based upon expectations of future taxable income.

The income tax provision for the year ended December 31, 2017 consists of the following:

Current tax expense:	
Federal	\$ 2,743
State	778
Total current tax expense	<u>3,521</u>
Deferred income tax expense (benefit):	
Federal	971
State	<u>(153)</u>
Total deferred tax (benefit) expense	818
Income tax provision	<u>\$ 4,339</u>

The income tax provision differs from the amount of income tax determined by applying the U.S. federal income tax rate to income before income tax provision for the year ended December 31, 2017 due to the following:

Computed "expected" tax provision	\$ 2,866	35.0 %
(Decrease) increase in income tax resulting from:		
Section 199 benefits	(168)	(2.1)%
State income taxes	473	5.8 %
Impact of federal and state rate changes, net	1,096	13.4 %
Change of unrecognized tax benefits	112	1.4 %
Other	<u>(40)</u>	<u>(0.5)%</u>
Income tax provision	<u>\$ 4,339</u>	<u>53.0 %</u>

A reconciliation of the unrecognized tax benefits for the year ended December 31, 2017 is as follows:

Balance at beginning of year	\$ 115
Additions for current year tax positions	157
Additions for prior year tax positions	82
Reductions for prior year tax positions	(68)
Reductions related to expirations of statute of limitations	—
Adjustments for accounting policy change	(13)
Settlements	—
Balance at end of year	<u>\$ 273</u>

The Company amended its tax sharing agreement with the Parent effective January 1, 2017 to switch from the separate return to pro rata basis of allocating income tax. The impact to the Company of amending the agreement was booked to additional paid in capital which primarily relates to changes in the valuation allowance required.

At December 31, 2017, the Company had \$0.3 million of unrecognized tax benefits, net of federal benefit that, if recognized, would affect the effective tax rate. The Company had accrued interest and penalties of \$5 thousand related to uncertain tax positions at December 31, 2017. Total interest and penalties increased by \$4 thousand in 2017.

On December 22, 2017 the U.S. enacted the Tax Cuts and Jobs Act (the "Jobs Act"). The Jobs Act significantly changes U.S. corporate income tax laws by, among other things, reducing the U.S. corporate income tax rate to 21% starting in 2018. The Company expects a significant reduction in its overall effective tax rate in 2018. In 2017, the Company recorded net tax expense of \$1.0 million associated with the impact of the Jobs Act due to the re-measurement of net deferred tax assets.

The Company's open tax years are generally 2014 through 2017. The Company is currently under a U.S. federal income tax examination for tax years 2015 and 2016 and under income tax examinations in certain states. The Company believes the

aggregate amount of any additional liabilities that may result from these examinations, if any, will not have a material adverse effect on the financial position, results of operations, or cash flows of the Company.

## (7) Fair Value Measurements

Fair value is the price that would be received upon sale of an asset or paid upon transfer of a liability in an orderly transaction between market participants at the measurement date and in the principal or most advantageous market for that asset or liability. The fair value should be calculated based on assumptions that market participants would use in pricing the asset or liability, not on assumptions specific to the entity. In addition, the fair value of liabilities should include consideration of non-performance risk, including the Company's own credit risk.

Cboe applied ASC 820, *Fair Value Measurement and Disclosure*, which provides guidance for using fair value to measure assets and liabilities by defining fair value and establishing the framework for measuring fair value. ASC 820 applies to financial and nonfinancial instruments that are measured and reported on a fair value basis. The three-level hierarchy of fair value measurements is based on whether the inputs to those measurements are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company's market assumptions. The fair-value hierarchy requires the use of observable market data when available and consists of the following levels:

The fair-value hierarchy requires the use of observable market data when available and consists of the following levels:

- Level 1—Unadjusted inputs based on quoted markets for identical assets or liabilities.
- Level 2—Observable inputs, either direct or indirect, not including Level 1, corroborated by market data or based upon quoted prices in non-active markets.
- Level 3—Unobservable inputs that reflect management's best assumptions of what market participants would use in valuing the asset or liability.

The following table summarizes financial assets that are measured at fair value on a recurring basis in the balance sheet as of December 31, 2017. C2 holds no financial liabilities that are measured at fair value on a recurring basis.

(amounts in thousands)	Level 1	Level 2	Level 3	Total
Assets at fair value:				
Cash and cash equivalents	\$ 3,343	\$ —	\$ —	\$ 3,343
Note receivable - long-term	—	—	1,000	1,000
Total assets at fair value at December 31, 2017	<u>\$ 3,343</u>	<u>\$ —</u>	<u>\$ 1,000</u>	<u>\$ 4,343</u>

## (8) Commitments and Contingencies

As of December 31, 2017, the end of the period covered by this report, C2 was subject to the legal proceeding discussed below, as well as certain other legal proceedings and claims that have not been fully resolved and that have arisen in the ordinary course of business.

### *SIFMA*

Securities Industry Financial Markets Association ("SIFMA") has filed a number of denial of access applications with the SEC to set aside proposed rule changes to establish or modify fees for C2 market data products and related services. Each application is being held in abeyance pending a decision on a separate SIFMA denial of access application held before an SEC's administrative law judge ("ALJ") regarding fees proposed by NASDAQ and the NYSE for their respective market data products. On June 1, 2016, the ALJ issued a decision rejecting SIFMA's denial of access challenge to the NASDAQ and NYSE

fees at issue. On July 19, 2016, SIFMA petitioned the SEC for review of the ALJ decision. An adverse ruling in that matter or a subsequent appeal could adversely affect exchange market data fees.

*Other*

As a self-regulatory organization under the jurisdiction of the SEC, the Company is subject to routine reviews and inspections by the SEC.

The Company is also currently a party to various other legal proceedings in addition to those already mentioned. Management does not believe that the outcome of any of these other reviews, inspections or other legal proceedings will have a material impact on the Company's financial position, results of operations or cash flows.

**(10) Subsequent Events**

C2 has evaluated subsequent events through June 28, 2018, the date at which the financial statements were available to be issued and determined that there are no other events that would require disclosure in, or adjustment to, the financial statements as of and for the year ended December 31, 2017.

**Cboe BZX Exchange, Inc.**

(formerly known as Bats BZX Exchange, Inc.)

Financial Statements

As of and for the Year ended December 31, 2017

(With Independent Auditors' Report Thereon)

**Cboe BZX Exchange, Inc.**

**Table of Contents**

	<b>Page</b>
Independent Auditors' Report	
Financial Statements:	
Statement of Financial Condition	1
Statement of Income	2
Statement of Changes in Stockholder's Deficit	3
Statement of Cash Flows	4
Notes to Financial Statements	5



**Deloitte & Touche LLP**  
111 South Wacker Drive  
Chicago, IL 60606-4301  
USA

Tel: +1 312 486 1000  
Fax: +1 312 486 1486  
[www.deloitte.com](http://www.deloitte.com)

## **INDEPENDENT AUDITORS' REPORT**

To the Board of Directors of  
Cboe BZX Exchange, Inc.:

We have audited the accompanying financial statements of Cboe BZX Exchange, Inc. (the "Company"), which comprise the statement of financial condition as of December 31, 2017, and the related statements of income, changes in stockholder's deficit, and cash flows for the year then ended, and the related notes to the financial statements.

### **Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditors' Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Cboe BZX Exchange, Inc. as of December 31, 2017, and the results of its operations and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.



**Cboe BZX Exchange, Inc.**  
Statement of Financial Condition  
December 31, 2017  
(In thousands)

**Assets**

Current assets:		
Accounts receivable	\$	40,966
Other receivables		<u>2,810</u>
Total current assets		43,776
Property and equipment, net		88
Deferred income taxes		3,010
Other assets		<u>3,225</u>
Total assets	\$	<u><u>50,099</u></u>

**Liabilities and Stockholder's Deficit**

Current liabilities:		
Accounts payable and accrued liabilities	\$	13,417
Section 31 fees payable		35,235
Intercompany payable		29,921
Other current liabilities		<u>408</u>
Total current liabilities		78,981
Unrecognized tax benefits		13,857
Stockholder's deficit:		
Accumulated deficit		<u>(42,739)</u>
Total stockholder's deficit		<u>(42,739)</u>
Total liabilities and stockholder's deficit	\$	<u><u>50,099</u></u>

See accompanying notes to financial statements.

**Cboe BZX Exchange, Inc.**  
Statement of Income  
Year ended December 31, 2017  
(In thousands)

Revenues:	
Transaction fees	\$ 538,676
Access fees	28,942
Market data fees	55,640
Exchange services and other fees	5,780
Regulatory transaction fees	109,019
Other revenue	<u>1,659</u>
Total revenues	739,716
Cost of revenues:	
Liquidity payments	480,773
Section 31 fees	106,896
Routing and clearing	<u>17,699</u>
Total cost of revenues	<u>605,368</u>
Revenues less cost of revenues	134,348
Operating expenses:	
Compensation and benefits	19,094
Management fee	4,394
Depreciation	141
Technology support services	5,408
Professional fees and outside services	5,193
Travel and promotional expenses	1,459
Facilities costs	961
Other expenses	<u>373</u>
Total operating expenses	<u>37,023</u>
Operating income	97,325
Non-operating income:	
Interest income	<u>8</u>
Income before income tax provision	97,333
Income tax provision	<u>41,277</u>
Net income	<u><u>\$ 56,056</u></u>

See accompanying notes to financial statements.

**Cboe BZX Exchange, Inc.**  
Statement of Changes in Stockholder's Deficit  
Year ended December 31, 2017  
(In thousands)

	<b>Accumulated deficit</b>	<b>Total stockholder's deficit</b>
Balance at December 31, 2016	\$ (78,139)	\$ (78,139)
Distribution to Parent	(20,656)	(20,656)
Net income	56,056	56,056
Balance at December 31, 2017	\$ (42,739)	\$ (42,739)

See accompanying notes to financial statements.

**Cboe BZX Exchange, Inc.**  
Statement of Cash Flows  
Year ended December 31, 2017  
(In thousands)

Cash flows from operating activities:	
Net income	\$ 56,056
Adjustments to reconcile net income to net cash provided by operating activities:	
Depreciation	141
Deferred income taxes	1,341
Changes in assets and liabilities:	
Receivables	3,448
Intercompany payable	(36,785)
Other assets	(2,042)
Accounts payable and accrued liabilities	(7,479)
Unrecognized tax benefits	6,514
Section 31 fees payable	(494)
Other liabilities	(44)
	<hr/>
Net cash provided by operating activities	20,656
Cash flows from financing activities:	
Distribution to Parent	(20,656)
	<hr/>
Net cash used in financing activities	(20,656)
Increase in cash and cash equivalents	-
Cash and cash equivalents:	
Beginning of year	-
	<hr/>
End of year	\$ -
	<hr/> <hr/>

See accompanying notes to financial statements.

**Cboe BZX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

**(1) Nature of Operations**

Cboe BZX Exchange, Inc. (the Company or Cboe), a wholly owned subsidiary of Cboe Global Markets, Inc. (the Parent), is an electronic market for the trading of listed cash equity securities and listed equity options in the United States (U.S.). The Company is headquartered in the Chicago, Illinois area with additional offices in Kansas City, Missouri and New York, New York. In addition to equity and options trading, the Company also lists Exchange Traded Products (ETPs) and provides market data products to its member firms.

On February 28, 2017, the Company's then Parent was acquired by Cboe Global Markets, Inc. In October 2017, the Company's name was changed from Bats BZX Exchange, Inc. to Cboe BZX Exchange, Inc.

**(2) Summary of Significant Accounting Policies**

**(a) Basis of Presentation**

The accompanying financial statements for the Company have been prepared from the separate records maintained by the Parent and may not necessarily be indicative of the conditions that would have existed or the results of operations if the Company had been operated as an unaffiliated company. Portions of certain income and expenses represent allocations made from the Parent applicable to the Company as disclosed. See Note 3 for more information on related party transactions.

**(b) Principles of Accounting**

The Company follows accounting standards established by the Financial Accounting Standards Board (FASB) to report its financial condition, results of operations and cash flows. References to accounting principles generally accepted in the United States (GAAP) in these footnotes are to the FASB Accounting Standards Codification (ASC or Codification).

**(c) Use of Estimates**

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities as well as disclosure of the amounts of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates. Material estimates that are particularly susceptible to significant change in the near term include unrecognized tax benefits and the receivable for market data fees.

**(d) Cash and Cash Equivalents**

The Company's cash and cash equivalents are exposed to concentrations of credit risk. The Company maintains cash at various financial institutions and brokerage firms which, at times, may be in excess of the federal depository insurance limit. The Company's management regularly monitors these institutions and believes that the potential for future loss is remote. The Company considers all liquid investments with original or acquired maturities of three

**Cboe BZX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

months or less to be cash equivalents. The Company's operations are funded by its Parent through a centralized treasury function.

**(e) *Accounts Receivable***

Accounts receivable represent amounts due from the Company's member firms and market data distributors and are carried at cost. On a periodic basis, management evaluates the Company's receivables and determines if an allowance for uncollectible accounts receivable based on anticipated collections is required. In circumstances where a specific member firm's or market data distributor's inability to meet its financial obligations is probable, the Company records a specific provision for uncollectible accounts against amounts due to reduce the receivable to the amount the Company estimates will be collected.

**(f) *Property and Equipment, Net***

Property and equipment, net is stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated lives of the assets, generally ranging from three to seven years. Expenditures for repairs and maintenance are charged to expense as incurred.

Long-lived assets to be held and used are reviewed to determine whether any events or changes in circumstances indicate that the carrying amounts of the assets may not be recoverable. The Company bases this evaluation on such impairment indicators as the nature of the assets, the future economic benefit of the assets, any historical or future profitability measurements, as well as other external market conditions or factors that may be present. If such impairment indicators are present that would indicate that the carrying amount of any asset may not be recoverable, the Company determines whether an impairment has occurred through the use of an undiscounted cash flow analysis of the asset at the lowest level for which identifiable cash flows exist. In the event of impairment, the Company recognizes a loss for the difference between the carrying amount and the estimated fair value of the asset as measured using quoted market prices or, in the absence of quoted market prices, a discounted cash flow analysis.

**(g) *Income Taxes***

Deferred taxes are recorded on a liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carryforwards, and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax bases. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment. The results of the Company's operations are included in the Parent's income tax returns. Income taxes are allocated to the Company using the pro-rata method. Tax accounts are settled periodically in accordance with the tax sharing agreement in place with the Parent.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained upon examination by the taxing authorities, based upon the technical merits of the position. The tax benefit recognized in the financial statements from such a position is measured based on the largest benefit that has a greater than

**Cboe BZX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

50% likelihood of being realized upon ultimate settlement. Also, interest and penalties expense is recognized on the full amount of deferred benefits for uncertain tax positions. The Company's policy is to include interest and penalties related to unrecognized tax benefits in the income tax provision within the statement of income.

**(h) Revenue Recognition**

As of January 1, 2017, the Company adopted ASU 2014-09 Revenue from Contracts with Customers - Topic 606 and all subsequent ASUs that modified ASC 606. The Company elected to apply the ASU and all subsequent ASUs retrospectively, and the implementation of the guidance had no material impact on the measurement or recognition of revenue. The statement of income presents revenue at the disaggregated level for relevant revenue streams.

**Transaction Fees and Liquidity Payments**

Under the Company's "maker-taker" pricing model, a member posting an order (the liquidity maker) is paid a rebate (recorded in liquidity payments) for an execution occurring against that order, and a member executing against an order resting on the Company's book (the liquidity taker) is charged a fee (recorded in transaction fees). Transaction fees and liquidity payments are considered earned and incurred upon execution of a trade, are recognized on a trade-date basis and are recorded on a gross basis in revenues and cost of revenues.

**Access Fees**

Access fees represent fees assessed for the opportunity to trade, including fees for trading related functionality across all segments. These fees are billed monthly in accordance with the Company's published fee schedules and recognized on a monthly basis when the performance obligation is met. There is no remaining performance obligation after revenue is recognized.

**Exchange Services and Other Fees**

To facilitate trading, the Company offers technology services consisting primarily of physical connectivity related to the Company's electronic market that are earned and recognized on a monthly basis

**Market Data Fees**

Market data fees are earned from U.S. tape plans, including the Unlisted Trading Privileges Plan (UTP), the Consolidated Tape Association Plan (CTA), and the Options Price Reporting Authority, LLC (OPRA), and also proprietary market data products. Fees collected from tape plan subscribers, net of plan costs, from UTP and CTA are allocated and distributed to plan participants according to their share of tape fees based on a formula required by Securities and Exchange Commission (SEC) Regulation NMS that takes into account both trading and quoting activity. Market data fees from OPRA are allocated based upon the share of total options transactions cleared for each of the OPRA members. The Company also charges data subscribers directly for proprietary market data. The proprietary market data fees are recognized monthly, as the subscription fees are earned.

**Cboe BZX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

**Regulatory Transaction and Section 31 Fees**

The Company, as a U.S. exchange, is assessed Section 31 fees pursuant to the Securities Exchange Act of 1934, as amended (Exchange Act). Section 31 fees are assessed on the notional value traded and are designed to recover the costs to the government of supervision and regulation of securities markets and securities professionals. The Company, in turn, assesses regulatory transaction fees to its members that are designed to equal the Section 31 fees. The Company acts as the principal on these transactions, and therefore these revenues are reported gross in the statement of income and the related Section 31 fees in cost of revenues as incurred on a settlement date basis. Regulatory transaction fees are collected by the Parent and paid directly to the SEC by the Parent on behalf of the Company. As required by law, the amount due to the SEC is remitted semiannually and recorded as Section 31 fees payable in the statement of financial condition until paid.

**(3) Accounts Payable and Accrued Liabilities**

Accounts payable and accrued liabilities consisted of the following as of December 31, 2017 (in thousands):

Accounts payable	\$ 13,267
Accrued liabilities	<u>150</u>
	<u>\$ 13,417</u>

**(4) Related Party Transactions**

Prior to the sale of the Parent to Cboe Global Markets, certain affiliates of stockholders of the Parent conducted trading activity through the Company. The Company routed certain trades to other market centers through an affiliated broker-dealer. Based upon intercompany arrangements in place at the time, the Company remitted the revenue earned from customers for routing these transactions to the affiliated broker-dealer. The total expense associated with these arrangements, prior to the acquisition, was \$0.2 million and is included in routing and clearing in the statement of income.

The Company utilizes property and equipment that are held at the Parent level. The Company also records expenses allocated from the Parent for various operating expenses. Similar results may not be achievable on an arm's length basis. The following table presents the Company's allocation of expenses from the Parent for the year ended December 31, 2017 (in thousands):

Compensation and benefits	\$ 19,094
Management fee	4,394
Technology support services	4,222
Professional fees and outside services	1,164



**Cboe BZX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

Travel and promotional expenses	1,459
Facilities costs	961
Other expenses	770
	<u>\$ 32,064</u>

**(5) Income Taxes**

Deferred tax assets consist of the following components as of December 31, 2017:

Deferred tax assets:	
Deferred revenue	\$ 113
Property and equipment	124
Intangible assets	115
Unrecognized tax benefits	2,658
Total deferred tax assets	\$ 3,010

The Company provides a valuation allowance against deferred tax assets if, based on management's assessment of historical and projected future operating results and other available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. Management believes it is more likely than not that the deferred tax assets will be realized based upon expectations of future taxable income.

The income tax provision for the year ended December 31, 2017 consists of the following:

Current tax expense:	
Federal	\$ 31,100
State	8,835
Total current tax expense	39,935
Deferred income tax (benefit) expense:	
Federal	1,447
State	(105)
Income tax provision	\$ 41,277

**Cboe BZX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

The income tax provision differs from the amount of income tax determined by applying the U.S. federal income tax rate to income before income tax provision for the year ended December 31, 2017 due to the following:

Computed “expected” tax provision	\$ 34,067	35.0%
(Decrease) increase in income tax resulting from:		
Section 199 benefits	(1,383)	(1.4)%
State income taxes	5,066	5.2%
Impact of federal and state rate changes, net	1,277	1.3%
Change of unrecognized tax benefits	2,150	2.2%
Other	<u>100</u>	<u>0.1%</u>
Income tax provision	<u>\$ 41,277</u>	<u>42.4%</u>

A reconciliation of the unrecognized tax benefits for the year ended December 31, 2017 is as follows:

Balance at beginning of year	\$ 10,212
Additions for current year tax positions	1,388
Additions for prior year tax positions	485
Reductions for prior year tax positions	(55)
Reductions related to expirations of statute of limitations	<u>(457)</u>
Balance at end of year	<u>\$ 11,573</u>

Reductions to uncertain tax positions from the lapse of the applicable statutes of limitations are estimated to be approximately \$0.3 million.

At December 31, 2017, the Company had \$11.2 million of unrecognized tax benefits, net of federal benefit that, if recognized, would affect the effective tax rate. The Company had accrued interest and penalties of \$2.3 million related to uncertain tax positions at December 31, 2017. Total interest and penalties increased \$0.8 million in 2017.

On December 22, 2017 the U.S. enacted the Tax Cuts and Jobs Act (the “Jobs Act”). The Jobs Act significantly changes U.S. corporate income tax laws by, among other things, reducing the U.S. corporate income tax rate to 21% starting in 2018. The Company expects a significant reduction in its overall effective tax rate in 2018. In 2017, the Company recorded net tax expense of \$1.3 million associated with the impact of the Jobs Act due to the re-measurement of net deferred tax assets.

The Company’s open tax years are generally 2014 through 2017. The Company is currently under a U.S. federal income tax examination for tax years 2011, 2012 and 2013 and under income tax

**Cboe BZX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

examinations in certain states. The Company believes the aggregate amount of any additional liabilities that may result from these examinations, if any, will not have a material adverse effect on the financial position, results of operations, or cash flows of the Company.

**(6) Commitments and Contingencies**

*Legal Proceedings*

From time to time the Company is involved in various legal proceedings arising in the ordinary course of business. The Company does not believe that the outcome of any of the reviews, inspections or other legal proceedings will have a material impact on the statement of financial position, results of operations or cash flows; however, litigation is subject to many uncertainties, and the outcome of individual litigated matters is not predictable with assurance.

Securities Industry and Financial Markets Association (“SIFMA”) has filed a number of denial of access applications with the SEC to set aside proposed rule changes to establish or modify fees for Bats market data products and related services. Each application is being held in abeyance pending a decision on a separate SIFMA denial of access application held before the SEC’s Chief Administrative Law Judge, or “ALJ”, regarding fees proposed by Nasdaq and the NYSE for their respective market data products. On June 1, 2016, the ALJ issued a decision rejecting SIFMA’s denial of access challenge to the Nasdaq and NYSE fees at issue, concluding that the exchanges do not enjoy monopoly pricing power over their depth of book feeds. On July 19, 2016, SIFMA petitioned the SEC for review of the ALJ decision. An adverse ruling in that matter could cause the SEC to more closely examine exchange market data fees, which in turn could result in the Company having to reduce the fees it charges for market data.

On April 18, 2014, the City of Providence, Rhode Island filed a securities class action lawsuit in the Southern District of New York against the Company, as well as 14 other securities exchanges. The action purports to be brought on behalf of all public investors who purchased and/or sold shares of stock in the United States since April 18, 2009 on a registered public stock exchange (“Exchange Defendants”) or a U.S.-based alternate trading venue and were injured as a result of the alleged misconduct detailed in the complaint, which includes allegations that the Exchange Defendants committed fraud through a variety of business practices associated with, among other things, what is commonly referred to as high frequency trading. On May 2, 2014 and May 20, 2014, American European Insurance Company and Harel Insurance Co., Ltd. each filed substantially similar class action lawsuits against the Exchange Defendants which were ultimately consolidated with the City of Providence, Rhode Island securities class action lawsuit. On June 18, 2015, the Southern District of New York (the “Lower Court”) held oral argument on the pending Motion to Dismiss and thereafter, on August 26, 2015, the Lower Court issued an Opinion and Order granting Exchange Defendants’ Motion to Dismiss, dismissing the complaint in full. Plaintiff filed a Notice of Appeal of the dismissal on September 24, 2015 and its appeal brief on January 7, 2016. Respondent’s brief was filed on April 7, 2016 and oral argument was held on August 24, 2016. Following oral argument, the Court of Appeals issued an order requesting that the SEC submit an amicus brief on whether the Lower Court had jurisdiction and whether the Exchange Defendants have immunity in the claims alleged. The SEC filed its amicus brief with the Court of Appeals on November 28, 2016 and Plaintiff and the Exchange Defendants filed their respective supplemental response briefs on December 12,

**Cboe BZX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

2016. On December 19, 2017, the Court of Appeals reversed the Lower Court's dismissal and remanded the case back to the Lower Court. On March 13, 2018, the Court of Appeals denied the Exchange Defendants' motion for re-hearing. Exchange Defendants filed their opening brief for their motions to dismiss on May 18, 2018. Plaintiffs' responses were filed June 15, 2018 and Exchange Defendants' reply is due June 29, 2018. Given the preliminary nature of the proceedings, the Company is unable to estimate what, if any, liability may result from this litigation. However, the Company believes that the claims are without merit and intends to litigate the matter vigorously.

In addition, as a self-regulatory organization under the jurisdiction of the SEC, the Company is subject to routine reviews and inspections by the SEC. From time to time the Company receives inquiries and investigative requests from the SEC's Office of Compliance Inspections and Examinations as well as the Division of Enforcement seeking information about compliance with the federal securities laws as well as members' compliance with the federal securities laws.

**(7) Subsequent Events**

The Company has performed an evaluation of events that have occurred subsequent to December 31, 2017 through June 28, 2018, the date the financial statements were issued.

There have been no subsequent events that have occurred during such period that would require disclosure in, or adjustment to, the financial statements as of and for the year ended December 31, 2017.

**Cboe BYX Exchange, Inc.**

(formerly known as Bats BYX Exchange, Inc.)

Financial Statements

As of and for the Year ended December 31, 2017

(With Independent Auditors' Report Thereon)

**Cboe BYX Exchange, Inc.**

**Table of Contents**

	<b>Page</b>
Independent Auditors' Report	
Financial Statements:	
Statement of Financial Condition	1
Statement of Income	2
Statement of Changes in Stockholder's Deficit	3
Statement of Cash Flows	4
Notes to Financial Statements	5



**Deloitte & Touche LLP**  
111 South Wacker Drive  
Chicago, IL 60606-4301  
USA

Tel: +1 312 486 1000  
Fax: +1 312 486 1486  
[www.deloitte.com](http://www.deloitte.com)

## **INDEPENDENT AUDITORS' REPORT**

To the Board of Directors of  
Cboe BYX Exchange, Inc.:

We have audited the accompanying financial statements of Cboe BYX Exchange, Inc. (the "Company"), which comprise the statement of financial condition as of December 31, 2017, and the related statements of income, changes in stockholder's deficit, and cash flows for the year then ended, and the related notes to the financial statements.

### **Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditors' Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Cboe BYX Exchange, Inc. as of December 31, 2017, and the results of its operations and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

**Cboe BYX Exchange, Inc.**  
Statement of Financial Condition  
December 31, 2017  
(In thousands)

**Assets**

Current assets:		
Accounts receivable	\$	18,828
Total current assets		18,828
Deferred income taxes		864
Other assets		1,142
Total assets	\$	<u>20,834</u>

**Liabilities and Stockholder's Deficit**

Current liabilities:		
Accounts payable	\$	3,760
Section 31 fees payable		22,812
Intercompany payable		138
Other current liabilities		328
Total current liabilities		<u>27,038</u>
Unrecognized tax benefits		3,630
Stockholder's deficit:		
Accumulated deficit		<u>(9,834)</u>
Total stockholder's deficit		<u>(9,834)</u>
Total liabilities and stockholder's deficit	\$	<u>20,834</u>

See accompanying notes to financial statements.



**Cboe BYX Exchange, Inc.**  
Statement of Income  
Year ended December 31, 2017  
(In thousands)

Revenues:	
Transaction fees	\$ 149,107
Access fees	9,864
Market data fees	26,165
Exchange services and other fees	5,780
Regulatory transaction fees	62,557
Other revenue	<u>418</u>
Total revenues	253,891
Cost of revenues:	
Liquidity payments	131,534
Routing and clearing	6,168
Section 31 fees	<u>62,557</u>
Total cost of revenues	<u>200,259</u>
Revenues less cost of revenues	53,632
Operating expenses:	
Compensation and benefits	8,093
Management fee	2,030
Technology support services	3,097
Professional fees and outside services	2,995
Travel and promotional expenses	789
Facilities costs	443
Other expenses	<u>442</u>
Total operating expenses	<u>17,889</u>
Income before income tax provision	35,743
Income tax provision	<u>14,875</u>
Net income	<u><u>\$ 20,868</u></u>

See accompanying notes to financial statements.

**Cboe BYX Exchange, Inc.**  
Statement of Changes in Stockholder's Deficit  
Year ended December 31, 2017  
(In thousands)

	<b>Accumulated deficit</b>	<b>Total stockholder's deficit</b>
Balance at December 31, 2016	\$ (28,739)	\$ (28,739)
Distribution to Parent	(1,963)	(1,963)
Net income	20,868	20,868
Balance at December 31, 2017	<u>\$ (9,834)</u>	<u>\$ (9,834)</u>

See accompanying notes to financial statements.

**Cboe BYX Exchange, Inc.**  
Statement of Cash Flows  
Year ended December 31, 2017  
(In thousands)

Cash flows from operating activities:	
Net income	\$ 20,868
Adjustments to reconcile net income to net cash provided by operating activities:	
Deferred income taxes	371
Changes in assets and liabilities:	
Receivables	(1,544)
Intercompany payable	(21,578)
Other assets	(1,074)
Accounts payable	(700)
Unrecognized tax benefits	1,381
Section 31 fees payable	<u>4,239</u>
Net cash provided by operating activities	1,963
Cash flows from financing activities:	
Distribution to Parent	<u>(1,963)</u>
Net cash used in financing activities	(1,963)
Increase in cash and cash equivalents	-
Cash and cash equivalents:	
Beginning of year	<u>-</u>
End of year	<u><u>\$ -</u></u>

See accompanying notes to financial statements.

**Cboe BYX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

**(1) Nature of Operations**

Cboe BYX Exchange, Inc. (the Company or Cboe), a wholly owned subsidiary of Cboe Global Markets, Inc. (the Parent), is an electronic market for the trading of listed cash equity securities in the United States (U.S.). The Company is headquartered in Chicago, Illinois with additional offices in Kansas City, Missouri and New York, New York.

On February 28, 2017, the Company's then Parent was acquired by Cboe Global Markets, Inc. In October 2017, the Company's name was changed from Bats BYX Exchange, Inc. to Cboe BYX Exchange, Inc.

**(2) Summary of Significant Accounting Policies**

**(a) Basis of Presentation**

The accompanying financial statements for the Company have been prepared from the separate records maintained by the Parent and may not necessarily be indicative of the conditions that would have existed or the results of operations if the Company had been operated as an unaffiliated company. Portions of certain income and expenses represent allocations made from the Parent applicable to the Company as disclosed. See Note 3 for more information on related party transactions.

**(b) Principles of Accounting**

The Company follows accounting standards established by the Financial Accounting Standards Board (FASB) to report its financial condition, results of operations and cash flows. References to accounting principles generally accepted in the United States (GAAP) in these footnotes are to the FASB Accounting Standards Codification (ASC or Codification).

**(c) Use of Estimates**

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities as well as disclosure of the amounts of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates. Material estimates that are particularly susceptible to significant change in the near term include unrecognized tax benefits.

**(d) Cash and Cash Equivalents**

The Company's cash and cash equivalents are exposed to concentrations of credit risk. The Company maintains cash at various financial institutions and brokerage firms which, at times, may be in excess of the federal depository insurance limit. The Company's management regularly monitors these institutions and believes that the potential for future loss is remote. The Company considers all liquid investments with original or acquired maturities of three months or less to be cash equivalents. The Company's operations are funded by its Parent through a centralized treasury function.

**Cboe BYX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

**(e) *Accounts Receivable***

Accounts receivable represent amounts due from the Company's member firms and market data distributors and are carried at cost. On a periodic basis, management evaluates the Company's receivables and determines if an allowance for uncollectible accounts receivable based on anticipated collections is required. In circumstances where a specific member firm's or market data distributor's inability to meet its financial obligations is probable, the Company records a specific provision for uncollectible accounts against amounts due to reduce the receivable to the amount the Company estimates will be collected.

**(f) *Property and Equipment, Net***

Property and equipment, net is stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated lives of the assets, generally ranging from three to seven years. Expenditures for repairs and maintenance are charged to expense as incurred.

Long-lived assets to be held and used are reviewed to determine whether any events or changes in circumstances indicate that the carrying amounts of the assets may not be recoverable. The Company bases this evaluation on such impairment indicators as the nature of the assets, the future economic benefit of the assets, any historical or future profitability measurements, as well as other external market conditions or factors that may be present. If such impairment indicators are present that would indicate that the carrying amount of any asset may not be recoverable, the Company determines whether an impairment has occurred through the use of an undiscounted cash flow analysis of the asset at the lowest level for which identifiable cash flows exist. In the event of impairment, the Company recognizes a loss for the difference between the carrying amount and the estimated fair value of the asset as measured using quoted market prices or, in the absence of quoted market prices, a discounted cash flow analysis.

**(g) *Income Taxes***

Deferred taxes are recorded on a liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carryforwards, and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax bases. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment. The results of the Company's operations are included in the Parent's income tax returns. Income taxes are allocated to the Company using the pro-rata method. Tax accounts are settled periodically in accordance with the tax sharing agreement in place with the Parent.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained upon examination by the taxing authorities, based upon the technical merits of the position. The tax benefit recognized in the financial statements from such a position is measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. Also, interest and penalties expense is recognized on the full amount of deferred benefits for uncertain tax positions. The

**Cboe BYX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

Company's policy is to include interest and penalties related to unrecognized tax benefits in the income tax provision within the statement of income.

**(h) Revenue Recognition**

As of January 1, 2017, the Company adopted ASU 2014-09 Revenue from Contracts with Customers - Topic 606 and all subsequent ASUs that modified ASC 606. The Company elected to apply the ASU and all subsequent ASUs retrospectively, and the implementation of the guidance had no material impact on the measurement or recognition of revenue. The statement of income presents revenue at the disaggregated level for relevant revenue streams.

**Transaction Fees and Liquidity Payments**

Under the Company's "taker-maker" pricing model, a liquidity taker is paid a rebate (recorded in liquidity payments) for an execution occurring against that order and a liquidity maker is charged a fee (recorded in transaction fees) for posting such an order. Transaction fees and liquidity payments are considered earned and incurred upon execution of a trade, are recognized on a trade-date basis and are recorded on a gross basis in revenues and cost of revenues.

**Access Fees**

Access fees represent fees assessed for the opportunity to trade, including fees for trading related functionality across all segments. These fees are billed monthly in accordance with the Company's published fee schedules and recognized on a monthly basis when the performance obligation is met. There is no remaining performance obligation after revenue is recognized.

**Exchange Services and Other Fees**

To facilitate trading, the Company offers technology services consisting primarily of physical connectivity related to the Company's electronic market that are earned and recognized on a monthly basis

**Market Data Fees**

Market data fees are earned from U.S. tape plans, including the Unlisted Trading Privileges Plan (UTP), and the Consolidated Tape Association Plan (CTA), and also proprietary market data products. Fees collected from tape plan subscribers, net of plan costs, from UTP and CTA are allocated and distributed to plan participants according to their share of tape fees based on a formula required by Securities and Exchange Commission (SEC) Regulation NMS that takes into account both trading and quoting activity. The Company also charges data subscribers directly for proprietary market data. The proprietary market data fees are recognized monthly, as the subscription fees are earned.

**Regulatory Transaction and Section 31 Fees**

The Company, as a U.S. exchange, is assessed Section 31 fees pursuant to the Securities Exchange Act of 1934, as amended (Exchange Act). Section 31 fees are assessed on the notional value traded and are designed to recover the costs to the government of supervision and regulation of securities markets and securities professionals. The Company, in turn, assesses regulatory transaction fees to its members that are designed to equal the Section 31

**Cboe BYX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

fees. The Company acts as the principal on these transactions, and therefore these revenues are reported gross in the statement of income and the related Section 31 fees in cost of revenues as incurred on a settlement date basis. Regulatory transaction fees are collected by the Parent and paid directly to the SEC by the Parent on behalf of the Company. As required by law, the amount due to the SEC is remitted semiannually and recorded as Section 31 fees payable in the statement of financial condition until paid.

**(3) Related Party Transactions**

Prior to the sale of the Parent to Cboe Global Markets, certain affiliates of stockholders of the Parent conducted trading activity through the Company. The Company routed certain trades to other market centers through an affiliated broker-dealer. Based upon intercompany arrangements in place at that time, the Company remitted the revenue earned from customers for routing these transactions to the affiliated broker-dealer. The total expense associated with these arrangements, prior to the acquisition, was \$197 thousand and is included in routing and clearing in the statement of income.

The Company utilizes property and equipment that are held at the Parent level. The Company also records expenses allocated from the Parent and other affiliated subsidiaries of the Parent for various operating expenses. Similar results may not be achievable on an arm's length basis. The following table presents the Company's allocation of expenses from the Parent and other affiliated subsidiaries for the year ended December 31, 2017 (in thousands):

Compensation and benefits	\$ 8,093
Management fee	2,030
Technology support services	2,355
Professional fees and outside services	661
Travel and promotional expenses	789
Facilities costs	443
Other expenses	442
	<u>\$ 14,813</u>

**(4) Income Taxes**

Deferred tax assets consist of the following components as of December 31, 2017:

Deferred tax assets:	
Deferred revenue	\$ 90
Property and equipment	5
Intangible assets	76
Unrecognized tax benefits	692
Other	1
Total deferred tax assets	<u>\$ 864</u>

**Cboe BYX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

The Company provides a valuation allowance against deferred tax assets if, based on management's assessment of historical and projected future operating results and other available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. Management believes it is more likely than not that the deferred tax assets will be realized based upon expectations of future taxable income.

The income tax provision for the year ended December 31, 2017 consists of the following:

Current tax expense:		
Federal		\$ 11,464
State		<u>3,040</u>
Total current tax expense		14,504
Deferred income tax (benefit) expense:		
Federal		395
State		<u>(24)</u>
Income tax provision		<u>\$ 14,875</u>

The income tax provision differs from the amount of income tax determined by applying the U.S. federal income tax rate to income before income tax provision for the year ended December 31, 2017 due to the following:

Computed "expected" tax provision	\$ 12,510	35.0%
(Decrease) increase in income tax resulting from:		
Section 199 benefits	(405)	(1.1)%
State income taxes	1,744	4.9%
Impact of federal and state rate changes, net	341	1.0%
Change of unrecognized tax benefits	669	1.9%
Other	<u>16</u>	<u>0.0%</u>
Income tax provision	<u>\$ 14,875</u>	<u>41.7%</u>

A reconciliation of the unrecognized tax benefits for the year ended December 31, 2017 is as follows:

Balance at beginning of year	\$ 2,688
Additions for current year tax positions	471
Additions for prior year tax positions	107



**Choe BYX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

Reductions for prior year tax positions	(20)
Reductions related to expirations of statute of limitations	<u>(89)</u>
Balance at end of year	<u>\$ 3,157</u>

Reductions to uncertain tax positions from the lapse of the applicable statutes of limitations are estimated to be approximately \$0.1 million.

At December 31, 2017, the Company had \$2.9 million of unrecognized tax benefits, net of federal benefit that, if recognized, would affect the effective tax rate. The Company had accrued interest and penalties of \$0.7 million related to uncertain tax positions at December 31, 2017. Total interest and penalties increased \$0.2 million in 2017.

On December 22, 2017 the U.S. enacted the Tax Cuts and Jobs Act (the “Jobs Act”). The Jobs Act significantly changes U.S. corporate income tax laws by, among other things, reducing the U.S. corporate income tax rate to 21% starting in 2018. The Company expects a significant reduction in its overall effective tax rate in 2018. In 2017, the Company recorded net tax expense of \$0.3 million associated with the impact of the Jobs Act due to the re-measurement of net deferred tax assets.

The Company’s open tax years are generally 2014 through 2017. The Company is currently under a U.S. federal income tax examination for tax years 2011, 2012 and 2013 and under income tax examinations in certain states. The Company believes the aggregate amount of any additional liabilities that may result from these examinations, if any, will not have a material adverse effect on the financial position, results of operations, or cash flows of the Company.

**(5) Commitments and Contingencies**

***Legal Proceedings***

From time to time the Company is involved in various legal proceedings arising in the ordinary course of business. The Company does not believe that the outcome of any of the reviews, inspections or other legal proceedings will have a material impact on the statement of financial position, results of operations or cash flows; however, litigation is subject to many uncertainties, and the outcome of individual litigated matters is not predictable with assurance.

Securities Industry and Financial Markets Association (“SIFMA”) has filed a number of denial of access applications with the SEC to set aside proposed rule changes to establish or modify fees for Bats market data products and related services. Each application is being held in abeyance pending a decision on a separate SIFMA denial of access application held before the SEC’s Chief Administrative Law Judge, or “ALJ”, regarding fees proposed by Nasdaq and the NYSE for their respective market data products. On June 1, 2016, the ALJ issued a decision rejecting SIFMA’s denial of access challenge to the Nasdaq and NYSE fees at issue, concluding that the exchanges do not enjoy monopoly pricing power over their depth of book feeds. On July 19, 2016, SIFMA petitioned the SEC for review of the ALJ decision. An adverse ruling in that matter could cause the SEC to more closely examine exchange market data fees, which in turn could result in the Company having to reduce the fees it charges for market data.

**Cboe BYX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

On April 18, 2014, the City of Providence, Rhode Island filed a securities class action lawsuit in the Southern District of New York against the Company, as well as 14 other securities exchanges. The action purports to be brought on behalf of all public investors who purchased and/or sold shares of stock in the United States since April 18, 2009 on a registered public stock exchange (“Exchange Defendants”) or a U.S.-based alternate trading venue and were injured as a result of the alleged misconduct detailed in the complaint, which includes allegations that the Exchange Defendants committed fraud through a variety of business practices associated with, among other things, what is commonly referred to as high frequency trading. On May 2, 2014 and May 20, 2014, American European Insurance Company and Harel Insurance Co., Ltd. each filed substantially similar class action lawsuits against the Exchange Defendants which were ultimately consolidated with the City of Providence, Rhode Island securities class action lawsuit. On June 18, 2015, the Southern District of New York (the “Lower Court”) held oral argument on the pending Motion to Dismiss and thereafter, on August 26, 2015, the Lower Court issued an Opinion and Order granting Exchange Defendants’ Motion to Dismiss, dismissing the complaint in full. Plaintiff filed a Notice of Appeal of the dismissal on September 24, 2015 and its appeal brief on January 7, 2016. Respondent’s brief was filed on April 7, 2016 and oral argument was held on August 24, 2016. Following oral argument, the Court of Appeals issued an order requesting that the SEC submit an amicus brief on whether the Lower Court had jurisdiction and whether the Exchange Defendants have immunity in the claims alleged. The SEC filed its amicus brief with the Court of Appeals on November 28, 2016 and Plaintiff and the Exchange Defendants filed their respective supplemental response briefs on December 12, 2016. On December 19, 2017, the Court of Appeals reversed the Lower Court’s dismissal and remanded the case back to the Lower Court. On March 13, 2018, the Court of Appeals denied the Exchange Defendants’ motion for re-hearing. Exchange Defendants filed their opening brief for their motions to dismiss on May 18, 2018. Plaintiffs’ responses were filed June 15, 2018 and Exchange Defendants’ reply is due June 29, 2018. Given the preliminary nature of the proceedings, the Company is unable to estimate what, if any, liability may result from this litigation. However, the Company believes that the claims are without merit and intends to litigate the matter vigorously.

In addition, as a self-regulatory organization under the jurisdiction of the SEC, the Company is subject to routine reviews and inspections by the SEC. From time to time the Company receives inquiries and investigative requests from the SEC’s Office of Compliance Inspections and Examinations as well as the Division of Enforcement seeking information about compliance with the federal securities laws as well as members’ compliance with the federal securities laws.

**(6) Subsequent Events**

The Company has performed an evaluation of events that have occurred subsequent to December 31, 2017 through June 28, 2018, the date the financial statements were issued.

There have been no subsequent events that have occurred during such period that would require disclosure in, or adjustment to, the financial statements as of and for the year ended December 31, 2017.

**Cboe EDGA Exchange, Inc.**

(formerly known as Bats EDGA Exchange, Inc.)

Financial Statements

As of and for the Year ended December 31, 2017

(With Independent Auditors' Report Thereon)

**Cboe EDGA Exchange, Inc.**

**Table of Contents**

	<b>Page</b>
Independent Auditors' Report	
Financial Statements:	
Statement of Financial Condition	1
Statement of Income	2
Statement of Changes in Stockholder's Equity	3
Statement of Cash Flows	4
Notes to Financial Statements	5



**Deloitte & Touche LLP**  
111 South Wacker Drive  
Chicago, IL 60606-4301  
USA

Tel: +1 312 486 1000  
Fax: +1 312 486 1486  
[www.deloitte.com](http://www.deloitte.com)

## **INDEPENDENT AUDITORS' REPORT**

To the Board of Directors of  
Cboe EDGA Exchange, Inc.:

We have audited the accompanying financial statements of Cboe EDGA Exchange, Inc. (the "Company"), which comprise the statement of financial condition as of December 31, 2017, and the related statements of income, changes in stockholder's equity, and cash flows for the year then ended, and the related notes to the financial statements.

### **Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditors' Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Cboe EDGA Exchange, Inc. as of December 31, 2017, and the results of its operations and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

**Cboe EDGA Exchange, Inc.**  
Statement of Financial Condition  
December 31, 2017  
(In thousands)

**Assets**

Current assets:		
Accounts receivable	\$	7,819
Intercompany receivable		<u>23,364</u>
Total current assets		31,183
Deferred income taxes		804
Other assets		<u>1,142</u>
Total assets	\$	<u><u>33,129</u></u>

**Liabilities and Stockholder's Equity**

Current liabilities:		
Accounts payable	\$	15
Section 31 fees payable		7,494
Other current liabilities		<u>303</u>
Total current liabilities		7,812
Unrecognized tax benefits		3,607
Stockholder's equity:		
Retained earnings		<u>21,710</u>
Total stockholder's equity		<u>21,710</u>
Total liabilities and stockholder's equity	\$	<u><u>33,129</u></u>

See accompanying notes to financial statements.

**Cboe EDGA Exchange, Inc.**  
Statement of Income  
Year ended December 31, 2017  
(In thousands)

Revenues:	
Transaction fees	\$ 31,682
Access fees	9,923
Market data fees	13,756
Exchange services and other fees	5,780
Regulatory transaction fees	29,162
Other revenue	<u>469</u>
Total revenues	90,772
Cost of revenues:	
Liquidity payments	3,814
Section 31 fees	29,162
Routing and clearing	<u>13,714</u>
Total cost of revenues	<u>46,690</u>
Revenues less cost of revenues	44,082
Operating expenses:	
Compensation and benefits	2,986
Management fee	749
Technology support services	1,372
Professional fees and outside services	1,951
Travel and promotional expenses	291
Facilities costs	158
Other expenses	<u>163</u>
Total operating expenses	<u>7,670</u>
Income before income tax provision	36,412
Income tax provision	<u>16,120</u>
Net income	<u><u>\$ 20,292</u></u>

See accompanying notes to financial statements.

**Cboe EDGA Exchange, Inc.**  
Statement of Changes in Stockholder's Equity  
Year ended December 31, 2017  
(In thousands)

	<b>Retained earnings</b>	<b>Total stockholder's equity</b>
Balance at December 31, 2016	\$ 10,265	\$ 10,265
Distribution to Parent	(8,847)	(8,847)
Net income	20,292	20,292
Balance at December 31, 2017	<u>\$ 21,710</u>	<u>\$ 21,710</u>

See accompanying notes to financial statements.



**Cboe EDGA Exchange, Inc.**  
Statement of Cash Flows  
Year ended December 31, 2017  
(In thousands)

Cash flows from operating activities:	
Net income	\$ 20,292
Adjustments to reconcile net income to net cash provided by operating activities:	
Deferred income taxes	(106)
Changes in assets and liabilities:	
Accounts receivable	2,476
Intercompany receivable	(10,462)
Other assets	(1,072)
Accounts payable	(57)
Unrecognized tax benefits	1,782
Section 31 fees payable	(4,001)
Other liabilities	(5)
Net cash provided by operating activities	8,847
Cash flows from financing activities:	
Distribution to Parent	(8,847)
Net cash used in financing activities	(8,847)
Increase in cash and cash equivalents	-
Cash and cash equivalents:	
Beginning of year	-
End of year	\$ -

See accompanying notes to financial statements.

**Cboe EDGA Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

**(1) Nature of Operations**

Cboe EDGA Exchange, Inc. (the Company or EDGA), a wholly owned subsidiary of Cboe Global Markets, Inc. (the Parent), is an electronic market for the trading of listed cash equity securities in the United States (U.S.). The Company is headquartered in Chicago, Illinois, with additional offices in Kansas City, Missouri and New York, New York.

On February 28, 2017, the Company's then Parent was acquired by Cboe Global Markets, Inc. In October 2017, the Company's name was changed from Bats EDGA Exchange, Inc. to Cboe EDGA Exchange, Inc.

**(2) Summary of Significant Accounting Policies**

**(a) Basis of Presentation**

The accompanying financial statements for the Company have been prepared from the separate records maintained by the Parent and may not necessarily be indicative of the conditions that would have existed or the results of operations if the Company had been operated as an unaffiliated company. Portions of certain income and expenses represent allocations made from the Parent applicable to the Company as disclosed. See Note 3 for more information on related party transactions.

**(b) Principles of Accounting**

The Company follows accounting standards established by the Financial Accounting Standards Board (FASB) to report its financial condition, results of operations and cash flows. References to accounting principles generally accepted in the United States (GAAP) in these footnotes are to the FASB Accounting Standards Codification (ASC or Codification).

**(c) Use of Estimates**

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities as well as disclosure of the amounts of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates. Material estimates that are particularly susceptible to significant change in the near term include unrecognized tax benefits.

**(d) Cash and Cash Equivalents**

The Company's cash and cash equivalents are exposed to concentrations of credit risk. The Company maintains cash at various financial institutions and brokerage firms which, at times, may be in excess of the federal depository insurance limit. The Company's management regularly monitors these institutions and believes that the potential for future loss is remote. The Company considers all liquid investments with original or acquired maturities of three months or less to be cash equivalents. The Company's operations are funded by its Parent through a centralized treasury function.

**Cboe EDGA Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

**(e) *Accounts Receivable***

Accounts receivable represent amounts due from the Company's member firms and market data distributors and are carried at cost. On a periodic basis, management evaluates the Company's receivables and determines if an allowance for uncollectible accounts receivable based on anticipated collections is required. In circumstances where a specific member firm's or market data distributor's inability to meet its financial obligations is probable, the Company records a specific provision for uncollectible accounts against amounts due to reduce the receivable to the amount the Company estimates will be collected.

**(f) *Income Taxes***

Deferred taxes are recorded on a liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carryforwards, and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax basis. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment. The results of the Company's operations are included in the Parent's income tax returns. Income taxes are allocated to the Company using the pro-rata method. Tax accounts are settled periodically in accordance with the tax sharing agreement in place with the Parent.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained upon examination by the taxing authorities, based upon the technical merits of the position. The tax benefit recognized in the financial statements from such a position is measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. Also, interest and penalties expense is recognized on the full amount of deferred benefits for uncertain tax positions. The Company's policy is to include interest and penalties related to unrecognized tax benefits in the income tax provision within the statement of income.

**(g) *Revenue Recognition***

As of January 1, 2017, the Company adopted ASU 2014-09 Revenue from Contracts with Customers - Topic 606 and all subsequent ASUs that modified ASC 606. The Company elected to apply the ASU and all subsequent ASUs retrospectively, and the implementation of the guidance had no material impact on the measurement or recognition of revenue. The statement of income presents revenue at the disaggregated level for relevant revenue streams.

**Transaction Fees and Liquidity Payments**

The Company's "fee-fee" pricing model provides that a low fee is assessed for both the liquidity maker and the liquidity provider. Transaction fees are assessed and are considered earned upon the execution of a trade, are recognized on a trade date basis and are recorded on a gross basis in revenues and cost of revenues.

**Access Fees**

**Cboe EDGA Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

Access fees represent fees assessed for the opportunity to trade, including fees for trading related functionality across all segments. These fees are billed monthly in accordance with the Company's published fee schedules and recognized on a monthly basis when the performance obligation is met. There is no remaining performance obligation after revenue is recognized.

**Exchange Services and Other Fees**

To facilitate trading, the Company offers technology services consisting primarily of physical connectivity related to the Company's electronic market that are earned and recognized on a monthly basis

**Market Data Fees**

Market data fees are earned from U.S. tape plans, including the Unlisted Trading Privileges Plan (UTP) and the Consolidated Tape Association Plan (CTA), and also proprietary market data products. Fees collected from tape plan subscribers, net of plan costs, from UTP and CTA are allocated and distributed to plan participants according to their share of tape fees based on a formula required by Securities and Exchange Commission (SEC) Regulation NMS that takes into account both trading and quoting activity. The Company also charges data subscribers directly for proprietary market data. The proprietary market data fees are recognized monthly, as the subscription fees are earned.

**Regulatory Transaction and Section 31 Fees**

The Company, as a U.S. exchange, is assessed Section 31 fees pursuant to the Securities Exchange Act of 1934, as amended (Exchange Act). Section 31 fees are assessed on the notional value traded and are designed to recover the costs to the government of supervision and regulation of securities markets and securities professionals. The Company, in turn, assesses regulatory transaction fees to its members that are designed to equal the Section 31 fees. The Company acts as the principal on these transactions, and therefore these revenues are reported gross in the statement of income and the related Section 31 fees in cost of revenues as incurred on a settlement date basis. Regulatory transaction fees are collected by the Parent and paid directly to the SEC by the Parent on behalf of the Company. As required by law, the amount due to the SEC is remitted semiannually and recorded as Section 31 fees payable in the statement of financial condition until paid.

**(3) Related Party Transactions**

Prior to the sale of the Parent to Cboe Global Markets, certain affiliates of stockholders of the Parent conducted trading activity through the Company. The Company routed certain trades to other market centers through an affiliated broker-dealer. Based upon intercompany arrangements in place at that time, the Company remitted the revenue earned from customers for routing these transactions to the affiliated broker-dealer. The total expense associated with these arrangements, prior to the acquisition, was \$0.4 million and is included in routing and clearing in the statement of income.

The Company utilizes property and equipment that are held at the Parent level. The Company also records expenses allocated from the Parent for various operating expenses. Similar results may not be achievable on an arm's length basis. The following table presents the Company's allocation of expenses from the Parent for the year ended December 31, 2017 (in thousands):

**Cboe EDGA Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

Compensation and benefits	\$ 2,986
Management fee	749
Technology support services	839
Professional fees and outside services	232
Travel and promotional expenses	291
Facilities costs	158
Other expenses	163
	\$ 5,418

**(4) Income Taxes**

Deferred tax assets consist of the following components as of December 31, 2017:

Deferred tax assets:	
Deferred revenue	\$ 84
Unrecognized tax benefits	720
Total deferred tax assets	\$ 804

The Company provides a valuation allowance against deferred tax assets if, based on management's assessment of historical and projected future operating results and other available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. Management believes it is more likely than not that the deferred tax assets will be realized based upon expectations of future taxable income.

The income tax provision for the year ended December 31, 2017 consists of the following:

Current tax expense:	
Federal	\$ 11,731
State	4,496
Total current tax expense	16,227
Deferred income tax benefit:	
Federal	(71)
State	(36)
Income tax provision	\$ 16,120

**Cboe EDGA Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

The income tax provision differs from the amount of income tax determined by applying the U.S. federal income tax rate to income before income tax provision for the year ended December 31, 2017 due to the following:

Computed “expected” tax provision	\$ 12,744	35.0%
(Decrease) increase in income tax resulting from:		
Section 199 benefits	(235)	(0.6)%
State income taxes	1,901	5.2%
Impact of federal and state rate changes, net	(109)	(0.3)%
Change of unrecognized tax benefits	1,782	4.9%
Other	<u>37</u>	<u>0.1%</u>
Income tax provision	<u>\$ 16,120</u>	<u>44.3%</u>

A reconciliation of the unrecognized tax benefits for the year ended December 31, 2017 is as follows:

Balance at beginning of year	\$ 1,781
Additions for current year tax positions	425
Additions for prior year tax positions	1,050
Reductions for prior year tax positions	<u>(46)</u>
Balance at end of year	<u>\$ 3,210</u>

At December 31, 2017, the Company had \$2.9 million of unrecognized tax benefits, net of federal benefit that, if recognized, would affect the effective tax rate. The Company had accrued interest and penalties of \$0.4 million related to uncertain tax positions at December 31, 2017. Total interest and penalties increased \$0.4 million in 2017.

On December 22, 2017 the U.S. enacted the Tax Cuts and Jobs Act (the “Jobs Act”). The Jobs Act significantly changes U.S. corporate income tax laws by, among other things, reducing the U.S. corporate income tax rate to 21% starting in 2018. The Company expects a significant reduction in its overall effective tax rate in 2018. In 2017, the Company recorded net tax expense of \$0.1 million associated with the impact of the Jobs Act due to the re-measurement of net deferred tax assets.

The Company’s open tax years are generally 2014 through 2017. The Company is currently under a U.S. federal income tax examination for tax years 2011, 2012 and 2013 and under income tax examinations in certain states. The Company believes the aggregate amount of any additional liabilities that may result from these examinations, if any, will not have a material adverse effect on the financial position, results of operations, or cash flows of the Company.

**Cboe EDGA Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

**(5) Commitments and Contingencies**

*Legal Proceedings*

From time to time the Company is involved in various legal proceedings arising in the ordinary course of business. The Company does not believe that the outcome of any of the reviews, inspections or other legal proceedings will have a material impact on the statement of financial position, results of operations or cash flows; however, litigation is subject to many uncertainties, and the outcome of individual litigated matters is not predictable with assurance.

Securities Industry and Financial Markets Association (“SIFMA”) has filed a number of denial of access applications with the SEC to set aside proposed rule changes to establish or modify fees for Bats market data products and related services. Each application is being held in abeyance pending a decision on a separate SIFMA denial of access application held before the SEC’s Chief Administrative Law Judge, or “ALJ”, regarding fees proposed by Nasdaq and the NYSE for their respective market data products. On June 1, 2016, the ALJ issued a decision rejecting SIFMA’s denial of access challenge to the Nasdaq and NYSE fees at issue, concluding that the exchanges do not enjoy monopoly pricing power over their depth of book feeds. On July 19, 2016, SIFMA petitioned the SEC for review of the ALJ decision. An adverse ruling in that matter could cause the SEC to more closely examine exchange market data fees, which in turn could result in the Company having to reduce the fees it charges for market data.

On April 18, 2014, the City of Providence, Rhode Island filed a securities class action lawsuit in the Southern District of New York against the Company, as well as 14 other securities exchanges. The action purports to be brought on behalf of all public investors who purchased and/or sold shares of stock in the United States since April 18, 2009 on a registered public stock exchange (“Exchange Defendants”) or a U.S.-based alternate trading venue and were injured as a result of the alleged misconduct detailed in the complaint, which includes allegations that the Exchange Defendants committed fraud through a variety of business practices associated with, among other things, what is commonly referred to as high frequency trading. On May 2, 2014 and May 20, 2014, American European Insurance Company and Harel Insurance Co., Ltd. each filed substantially similar class action lawsuits against the Exchange Defendants which were ultimately consolidated with the City of Providence, Rhode Island securities class action lawsuit. On June 18, 2015, the Southern District of New York (the “Lower Court”) held oral argument on the pending Motion to Dismiss and thereafter, on August 26, 2015, the Lower Court issued an Opinion and Order granting Exchange Defendants’ Motion to Dismiss, dismissing the complaint in full. Plaintiff filed a Notice of Appeal of the dismissal on September 24, 2015 and its appeal brief on January 7, 2016. Respondent’s brief was filed on April 7, 2016 and oral argument was held on August 24, 2016. Following oral argument, the Court of Appeals issued an order requesting that the SEC submit an amicus brief on whether the Lower Court had jurisdiction and whether the Exchange Defendants have immunity in the claims alleged. The SEC filed its amicus brief with the Court of Appeals on November 28, 2016 and Plaintiff and the Exchange Defendants filed their respective supplemental response briefs on December 12, 2016. On December 19, 2017, the Court of Appeals reversed the Lower Court’s dismissal and remanded the case back to the Lower Court. On March 13, 2018, the Court of Appeals denied the Exchange Defendants’ motion for re-hearing. Exchange Defendants filed their opening brief for their motions to dismiss on May 18, 2018. Plaintiffs’ responses were filed June 15, 2018 and Exchange

**Cboe EDGA Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

Defendants' reply is due June 29, 2018. Given the preliminary nature of the proceedings, the Company is unable to estimate what, if any, liability may result from this litigation. However, the Company believes that the claims are without merit and intends to litigate the matter vigorously.

In addition, as a self-regulatory organization under the jurisdiction of the SEC, the Company is subject to routine reviews and inspections by the SEC. From time to time the Company receives inquiries and investigative requests from the SEC's Office of Compliance Inspections and Examinations as well as the Division of Enforcement seeking information about compliance with the federal securities laws as well as members' compliance with the federal securities laws.

**(6) Subsequent Events**

The Company has performed an evaluation of events that have occurred subsequent to December 31, 2017 through June 28, 2018, the date the financial statements were issued.

There have been no subsequent events that have occurred during such period that would require disclosure in, or adjustment to, the financial statements as of and for the year ended December 31, 2017.



Order ID	Order Date	Order Time	Order Status	Order Type	Order Qty	Order Price	Order Total	Order Fee	Order Tax	Order Net	Order Gross	Order Balance	Order History	Order Comments
10000001	2017-01-01	10:00:00	Open	Market	100	100.00	100.00	0.00	0.00	100.00	100.00	0.00	100.00	100.00
10000002	2017-01-01	10:01:00	Open	Market	200	200.00	200.00	0.00	0.00	200.00	200.00	0.00	200.00	200.00
10000003	2017-01-01	10:02:00	Open	Market	300	300.00	300.00	0.00	0.00	300.00	300.00	0.00	300.00	300.00
10000004	2017-01-01	10:03:00	Open	Market	400	400.00	400.00	0.00	0.00	400.00	400.00	0.00	400.00	400.00
10000005	2017-01-01	10:04:00	Open	Market	500	500.00	500.00	0.00	0.00	500.00	500.00	0.00	500.00	500.00
10000006	2017-01-01	10:05:00	Open	Market	600	600.00	600.00	0.00	0.00	600.00	600.00	0.00	600.00	600.00
10000007	2017-01-01	10:06:00	Open	Market	700	700.00	700.00	0.00	0.00	700.00	700.00	0.00	700.00	700.00
10000008	2017-01-01	10:07:00	Open	Market	800	800.00	800.00	0.00	0.00	800.00	800.00	0.00	800.00	800.00
10000009	2017-01-01	10:08:00	Open	Market	900	900.00	900.00	0.00	0.00	900.00	900.00	0.00	900.00	900.00
10000010	2017-01-01	10:09:00	Open	Market	1000	1000.00	1000.00	0.00	0.00	1000.00	1000.00	0.00	1000.00	1000.00
10000011	2017-01-01	10:10:00	Open	Market	1100	1100.00	1100.00	0.00	0.00	1100.00	1100.00	0.00	1100.00	1100.00
10000012	2017-01-01	10:11:00	Open	Market	1200	1200.00	1200.00	0.00	0.00	1200.00	1200.00	0.00	1200.00	1200.00
10000013	2017-01-01	10:12:00	Open	Market	1300	1300.00	1300.00	0.00	0.00	1300.00	1300.00	0.00	1300.00	1300.00
10000014	2017-01-01	10:13:00	Open	Market	1400	1400.00	1400.00	0.00	0.00	1400.00	1400.00	0.00	1400.00	1400.00
10000015	2017-01-01	10:14:00	Open	Market	1500	1500.00	1500.00	0.00	0.00	1500.00	1500.00	0.00	1500.00	1500.00
10000016	2017-01-01	10:15:00	Open	Market	1600	1600.00	1600.00	0.00	0.00	1600.00	1600.00	0.00	1600.00	1600.00
10000017	2017-01-01	10:16:00	Open	Market	1700	1700.00	1700.00	0.00	0.00	1700.00	1700.00	0.00	1700.00	1700.00
10000018	2017-01-01	10:17:00	Open	Market	1800	1800.00	1800.00	0.00	0.00	1800.00	1800.00	0.00	1800.00	1800.00
10000019	2017-01-01	10:18:00	Open	Market	1900	1900.00	1900.00	0.00	0.00	1900.00	1900.00	0.00	1900.00	1900.00
10000020	2017-01-01	10:19:00	Open	Market	2000	2000.00	2000.00	0.00	0.00	2000.00	2000.00	0.00	2000.00	2000.00
10000021	2017-01-01	10:20:00	Open	Market	2100	2100.00	2100.00	0.00	0.00	2100.00	2100.00	0.00	2100.00	2100.00
10000022	2017-01-01	10:21:00	Open	Market	2200	2200.00	2200.00	0.00	0.00	2200.00	2200.00	0.00	2200.00	2200.00
10000023	2017-01-01	10:22:00	Open	Market	2300	2300.00	2300.00	0.00	0.00	2300.00	2300.00	0.00	2300.00	2300.00
10000024	2017-01-01	10:23:00	Open	Market	2400	2400.00	2400.00	0.00	0.00	2400.00	2400.00	0.00	2400.00	2400.00
10000025	2017-01-01	10:24:00	Open	Market	2500	2500.00	2500.00	0.00	0.00	2500.00	2500.00	0.00	2500.00	2500.00
10000026	2017-01-01	10:25:00	Open	Market	2600	2600.00	2600.00	0.00	0.00	2600.00	2600.00	0.00	2600.00	2600.00
10000027	2017-01-01	10:26:00	Open	Market	2700	2700.00	2700.00	0.00	0.00	2700.00	2700.00	0.00	2700.00	2700.00
10000028	2017-01-01	10:27:00	Open	Market	2800	2800.00	2800.00	0.00	0.00	2800.00	2800.00	0.00	2800.00	2800.00
10000029	2017-01-01	10:28:00	Open	Market	2900	2900.00	2900.00	0.00	0.00	2900.00	2900.00	0.00	2900.00	2900.00
10000030	2017-01-01	10:29:00	Open	Market	3000	3000.00	3000.00	0.00	0.00	3000.00	3000.00	0.00	3000.00	3000.00





**Exhibit I**

**Exhibit Request:**

**For the latest fiscal year of the applicant, audited financial statements which are prepared in accordance with, or in the case of a foreign applicant, reconciled with, United States generally accepted accounting principles, and are covered by a report prepared by an independent public accountant. If an applicant has no consolidated subsidiaries, it shall file audited financial statements under Exhibit I alone and need not file a separate unaudited financial statement for the applicant under Exhibit D.**

---

Attached please find audited financial statements of Cboe EDGX Exchange, Inc. for the latest fiscal year ending December 31, 2017. Cboe EDGX Exchange, Inc. has no consolidated subsidiaries.

**Cboe EDGX Exchange, Inc.**

(formerly known as Bats EDGX Exchange, Inc.)

Financial Statements

As of and for the Year ended December 31, 2017

(With Independent Auditors' Report Thereon)

**Cboe EDGX Exchange, Inc.**

**Table of Contents**

	<b>Page</b>
Independent Auditors' Report	
Financial Statements:	
Statement of Financial Condition	1
Statement of Income	2
Statement of Changes in Stockholder's (Deficit) Equity	3
Statement of Cash Flows	4
Notes to Financial Statements	5



**Deloitte & Touche LLP**  
111 South Wacker Drive  
Chicago, IL 60606-4301  
USA  
Tel: +1 312 486 1000  
Fax: +1 312 486 1486  
www.deloitte.com

## **INDEPENDENT AUDITORS' REPORT**

To the Board of Directors of  
Cboe EDGX Exchange, Inc.:

We have audited the accompanying financial statements of Cboe EDGX Exchange, Inc. (the "Company"), which comprise the statement of financial condition as of December 31, 2017, and the related statements of income, changes in stockholder's (deficit) equity, and cash flows for the year then ended, and the related notes to the financial statements.

### **Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditors' Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Cboe EDGX Exchange, Inc. as of December 31, 2017, and the results of its operations and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

**Cboe EDGX Exchange, Inc.**  
Statement of Financial Condition  
December 31, 2017  
(In thousands)

**Assets**

Current assets:		
Accounts receivable	\$	32,974
Intercompany receivable		20,965
Other receivables		<u>404</u>
Total current assets		54,343
Deferred income taxes		424
Other assets		<u>2,828</u>
Total assets	\$	<u><u>57,595</u></u>

**Liabilities and Stockholder's Equity**

Current liabilities:		
Accounts payable	\$	10,570
Section 31 fees payable		32,898
Other current liabilities		<u>335</u>
Total current liabilities		43,803
Unrecognized tax benefits		1,887
Stockholder's equity:		
Retained Earnings		<u>11,905</u>
Total stockholder's equity		<u>11,905</u>
Total liabilities and stockholder's equity	\$	<u><u>57,595</u></u>

See accompanying notes to financial statements.



**Cboe EDGX Exchange, Inc.**  
Statement of Income  
Year ended December 31, 2017  
(In thousands)

Revenues:	
Transaction fees	\$ 320,640
Access fees	13,223
Market data fees	47,136
Exchange services and other fees	5,780
Regulatory transaction fees	97,179
Other revenue	<u>1,118</u>
Total revenues	485,076
Cost of revenues:	
Liquidity payments	294,861
Section 31 fees	96,447
Routing and clearing	<u>6,792</u>
Total cost of revenues	<u>398,100</u>
Revenues less cost of revenues	86,976
Operating expenses:	
Compensation and benefits	19,799
Management fee	2,909
Technology support services	5,260
Professional fees and outside services	4,062
Travel and promotional expenses	1,524
Facilities costs	1,001
Other expenses	<u>805</u>
Total operating expenses	<u>35,360</u>
Operating income	51,616
Non-operating income:	
Interest income	<u>7</u>
Income before income tax provision	51,623
Income tax provision	<u>20,687</u>
Net income	<u><u>\$ 30,936</u></u>

See accompanying notes to financial statements.

**Cboe EDGX Exchange, Inc.**  
Statement of Changes in Stockholder's (Deficit) Equity  
Year ended December 31, 2017  
(In thousands)

	<b>(Accumulated deficit) Retained earnings</b>	<b>Total stockholder's (deficit) equity</b>
Balance at December 31, 2016	\$ (33,412)	\$ (33,412)
Contribution from Parent	14,381	14,381
Net income	30,936	30,936
Balance at December 31, 2017	\$ 11,905	\$ 11,905

See accompanying notes to financial statements.

**Cboe EDGX Exchange, Inc.**  
Statement of Cash Flows  
Year ended December 31, 2017  
(In thousands)

Cash flows from operating activities:	
Net income	\$ 30,936
Adjustments to reconcile net income to net cash provided by operating activities:	
Deferred income taxes	93
Changes in assets and liabilities:	
Receivables	2,599
Intercompany receivable	(42,626)
Other assets	(1,777)
Accounts payable	(1,915)
Unrecognized tax benefits	834
Section 31 fees payable	(2,537)
Other liabilities	12
Net cash used in operating activities	(14,381)
Cash flows from financing activities:	
Contribution from Parent	14,381
Net cash provided by financing activities	14,381
Increase in cash and cash equivalents	-
Cash and cash equivalents:	
Beginning of year	-
End of year	\$ -

See accompanying notes to financial statements.

**Cboe EDGX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

**(1) Nature of Operations**

Cboe EDGX Exchange, Inc. (the Company or EDGX), a wholly owned subsidiary of Cboe Global Markets, Inc. (the Parent), is an electronic market for the trading of listed cash equity securities and listed equity options in the United States (U.S.). The Company is headquartered in Chicago, Illinois, with additional offices in Kansas City, Missouri and New York, New York.

On February 28, 2017, the Company's then Parent was acquired by Cboe Global Markets, Inc. In October 2017, the Company's name was changed from Bats EDGX Exchange, Inc. to Cboe EDGX Exchange, Inc.

**(2) Summary of Significant Accounting Policies**

**(a) Basis of Presentation**

The accompanying financial statements for the Company have been prepared from the separate records maintained by the Parent and may not necessarily be indicative of the conditions that would have existed or the results of operations if the Company had been operated as an unaffiliated company. Portions of certain income and expenses represent allocations made from the Parent applicable to the Company as disclosed. See Note 3 for more information on related party transactions.

**(b) Principles of Accounting**

The Company follows accounting standards established by the Financial Accounting Standards Board (FASB) to report its financial condition, results of operations and cash flows. References to accounting principles generally accepted in the United States (GAAP) in these footnotes are to the FASB Accounting Standards Codification (ASC or Codification).

**(c) Use of Estimates**

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities as well as disclosure of the amounts of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates. Material estimates that are particularly susceptible to significant change in the near term include unrecognized tax benefits.

**(d) Cash and Cash Equivalents**

The Company's cash and cash equivalents are exposed to concentrations of credit risk. The Company maintains cash at various financial institutions and brokerage firms which, at times, may be in excess of the federal depository insurance limit. The Company's management regularly monitors these institutions and believes that the potential for future loss is remote. The Company considers all liquid investments with original or acquired maturities of three months or less to be cash equivalents. The Company's operations are funded by its Parent through a centralized treasury function.

**Choe EDGX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

**(e) *Accounts Receivable***

Accounts receivable represent amounts due from the Company's member firms and market data distributors and are carried at cost. On a periodic basis, management evaluates the Company's receivables and determines if an allowance for uncollectible accounts receivable based on anticipated collections is required. In circumstances where a specific member firm's or market data distributor's inability to meet its financial obligations is probable, the Company records a specific provision for uncollectible accounts against amounts due to reduce the receivable to the amount the Company estimates will be collected.

**(f) *Income Taxes***

Deferred taxes are recorded on a liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carryforwards, and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax bases. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment. The results of the Company's operations are included in the Parent's income tax returns. Income taxes are allocated to the Company using the pro-rata method. Tax accounts are settled periodically in accordance with the tax sharing agreement in place with the Parent.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained upon examination by the taxing authorities, based upon the technical merits of the position. The tax benefit recognized in the financial statements from such a position is measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. Also, interest and penalties expense is recognized on the full amount of deferred benefits for uncertain tax positions. The Company's policy is to include interest and penalties related to unrecognized tax benefits in the income tax provision within the statement of income.

**(g) *Revenue Recognition***

As of January 1, 2017, the Company adopted ASU 2014-09 Revenue from Contracts with Customers - Topic 606 and all subsequent ASUs that modified ASC 606. The Company elected to apply the ASU and all subsequent ASUs retrospectively, and the implementation of the guidance had no material impact on the measurement or recognition of revenue. The statement of income presents revenue at the disaggregated level for relevant revenue streams.

**Transaction Fees and Liquidity Payments**

Under the Company's "maker-taker" pricing model, a member posting an order (the liquidity maker) is paid a rebate (recorded in liquidity payments) for an execution occurring against that order, and a member executing against an order resting on the Company's book (the liquidity taker) is charged a fee (recorded in transaction fees). Transaction fees and liquidity payments are considered earned and incurred upon execution of a trade, are recognized on a trade-date basis and are recorded on a gross basis in revenues and cost of revenues.

**Cboe EDGX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

**Access Fees**

Access fees represent fees assessed for the opportunity to trade, including fees for trading related functionality across all segments. These fees are billed monthly in accordance with the Company's published fee schedules and recognized on a monthly basis when the performance obligation is met. There is no remaining performance obligation after revenue is recognized.

**Exchange Services and Other Fees**

To facilitate trading, the Company offers technology services consisting primarily of physical connectivity related to the Company's electronic market that are earned and recognized on a monthly basis

**Market Data Fees**

Market data fees are earned from U.S. tape plans, including the Unlisted Trading Privileges Plan (UTP), the Consolidated Tape Association Plan (CTA), and the Options Price Reporting Authority, LLC (OPRA), and also proprietary market data products. Fees collected from tape plan subscribers, net of plan costs, from UTP and CTA are allocated and distributed to plan participants according to their share of tape fees based on a formula required by Securities and Exchange Commission (SEC) Regulation NMS that takes into account both trading and quoting activity. Market data fees from OPRA are allocated based upon the share of total options transactions cleared for each of the OPRA members. The Company also charges data subscribers directly for proprietary market data. The proprietary market data fees are recognized monthly, as the subscription fees are earned.

**Regulatory Transaction and Section 31 Fees**

The Company, as a U.S. exchange, is assessed Section 31 fees pursuant to the Securities Exchange Act of 1934, as amended (Exchange Act). Section 31 fees are assessed on the notional value traded and are designed to recover the costs to the government of supervision and regulation of securities markets and securities professionals. The Company, in turn, assesses regulatory transaction fees to its members that are designed to equal the Section 31 fees. The Company acts as the principal on these transactions, and therefore these revenues are reported gross in the statement of income and the related Section 31 fees in cost of revenues as incurred on a settlement date basis. Regulatory transaction fees are collected by the Parent and paid directly to the SEC by the Parent on behalf of the Company. As required by law, the amount due to the SEC is remitted semiannually and recorded as Section 31 fees payable in the statement of financial condition until paid.

**(3) Related Party Transactions**

Prior to the sale of the Parent to Cboe Global Markets, certain affiliates of stockholders of the Parent conducted trading activity through the Company. The Company routed certain trades to other market centers through an affiliated broker-dealer. Based upon intercompany arrangements in place at that time, the Company remitted the revenue earned from customers for routing these transactions to the affiliated broker-dealer. The total expense associated with these arrangements, prior to the acquisition, was \$0.3 million and is included in routing and clearing in the statement of income.

**Cboe EDGX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

The Company utilizes property and equipment that are held at the Parent level. The Company also records expenses allocated from the Parent for various operating expenses. Similar results may not be achievable on an arm's length basis. The following table presents the Company's allocation of expenses from the Parent for the year ended December 31, 2017 (in thousands):

Compensation and benefits	\$ 19,799
Management fee	2,909
Technology support services	4,363
Professional fees and outside services	1,154
Travel and promotional expenses	1,524
Facilities costs	1,001
Other expenses	805
	\$ 31,555

**(4) Income Taxes**

Deferred tax assets consist of the following components as of December 31, 2017:

Deferred tax assets:	
Deferred revenue	\$ 91
Unrecognized tax benefits	333
Total deferred tax assets	\$ 424

The Company provides a valuation allowance against deferred tax assets if, based on management's assessment of historical and projected future operating results and other available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. Management believes it is more likely than not that the deferred tax assets will be realized based upon expectations of future taxable income.

The income tax provision for the year ended December 31, 2017 consists of the following:

Current tax expense:	
Federal	\$ 16,287
State	4,308
Total current tax expense	20,595
Deferred income tax (benefit) expense:	

**Cboe EDGX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

Federal		95
State		(3)
Income tax provision		\$ 20,687

The income tax provision differs from the amount of income tax determined by applying the U.S. federal income tax rate to income before income tax provision for the year ended December 31, 2017 due to the following:

Computed “expected” tax provision	\$ 18,068	35.0%
(Decrease) increase in income tax resulting from:		
Section 199 benefits	(703)	(1.4)%
State income taxes	2,457	4.8%
Impact of federal and state rate changes, net	45	0.1%
Change of unrecognized tax benefits	834	1.6%
Other	(14)	0.0%
Income tax provision	\$ 20,687	40.1%

A reconciliation of the unrecognized tax benefits for the year ended December 31, 2017 is as follows:

Balance at beginning of year	\$ 1,035	
Additions for current year tax positions	754	
Additions for prior year tax positions	23	
Reductions for prior year tax positions	(15)	
Balance at end of year	\$ 1,797	

At December 31, 2017, the Company had \$1.6 million of unrecognized tax benefits, net of federal benefit that, if recognized, would affect the effective tax rate. The Company had accrued interest and penalties of \$0.1 million related to uncertain tax positions at December 31, 2017. Total interest and penalties increased \$0.1 million in 2017.

On December 22, 2017 the U.S. enacted the Tax Cuts and Jobs Act (the “Jobs Act”). The Jobs Act significantly changes U.S. corporate income tax laws by, among other things, reducing the U.S. corporate income tax rate to 21% starting in 2018. The Company expects a significant reduction in its overall effective tax rate in 2018. In 2017, the Company recorded net tax expense of \$0.1 million associated with the impact of the Jobs Act due to the re-measurement of net deferred tax assets.



**Cboe EDGX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

The Company's open tax years are generally 2014 through 2017. The Company is currently under a U.S. federal income tax examination for tax years 2011, 2012 and 2013 and under income tax examinations in certain states. The Company believes the aggregate amount of any additional liabilities that may result from these examinations, if any, will not have a material adverse effect on the financial position, results of operations, or cash flows of the Company.

**(5) Commitments and Contingencies**

***Legal Proceedings***

From time to time the Company is involved in various legal proceedings arising in the ordinary course of business. The Company does not believe that the outcome of any of the reviews, inspections or other legal proceedings will have a material impact on the statement of financial position, results of operations or cash flows; however, litigation is subject to many uncertainties, and the outcome of individual litigated matters is not predictable with assurance.

Securities Industry and Financial Markets Association ("SIFMA") has filed a number of denial of access applications with the SEC to set aside proposed rule changes to establish or modify fees for Bats market data products and related services. Each application is being held in abeyance pending a decision on a separate SIFMA denial of access application held before the SEC's Chief Administrative Law Judge, or "ALJ", regarding fees proposed by Nasdaq and the NYSE for their respective market data products. On June 1, 2016, the ALJ issued a decision rejecting SIFMA's denial of access challenge to the Nasdaq and NYSE fees at issue, concluding that the exchanges do not enjoy monopoly pricing power over their depth of book feeds. On July 19, 2016, SIFMA petitioned the SEC for review of the ALJ decision. An adverse ruling in that matter could cause the SEC to more closely examine exchange market data fees, which in turn could result in the Company having to reduce the fees it charges for market data.

On April 18, 2014, the City of Providence, Rhode Island filed a securities class action lawsuit in the Southern District of New York against the Company, as well as 14 other securities exchanges. The action purports to be brought on behalf of all public investors who purchased and/or sold shares of stock in the United States since April 18, 2009 on a registered public stock exchange ("Exchange Defendants") or a U.S.-based alternate trading venue and were injured as a result of the alleged misconduct detailed in the complaint, which includes allegations that the Exchange Defendants committed fraud through a variety of business practices associated with, among other things, what is commonly referred to as high frequency trading. On May 2, 2014 and May 20, 2014, American European Insurance Company and Harel Insurance Co., Ltd. each filed substantially similar class action lawsuits against the Exchange Defendants which were ultimately consolidated with the City of Providence, Rhode Island securities class action lawsuit. On June 18, 2015, the Southern District of New York (the "Lower Court") held oral argument on the pending Motion to Dismiss and thereafter, on August 26, 2015, the Lower Court issued an Opinion and Order granting Exchange Defendants' Motion to Dismiss, dismissing the complaint in full. Plaintiff filed a Notice of Appeal of the dismissal on September 24, 2015 and its appeal brief on January 7, 2016. Respondent's brief was filed on April 7, 2016 and oral argument was held on August 24, 2016. Following oral argument, the Court of Appeals issued an order requesting that the SEC submit an amicus brief on whether the Lower Court had jurisdiction and whether the Exchange Defendants have immunity in the claims alleged. The SEC filed its amicus brief with the Court of Appeals on November 28, 2016 and Plaintiff and the Exchange Defendants filed their respective supplemental response briefs on December 12, 2016. On

**Cboe EDGX Exchange, Inc.**  
Notes to Financial Statements  
December 31, 2017  
(In thousands)

December 19, 2017, the Court of Appeals reversed the Lower Court's dismissal and remanded the case back to the Lower Court. On March 13, 2018, the Court of Appeals denied the Exchange Defendants' motion for re-hearing. Exchange Defendants filed their opening brief for their motions to dismiss on May 18, 2018. Plaintiffs' responses were filed June 15, 2018 and Exchange Defendants' reply is due June 29, 2018. Given the preliminary nature of the proceedings, the Company is unable to estimate what, if any, liability may result from this litigation. However, the Company believes that the claims are without merit and intends to litigate the matter vigorously.

In addition, as a self-regulatory organization under the jurisdiction of the SEC, the Company is subject to routine reviews and inspections by the SEC. From time to time the Company receives inquiries and investigative requests from the SEC's Office of Compliance Inspections and Examinations as well as the Division of Enforcement seeking information about compliance with the federal securities laws as well as members' compliance with the federal securities laws.

**(6) Subsequent Events**

The Company has performed an evaluation of events that have occurred subsequent to December 31, 2017 through June 28, 2018, the date the financial statements were issued.

There have been no subsequent events that have occurred during such period that would require disclosure in, or adjustment to, the financial statements as of and for the year ended December 31, 2017.

**Exhibit K**

**Exhibit Request:**

**This Exhibit is applicable only to exchanges that have one or more owners, shareholders, or partners that are not also members of the exchange. If the exchange is a corporation, please provide a list of each shareholder that directly owns 5% or more of a class of a voting security of the applicant. If the exchange is a partnership, please provide a list of all general partners and those limited and special partners that have the right to receive upon dissolution, or have contributed, 5% or more of the partnership's capital. For each of the persons listed in the Exhibit K, please provide the following:**

- 1. Full legal name;**
- 2. Title or Status;**
- 3. Date title or status was acquired;**
- 4. Approximate ownership interest; and**
- 5. Whether the person has control, a term that is defined in the instructions to this Form.**

**Response:**

Cboe EDGX Exchange, Inc. ("EDGX") is wholly-owned by Direct Edge LLC ("Direct Edge"). Direct Edge is the sole stockholder of the Exchange, and acquired its interest in the Exchange on July 22, 2010. Direct Edge exercises "control" over the Exchange, as that term is defined in the Form 1 instructions.

Direct Edge is wholly-owned by Cboe Bats, LLC (f/k/a CBOE V, LLC). Cboe Bats, LLC is the sole stockholder of Direct Edge, and acquired its interest in Direct Edge on January 31, 2014. Cboe Bats, LLC exercises "control" over the Exchange, as that term is defined in the Form 1 instructions.

Cboe Bats, LLC is wholly-owned by Cboe Global Markets, Inc. Cboe Global Markets, Inc. is the sole member of Cboe Bats, LLC, and acquired its interest in Cboe Bats, LLC on September 23, 2016. Cboe Global Markets, Inc. exercises "control" over the Exchange, as that term is defined in the Form 1 instructions.

**Exhibit M**

**Exhibit Request:**

Provide an alphabetical list of all members, participants, subscribers or other users, including the following information:

1. Name,
2. Date of election to membership or acceptance as a participant, subscriber or other user,
3. Principal business address and telephone number,
4. If member, participant, subscriber or other user is an individual, the name of the entity with which such individual is associated and the relationship of such individual to the entity (e.g., partner, officer, director, employee, etc.),
5. Describe the type of activities primarily engaged in by the member, participant, subscriber, or other user (e.g., floor broker, specialist, odd lot dealer, other market maker, proprietary trader, non-broker dealer, inactive or other functions). A person shall be “primarily engaged” in an activity or function for purposes of this item when that activity or function is the one in which that person is engaged for the majority of their time. When more than one type of person at an entity engages in any of the six types of activities or functions enumerated in this item, identify each type (e.g., proprietary trader, Registered Competitive Trader and Registered Competitive Market Maker) and state the number of members, participants, subscribers, or other users in each, and
6. The class of membership, participation or subscription or other access.

**Response:**

Attached please find a list of the current Members and Sponsored Participants accepted as Users of the Exchange.

Company Name	BZX Approval Date	BYX Approval Date	EDGA Approval Date	EDGX Approval Date	CBOE Effective Date	C2 Effective Date	Type of User	Address	Phone Number	Primary Activities
ABN AMRO Clearing Chicago LLC	10/15/2008	10/1/2010	5/25/2010	5/27/2010	5/13/1985	9/24/2010	Member TPH	175 W Jackson Boulevard Suite 400 Chicago, IL 60604	312-604-8000	Clearing, Transact Business with the Public, Brokerage
ACS Execution Services, LLC	1/15/2016	1/15/2016	1/15/2016	1/15/2016	NA	NA	Member TPH	12 Broad Street 2nd Floor Red Bank, NJ 07701	732-204-8999	Proprietary Trading
Agency Desk, LLC	7/1/2009	NA	NA	NA	NA	NA	Member TPH	590 Madison Avenue 21st Floor New York, NY 10022	212-935-9835	Market Maker
Akuna Securities LLC	9/15/2015	NA	NA	8/14/2017	2/2/2012	2/12/2015	Member TPH	333 S Wabash Avenue Suite 2600 Chicago, IL 60604	312-994-4640	Market Maker, Proprietary Trading
Albert Fried & Company, LLC	8/18/2008	4/15/2011	5/18/2010	5/18/2010	NA	NA	Member TPH	31 W 52nd Street New York, NY 10019	212-827-7000	Agency
Alpha Trading, LP	10/24/2017	10/24/2017	10/24/2017	10/24/2017	NA	NA	Member TPH	640 W California Avenue Sunnyvale, CA 94086	408-990-1940	Market Maker, Proprietary Trading
Alpine Securities Corporation	11/3/2008	11/15/2010	NA	NA	NA	NA	Member TPH	39 Exchange Place Salt Lake City, UT 84111	801-355-5588	Agency
AMS Derivatives B.V.	NA	NA	NA	NA	12/1/2017	NA	Member TPH	Strawinskylaan 3095 Amsterdam, 1077ZX Netherlands	31-020-708-7000	Proprietary Trading
Andrie Trading LLC	NA	NA	NA	NA	10/1/1999	NA	Member TPH	440 S LaSalle Street Suite 1110 Chicago, IL 60605	312-663-8195	Market Maker
Apex Clearing Corporation	6/5/2012	6/5/2012	6/5/2012	6/5/2012	6/6/2012	6/6/2012	Member TPH	One Dallas Center 350 N St. Paul, Suite 1300 Dallas, TX 75201	214-765-1055	Clearing, Transact Business with the Public
Archipelago Securities LLC	8/18/2008	9/1/2010	5/25/2010	5/27/2010	NA	NA	Member TPH	353 N Clark Street Suite 3200 Chicago, IL 60654	312-836-6700	Limited Routing Facility of ICE affiliated Exchanges
Athena Capital Research, LLC	7/1/2009	10/20/2010	NA	NA	NA	NA	Sponsored Participant	440 9th Avenue 11th Floor New York, NY 10001	212-931-9056	Proprietary Trading
ATM Execution LLC	3/15/2012	3/15/2012	3/21/2012	3/21/2012	NA	NA	Member TPH	599 Lexington Avenue 21st Floor New York, NY 10022	646-562-1010	Public Customer Business
Barclays Capital Inc.	8/18/2008	10/1/2010	5/14/2010	5/14/2010	9/22/2008	10/6/2010	Member TPH	745 7th Avenue New York, NY 10019	212-526-7000	Clearing, Market Maker, Transact Business with the Public, Brokerage, Proprietary Trading
Bay Crest Partners, LLC	10/15/2008	NA	5/25/2010	5/27/2010	NA	NA	Member TPH	40 Wall Street 42nd Floor New York, NY 10005	212-480-1400	Agency
Bayes Capital LLC	1/15/2015	1/30/2015	1/30/2015	1/30/2015	NA	NA	Member TPH	54 Jefferson Avenue Suite 2 Westwood, NJ 07675	201-660-7187	Agency
Belvedere Trading LLC	11/1/2011	3/1/2012	11/29/2011	NA	1/3/2005	4/4/2011	Member TPH	10 S Riverside Plaza Suite 2100 Chicago, IL 60606	312-893-3750	Market Maker, Proprietary Trading
Bengal Capital Trading LLC	NA	NA	NA	NA	1/15/2013	NA	Member TPH	440 S LaSalle Street Suite 2121 Chicago, IL 60605	312-362-4928	Proprietary Trading
Benjamin & Jerold Brokerage I LLC	10/1/2009	12/11/2017	12/11/2017	12/11/2017	NA	NA	Member TPH	80 Broad Street 8th Floor New York, NY 10005	646-558-0055	Agency
BGC Financial, LP	8/17/2009	NA	NA	NA	NA	NA	Member TPH	One Seaport Plaza 19th Floor New York, NY 10038	646-346-7000	Agency
Blaylock Van, LLC	5/3/2010	NA	NA	NA	NA	NA	Member TPH	800 Lexington Avenue 3rd Floor New York, NY 10022	212-715-8600	Public Customer Business
Bloomberg Tradebook LLC	10/23/2008	10/4/2010	5/14/2010	5/14/2010	NA	NA	Member TPH	919 3rd Avenue New York, NY 10022	646-324-3178	Agency
Bluefin Trading, LLC	8/3/2009	6/1/2015	9/27/2013	8/13/2013	4/27/2009	NA	Member TPH	3 Park Avenue 37th Floor New York, NY 10016	212-457-9150	Market Maker, Proprietary Trading
BMO Capital Markets Corp.	8/18/2008	11/15/2010	7/15/2014	7/15/2014	10/8/2013	11/15/2013	Member TPH	3 Times Square New York, NY 10036	212-885-4000	Clearing, Proprietary Trading, Transact Business with the Public, Brokerage
BMT Trading, LLC	2/1/2010	NA	NA	NA	NA	NA	Sponsored Participant	800 3rd Avenue New York, NY 10022	212-813-0870	Proprietary Trading
BNP Paribas Prime Brokerage, Inc.	12/3/2012	12/3/2012	NA	NA	NA	NA	Member TPH	787 7th Avenue New York, NY 10019	212-471-6768	Clearing
BNP Paribas Securities Corp.	8/18/2008	9/15/2010	5/25/2010	5/27/2010	1/5/2005	10/15/2010	Member TPH	787 7th Avenue New York, NY 10019	212-841-2000	Clearing, Order Flow Provider, Proprietary Trading, Transact Business with the Public
BNY Mellon Capital Markets, LLC	NA	NA	NA	1/17/2017	NA	NA	Member TPH	101 Barclay Street New York, NY 10286	212-815-4972	Market Maker
Boerboel Capital LLC	11/17/2017	NA	NA	NA	2/1/2017	NA	Member TPH	300 N LaSalle Street Suite 2060 Chicago, IL 60654	708-967-6843	Market Maker
BTIG, LLC	8/18/2008	11/15/2010	5/25/2010	5/27/2010	NA	NA	Member TPH	600 Montgomery Street 6th Floor San Francisco, CA 94111	415-248-2200	Market Maker
C&C Trading LLC	8/18/2008	10/11/2010	5/25/2010	5/27/2010	NA	NA	Member TPH	71 Arch Street 1st Floor Greenwich, CT 06830	212-706-1227	Proprietary Trading
Canaccord Genuity LLC	10/1/2013	10/1/2013	6/10/2010	6/10/2010	NA	NA	Member TPH	535 Madison Avenue New York, NY 10022	212-389-8000	Market Maker
Canadian Imperial Holdings, Inc.	10/15/2008	11/15/2010	NA	NA	NA	NA	Sponsored Participant	300 Madison Avenue 5th Floor New York, NY 10017	212-856-3877	Proprietary Trading
Cantor Fitzgerald & Co.	10/23/2008	2/13/2015	5/25/2010	5/27/2010	NA	NA	Member TPH	110 E 59th Street 4th Floor New York, NY 10022	212-938-5000	Agency, Institutional Trading
Capital Institutional Services, Inc.	8/18/2008	NA	5/25/2010	5/27/2010	NA	NA	Member TPH	1700 Pacific Avenue Suite 1100 Dallas, TX 75201	214-720-0055	Agency
Cardinal Capital Management, LLC	NA	NA	NA	NA	10/1/2007	NA	Member TPH	141 W Jackson Boulevard Suite 2200A Chicago, IL 60604	312-477-8400	Market Maker
Cboe Trading, Inc.	10/23/2008	9/1/2010	5/14/2010	5/14/2010	NA	4/18/2018	Member TPH	8050 Marshall Drive Suite 120 Lenexa, KS 66214	913-815-7000	Limited Routing Facility of Cboe affiliated Exchanges
CF Global Trading, LLC	10/23/2008	1/3/2011	NA	NA	NA	NA	Member TPH	60 E 42nd Street Suite 1455 New York, NY 10165	212-888-4711	Market Maker
Charles Schwab & Co., Inc.	NA	NA	NA	4/3/2017	6/2/1980	NA	Member TPH	211 Main Street San Francisco, CA 94105	415-636-7000	Clearing, Transact Business with the Public
Chimera Securities, LLC	6/2/2014	6/2/2014	6/25/2014	6/25/2014	NA	NA	Member TPH	27 Union Square W 4th Floor New York, NY 10003	646-597-6100	Proprietary Trading

Company Name	BZX Approval Date	BYX Approval Date	EDGA Approval Date	EDGX Approval Date	CBOE Effective Date	C2 Effective Date	Type of User	Address	Phone Number	Primary Activities
Chimera Securities, LLC	11/17/2017	11/27/2017	11/27/2017	11/17/2017	NA	NA	Sponsored Participant	27 Union Square W 4th Floor New York, NY 10003	646-597-6100	Proprietary Trading
CIBC World Markets Corp.	8/18/2008	11/15/2010	NA	NA	2/14/1973	NA	Member TPH	425 Lexington Avenue New York, NY 10017	212-856-4000	Clearing, Transact Business with the Public
Citadel Securities LLC	10/23/2008	10/1/2010	5/14/2010	5/14/2010	4/17/2002	10/7/2010	Member TPH	131 S Dearborn Street 32nd Floor Chicago, IL 60603	312-395-2100	Market Maker, Order Flow Provider, Brokerage
Citi Order Routing and Execution, LLC	8/18/2008	9/15/2010	5/25/2010	5/27/2010	10/1/2008	9/24/2010	Member TPH	11 Ewall Street Mount Pleasant, SC 29464	843-789-2080	Clearing, Transact Business with the Public
Citigroup Derivatives Markets Inc.	2/15/2018	NA	NA	2/15/2018	12/3/2004	2/25/2011	Member TPH	130 Cheshire Lane Suite 102 Minnetonka, MN 55305	212-723-2980	Market Maker
Citigroup Global Markets Inc.	9/24/2008	12/15/2010	5/25/2010	5/27/2010	5/2/2011	NA	Member TPH	390-388 Greenwich Street New York, NY 10013	212-816-6000	Clearing, Proprietary Trading, Transact Business with the Public
Clarksons Platou Securities, Inc.	NA	NA	1/15/2015	NA	NA	NA	Member TPH	280 Park Avenue 21st Floor New York, NY 10017	212-317-7080	Public Customer Business
Clearpool Execution Services, LLC	5/15/2014	5/15/2014	6/16/2014	6/16/2014	NA	NA	Member TPH	17 State Street 38th Floor New York, NY 10004	212-531-8500	Public Customer Business
CLSA Americas, LLC	NA	NA	5/21/2013	5/21/2013	NA	NA	Member TPH	1301 Avenue of the Americas 15th Floor New York, NY 10019	212-549-5097	Agency
CM-CIC Market Solutions, Inc.	8/18/2008	NA	NA	NA	NA	NA	Member TPH	520 Madison Avenue New York, NY 10022	212-659-6292	Agency
CMT Fund XXV Limited	7/2/2012	7/2/2012	NA	NA	NA	NA	Sponsored Participant	500 W Monroe Street Suite 2630 Chicago, IL 60661	312-320-7897	Agency
CMT Trading LLC	3/17/2014	3/17/2014	3/5/2014	3/5/2014	NA	NA	Member TPH	500 W Monroe Street Suite 2630 Chicago, IL 60661	312-930-9050	Market Maker, Proprietary Trading
CMZ Trading, LLC	NA	NA	NA	NA	10/1/2004	NA	Member TPH	141 W Jackson Boulevard Suite 826 Chicago, IL 60604	312-604-3310	Market Maker, Proprietary Trading
CODA Markets, Inc.	10/15/2008	10/4/2010	5/26/2010	5/27/2010	NA	NA	Member TPH	2624 Patriot Boulevard Glenview, IL 60026	224-521-2700	ATS
Cognitive Capital, LLC	NA	NA	NA	NA	5/13/2004	NA	Member TPH	141 W Jackson Boulevard Suite 1620 Chicago, IL 60604	312-431-0400	Proprietary Trading
Comhar Capital Markets, LLC	2/27/2017	NA	NA	NA	NA	NA	Member TPH	311 S Wacker Drive Suite 2280A Chicago, IL 60606	872-205-0190	Proprietary Trading
Consolidated Trading, LLC	NA	NA	NA	NA	1/2/2002	NA	Member TPH	71 S Wacker Drive Suite 2300 Chicago, IL 60606	312-360-7300	Market Maker
COR Clearing LLC	10/15/2009	NA	NA	NA	NA	NA	Member TPH	1200 Landmark Center 1299 Farnam Street Suite 800 Omaha, NE 68102	402-384-6100	Clearing Services
Cowen and Company, LLC	8/18/2008	10/7/2010	5/14/2010	5/14/2010	NA	NA	Member TPH	599 Lexington Avenue 20th Floor New York, NY 10022	646-562-1010	Market Maker
Cowen Execution Services LLC	10/15/2008	9/1/2010	5/25/2010	5/27/2010	NA	NA	Member TPH	1633 Broadway 48th Floor New York, NY 10019	800-367-8998	Full Service
Cowen Prime Services LLC	3/15/2011	3/15/2011	NA	NA	NA	NA	Member TPH	599 Lexington Avenue 21st Floor New York, NY 10022	646-562-1010	Public Customer Business, Proprietary Trading
Credit Suisse Securities (USA) LLC	9/3/2008	10/1/2010	5/25/2010	5/27/2010	8/14/1981	10/8/2010	Member TPH	11 Madison Avenue New York, NY 10010	212-325-2000	Clearing, Proprietary Trading, Transact Business with the Public, Brokerage
Critical Trading, LLC	7/1/2014	6/8/2018	NA	6/8/2018	NA	NA	Member TPH	120 W 45th Street 15th Floor New York, NY 10036	646-918-0529	Market Maker, Proprietary Trading
CSS, LLC	NA	NA	NA	NA	8/21/1998	NA	Member TPH	175 W Jackson Boulevard Suite 440 Chicago, IL 60604	312-542-8505	Proprietary Trading
CTC, LLC	3/15/2018	NA	NA	NA	3/25/1998	3/3/2011	Member TPH	440 S LaSalle Street 4th Floor Chicago, IL 60605	312-863-8000	Market Maker
Cutler Group, LP	4/1/2010	10/6/2010	NA	10/16/2015	4/5/1999	NA	Member TPH	101 Montgomery Street Suite 700 San Francisco, CA 94104	415-293-3956	Market Maker, Proprietary Trading
Dash Financial Technologies LLC	10/23/2008	7/2/2012	6/9/2010	6/9/2010	5/19/2000	9/30/2010	Member TPH	311 S Wacker Drive Suite 1000 Chicago, IL 60606	312-986-2006	Clearing, Floor Broker, Order Flow Provider, Transact Business with the Public, Brokerage
Deutsche Bank Securities Inc.	10/15/2008	10/11/2010	5/21/2010	5/21/2010	4/25/1996	8/15/2011	Member TPH	60 Wall Street New York, NY 10005	212-250-2500	Clearing, Proprietary Trading, Transact Business with the Public, Brokerage
DRW Securities, LLC	9/1/2009	11/1/2010	5/25/2010	5/27/2010	11/23/1998	1/22/2016	Member TPH	540 W Madison Street Suite 2500 Chicago, IL 60661	312-542-1000	Market Maker, Proprietary Trading
E*TRADE Securities LLC	NA	NA	NA	6/10/2010	NA	NA	Member TPH	11 Times Square 32nd Floor New York, NY 10036	646-521-4300	Public Customer Business
EG Market Technologies LLC	4/3/2017	4/3/2017	4/3/2017	4/3/2017	NA	NA	Member TPH	767 5th Avenue 45th Floor New York, NY 10153	646-757-2831	Market Maker, Proprietary Trading
Electronic Transaction Clearing, Inc.	10/23/2008	9/1/2010	5/25/2010	5/27/2010	NA	NA	Member TPH	680 S Figueroa Street Los Angeles, CA 90017	949-533-1885	Market Maker
Essex Radez LLC	2/17/2009	10/1/2010	5/10/2010	5/14/2010	NA	NA	Member TPH	440 S LaSalle Street Suite 1111 Chicago, IL 60605	312-212-1815	Market Maker
Evercore Group LLC	NA	NA	5/10/2017	NA	NA	NA	Member TPH	55 E 52nd Street New York, NY 10055	212-857-3100	Public Customer Business
FIS Brokerage & Securities Services LLC	8/18/2008	10/1/2010	5/6/2010	5/6/2010	NA	NA	Member TPH	2100 Enterprise Avenue Geneva, IL 60134	630-482-7100	Agency
Flow Traders U.S. Institutional Trading LLC	NA	NA	6/1/2016	NA	NA	NA	Member TPH	1114 Avenue of the Americas 4th Floor New York, NY 10036	917-210-5000	Riskless Principal
Flow Traders U.S. LLC	10/1/2009	8/1/2012	2/28/2014	2/28/2014	8/31/2010	NA	Member TPH	1114 Avenue of the Americas 4th Floor New York, NY 10036	917-210-5000	Proprietary Trading
G1 Execution Services, LLC	8/18/2008	12/1/2010	4/17/2010	4/17/2010	NA	NA	Member TPH	175 W Jackson Boulevard Suite 1700 Chicago, IL 60604	312-362-0404	Market Maker
G2 Trading LLC	6/1/2016	NA	NA	NA	NA	NA	Member TPH	325 S Sangamon Street Chicago, IL 60607	404-697-9915	Market Maker, Proprietary Trading
Gelber Securities, LLC	5/1/2015	NA	NA	NA	NA	NA	Member TPH	350 N Orleans Street 7th Floor Chicago, IL 60654	312-408-4354	Market Maker, Proprietary Trading

Company Name	BZX Approval Date	BYX Approval Date	EDGA Approval Date	EDGX Approval Date	CBOE Effective Date	C2 Effective Date	Type of User	Address	Phone Number	Primary Activities
Geneva Stock, LLC	NA	NA	NA	NA	4/6/2001	NA	Member TPH	440 S LaSalle Street Suite 1711 Chicago, IL 60605	312-362-4404	Market Maker
Global Execution Brokers, LP	2/1/2010	10/5/2010	12/1/2015	10/15/2015	12/23/2003	9/24/2010	Member TPH	401 City Avenue Bala Cynwyd, PA 19004	610-617-2600	Floor Broker, Transact Business with the Public, Brokerage
Global HFT Management, LLC	10/1/2010	NA	NA	NA	NA	NA	Sponsored Participant	800 3rd Avenue New York, NY 10022	212-813-0870	Proprietary Trading
Global Liquidity Partners, LLC	4/21/2011	5/15/2012	NA	NA	NA	NA	Sponsored Participant	12 Broad Street Suite 201 Redbank, NJ 07701	773-459-4665	Agency
Goldman Sachs & Co. LLC	10/23/2008	10/12/2010	5/14/2010	5/14/2010	2/21/1973	10/8/2010	Member TPH	200 West Street New York, NY 10282	212-902-1000	Clearing, Market Maker, Proprietary Trading, Transact Business with the Public, Brokerage
Gordon, Haskett Capital Corporation	NA	NA	NA	5/2/2016	NA	NA	Member TPH	441 Lexington Avenue 10th Floor New York, NY 10017	212-883-0600	Agency, Institutional Trading
Green Street Trading, LLC	11/1/2011	NA	NA	NA	NA	NA	Member TPH	660 Newport Center Drive Suite 800 Newport Beach, CA 92660	214-749-4730	Agency
Group One Trading, LP	6/2/2015	NA	NA	9/29/2015	11/23/1994	NA	Member TPH	440 S LaSalle Street Suite 3232 Chicago, IL 60605	312-347-8864	Market Maker
GTS Securities LLC	12/17/2013	5/1/2012	6/2/2014	6/2/2014	NA	NA	Member TPH	545 Madison Avenue 15th Floor New York, NY 10022	212-715-2830	Market Maker, Proprietary Trading
Hainey Investments Limited	6/16/2014	NA	NA	NA	NA	NA	Sponsored Participant	Themistokli Dervi 41 #806-807 Nicosia, Cyprus	704-248-8221	Proprietary Trading
HAP Trading, LLC	10/1/2009	11/15/2010	NA	6/2/2010	3/16/2001	NA	Member TPH	395 Hudson Street Suite 701 New York, NY 10014	212-380-5100	Market Maker, Proprietary Trading
Hardcastle Trading USA LLC	4/15/2009	NA	5/25/2010	5/27/2010	5/16/2005	NA	Member TPH	755 Secaucus Road Suite F-1110 Secaucus, NJ 07094	201-305-8888	Proprietary Trading
Henning-Carey Proprietary Trading, LLC	8/15/2012	NA	NA	NA	NA	NA	Sponsored Participant	141 W Jackson Boulevard Suite 1801 Chicago, IL 60604	312-789-8764	Proprietary Trading
Highbridge Capital Management, LLC	10/23/2008	NA	NA	NA	NA	NA	Sponsored Participant	9 West 57th Street 27th Floor New York, NY 10019	212-287-4900	Proprietary Trading
Hilltop Securities Inc.	10/23/2008	9/1/2010	NA	5/21/2013	10/1/2010	NA	Member TPH	1201 Elm Street Suite 3500 Dallas, TX 75270	214-859-1800	Clearing, Transact Business with the Public
HRT Financial LLC	2/1/2010	10/1/2010	5/18/2010	5/18/2010	1/24/2011	1/24/2011	Member TPH	4 World Trade Center 150 Greenwich Street, 57th Floor New York, NY 10007	212-293-1444	Proprietary Trading
HSBC Securities (USA) Inc.	4/3/2017	4/3/2017	4/3/2017	4/3/2017	11/21/2005	NA	Member TPH	452 Fifth Avenue New York, NY 10018	224-880-7116	Clearing, Transact Business with the Public
HTG Capital Partners, LLC	10/3/2016	10/3/2016	10/3/2016	10/3/2016	NA	NA	Sponsored Participant	601 S LaSalle Street 2nd Floor Chicago, IL 60605	312-327-4112	Proprietary Trading
Hybrid Trading & Resources, LLC	NA	NA	NA	NA	3/22/2005	NA	Member TPH	111 W Jackson Boulevard Suite 1146 Chicago, IL 60604	312-427-1585	Floor Broker, Transact Business with the Public
ICAP Corporates LLC	NA	NA	3/28/2013	NA	NA	NA	Member TPH	Harborside 5 Hudson Street, Suite 1200 Jersey City, NJ 07311	212-341-9944	Agency
IEX Services LLC	10/1/2013	10/1/2013	9/24/2013	9/24/2013	NA	NA	Member TPH	4 World Trade Center 44th Floor New York, NY 10007	646-343-2000	Limited Routing Facility of IEX affiliated Exchanges
IMC Financial Markets	8/18/2008	10/1/2010	5/25/2010	5/27/2010	7/5/2000	9/24/2010	Member TPH	233 S Wacker Drive Suite 4300 Chicago, IL 60606	312-244-3300	Market Maker, Proprietary Trading
Industrial and Commercial Bank of China Financial Services LLC	5/15/2014	5/15/2014	NA	NA	NA	NA	Member TPH	1633 Broadway 28th Floor New York, NY 10019	212-993-7300	Clearing Services
Instinet LLC	8/18/2008	9/1/2010	5/14/2010	5/14/2010	12/29/2009	10/6/2010	Member TPH	Worldwide Plaza 309 W 49th Street New York, NY 10019	212-310-9500	Clearing, Transact Business with the Public, Brokerage
Interactive Brokers Corp.	NA	NA	NA	NA	4/21/2009	10/6/2010	Member TPH	8 Greenwich Office Park Greenwich, CT 06831	203-618-5700	Floor Broker, Brokerage
Interactive Brokers LLC	8/18/2008	9/15/2010	5/25/2010	5/27/2010	NA	NA	Member TPH	One Pickwick Plaza 2nd Floor Greenwich, CT 06830	203-618-5710	Full Service
International Correspondent Trading, Inc.	8/18/2008	NA	NA	NA	NA	NA	Member TPH	One University Plaza Suite 301 Hackensack, NJ 07601	201-222-9300	Agency
Israel A. Englander & Co., LLC	NA	NA	NA	NA	10/27/1995	9/24/2010	Member TPH	666 5th Avenue 14th Floor New York, NY 10103	212-841-4567	Floor Broker, Transact Business with the Public, Brokerage
ISTRA, LLC	12/15/2011	12/15/2011	NA	NA	NA	NA	Sponsored Participant	230 Park Avenue 10th Floor New York, NY 10169	718-618-4929	Proprietary Trading
ITG Inc.	8/18/2008	10/1/2010	5/25/2010	5/27/2010	NA	NA	Member TPH	One Liberty Plaza 165 Broadway, 4th Floor New York, NY 10006	212-588-4000	Agency
J.P. Morgan Securities LLC	8/18/2008	9/15/2010	5/14/2010	5/14/2010	10/29/1985	11/18/2010	Member TPH	383 Madison Avenue New York, NY 10179	212-272-2000	Clearing, Transact Business with the Public
Jane Street Capital, LLC	5/1/2009	11/15/2010	5/14/2010	5/14/2010	9/4/2012	NA	Member TPH	250 Vesey Street 5th Floor New York, NY 10281	646-759-8000	Market Maker, Proprietary Trading
Jane Street Options, LLC	1/3/2012	NA	NA	NA	NA	NA	Sponsored Participant	One New York Plaza New York, NY 10004	212-651-6969	Proprietary Trading
Jane Street Options, LLC	4/15/2016	NA	NA	NA	5/2/2005	NA	Member TPH	250 Vesey Street 5th Floor New York, NY 10281	646-759-8000	Market Maker
Jefferies Investment Advisers	7/1/2011	7/15/2011	NA	NA	NA	NA	Sponsored Participant	520 Madison Avenue New York, NY 10022	212-323-3993	Full Service
Jefferies LLC	10/23/2008	10/19/2010	5/25/2010	5/27/2010	7/9/2012	7/18/2012	Member TPH	520 Madison Avenue New York, NY 10022	212-284-2300	Clearing, Proprietary Trading, Transact Business with the Public, Brokerage
JNK Securities Corp.	11/17/2008	11/15/2010	NA	NA	NA	NA	Member TPH	140 E 45th Street 27th Floor New York, NY 10017	212-885-6300	Agency
Juliet Group, LLC	3/1/2011	3/1/2011	NA	NA	NA	NA	Sponsored Participant	240 E 35th Street #3A New York, NY 10016	646-360-0595	Proprietary Trading
Juliet Labs, LLC	9/20/2017	9/20/2017	9/20/2017	9/20/2017	NA	NA	Sponsored Participant	1 Northside Piers Suite 14H Brooklyn, NY 11249	646-360-0595	Proprietary Trading
Jump Trading, LLC	8/18/2008	10/1/2010	5/14/2010	5/14/2010	4/2/2012	6/6/2017	Member TPH	600 W Chicago Avenue Suite 825 Chicago, IL 60654	312-205-8900	Market Maker, Proprietary Trading

Company Name	BZX Approval Date	BYX Approval Date	EDGA Approval Date	EDGX Approval Date	CBOE Effective Date	C2 Effective Date	Type of User	Address	Phone Number	Primary Activities
Keefe, Bruyette & Woods, Inc.	8/18/2008	12/1/2010	6/8/2010	6/8/2010	NA	NA	Member TPH	787 7th Avenue New York, NY 10019	212-867-7777	Agency
Lakeshore Securities, LP	NA	NA	NA	NA	1/24/1983	NA	Member TPH	401 S LaSalle Street Suite 1000 Chicago, IL 60605	312-663-1307	Clearing, Floor Broker, Market Maker, Transact Business with the Public
Lamberson Capital LLC	NA	NA	NA	NA	3/23/2016	NA	Member TPH	71 S Wacker Drive Suite 2300 Chicago, IL 60606	312-360-7300	Market Maker
Lampert Capital Markets Inc.	NA	2/18/2014	2/26/2014	NA	NA	NA	Member TPH	444 Madison Avenue Suite 401 New York, NY 10022	646-833-4900	Introducing Broker
Lampost Capital, LC	NA	NA	NA	3/15/2016	NA	NA	Member TPH	1900 Glades Road Suite 205 Boca Raton, FL 33431	561-883-0454	Public Customer Business, Proprietary Trading
Latour Trading LLC	8/17/2009	10/1/2010	5/26/2010	5/27/2010	4/8/2011	NA	Member TPH	377 Broadway 10th Floor New York, NY 10013	917-388-8000	Proprietary Trading
Leerink Partners LLC	8/18/2008	10/5/2010	5/26/2010	5/27/2010	NA	NA	Member TPH	1 Federal Street 37th Floor Boston, MA 02110	617-918-4900	Agency
LEK Securities Corporation	8/18/2008	10/1/2010	5/26/2010	5/27/2010	1/9/2001	9/24/2010	Member TPH	111 Liberty Plaza 165 Broadway, 52nd Floor New York, NY 10006	212-509-2300	Clearing, Transact Business with the Public
Lightspeed Trading, LLC	8/18/2008	11/15/2010	5/19/2010	5/19/2010	NA	NA	Member TPH	1001 Avenue of the Americas 16th Floor New York, NY 10018	646-393-4800	Proprietary Trading
Lime Brokerage LLC	8/18/2008	10/1/2010	5/26/2010	5/27/2010	NA	NA	Member TPH	11 E 44th Street Suite 705 New York, NY 10017	212-824-5000	Transact Business with the Public
Liquidnet, Inc.	9/1/2009	9/15/2010	NA	NA	NA	NA	Member TPH	498 7th Avenue 15th Floor New York, NY 10018	646-674-2000	Agency
Lupo Securities, LLC	NA	NA	NA	NA	8/1/1997	NA	Member TPH	141 W Jackson Boulevard Suite 2200A Chicago, IL 60604	312-477-8400	Market Maker, Proprietary Trading
Macquarie Capital (USA) Inc.	12/1/2009	NA	5/26/2010	5/27/2010	NA	NA	Member TPH	125 W 55th Street Level 22 New York, NY 10019	212-231-1000	Agency
Marathon Trading Group LLC	2/13/2015	NA	NA	NA	1/30/2013	NA	Member TPH	100 Malsonford Road Building 2, Suite 107 Wayne, PA 19087	610-254-4890	Market Maker, Proprietary Trading
Matrix Executions, LLC	8/18/2008	11/15/2010	NA	11/12/2015	2/1/2008	10/26/2010	Member TPH	601 S LaSalle Street Suite 300 Chicago, IL 60605	312-334-8000	Transact Business with the Public, Brokerage
Meadowhawk Capital, LLC	NA	NA	NA	NA	6/1/2007	NA	Member TPH	141 W Jackson Boulevard Suite 3750 Chicago, IL 60604	773-837-2612	Market Maker
Merrill Lynch Professional Clearing Corp.	8/18/2008	10/5/2010	5/14/2010	5/14/2010	4/8/1985	9/24/2010	Member TPH	One Bryant Park, 6th Floor NY-1-100-06-01 New York, NY 10036	646-743-1295	Clearing, Brokerage, Transact Business with the Public
Merrill Lynch, Pierce, Fenner & Smith Incorporated	8/18/2008	10/4/2010	5/14/2010	5/14/2010	4/25/1973	9/27/2010	Member TPH	One Bryant Park New York, NY 10036	800-637-7455	Clearing, Transact Business with the Public, Brokerage, Market Maker, Proprietary Trading
Mint Global Markets, Inc.	NA	NA	5/26/2010	5/27/2010	NA	NA	Member TPH	1717 Route 6 Suite 102 Carmel, NY 10512	800-874-3039	Agency
Mizuho Securities USA, LLC	6/1/2010	1/3/2011	NA	NA	NA	NA	Member TPH	320 Park Avenue 12th Floor New York, NY 10022	212-209-9300	Agency
MKM Partners LLC	8/3/2009	NA	5/14/2010	5/14/2010	NA	NA	Member TPH	300 First Stamford Place 4th Floor East Wing Stamford, CT 06902	203-861-9060	Agency
MNR Executions, LLC	NA	NA	NA	NA	4/30/2008	NA	Member TPH	141 W Jackson Boulevard Suite 3900 Chicago, IL 60604	312-878-4704	Floor Broker, Transact Business with the Public
Monadnock Capital Management, LP	NA	NA	NA	NA	12/1/2014	NA	Member TPH	1845 Walnut Street Suite 940 Philadelphia, PA 19103	267-239-0367	Market Maker
Moors & Cabot, Inc.	NA	4/2/2012	NA	NA	NA	NA	Member TPH	111 Devonshire Street Boston, MA 02109	617-426-0500	Agency
Morgan Stanley & Co. International plc	NA	NA	NA	NA	4/12/2017	NA	Sponsored Participant	20 Bank Street Canary Wharf London, UK E14 4A	#####	
Morgan Stanley & Co. LLC	10/23/2008	9/1/2010	5/14/2010	5/14/2010	8/20/1980	9/24/2010	Member TPH	1585 Broadway New York, NY 10036	212-761-4000	Clearing, Market Maker, Proprietary Trading, Transact Business with the Public, Brokerage
Nasdaq Execution Services, LLC	8/19/2008	9/1/2010	5/26/2010	5/27/2010	NA	NA	Member TPH	One Liberty Plaza 165 Broadway New York, NY 10006	212-231-5100	Limited Routing Facility of Nasdaq affiliated Exchanges
National Financial Services LLC	10/23/2008	10/4/2010	5/26/2010	5/27/2010	10/8/1987	4/16/2012	Member TPH	200 Seaport Boulevard Boston, MA 02210	617-563-7000	Clearing, Floor Broker, Transact Business with the Public
National Securities Corporation	7/1/2009	NA	NA	NA	NA	NA	Member TPH	One Union Square 600 University Street, Suite 2900 Seattle, WA 98101	206-622-7200	Agency
Needham & Company, LLC	10/23/2008	10/1/2010	NA	NA	NA	NA	Member TPH	445 Park Avenue New York, NY 10022	212-371-8300	Market Maker
Nomura Securities International, Inc.	10/23/2008	10/1/2010	5/26/2010	5/27/2010	9/1/2009	11/16/2010	Member TPH	Worldwide Plaza 309 W 49th Street New York, NY 10019	212-667-9000	Clearing, Transact Business with the Public, Proprietary Trading
Northern Trust Securities, Inc.	8/18/2008	10/5/2010	5/26/2010	5/27/2010	NA	NA	Member TPH	50 S LaSalle Street Chicago, IL 60603	312-557-2000	Market Maker
Northland Securities, Inc.	12/15/2010	12/15/2010	NA	NA	NA	NA	Member TPH	45 S 7th Street 20th Floor Minneapolis, MN 55402	612-851-5900	Market Maker, Proprietary Trading
Old Mission Capital, LLC	4/16/2012	4/16/2012	4/25/2012	4/25/2012	9/27/2017	NA	Member TPH	314 W Superior Suite 200 Chicago, IL 60654	312-260-3031	Market Maker
Olivetree Financial, LLC	NA	NA	9/1/2016	NA	NA	NA	Member TPH	420 Lexington Avenue Suite 800 New York, NY 10170	646-930-8600	Agency
Oppenheimer & Co. Inc.	NA	NA	NA	NA	5/17/1973	NA	Member TPH	85 Broad Street 22nd, 24th Floors New York, NY 10004	212-668-8000	Clearing, Transact Business with the Public
Optiver US, LLC	6/15/2009	NA	NA	5/30/2018	6/1/2005	9/24/2010	Member TPH	130 E Randolph Street 14th Floor Chicago, IL 60601	312-821-9500	Market Maker
Oscar Gruss & Son Incorporated	8/7/2017	NA	NA	NA	NA	NA	Member TPH	430 Park Avenue 6th Floor New York, NY 10022	212-419-4000	Agency
OTA LLC	8/18/2008	10/7/2010	NA	NA	NA	NA	Member TPH	One Manhattanville Road Purchase, NY 10577	914-694-5800	Institutional Trading
PEAK6 Capital Management LLC	8/1/2014	NA	NA	2/1/2016	12/2/1997	NA	Member TPH	141 W Jackson Boulevard Suite 500 Chicago, IL 60604	312-444-8000	Proprietary Trading



Company Name	BZX Approval Date	BYX Approval Date	EDGA Approval Date	EDGX Approval Date	CBOE Effective Date	C2 Effective Date	Type of User	Address	Phone Number	Primary Activities
PEAK6 Capital Management, LLC	11/3/2008	7/15/2011	NA	NA	NA	NA	Sponsored Participant	141 W Jackson Boulevard Suite 500 Chicago, IL 60604	312-362-2401	Market Maker
Penserra Securities, LLC	8/18/2008	10/6/2010	NA	NA	NA	NA	Member TPH	4 Orinda Way Suite 100-A Orinda, CA 94563	212-607-3190	Agency
Pershing LLC	8/18/2008	9/15/2010	5/26/2010	5/27/2010	2/21/1973	9/28/2010	Member TPH	One Pershing Plaza Jersey City, NJ 07399	201-413-2000	Clearing, Transact Business with the Public
Phillip Capital Inc.	NA	NA	NA	11/27/2017	NA	NA	Member TPH	141 W Jackson Boulevard Suite 3050 Chicago, IL 60604	312-356-9001	Clearing Services
Pictet Overseas Inc.	6/1/2015	6/1/2015	5/26/2010	5/27/2010	NA	NA	Member TPH	1000 de la Gauchetiere West Suite 3100 Montreal, Quebec H3B 4W5	514-288-8161	Agency
Piper Jaffray & Co.	10/15/2008	11/15/2012	5/14/2010	5/14/2010	NA	NA	Member TPH	800 Nicollet Mall Minneapolis, MN 55402	612-303-6000	Market Maker
Potamus Trading, LLC	4/15/2013	4/15/2013	4/11/2013	4/11/2013	NA	NA	Member TPH	2 Seaport Lane 8th Floor Boston, MA 02210	617-855-8722	Market Maker, Proprietary Trading
Princeton Alpha Management, LP	12/1/2015	12/1/2015	12/1/2015	12/1/2015	NA	NA	Sponsored Participant	61 Princeton Hightstown Road West Windsor, NJ 08550	609-269-9212	Agency
PTR, Inc.	NA	NA	NA	NA	8/2/1995	NA	Member TPH	1800 JFK Boulevard Suite 401 Philadelphia, PA 19103	267-909-8368	Floor Broker, Transact Business with the Public
Puma Capital, LLC	NA	NA	6/15/2016	6/15/2016	NA	NA	Member TPH	287 Bowman Avenue 3rd Floor Purchase, NY 10577	212-269-4100	Market Maker, Proprietary Trading
Pundion LLC	2/27/2017	2/27/2017	2/27/2017	2/27/2017	NA	NA	Member TPH	230 Park Avenue 10th Floor New York, NY 10169	718-618-4929	Proprietary Trading
Quantbot Technologies LP	3/27/2018	3/27/2018	3/27/2018	3/27/2018	NA	NA	Sponsored Participant	369 Lexington Avenue New York, NY 10017	212-622-6510	Proprietary Trading
Quantex Clearing, LLC	10/3/2011	12/27/2011	5/17/2011	5/17/2011	NA	NA	Member TPH	70 Hudson Street Hoboken, NJ 07030	201-706-7157	Clearing Services
Quantlab Securities LP	8/18/2008	11/1/2010	5/26/2010	5/27/2010	NA	NA	Member TPH	3 Greenway Plaza Suite 200 Houston, TX 77046	713-333-3700	Transact Business with the Public, Brokerage
Quiet Light Securities, LLC	NA	NA	NA	NA	5/1/2001	NA	Member TPH	141 W Jackson Boulevard Suite 2020A Chicago, IL 60604	312-431-0573	Market Maker, Proprietary Trading
R.W. Pressprich & Co.	2/17/2009	11/15/2010	6/2/2010	6/2/2010	NA	NA	Member TPH	452 5th Avenue New York, NY 10018	212-832-6200	Agency
Rackson Asset Management, LLC	10/1/2009	NA	NA	NA	NA	NA	Sponsored Participant	2000 Broadway Suite 22C New York, NY 10023	212-724-2567	Proprietary Trading
Rainier Investment Management, Inc.	1/4/2010	NA	NA	NA	NA	NA	Sponsored Participant	601 Union Street Suite 2801 Seattle, WA 98101	206-518-6658	Hedge Fund
RBC Capital Markets, LLC	9/18/2008	10/14/2010	5/14/2010	5/14/2010	11/24/1993	10/19/2010	Member TPH	3 World Financial Center 200 Vesey Street New York, NY 10281	212-858-7000	Clearing, Proprietary Trading, Transact Business with the Public
Robert W. Baird & Co. Incorporated	10/23/2008	1/3/2011	NA	NA	NA	NA	Member TPH	777 E Wisconsin Avenue Milwaukee, WI 53202	414-765-3500	Market Maker
Ronin Capital, LLC	NA	NA	NA	NA	12/17/2001	NA	Member TPH	350 N Orleans Street Suite 2N Chicago, IL 60654	312-244-5000	Market Maker
Ronin Professional, LLC	8/18/2008	10/1/2010	5/25/2010	5/27/2010	1/2/2008	10/20/2010	Member TPH	350 N Orleans Street Suite 2N Chicago, IL 60654	312-244-5400	Order Flow Provider, Transact Business with the Public, Brokerage
Rosenblatt Securities Inc.	8/18/2008	10/6/2010	5/26/2010	5/27/2010	NA	NA	Member TPH	40 Wall Street 59th Floor New York, NY 10005	212-607-3100	Agency
Roth Capital Partners, LLC	8/18/2008	NA	NA	NA	NA	NA	Member TPH	888 San Clemente Suite 400 Newport Beach, CA 92660	949-720-5700	Market Maker
SAC Capital Advisors, LP	10/23/2008	NA	NA	NA	NA	NA	Sponsored Participant	72 Cummings Point Road Stamford, CT 06902	203-890-2275	Hedge Fund
Safra Securities LLC	NA	NA	5/26/2010	5/27/2010	NA	NA	Member TPH	546 5th Avenue New York, NY 10036	212-704-5500	Market Maker
SageTrader, LLC	3/1/2016	6/5/2017	6/5/2017	6/1/2016	NA	NA	Member TPH	340 Pine Street Suite 501 San Francisco, CA 94104	415-293-3894	Public Customer Business
SAL Equity Trading, GP	9/3/2008	10/5/2010	5/26/2010	5/27/2010	NA	NA	Member TPH	401 City Avenue Suite 220 Bala Cynwyd, PA 19004	610-617-3000	Agency, Institutional Trading
Sanford C. Bernstein & Co, LLC	9/10/2008	10/21/2010	5/26/2010	5/27/2010	8/13/2013	NA	Member TPH	1345 Avenue of the Americas New York, NY 10105	212-969-1000	Clearing, Proprietary Trading, Transact Business with the Public
Santander Investment Securities Inc.	4/15/2009	1/3/2011	NA	NA	NA	NA	Member TPH	45 E 53rd Street New York, NY 10022	212-350-3500	Institutional Trading
Scotia Capital (USA) Inc.	3/2/2009	9/15/2010	5/26/2010	5/27/2010	NA	NA	Member TPH	250 Vesey Street New York, NY 10281	212-225-6500	Institutional Trading
Scottrade, Inc.	6/1/2010	11/15/2010	5/26/2010	5/27/2010	NA	NA	Member TPH	700 Maryville Centre Drive St. Louis, MO 63141	314-965-1555	Public Customer Business
Seven Points Capital, LLC	NA	NA	5/14/2010	NA	NA	NA	Member TPH	805 3rd Avenue 15th Floor New York, NY 10022	212-760-0760	Agency
SG Americas Securities, LLC	9/17/2008	11/15/2011	5/14/2010	5/14/2010	4/23/2004	1/2/2015	Member TPH	245 Park Avenue New York, NY 10167	212-278-6000	Clearing, Proprietary Trading, Transact Business with the Public, Brokerage
Silver Fern Investments, LLC	8/20/2015	8/20/2015	8/20/2015	8/20/2015	NA	NA	Sponsored Participant	533 2nd Street Encinitas, CA 92024	858-947-8650	Proprietary Trading
Simplex Trading, LLC	3/16/2015	NA	NA	4/13/2017	8/12/2010	3/1/2017	Member TPH	230 S LaSalle Street Suite 4-100 Chicago, IL 60604	312-360-2440	Market Maker, Proprietary Trading
SMBC Nikko Securities America, Inc.	8/7/2017	8/7/2017	8/7/2017	8/7/2017	NA	NA	Member TPH	277 Park Avenue 5th Floor New York, NY 10172	212-224-5039	Institutional Trading
SogoTrade, Inc.	NA	NA	NA	6/19/2017	NA	NA	Member TPH	11 Broadway Suite 514 New York, NY 10004	646-885-6486	Public Customer Business
Stifel, Nicolaus & Company, Incorporated	8/18/2008	NA	6/2/2010	6/2/2010	NA	NA	Member TPH	501 N Broadway St. Louis, MO 63102	314-342-2000	Agency
Summit Securities Group, LLC	7/16/2012	7/16/2012	8/20/2012	8/20/2012	6/6/2012	NA	Member TPH	55 Broadway Suite 2102 New York, NY 10006	646-738-4066	Market Maker, Proprietary Trading

Company Name	BZX Approval Date	BYX Approval Date	EDGA Approval Date	EDGX Approval Date	CBOE Effective Date	C2 Effective Date	Type of User	Address	Phone Number	Primary Activities
Sumo Capital, LLC	7/15/2013	NA	NA	10/15/2015	3/3/2008	NA	Member TPH	440 S LaSalle Street Suite 2101 Chicago, IL 60605	312-324-0326	Market Maker, Proprietary Trading
SumRidge Partners, LLC	NA	NA	NA	12/27/2017	NA	NA	Member TPH	111 Town Square Place Suite 320 Jersey City, NJ 07310	201-898-2520	Proprietary Trading
Sun Trading LLC	8/18/2008	10/1/2010	5/26/2010	5/27/2010	NA	NA	Member TPH	100 S Wacker Drive Suite 300 Chicago, IL 60606	312-924-4777	Market Maker, Proprietary Trading
Susquehanna Financial Group, LLLP	9/3/2008	10/5/2010	5/26/2010	5/27/2010	NA	NA	Member TPH	401 City Avenue Suite 220 Bala Cynwyd, PA 19004	800-825-9550	Agency, Institutional Trading
Susquehanna Investment Group	NA	NA	NA	NA	5/1/1987	NA	Member TPH	401 City Avenue Suite 220 Bala Cynwyd, PA 19004	610-617-2600	Market Maker
Susquehanna Securities	10/15/2014	10/15/2014	10/15/2014	10/15/2014	4/4/1994	9/24/2010	Member TPH	401 City Avenue Suite 220 Bala Cynwyd, PA 19004	610-617-2600	Market Maker, Proprietary Trading
Synergy Capital Management, LLC	8/1/2016	NA	NA	NA	6/5/2007	NA	Member TPH	141 W Jackson Boulevard Suite 1530 Chicago, IL 60604	312-986-8869	Proprietary Trading
TD Ameritrade Clearing, Inc.	5/3/2011	5/3/2011	NA	5/27/2010	NA	NA	Member TPH	200 S 108th Avenue Omaha, NE 68154	800-669-3900	Public Customer Business, Clearing Services
Telsey Advisory Group, LLC	1/24/2011	8/15/2014	NA	NA	NA	NA	Member TPH	555 5th Avenue 7th Floor New York, NY 10017	212-973-9700	Public Customer Business
Tewksbury Investment Fund, Ltd.	7/1/2011	7/1/2011	1/6/2015	1/6/2015	NA	NA	Sponsored Participant	Washington Mall I 20th Church Street, 4th Floor Hamilton, HM 11 Bermuda	610-971-5000	Proprietary Trading
Tewksbury Investment Fund, Ltd.	10/23/2008	11/15/2010	NA	NA	NA	NA	Sponsored Participant	Washington Mall I 20th Church Street, 4th Floor Hamilton, HM 11 Bermuda	212-310-7076	Proprietary Trading
Themis Trading LLC	8/18/2008	10/1/2010	NA	NA	NA	NA	Member TPH	10 Town Square Suite 100 Chatham, NJ 07928	973-665-9600	Agency
ThinkTrade, LLC	2/1/2010	10/20/2010	1/9/2015	1/9/2015	NA	NA	Sponsored Participant	2210 Encintas Boulevard Suite I Encinitas, CA 92024	760-452-2451	Proprietary Trading
Timber Hill LLC	NA	NA	NA	NA	12/27/1996	12/15/2010	Member TPH	One Pickwick Plaza Suite 200 Greenwich, CT 06830	203-618-5800	Clearing, Market Maker
TJM Investments, LLC	NA	NA	NA	NA	3/11/2013	NA	Member TPH	318 W Adams Street 9th Floor Chicago, IL 60606	312-432-5100	Floor Broker, Transact Business with the Public
TMT Investments, LLC	NA	NA	NA	NA	4/2/2008	NA	Member TPH	440 S LaSalle Street Suite 1729 Chicago, IL 60605	312-362-3024	Market Maker
Tradebot Systems, Inc.	8/18/2008	9/1/2010	5/26/2010	5/27/2010	NA	NA	Member TPH	1251 NW Briarcliff Parkway Suite 700 Kansas City, MO 64116	816-285-6400	Proprietary Trading
TradeKing	10/15/2009	11/15/2010	NA	NA	NA	NA	Member TPH	888 E Las Olas Boulevard Suite 300 Fort Lauderdale, FL 33301	877-495-5464	Agency
TradeStation Securities, Inc.	8/18/2008	9/1/2010	5/25/2010	5/25/2010	NA	NA	Member TPH	8050 SW 10th Street Suite 2000 Plantation, FL 33324	954-652-7900	Market Maker
TRC Helepolis, Ltd.	12/11/2009	NA	NA	NA	NA	NA	Sponsored Participant	377 Broadway 11th Floor New York, NY 10013	646-472-1782	Proprietary Trading
TRC Markets LLC	4/13/2017	4/13/2017	4/13/2017	4/13/2017	NA	NA	Member TPH	710 Johnnie Dodds Boulevard Suite 300 Mt. Pleasant, SC 29464	917-388-8644	Agency
Trinity Executions, LLC	NA	NA	NA	NA	11/1/2011	NA	Member TPH	141 W Jackson Boulevard Suite 3900 Chicago, IL 60604	312-878-4704	Floor Broker, Transact Business with the Public
Tudor, Pickering, Holt & Co. Securities, Inc.	8/18/2008	10/17/2011	NA	NA	NA	NA	Member TPH	1111 Bagby Suite 4900 Houston, TX 77002	713-333-7100	Agency
Two Sigma Investments, LLC	9/1/2009	NA	NA	NA	NA	NA	Sponsored Participant	100 Avenue of the Americas 4th Floor New York, NY 10013	212-775-6678	Proprietary Trading
Two Sigma Partners Master Fund, Ltd.	3/2/2009	NA	NA	NA	NA	NA	Sponsored Participant	100 Avenue of the Americas 4th Floor New York, NY 10013	212-775-6678	Proprietary Trading
Two Sigma Securities, LLC	7/1/2009	NA	NA	NA	NA	NA	Sponsored Participant	100 Avenue of the Americas 4th Floor New York, NY 10013	646-292-6643	Proprietary Trading
Two Sigma Securities, LLC	10/1/2009	10/5/2010	5/27/2010	5/27/2010	9/15/2017	NA	Member TPH	100 Avenue of the Americas 19th Floor New York, NY 10013	212-625-5700	Market Maker
U.S. Securities, Intl. Corp.	NA	NA	NA	NA	7/3/1973	NA	Member TPH	120 Broadway Suite 1017 New York, NY 10271	212-227-0800	Transact Business with the Public
UBS Financial Services Inc.	NA	NA	NA	NA	12/11/1972	NA	Member TPH	1200 Harbor Boulevard Weehawken, NJ 07006	201-352-3000	Clearing, Transact Business with the Public
UBS Securities LLC	10/15/2008	10/1/2010	4/12/2010	4/12/2010	10/1/1998	10/8/2010	Member TPH	1285 Avenue of the Americas New York, NY 10019	203-719-3000	Clearing, Proprietary Trading, Transact Business with the Public
Ustocktrade Securities, Inc.	4/17/2015	NA	NA	NA	NA	NA	Member TPH	275 Grove Street Suite 2-400 Newton, MA 02466	617-340-3041	Public Customer Business, Proprietary Trading
ViewTrade Securities, Inc.	8/18/2008	11/15/2010	6/10/2010	6/10/2010	NA	NA	Member TPH	7280 W Palmetto Park Road Suite 310 Boca Raton, FL 33433	561-620-0308	Agency
Virtu Americas LLC	9/15/2009	10/14/2010	1/3/2011	1/3/2011	9/18/2009	3/17/2011	Member TPH	300 Vesey Street New York, NY 10282	646-682-6000	Clearing, Proprietary Trading, Transact Business with the Public, Brokerage
Virtu Financial BD LLC	11/17/2008	10/7/2010	5/27/2010	5/27/2010	3/1/2010	6/12/2012	Member TPH	307 Camp Craft Road Austin, TX 78743	800-544-7508	Proprietary Trading
Virtu Financial Capital Markets LLC	8/18/2008	9/1/2010	5/25/2010	5/27/2010	NA	NA	Member TPH	300 Vesey Street New York, NY 10282	212-418-0100	Proprietary Trading
Vision Financial Markets LLC	4/1/2009	11/15/2010	7/13/2012	7/13/2012	12/11/2006	NA	Member TPH	120 Long Ridge Road 3 North Stamford, CT 06902	203-388-2700	Clearing, Transact Business with the Public
Volant Execution, LLC	6/15/2011	NA	NA	10/1/2015	4/12/2005	9/24/2010	Member TPH	111 W Jackson Boulevard 20th Floor Chicago, IL 60604	312-692-5000	Clearing, Brokerage
Volant Liquidity, LLC	4/15/2011	NA	5/27/2010	5/27/2010	2/1/2010	3/23/2011	Member TPH	250 Vesey Street Suite 2601 New York, NY 10281	646-804-7900	Market Maker, Order Flow Provider, Brokerage
Wall Street Access	11/3/2008	10/17/2011	5/27/2010	5/27/2010	NA	NA	Member TPH	17 Battery Place 11th Floor New York, NY 10004	212-709-9400	Agency
Walleye Trading LLC	12/1/2008	11/12/2010	NA	4/17/2018	6/1/2006	NA	Member TPH	2800 Niagara Lane North Plymouth, MN 55447	952-345-6611	Market Maker

Company Name	BZX Approval Date	BYX Approval Date	EDGA Approval Date	EDGX Approval Date	CBOE Effective Date	C2 Effective Date	Type of User	Address	Phone Number	Primary Activities
Wedbush Securities Inc.	8/18/2008	9/1/2010	5/27/2010	5/27/2010	2/23/2012	3/8/2012	Member TPH	1000 Wilshire Boulevard Suite 900 Los Angeles, CA 90017	213-688-8090	Clearing
Wells Fargo Clearing Services, LLC	7/1/2016	NA	NA	NA	11/14/2016	NA	Member TPH	One N Jefferson Avenue Mail Code: H0004-050 St. Louis, MO 63103	314-875-3000	Clearing, Transact Business with the Public
Wells Fargo Securities, LLC	8/18/2008	10/11/2010	6/9/2010	6/9/2010	4/1/2014	4/1/2014	Member TPH	550 S Tryon Street, 6th Floor D1086-060 Charlotte, NC 28202	704-410-1913	Clearing, Proprietary Trading
Western International Securities, Inc.	8/18/2008	11/15/2010	NA	NA	NA	NA	Member TPH	70 S Lake Avenue Suite 700 Pasadena, CA 91101	626-793-7717	Market Maker
Wolverine Execution Services, LLC	8/18/2008	10/19/2010	5/14/2010	5/14/2010	3/1/2006	9/24/2010	Member TPH	175 W Jackson Boulevard Suite 200 Chicago, IL 60604	312-884-4000	Clearing, Floor Broker, Transact Business with the Public, Brokerage
Wolverine Securities, LLC	NA	NA	NA	5/31/2017	NA	NA	Member TPH	175 W Jackson Boulevard Suite 200 Chicago, IL 60604	312-884-4000	Market Maker
Wolverine Trading, LLC	10/3/2011	NA	NA	10/1/2015	7/12/1994	9/24/2010	Member TPH	175 W Jackson Boulevard Suite 200 Chicago, IL 60604	312-884-4000	Market Maker, Proprietary Trading
X-Change Financial Access, LLC	NA	NA	NA	NA	5/1/2003	NA	Member TPH	440 S LaSalle Street Suite 2900 Chicago, IL 60605	312-235-0320	Clearing, Floor Broker, Transact Business with the Public
XR Securities LLC	1/15/2009	11/15/2010	5/10/2012	5/10/2012	11/30/2007	NA	Member TPH	550 W Jackson Boulevard Suite 1000 Chicago, IL 60661	312-244-4500	Market Maker, Proprietary Trading

Exhibit N

**Exhibit Request: Provide a schedule for each of the following:**

- 1. The securities listed in the exchange, indicating for each the name of the issuer and a description of the security;**
- 2. The securities admitted to unlisted trading privileges, indicating for each the name of the issuer and a description of the security;**
- 3. The unregistered securities admitted to trading on the exchange which are exempt from registration under Section 12(a) of the Act. For each security listed, provide the name of the issuer and a description of the security, and the statutory exemption claimed (e.g., Rule 12a-6); and**
- 4. Other securities traded on the exchange, including for each the name of the issuer and a description of the security.**

**Response:**

Attached is a schedule showing the information requested by this Exhibit as of June 23, 2018.

All securities that trade through the Cboe EDGX Exchange, Inc. System are “NMS stocks,” as such term is defined in Rule 600(b)(47) of Regulation NMS, and are traded pursuant to unlisted trading privileges. The Exchange does not currently list any securities, though it may do so in the future. The Exchange allows trading of Nasdaq National Market and Nasdaq Capital Market securities (both “Nasdaq securities” as defined in Rule 600(b)(41) of Regulation NMS) through Cboe EDGX Exchange, Inc. The Exchange also allows trading of exchange-traded securities, as defined in Rule 600(b)(25) of Regulation NMS, including exchange-traded funds or ETFs.

Symbol	Description
<b>Attachment to Exhibit N:</b>	
<b>List of Securities Admitted to Unlisted Trading Privileges on Cboe EDGX Exchange, Inc. as of June 23, 2018</b>	
A	AGILENT TECHNOLOGIES INC COM
AA	ALCOA CORP COM
AABA	ALTABA INC COM
AAC	AAC HLDGS INC COM
AADR	ADVISORSHARES TR ADVISORSHS ETF
AAL	AMERICAN AIRLS GROUP INC COM
AAMC	ALTISOURCE ASSET MGMT CORP COM
AAME	ATLANTIC AMERN CORP COM
AAN	AARONS INC COM PAR \$0.50
AAOI	APPLIED OPTOELECTRONICS INC COM
AAON	AAON INC COM PAR \$0.004
AAP	ADVANCE AUTO PARTS INC COM
AAPL	APPLE INC COM
AAT	AMERICAN ASSETS TR INC COM
AAU	ALMADEN MINERALS LTD COM CL B
AAV	ADVANTAGE OIL & GAS LTD COM
AAWW	ATLAS AIR WORLDWIDE HLDGS INC COM NEW
AAXJ	ISHARES TR MSCI AC ASIA ETF
AAXN	AXON ENTERPRISE INC COM
AB	ALLIANCEBERNSTEIN HOLDING LP UNIT LTD PARTN
ABAC	RENMIN TIANLI GROUP INC SHS
ABAX	ABAXIS INC COM
ABB	ABB LTD SPONSORED ADR
ABBV	ABBVIE INC COM
ABC	AMERISOURCEBERGEN CORP COM
ABCB	AMERIS BANCORP COM
ABCD	CAMBIUM LEARNING GRP INC COM
ABDC	ALCENTRA CAP CORP COM
ABEO	ABEONA THERAPEUTICS INC COM
ABEOW	ABEONA THERAPEUTICS INC WT EXP 122419
ABEV	AMBEV SA SPONSORED ADR
ABG	ASBURY AUTOMOTIVE GROUP INC COM
ABIL	ABILITY INC SHS
ABIO	ARCA BIOPHARMA INC COM PAR
ABM	ABM INDS INC COM
ABMD	ABIOMED INC COM

ABR	ARBOR RLTY TR INC COM
ABR-A	ARBOR RLTY TR INC PFD SER A %
ABR-B	ARBOR RLTY TR INC CUM RED PFD B
ABR-C	ARBOR RLTY TR INC CUM RED PFD SR C
ABT	ABBOTT LABS COM
ABTX	ALLEGIANCE BANCSHARES INC COM
ABUS	ARBUTUS BIOPHARMA CORP COM
ABX	BARRICK GOLD CORP COM
AC	ASSOCIATED CAP GROUP INC CL A
ACAD	ACADIA PHARMACEUTICALS INC COM
ACBI	ATLANTIC CAP BANCSHARES INC COM
ACC	AMERICAN CAMPUS CMNTYS INC COM
ACCO	ACCO BRANDS CORP COM
ACER	ACER THERAPEUTICS INC COM
ACET	ACETO CORP COM
ACGL	ARCH CAP GROUP LTD ORD
ACGLO	ARCH CAP GROUP LTD 5.45% PFD SER F
ACGLP	ARCH CAP GROUP LTD DSHS 1/1000 E
ACH	ALUMINUM CORP CHINA LTD SPON ADR H SHS
ACHC	ACADIA HEALTHCARE COMPANY INC COM
ACHN	ACHILLION PHARMACEUTICALS INC COM
ACHV	ACHIEVE LIFE SCIENCE INC COM NEW
ACIA	ACACIA COMMUNICATIONS INC COM
ACIM	SPDR INDEX SHS FDS MSCI ACWI ETF
ACIU	AC IMMUNE SA SHS
ACIW	ACI WORLDWIDE INC COM
ACLS	AXCELIS TECHNOLOGIES INC COM NEW
ACM	AECOM COM
ACMR	ACM RESEARCH INC COM CL A
ACN	ACCENTURE PLC IRELAND SHS CLASS A
ACNB	ACNB CORP COM
ACOR	ACORDA THERAPEUTICS INC COM
ACP	ABERDEEN INCOME CR STRATEGIES COM
ACRE	ARES COML REAL ESTATE CORP COM
ACRS	ACLARIS THERAPEUTICS INC COM
ACRX	ACELRX PHARMACEUTICALS INC COM
ACSF	AMERICAN CAP SR FLOATING LTD COM
ACSI	American Customer Satisfaction ETF
ACST	ACASTI PHARMA INC CL A NEW

ACT	ADVISORSHARES TR VICE ETF
ACTG	ACACIA RESH CORP ACACIA TCH COM
ACU	ACME UTD CORP COM
ACV	ALLIANZGI DIVERS INC & CNV FD COM
ACWF	ISHARES TR MULTIFACTOR GLBL
ACWI	ISHARES TR MSCI ACWI ETF
ACWV	iShares Edge MSCI Min Vol Global ETF
ACWX	ISHARES TR MSCI ACWI EX US
ACXM	ACXIOM CORP COM
ACY	AEROCENTURY CORP COM
ADAP	ADAPT IMMUNE THERAPEUTICS PLC SPONDS ADR
ADBE	ADOBE SYS INC COM
ADC	AGREE REALTY CORP COM
ADES	ADVANCED EMISSIONS SOLUTS INC COM
ADI	ANALOG DEVICES INC COM
ADM	ARCHER DANIELS MIDLAND CO COM
ADMA	ADMA BIOLOGICS INC COM
ADMP	ADAMIS PHARMACEUTICALS CORP COM NEW
ADMS	ADAMAS PHARMACEUTICALS INC COM
ADNT	ADIANT PLC ORD SHS
ADOM	ADOMANI INC COM
ADP	AUTOMATIC DATA PROCESSING INC COM
ADRA	INVESCO BLDRS INDEX FDS TR ASIA 50ADR IDX
ADRD	INVESCO BLDRS INDEX FDS TR DEVLDP MKTS100
ADRE	INVESCO BLDRS INDEX FDS TR EMGRING MKTS50
ADRO	ADURO BIOTECH INC COM
ADRU	INVESCO BLDRS INDEX FDS TR EUROPE 100 ADR
ADS	ALLIANCE DATA SYSTEMS CORP COM
ADSK	AUTODESK INC COM
ADSW	ADVANCED DISP SVCS INC DEL COM
ADT	ADT INC COM
ADTN	ADTRAN INC COM
ADUS	ADDUS HOMECARE CORP COM
ADVM	ADVERUM BIOTECHNOLOGIES INC COM
ADX	ADAMS DIVERSIFIED EQUITY FD COM
ADXS	ADVAXIS INC COM NEW
ADXSW	ADVAXIS INC WT EXP 102218
ADZ	DEUTSCHE BK AG LDN BRH DB AGRIC SHT ETN
AE	ADAMS RES & ENERGY INC COM NEW

AEB	AEGON N V PERP CAP FLTG RT
AED	AEGON N V PERP CAP SECS
AEE	AMEREN CORP COM
AEF	ABERDEEN EMRG MRKTS EQT INM FD COM
AEG	AEGON N V NY REGISTRY SH
AEGN	AEGION CORP COM
AEH	AEGON N V PRP CP SEC 6.375
AEHR	AEHR TEST SYSTEMS COM
AEIS	ADVANCED ENERGY INDS COM
AEL	AMERICAN EQTY INVT LIFE HLD CO COM
AEM	AGNICO EAGLE MINES LTD COM
AEMD	AETHLON MED INC COM NEW
AEO	AMERICAN EAGLE OUTFITTERS NEW COM
AEP	AMERICAN ELEC PWR INC COM
AER	AERCAP HOLDINGS NV SHS
AERI	AERIE PHARMACEUTICALS INC COM
AES	AES CORP COM
AET	AETNA INC NEW COM
AETI	AMERICAN ELECTRIC TECH INC COM
AEY	ADVANTAGE TECHNOLOGIES GP INC COM NEW
AEZS	AETERNA ZENTARIS INC COM PAR
AFB	ALLIANCEBERNSTEIN NATL MUNI IN COM
AFC	ALLIED CAP CORP NEW NT 6.875 2047
AFG	AMERICAN FINL GROUP INC OHIO COM
AFGE	AMERICAN FINL GROUP INC OHIO SUB DEB
AFGH	AMERICAN FINL GROUP INC OHIO 6% SUB DEB 2055
AFH	ATLAS FINANCIAL HOLDINGS INC SHS NEW
AFHBL	ATLAS FINANCIAL HOLDINGS INC 6.625 SR NT 22
AFI	ARMSTRONG FLOORING INC COM
AFK	VANECK VECTORS ETF TR AFRICA INDEX ETF
AFL	AFLAC INC COM
AFMD	AFFIMED N V COM
AFSI	AMTRUST FINL SVCS INC COM
AFSI-A	AMTRUST FINL SVCS INC PFD SER A
AFSI-B	AMTRUST FINL SVCS INC DEP 1/40 PFD B
AFSI-C	AMTRUST FINL SVCS INC DEP 1/40 SR-C
AFSI-D	AMTRUST FINL SVCS INC DEP SHS PFD
AFSI-E	AMTRUST FINL SVCS INC DSHS 1/40 PF E
AFSI-F	AMTRUST FINL SVCS INC DSHS 1/40 PF F



AFSS	AMTRUST FINL SVCS INC 7.25 SUB NT 55
AFST	AMTRUST FINL SVCS INC SUB NT
AFT	APOLLO SR FLOATING RATE FD INC COM
AFTY	CSOP ETF TR FTSE CHINA A50
AG	FIRST MAJESTIC SILVER CORP COM
AGC	ADVENT CLAY CONV SEC INC FD II COM
AGCO	AGCO CORP COM
AGD	ABERDEEN GLOBAL DYNAMIC DIVID COM
AGEN	AGENUS INC COM NEW
AGF	DEUTSCHE BK AG LDN BRH DB AGRIC LNG ETN
AGFS	AGROFRESH SOLUTIONS COM
AGFSW	AGROFRESH SOLUTIONS WT EXP 073120
AGG	ISHARES TR CORE US AGGBD ET
AGGE	INDEXIQ ETF TR IQ ENCH BD US
AGGP	INDEXIQ ETF TR IQ ENCH COR PL
AGGY	WISDOMTREE TR BARCLYS YLD AGGR
AGI	ALAMOS GOLD INC NEW COM CL A
AGIO	AGIOS PHARMACEUTICALS INC COM
AGLE	AEGLEA BIOTHERAPEUTICS INC COM
AGM	FEDERAL AGRIC MTG CORP CL C
AGM.A	FEDERAL AGRIC MTG CORP CL A
AGM-A	FEDERAL AGRIC MTG CORP PFD A 5.875%NON
AGM-B	FEDERAL AGRIC MTG CORP NCUM PFD SER B
AGM-C	FEDERAL AGRIC MTG CORP PFD C FIX TO FLT
AGMH	AGM GROUP HOLDINGS INC SHS CL A
AGN	ALLERGAN PLC SHS
AGNC	AGNC INVT CORP COM
AGNCB	AGNC INVT CORP DEP SHS 1/1000
AGNCN	AGNC INVT CORP CUM 1/1000 7% C
AGND	WISDOMTREE TR BRCLYS NEGTV DUR
AGO	ASSURED GUARANTY LTD COM
AGO-B	ASSURED GUARNTY MUNI HLDGS INC QUIBS 6.875%
AGO-E	ASSURED GUARNTY MUNI HLDGS INC NT 6.25% 2102
AGO-F	ASSURED GUARNTY MUNI HLDGS INC NT 5.60% 2103
AGQ	PROSHARES TR II ULTRA SILVER NEW
AGR	AVANGRID INC COM
AGRO	ADECOAGRO S A COM
AGRX	AGILE THERAPEUTICS INC COM
AGS	PLAYAGS INC COM

AGT	iShares MSCI Argentina and Global Exposure ETF
AGTC	APPLIED GENETIC TECHNOL CORP COM
AGX	ARGAN INC COM
AGYS	AGILYSYS INC COM
AGZ	ISHARES TR AGENCY BOND ETF
AGZD	WISDOMTREE TR BRCLYS INTRT HED
AHC	A H BELO CORP COM CL A
AHH	ARMADA HOFFLER PPTYS INC COM
AHL	ASPEN INSURANCE HOLDINGS LTD SHS
AHL-C	ASPEN INSURANCE HOLDINGS LTD PFD SHS 5.95
AHL-D	ASPEN INSURANCE HOLDINGS LTD PFD SHS
AHPA	AVISTA HEALTHCARE PUB ACQ CORP CL A
AHPAU	AVISTA HEALTHCARE PUB ACQ CORP UT 1CL A 1WT E
AHPAW	AVISTA HEALTHCARE PUB ACQ CORP WT EXP 000021
AHPI	ALLIED HEALTHCARE PRODS INC COM NEW
AHT	ASHFORD HOSPITALITY TR INC COM SHS
AHT-D	ASHFORD HOSPITALITY TR INC PFD D 8.45% CUM
AHT-F	ASHFORD HOSPITALITY TR INC PFD CUM SER F
AHT-G	ASHFORD HOSPITALITY TR INC PFD SER G
AHT-H	ASHFORD HOSPITALITY TR INC 7.50% CUM PFD H
AHT-I	ASHFORD HOSPITALITY TR INC 7.5% PFD SER I
AI	ARLINGTON ASSET INVT CORP CL A NEW
AIA	ISHARES TR ASIA 50 ETF
AI-B	ARLINGTON ASSET INVT CORP PFD SER B
AIC	ARLINGTON ASSET INVT CORP 6.75% SR NT 25
AIEQ	ETF MANAGERS TR AI POWERED EQT
AIF	APOLLO TACTICAL INCOME FD INC COM
AIG	AMERICAN INTL GROUP INC COM NEW
AIG+	AMERICAN INTL GROUP INC WT EXP 011921
AIHS	SENMIAO TECHNOLOGY LTD COM
AIHQ	ETF SER SOLUTIONS AI PWD INTL EQTY
AIMC	ALTRA INDL MOTION CORP COM
AIMT	AIMMUNE THERAPEUTICS INC COM
AIN	ALBANY INTL CORP CL A
AINC	ASHFORD INC COM
AINV	APOLLO INVT CORP COM
AIPT	PRECISION THERAPEUTICS INC COM
AIQ	GLOBAL X FDS FUTR ANALY ETF
AIR	AAR CORP COM

AIRG	AIRGAIN INC COM
AIRI	AIR INDS GROUP COM NEW
AIRR	FIRST TR EXCHANGE TRADED FD VI RBA INDL ETF
AIRT	AIR T INC COM
AIT	APPLIED INDL TECHNOLOGIES INC COM
AIV	APARTMENT INVT & MGMT CO CL A
AIV-A	APARTMENT INVT & MGMT CO PFD CL A 6.875%
AIW	ARLINGTON ASSET INVT CORP SR NT6.625 23
AIY	APOLLO INVT CORP SR NT 43
AIZ	ASSURANT INC COM
AIZP	ASSURANT INC 6.50% CONV PFD D
AJG	GALLAGHER ARTHUR J & CO COM
AJRD	AEROJET ROCKETDYNE HLDGS INC COM
AJX	GREAT AJAX CORP COM
AJXA	GREAT AJAX CORP 7.25 CV SR NT 24
AKAM	AKAMAI TECHNOLOGIES INC COM
AKAO	ACHAOGEN INC COM
AKBA	AKEBIA THERAPEUTICS INC COM
AKCA	AKCEA THERAPEUTICS INC COM
AKER	AKERS BIOSCIENCES INC COM
AKG	ASANKO GOLD INC COM
AKO.A	EMBOTELLADORA ANDINA S A SPON ADR A
AKO.B	EMBOTELLADORA ANDINA S A SPON ADR B
AKP	ALLIANCE CALIF MUN INCOME FD COM
AKR	ACADIA RLTY TR COM SH BEN INT
AKRX	AKORN INC COM
AKS	AK STL HLDG CORP COM
AKTS	AKOUSTIS TECHNOLOGIES INC COM
AKTX	AKARI THERAPEUTICS PLC SPONSORED ADR
AL	AIR LEASE CORP CL A
ALB	ALBEMARLE CORP COM
ALBO	ALBIREO PHARMA INC COM
ALCO	ALICO INC COM
ALD	WISDOMTREE TR ASIA LC DBT FD
ALDR	ALDER BIOPHARMACEUTICALS INC COM
ALDX	ALDEYRA THERAPEUTICS INC COM
ALE	ALLETE INC COM NEW
ALEX	ALEXANDER & BALDWIN INC NEW COM
ALFA	AlphaClone Alternative Alpha ETF

ALFI	AlphaClone International ETF
ALG	ALAMO GROUP INC COM
ALGN	ALIGN TECHNOLOGY INC COM
ALGT	ALLEGIANT TRAVEL CO COM
ALIM	ALIMERA SCIENCES INC COM
ALJJ	ALJ REGIONAL HLDGS INC COM
ALK	ALASKA AIR GROUP INC COM
ALKS	ALKERMES PLC SHS
ALL	ALLSTATE CORP COM
ALL-A	ALLSTATE CORP DEP SHS PFD A
ALL-B	ALLSTATE CORP SUB DEB 53
ALL-C	ALLSTATE CORP DEP 1/1000 C
ALL-D	ALLSTATE CORP LEOPRD PFD SER D
ALLE	ALLEGION PUB LTD CO ORD SHS
ALL-E	ALLSTATE CORP DEP SH 1/1000 E
ALL-F	ALLSTATE CORP LEOPR 1/1000 PFD
ALL-G	ALLSTATE CORP DEP 1/1000 PFD G
ALLT	ALLOT COMMUNICATIONS LTD SHS
ALLY	ALLY FINL INC COM
ALLY-A	GMAC CAP TR I GTD TR PFD-2
ALN	AMERICAN LORAIN CORP COM
ALNA	ALLENA PHARMACEUTICALS INC COM
ALNY	ALNYLAM PHARMACEUTICALS INC COM
ALO	ALIO GOLD INC COM
ALOG	ANALOGIC CORP COM PAR \$0.05
ALOT	ASTRONOVA INC COM
ALPN	ALPINE IMMUNE SCIENCES INC COM
ALP-Q	ALABAMA PWR CO 5% PFD CL A
ALQA	ALLIQUA BIOMEDICAL INC COM PAR
ALRM	ALARM COM HLDGS INC COM
ALRN	AILERON THERAPEUTICS INC COM
ALSK	ALASKA COMMUNICATIONS SYS GRP COM
ALSN	ALLISON TRANSMISSION HLDGS INC COM
ALT	ALTIMMUNE INC COM
ALTR	ALTAIR ENGR INC COM CL A
ALTS	ProShares Morningstar Alternatives Solution ETF
ALTY	GLOBAL X FDS SUPER DIV ALTR
ALV	AUTOLIV INC COM
ALV#	AUTOLIV INC EX DISTRIBUTIN

ALX	ALEXANDERS INC COM
ALXN	ALEXION PHARMACEUTICALS INC COM
AM	ANTERO MIDSTREAM PARTNERS LP UNT LTD PARTN
AMAG	AMAG PHARMACEUTICALS INC COM
AMAT	APPLIED MATLS INC COM
AMBA	AMBARELLA INC SHS
AMBC	AMBAC FINL GROUP INC COM NEW
AMBCW	AMBAC FINL GROUP INC WT EXP 043023
AMBO	AMBOW ED HLDG LTD SPONSORED ADS
AMBR	AMBER RD INC COM
AMC	AMC ENTMT HLDGS INC CL A COM
AMCA	ISHARES TR RUSSELL 1000 US
AMCN	AIRMEDIA GROUP INC SPONSORED ADR
AMCX	AMC NETWORKS INC CL A
AMD	ADVANCED MICRO DEVICES INC COM
AMDA	AMEDICA CORP COM PAR
AME	AMETEK INC NEW COM
AMED	AMEDISYS INC COM
AMEH	APOLLO MEDICAL HLDGS INC COM NEW
AMG	AFFILIATED MANAGERS GROUP COM
AMGN	AMGEN INC COM
AMGP	ANTERO MIDSTREAM GP LP COM SHS REPSTG
AMH	AMERICAN HOMES 4 RENT CL A
AMH-D	AMERICAN HOMES 4 RENT RED PFD SER D
AMH-E	AMERICAN HOMES 4 RENT PFD CUM RED E
AMH-F	AMERICAN HOMES 4 RENT CM RED PFD SHS F
AMH-G	AMERICAN HOMES 4 RENT 5.875% CUM PFD G
AMID	AMERICAN MIDSTREAM PARTNERS LP COM UNITS
AMJ	JPMORGAN CHASE & CO ALERIAN ML ETN
AMJL	CREDIT SUISSE AG NASSAU BRH XLNKS AMLP ETN36
AMKR	AMKOR TECHNOLOGY INC COM
AMLP	ALPS ETF TR ALERIAN MLP
AMMA	ALLIANCE MMA INC COM
AMN	AMN HEALTHCARE SERVICES INC COM
AMNB	AMERICAN NATL BANKSHARES INC COM
AMOT	ALLIED MOTION TECHNOLOGIES INC COM
AMOV	AMERICA MOVIL SAB DE CV SPONSORED ADR
AMP	AMERIPRISE FINL INC COM
AMPE	AMPIO PHARMACEUTICALS INC COM

AMPH	AMPHASTAR PHARMACEUTICALS INC COM
AMR	ALTA MESA RES INC CL A
AMRB	AMERICAN RIVER BANKSHARES COM
AMRC	AMERESCO INC CL A
AMRH	AMERI HLDGS INC COM
AMRHW	AMERI HLDGS INC WT EXP 110823
AMRK	A MARK PRECIOUS METALS INC COM
AMRN	AMARIN CORP PLC SPONS ADR NEW
AMRS	AMYRIS INC COM NEW
AMRWW	ALTA MESA RES INC WT EXP 032824
AMRX	AMNEAL PHARMACEUTICALS INC COM STK CL A
AMS	AMERICAN SHARED HOSPITAL SVCS COM
AMSC	AMERICAN SUPERCONDUCTOR CORP SHS NEW
AMSF	AMERISAFE INC COM
AMSWA	AMERICAN SOFTWARE INC CL A
AMT	AMERICAN TOWER CORP NEW COM
AMTD	TD AMERITRADE HLDG CORP COM
AMTX	AEMETIS INC COM NEW
AMU	UBS AG LONDON BRH ETRAC ALER MLP
AMUB	UBS AG LONDON BRH ETRACS ALERIAN M
AMWD	AMERICAN WOODMARK CORPORATION COM
AMX	AMERICA MOVIL SAB DE CV SPON ADR L SHS
AMZA	ETFIS SER TR I INFRAC ACT MLP
AMZN	AMAZON COM INC COM
AN	AUTONATION INC COM
ANAB	ANAPTYSBIO INC COM
ANAT	AMERICAN NATL INS CO COM
ANCB	ANCHOR BANCORP WA COM
ANCX	ACCESS NATL CORP COM
ANDE	ANDERSONS INC COM
ANDV	ANDEAVOR COM
ANDX	ANDEAVOR LOGISTICS LP COM UNIT LP INT
ANET	ARISTA NETWORKS INC COM
ANF	ABERCROMBIE & FITCH CO CL A
ANFI	AMIRA NATURE FOODS LTD SHS
ANGI	ANGI HOMESERVICES INC COM CL A
ANGL	VANECK VECTORS ETF TR FALLEN ANGEL HG
ANGO	ANGIODYNAMICS INC COM
ANH	ANWORTH MORTGAGE ASSET CP COM

ANH-A	ANWORTH MORTGAGE ASSET CP PFD A 8.625%
ANH-B	ANWORTH MORTGAGE ASSET CP PFD B 6.25%
ANH-C	ANWORTH MORTGAGE ASSET CP PFD SER C 7.625%
ANIK	ANIKA THERAPEUTICS INC COM
ANIP	ANI PHARMACEUTICALS INC COM
ANSS	ANSYS INC COM
ANTH	ANTHERA PHARMACEUTICALS INC COM
ANTM	ANTHEM INC COM
ANW	AEGEAN MARINE PETROLEUM NETWRK SHS
ANY	SPHERE 3D CORP NEW COM NEW
AOA	ISHARES TR AGGRES ALLOC ETF
AOBC	AMERICAN OUTDOOR BRANDS CORP COM
AOD	ABERDEEN TOTAL DYNAMIC DIVD FD COM SH BEN INT
AOI	ALLIANCE ONE INTL INC COM NEW
AOK	ISHARES TR CONSER ALLOC ETF
AOM	ISHARES TR MODERT ALLOC ETF
AON	AON PLC SHS CL A
AOR	ISHARES TR GRWT ALLOCAT ETF
AOS	SMITH A O COM
AOSL	ALPHA & OMEGA SEMICONDUCTOR LT SHS
AP	AMPCO-PITTSBURGH CORP COM
APA	APACHE CORP COM
APAM	ARTISAN PARTNERS ASSET MGMT IN CL A
APB	ASIA PAC FD INC COM
APC	ANADARKO PETE CORP COM
APD	AIR PRODS & CHEMS INC COM
APDN	APPLIED DNA SCIENCES INC COM NEW
APDNW	APPLIED DNA SCIENCES INC WT EXP 112119
APEI	AMERICAN PUBLIC EDUCATION INC COM
APEN	APOLLO ENDOSURGERY INC COM
APF	MORGAN STANLEY ASIA PAC FD INC COM
APH	AMPHENOL CORP NEW CL A
APHB	AMPLIPHI BIOSCIENCES CORP COM PAR
APLE	APPLE HOSPITALITY REIT INC COM NEW
APLS	APELLIS PHARMACEUTICALS INC COM
APO	APOLLO GLOBAL MGMT LLC CL A SHS
APO-A	APOLLO GLOBAL MGMT LLC PFD SERIES A
APO-B	APOLLO GLOBAL MGMT LLC 6.375% PFD SHS B
APOG	APOGEE ENTERPRISES INC COM

APOP	CELLECT BIOTECHNOLOGY LTD SPON ADS
APOPW	CELLECT BIOTECHNOLOGY LTD WT EXP 080321
APPF	APPFOLIO INC COM CL A
APPN	APPIAN CORP CL A
APPS	DIGITAL TURBINE INC COM NEW
APRI	APRICUS BIOSCIENCES INC COM NEW
APRN	BLUE APRON HLDGS INC CL A
APT	ALPHA PRO TECH LTD COM
APTI	APPTIO INC CL A
APTO	APTOSE BIOSCIENCES INC COM NEW
APTS	PREFERRED APT CMNTYS INC COM
APTV	APTIV PLC SHS
APTIX	APTINYX INC COM
APU	AMERIGAS PARTNERS L P UNIT L P INT
APVO	APTEVO THERAPEUTICS INC COM
APWC	ASIA PACIFIC WIRE & CABLE CORP ORD
APY	APERGY CORP COM
AQ	AQUANTIA CORP COM
AQB	AQUABOUNTY TECHNOLOGIES INC COM NEW
AQMS	AQUA METALS INC COM
AQN	ALGONQUIN PWR UTILS CORP COM
AQUA	EVOQUA WATER TECHNOLOGIES CORP COM
AQXP	AQUINOX PHARMACEUTICALS INC COM
AR	ANTERO RES CORP COM
ARA	AMERICAN RENAL ASSOCIATES HOLD COM
ARAY	ACCURAY INC COM
ARC	ARC DOCUMENT SOLUTIONS INC COM
ARCB	ARCBEST CORP COM
ARCC	ARES CAP CORP COM
ARCH	ARCH COAL INC CL A
ARCI	APPLIANCE RECYCLING CTRS AMER COM NEW
ARCM	Arrow Reserve Capital Management ETF
ARCO	ARCOS DORADOS HOLDINGS INC SHS CLASS -A -
ARCT	ARCTURUS THERAPEUTICS LTD SHS
ARCW	ARC GROUP WORLDWIDE INC COM
ARD	ARDAGH GROUP S A CL A
ARDC	ARES DYNAMIC CR ALLOCATION FD COM
ARDM	ARADIGM CORP COM PAR
ARDX	ARDELYX INC COM



ARE	ALEXANDRIA REAL ESTATE EQ INC COM
ARE-D	ALEXANDRIA REAL ESTATE EQ INC PFD CONV SER D
ARES	ARES MGMT LP COM SHS REG INT
ARES-A	ARES MGMT LP 7% PFD REG INT A
AREX	APPROACH RESOURCES INC COM
ARGD	ARGO GROUP US INC 6.5% SR NTS 42
ARGO	ARGO GROUP INTL HLDGS LTD COM
ARGT	GLOBAL X FDS GB MSCI AR ETF
ARGX	ARGENX SE SPONSORED ADR
ARI	APOLLO COML REAL EST FIN INC COM
ARI-C	APOLLO COML REAL EST FIN INC RED PFD SER C
ARII	AMERICAN RAILCAR INDS INC COM
ARKG	ARK ETF TR GEN REV MLTST
ARKK	ARK ETF TR INNOVATION ETF
ARKQ	ARK ETF TR INDL INNOVATIN
ARKR	ARK RESTAURANTS CORP COM
ARKW	ARK ETF TR WEB X.O ETF
ARL	AMERICAN RLTY INVS INC COM
ARLP	ALLIANCE RES PARTNER L P UT LTD PART
ARLZ	ARALEZ PHARMACEUTICALS INC COM
ARMK	ARAMARK COM
ARMO	ARMO BIOSCIENCES INC COM
ARNA	ARENA PHARMACEUTICALS INC COM NEW
ARNC	ARCONIC INC COM
ARNC-	ARCONIC INC PFD SER A
AROC	ARCHROCK INC COM
AROW	ARROW FINL CORP COM
ARQL	ARQULE INC COM
ARR	ARMOUR RESIDENTIAL REIT INC COM NEW
ARR-A	ARMOUR RESIDENTIAL REIT INC PFD A 8.25%
ARR-B	ARMOUR RESIDENTIAL REIT INC PFD SER B 7.875%
ARRS	ARRIS INTL INC SHS
ARRY	ARRAY BIOPHARMA INC COM
ARTNA	ARTESIAN RESOURCES CORP CL A
ARTW	ARTS WAY MFG INC COM
ARTX	AROTECH CORP COM NEW
ARW	ARROW ELECTRS INC COM
ARWR	ARROWHEAD PHARMACEUTICALS INC COM
ASA	ASA GOLD AND PRECIOUS MTLs LMT SHS

ASB	ASSOCIATED BANC CORP COM
ASB+	ASSOCIATED BANC CORP WT EXP 112118
ASB-C	ASSOCIATED BANC CORP WIS DEP SHS 1/40 C
ASB-D	ASSOCIATED BANC CORP WIS DEP PFD NONCUM D
ASC	ARDMORE SHIPPING CORP COM
ASCMA	ASCENT CAP GROUP INC COM SER A
ASEA	GLOBAL X FDS GBL X FTSE ETF
ASET	FLEXSHARES TR REAL ASST IDX
ASFI	ASTA FDG INC COM
ASG	LIBERTY ALL-STAR GROWTH FD INC COM
ASGN	ASGN INC COM
ASH	ASHLAND GLOBAL HLDGS INC COM
ASHR	DBX ETF TR XTRACK HRVST CSI
ASHS	DBX ETF TR XTRACK CSI 500 A
ASHX	DBX ETF TR XTRACK MSCI CHIN
ASIX	ADVANSIX INC COM
ASLN	ASLAN PHARMACEUTICALS LTD ADS
ASM	AVINO SILVER & GOLD MINES LTD COM
ASMB	ASSEMBLY BIOSCIENCES INC COM
ASML	ASML HOLDING N V N Y REGISTRY SHS
ASNA	ASCENA RETAIL GROUP INC COM
ASND	ASCENDIS PHARMA A S SPONSORED ADR
ASNS	ARSANIS INC COM
ASPN	ASPEN AEROGELS INC COM
ASPS	ALTISOURCE PORTFOLIO SOLNS SA REG SHS
ASPU	ASPEN GROUP INC COM NEW
ASR	GRUPO AEROPORTUARIO DEL SUREST SPON ADR SER B
ASRV	AMERISERV FINL INC COM
ASRVP	AMERISERV FINL CAP TR I PFD A GTD 8.45
AST	ASTERIAS BIOTHERAPEUTICS INC COM SER A
ASTC	ASTROTECH CORP COM NEW
ASTE	ASTEC INDS INC COM
ASUR	ASURE SOFTWARE INC COM
ASV	ASV HLDGS INC COM
ASX	ASE TECHNOLOGY HOLDING CO LTD SPONSORED ADS
ASYS	AMTECH SYS INC COM PAR \$0.01N
AT	ATLANTIC PWR CORP COM NEW
ATAC	ATLANTIC ACQUISITION CORP COM
ATACR	ATLANTIC ACQUISITION CORP RT

ATACU	ATLANTIC ACQUISITION CORP UNIT EX 020819
ATAI	ATA INC SPONS ADR
ATAX	AMERICA FIRST MULTIFAMILY INV BEN UNIT CTF
ATEC	ALPHATEC HOLDINGS INC COM NEW
ATEN	A10 NETWORKS INC COM
ATGE	ADTALEM GLOBAL ED INC COM
ATH	ATHENE HLDG LTD CL A
ATHM	AUTOHOME INC SP ADR RP CL A
ATHN	ATHENAHEALTH INC COM
ATHX	ATHERSYS INC COM
ATI	ALLEGHENY TECHNOLOGIES INC COM
ATIS	ATTIS INDS INC COM
ATISW	ATTIS INDS INC WT EXP 021022
ATKR	ATKORE INTL GROUP INC COM
ATLC	ATLANTICUS HLDGS CORP COM
ATLO	AMES NATL CORP COM
ATMP	BARCLAYS BK PLC ETN+ SEL MLP
ATNI	ATN INTL INC COM
ATNM	ACTINIUM PHARMACEUTICALS INC COM
ATNX	ATHENEX INC COM
ATO	ATMOS ENERGY CORP COM
ATOM	ATOMERA INC COM
ATOS	ATOSSA GENETICS INC COM PAR
ATR	APTARGROUP INC COM
ATRA	ATARA BIOTHERAPEUTICS INC COM
ATRC	ATRICURE INC COM
ATRI	ATRION CORP COM
ATRO	ASTRONICS CORP COM
ATRS	ANTARES PHARMA INC COM
ATSG	AIR TRANSPORT SERVICES GRP INC COM
ATTO	ATENTO S A SHS
ATTU	ATTUNITY LTD SHS NEW
ATU	ACTUANT CORP CL A NEW
ATUS	ALTICE USA INC CL A
ATV	ACORN INTL INC SPONSORD ADR NEW
ATVI	ACTIVISION BLIZZARD INC COM
ATXI	AVENUE THERAPEUTICS INC COM NEW
AU	ANGLOGOLD ASHANTI LTD SPONSORED ADR
AUBN	AUBURN NATL BANCORP COM

AUDC	AUDICODES LTD ORD
AUG	AURYN RES INC COM
AUMN	GOLDEN MINERALS CO COM
AUO	AU OPTRONICS CORP SPONSORED ADR
AUPH	AURINIA PHARMACEUTICALS INC COM
AUSE	WISDOMTREE TR AUSTRALIA DIV FD
AUTL	AUTOLUS THERAPEUTICS LTD ADS
AUTO	AUTOWEB INC COM
AUY	YAMANA GOLD INC COM
AVA	AVISTA CORP COM
AVAL	GRUPO AVAL ACCIONES Y VALORES SPONSORED ADS
AVAV	AEROVIRONMENT INC COM
AVB	AVALONBAY CMNTYS INC COM
AVD	AMERICAN VANGUARD CORP COM
AVDL	AVADEL PHARMACEUTICALS PLC SPONSORED ADR
AVEO	AVEO PHARMACEUTICALS INC COM
AVGO	BROADCOM INC COM
AVGR	AVINGER INC COM NEW
AVH	AVIANCA HLDGS SA SPON ADR REP PFD
AVHI	AV HOMES INC COM
AVID	AVID TECHNOLOGY INC COM
AVK	ADVENT CLAYMORE CV SECS & INC COM
AVLR	AVALARA INC COM
AVNW	AVIAT NETWORKS INC COM NEW
AVP	AVON PRODS INC COM
AVRO	AVROBIO INC COM
AVT	AVNET INC COM
AVX	AVX CORP NEW COM
AVXL	ANAVEX LIFE SCIENCES CORP COM NEW
AVY	AVERY DENNISON CORP COM
AVYA	AVAYA HLDGS CORP COM
AWF	ALLIANCEBERNSTEIN GBL HGH INCM COM
AWI	ARMSTRONG WORLD INDS INC NEW COM
AWK	AMERICAN WTR WKS CO INC NEW COM
AWP	ABERDEEN GLOBAL PREMIER PPTYS COM SH BEN INT
AWR	AMERICAN STS WTR CO COM
AWRE	AWARE INC MASS COM
AWX	AVALON HLDGS CORP CL A
AXAS	ABRAXAS PETE CORP COM

AXDX	ACCELERATE DIAGNOSTICS INC COM
AXE	ANIXTER INTL INC COM
AXGN	AXOGEN INC COM
AXJL	WISDOMTREE TR ASIA PAC EXJP FD
AXJV	ISHARES TR MIN VOL ASIA JAP
AXL	AMERICAN AXLE & MFG HLDGS INC COM
AXON	AXOVANT SCIENCES LTD COM
AXP	AMERICAN EXPRESS CO COM
AXR	AMREP CORP NEW COM
AXS	AXIS CAPITAL HOLDINGS LTD SHS
AXS-D	AXIS CAPITAL HOLDINGS LTD PFD SER D 5.50%
AXS-E	AXIS CAP HLDGS LTD DEP SHS PFD E
AXSM	AXSOME THERAPEUTICS INC COM
AXTA	AXALTA COATING SYS LTD COM
AXTI	AXT INC COM
AXU	ALEXCO RESOURCE CORP COM
AY	ATLANTICA YIELD PLC SHS
AYI	ACUITY BRANDS INC COM
AYR	AIRCASTLE LTD COM
AYTU	AYTU BIOSCIENCE INC COM PAR
AYX	ALTERYX INC COM CL A
AZN	ASTRAZENECA PLC SPONSORED ADR
AZO	AUTOZONE INC COM
AZPN	ASPEN TECHNOLOGY INC COM
AZRE	AZURE PWR GLOBAL LTD SHS
AZRX	AZURRX BIOPHARMA INC COM
AZUL	AZUL S A SPONSOR ADR PFD
AZZ	AZZ INC COM
B	BARNES GROUP INC COM
BA	BOEING CO COM
BAB	INVESCO EXCHNG TRADED FD TR II TAXABLE MUN BD
BABA	ALIBABA GROUP HLDG LTD SPONSORED ADS
BABY	NATUS MEDICAL INC DEL COM
BAC	BANK AMER CORP COM
BAC+A	BANK AMER CORP WT EXP 011619
BAC+B	BANK AMER CORP WT EXP 102818
BAC-A	BANK AMER CORP DEP SHS PFD EE
BAC-B	BANK AMER CORP 6 NCUM PFD SR GG
BAC-C	BANK AMER CORP PFD CUM SER C

BAC-D	BANK AMER CORP 1/1000 6.204%D
BAC-E	BANK AMER CORP PFD PER1/1000E
BAC-L	BANK AMER CORP 7.25%CNV PFD L
BAC-W	BANK AMER CORP DEPSHS PFD SER W
BAC-Y	BANK AMER CORP DEP 1/1000 PFD
BAF	BLACKROCK MUNI INCOME INV QLTY COM
BAH	BOOZ ALLEN HAMILTON HLDG CORP CL A
BAK	BRASKEM S A SP ADR PFD A
BALB	BARCLAYS BK PLC IPATH B COTTON
BAM	BROOKFIELD ASSET MGMT INC CL A LTD VT SH
BANC	BANC OF CALIFORNIA INC COM
BANC-C	BANC OF CALIFORNIA INC DEP SHS REP 1/40
BANC-D	BANC OF CALIFORNIA INC DEP SHS SER-D
BANC-E	BANC OF CALIFORNIA INC DEP SHS REPSTG
BAND	BANDWIDTH INC COM CL A
BANF	BANCFIRST CORP COM
BANFP	BFC CAP TR II PFD TR 7.20%
BANR	BANNER CORP COM NEW
BANX	STONECASTLE FINL CORP COM
BAP	CREDICORP LTD COM
BAR	GRANITESHARES GOLD TR SHS BEN INT
BAS	BASIC ENERGY SVCS INC NEW COM NEW
BASI	BIOANALYTICAL SYS INC COM
BATRA	LIBERTY MEDIA CORP DELAWARE COM A BRAVES GRP
BATRK	LIBERTY MEDIA CORP DELAWARE COM C BRAVES GRP
BATT	AMPLIFY ETF TR ADVANCED BATTERY
BAX	BAXTER INTL INC COM
BB	BLACKBERRY LTD COM
BBBY	BED BATH & BEYOND INC COM
BBC	ETFIS SER TR I VIRTUS LIFESC CT
BBD	BANCO BRADESCO S A SP ADR PFD NEW
BBDO	BANCO BRADESCO S A SPONSORED ADR
BBEU	JPMorgan BetaBuilders Europe ETF
BBF	BLACKROCK MUNIC INCM INVST TR SH BEN INT
BBGI	BEASLEY BROADCAST GROUP INC CL A
BBH	VANECK VECTORS ETF TR BIOTECH ETF
BBJP	JPMorgan BetaBuilders Japan ETF
BBK	BLACKROCK MUNICIPAL BOND TR COM
BBL	BHP BILLITON PLC SPONSORED ADR

BBN	BLACKROCK TAX MUNICIPAL BD TR SHS
BBOX	BLACK BOX CORP DEL COM
BBP	ETFIS SER TR I VIRTUS LIFESC BT
BBRC	COLUMBIA ETF TR II BEYOND BRICS ETF
BBRE	JPMorgan BetaBuilders MSCI U.S. REIT ETF
BBSI	BARRETT BUSINESS SERVICES INC COM
BBT	BB&T CORP COM
BBT-D	BB&T CORP DEP SHS REPSTG 1
BBT-E	BB&T CORP DEP SHS REPSTG 1
BBT-F	BB&T CORP DEP1/1000 PFD F
BBT-G	BB&T CORP DP SHS RP PF G
BBT-H	BB&T CORP DEP PFD SER H
BBU	BROOKFIELD BUSINESS PARTNERS L UNIT LTD LP
BBVA	BANCO BILBAO VIZCAYA ARGENTARI SPONSORED ADR
BBW	BUILD A BEAR WORKSHOP COM
BBX	BBX CAP CORP NEW CL A
BBY	BEST BUY INC COM
BC	BRUNSWICK CORP COM
BCAC	BISON CAP ACQUISITION CORP ORD SHS
BCACR	BISON CAP ACQUISITION CORP RT
BCACU	BISON CAP ACQUISITION CORP UT 1SH 1RT 1/2WT
BCACW	BISON CAP ACQUISITION CORP WT EXP 062022
BCBP	BCB BANCORP INC COM
BCC	BOISE CASCADE CO DEL COM
BCD	ETFS TR BBG LONGER K 1
BCE	BCE INC COM NEW
BCEI	BONANZA CREEK ENERGY INC COM NEW
BCH	BANCO DE CHILE SPONSORED ADR
BCI	ETFS TR BBG COMMD K 1
BCLI	BRAINSTORM CELL THERAPEUTICS COM NEW
BCM	BARCLAYS BK PLC IPH PURE BRD
BCML	BAYCOM CORP COM
BCNA	REALITY SHS ETF TR NASDAQ NEXGEN
BCO	BRINKS CO COM
BCOM	B COMMUNICATIONS LTD SHS
BCOR	BLUCORA INC COM
BCOV	BRIGHTCOVE INC COM
BCPC	BALCHEM CORP COM
BCRH	BLUE CAP REINS HLDGS LTD COM

BCRX	BIOCRYST PHARMACEUTICALS COM
BCS	BARCLAYS PLC ADR
BCS-D	BARCLAYS BANK PLC ADR PFD SR 5
BCTF	BANCORP 34 INC COM
BCV	BANCROFT FUND LTD COM
BCV-A	BANCROFT FUND LTD PFD CUM SER A
BCX	BLACKROCK RES & COMM STRAT TR SHS
BDC	BELDEN INC COM
BDC-B	BELDEN INC DEP PFD COV B
BDCL	UBS AG LONDON BRH ETRAC 2X LEV LNG
BDCS	UBS AG JERSEY BRH ETRAC WELLS BDCI
BDCZ	UBS AG LONDON BRH ETRACS WF BUS DE
BDD	DEUTSCHE BK AG LONDON BRH DB BASE MET DBL
BDGE	BRIDGE BANCORP INC COM
BDJ	BLACKROCK ENHANCED EQT DIV TR COM
BDL	FLANIGANS ENTERPRISES INC COM
BDN	BRANDYWINE RLTY TR SH BEN INT NEW
BDR	BLONDER TONGUE LABS INC COM
BDRY	ETF MANAGER GROUP COMMODITY TR BREAKWAVE DRY
BDSI	BIODELIVERY SCIENCES INTL INC COM
BDX	BECTON DICKINSON & CO COM
BDXA	BECTON DICKINSON & CO PFD SHS CONV A
BEAT	BIOTELEMETRY INC COM
BECN	BEACON ROOFING SUPPLY INC COM
BEDU	BRIGHT SCHOLAR ED HLDGS LTD SPONSORED ADS
BEF	ETF TR BBG STRGY K 1
BEL	BELMOND LTD CL A
BELFA	BEL FUSE INC CL A
BELFB	BEL FUSE INC CL B
BEMO	Aptus Behavioral Momentum ETF
BEN	FRANKLIN RES INC COM
BEP	BROOKFIELD RENEWABLE PARTNERS PARTNERSHIP UNIT
BERN	Bernstein U.S. Research Fund
BERY	BERRY GLOBAL GROUP INC COM
BF.A	BROWN FORMAN CORP CL A
BF.B	BROWN FORMAN CORP CL B
BFAM	BRIGHT HORIZONS FAM SOL IN DEL COM
BFIN	BANKFINANCIAL CORP COM
BFIT	GLOBAL X FDS HELTH WELL ETF



BFK	BLACKROCK MUN INCOME TR SH BEN INT
BFO	BLACKROCK FLA MUN 2020 TERM TR COM SHS
BFOR	ALPS ETF TR BARRONS 400 ETF
BFR	BBVA BANCO FRANCES S A SPONSORED ADR
BFRA	BIOFRONTERA AG SPONSORED ADS
BFS	SAUL CTRS INC COM
BFS-C	SAUL CTRS INC DEP 1/100 PFD
BFS-D	SAUL CTRS INC 6.125% PFD CUM D
BFST	BUSINESS FIRST BANCSHARES INC COM
BFY	BLACKROCK NY MUN INCOME TR II COM
BFZ	BLACKROCK CALIF MUN INCOME TR SH BEN INT
BG	BUNGE LIMITED COM
BGB	BLACKSTONE GSO STRATEGIC CR FD COM SHS BEN IN
BGCA	BGC PARTNERS INC SR NT 8.125%42
BGCP	BGC PARTNERS INC CL A
BGFV	BIG 5 SPORTING GOODS CORP COM
BGG	BRIGGS & STRATTON CORP COM
BGH	BARINGS GLOBAL SHORT DURATION COM
BGI	BIRKS GROUP INC CL A COM
BGIO	BLACKROCK 2022 GBL INCM OPP COM
BGNE	BEIGENE LTD SPONSORED ADR
BGR	BLACKROCK ENERGY & RES TR COM
BGS	B & G FOODS INC NEW COM
BGSF	BG STAFFING INC COM
BGT	BLACKROCK FLOATING RATE INCOME COM
BGX	BLACKSTONE GSO LNG SHRT CR INC COM SHS BN INT
BGY	BLACKROCK ENHANCED INTL DIV TR COM BENE INTER
BH	BIGLARI HLDGS INC COM STK CL B
BH.A	BIGLARI HLDGS INC COM STK CL A
BHAC	BARINGTON HILCO ACQUISITION COM
BHACR	BARINGTON HILCO ACQUISITION RT
BHACU	BARINGTON HILCO ACQUISITION UNT 1COM&1RT&1WT
BHACW	BARINGTON HILCO ACQUISITION WT EXP 021.120
BHB	BAR HBR BANKSHARES COM
BHBK	BLUE HILLS BANCORP INC COM
BHE	BENCHMARK ELECTRS INC COM
BHF	BRIGHTHOUSE FINL INC COM
BHGE	BAKER HUGHES A GE CO CL A
BHK	BLACKROCK CORE BD TR SHS BEN INT

BHLB	BERKSHIRE HILLS BANCORP INC COM
BHP	BHP BILLITON LTD SPONSORED ADR
BHR	BRAEMAR HOTELS & RESORTS INC COM
BHR-B	BRAEMAR HOTELS & RESORTS INC 5.5 CUM CV PFD B
BHTG	BIOHITECH GLOBAL INC COM
BHV	BLACKROCK VA MUNICIPAL BOND TR COM
BHVN	BIOHAVEN PHARMACTL HLDG CO LTD COM
BIB	PROSHARES TR PSHS ULT NASB
BIBL	NORTHERN LTS FD TR IV INSPIRE 100ETF
BICK	FIRST TR BICK INDEX FD COM SHS
BID	SOTHEBYS COM
BIDU	BAIDU INC SPON ADR REP A
BIF	BOULDER GROWTH & INCOME FD INC COM
BIG	BIG LOTS INC COM
BIIB	BIOGEN INC COM
BIKR	ETF MANAGERS TR ROGERS AI GLOB
BIL	SPDR SER TR SPDR BLOOMBERG
BILI	BILIBILI INC SPONS ADS REP Z
BIO	BIO RAD LABS INC CL A
BIO.B	BIO RAD LABS INC CL B
BIOC	BIOCEPT INC COM NEW
BIOL	BIOLASE INC COM NEW
BIOS	BIOSCRIP INC COM
BIP	BROOKFIELD INFRAST PARTNERS LP LP INT UNIT
BIS	PROSHARES TR ULTSH NASD BIOT
BIT	BLACKROCK MULTI-SECTOR INC TR COM
BITA	BITAUTO HLDGS LTD SPONSORED ADS
BIV	VANGUARD BD INDEX FD INC INTERMED TERM
BIZD	VANECK VECTORS ETF TR BDC INCOME ETF
BJJN	BARCLAYS BK PLC IPATH B NICKEL
BJK	VANECK VECTORS ETF TR GAMING ETF
BJO	BARCLAYS BK PLC IPATH B COFFEE
BJRI	BJS RESTAURANTS INC COM
BJZ	BLACKROCK CA MUNI 2018 TERM TR COM
BK	BANK NEW YORK MELLON CORP COM
BKC	EXCHANGE LISTED FDS TR REX BKCM ETF
BK-C	BANK NEW YORK MELLON CORP DP1/4000 PFD-C
BKCC	BLACKROCK CAPITAL INVESTMENT C COM
BKD	BROOKDALE SR LIVING INC COM

BKE	BUCKLE INC COM
BKEP	BLUEKNIGHT ENERGY PARTNERS L P COM UNIT
BKEPP	BLUEKNIGHT ENERGY PARTNERS L P PFD UNIT SER A
BKF	ISHARES INC MSCI BRIC INDX
BKH	BLACK HILLS CORP COM
BKHU	BLACK HILLS CORP EQUITY UNIT
BKI	BLACK KNIGHT INC COM
BKJ	BANCORP NEW JERSEY INC NEW COM
BKK	BLACKROCK MUN 2020 TERM TR COM SHS
BKLN	INVESCO EXCHNG TRADED FD TR II SR LN ETF
BKN	BLACKROCK INVT QUALITY MUN TR COM
BKNG	BOOKING HLDGS INC COM
BKS	BARNES & NOBLE INC COM
BKSC	BANK SOUTH CAROLINA CORP COM
BKT	BLACKROCK INCOME TR INC COM
BKTI	BK TECHNOLOGIES INC COM
BKU	BANKUNITED INC COM
BKYI	BIO-KEY INTERNATIONAL INC COM PAR
BL	BLACKLINE INC COM
BLBD	BLUE BIRD CORP COM
BLCM	BELLICUM PHARMACEUTICALS INC COM
BLCN	REALITY SHS ETF TR NSD NXGN ECO ETF
BLD	TOPBUILD CORP COM
BLDP	BALLARD PWR SYS INC NEW COM
BLDR	BUILDERS FIRTSOURCE INC COM
BLE	BLACKROCK MUNI INCOME TR II COM
BLES	NORTHERN LTS FD TR IV INSPIRE GBL HOPE
BLFS	BIOLIFE SOLUTIONS INC COM NEW
BLH	BLACKROCK NY MUNI 2018 TERM TR COM
BLHY	VIRTUS ETF TR II VIRTUS DYNMC ETF
BLIN	BRIDGELINE DIGITAL INC COM PAR
BLK	BLACKROCK INC COM
BLKB	BLACKBAUD INC COM
BLL	BALL CORP COM
BLMN	BLOOMIN BRANDS INC COM
BLMT	BSB BANCORP INC MD COM
BLNK	BLINK CHARGING CO COM
BLNKW	BLINK CHARGING CO WT EXP 013123
BLOK	AMPLIFY ETF TR BLOCKCHAIN LDR

BLPH	BELLEROPHON THERAPEUTICS INC COM
BLRX	BIOLINERX LTD SPONSORED ADR
BLUE	BLUEBIRD BIO INC COM
BLV	VANGUARD BD INDEX FD INC LONG TERM BOND
BLW	BLACKROCK LTD DURATION INC TR COM SHS
BLX	BANCO LATINOAMERICANO DE COME SHS E
BMA	BANCO MACRO SA SPON ADR B
BMCH	BMC STK HLDGS INC COM
BME	BLACKROCK HEALTH SCIENCES TR COM
BMI	BADGER METER INC COM
BML-G	BANK AMER CORP PFD1/1200 SR1
BML-H	BANK AMER CORP PFD 1/1200SER2
BML-I	BANK AMER CORP PFD 1/1200SER3
BML-J	BANK AMER CORP PFD DP1/1200 4
BML-L	BANK AMER CORP PFD 1/1200SER5
BMLP	BANK OF MONTREAL BMO ELK ETN
BMO	BANK MONTREAL QUE COM
BMRA	BIOMERICA INC COM NEW
BMRC	BANK OF MARIN BANCORP COM
BMRN	BIOMARIN PHARMACEUTICAL INC COM
BMS	BEMIS INC COM
BMTC	BRYN MAWR BK CORP COM
BMY	BRISTOL MYERS SQUIBB CO COM
BNCL	BENEFICIAL BANCORP INC COM
BND	VANGUARD BD INDEX FD INC TOTAL BND MRKT
BNDX	VANGUARD CHARLOTTE FDS INTL BD IDX ETF
BNED	BARNES & NOBLE ED INC COM
BNFT	BENEFITFOCUS INC COM
BNO	UNITED STS BRENT OIL FD LP UNIT
BNS	BANK N S HALIFAX COM
BNSO	BONSO ELECTRS INTL INC COM PAR \$0.003
BNTC	BENITEC BIOPHARMA LTD SPONS ADR NEW
BNTCW	BENITEC BIOPHARMA LTD WT EXP 081420
BNY	BLACKROCK N Y MUN INCOME TR SH BEN INT
BOCH	BANK COMM HLDGS COM
BOE	BLACKROCK ENHANCED GBL DIV TR COM
BOFI	BOFI HLDG INC COM
BOFIL	BOFI HLDG INC SUB NT

BOH	BANK HAWAII CORP COM
BOIL	PROSHARES TR II ULTRA BLOOMBERG
BOJA	BOJANGLES INC COM
BOKF	BOK FINL CORP COM NEW
BOKFL	BOK FINL CORP SUB NTS
BOLD	AUDENTES THERAPEUTICS INC COM
BOM	DEUTSCHE BK AG LONDON BRH DB BASE MET DBL
BOMN	BOSTON OMAHA CORP COM
BOND	PIMCO ETF TR ACTIVE BD ETF
BOOM	DMC GLOBAL INC COM
BOON	ETF SER SOLUTIONS NYSE PICKENS
BOOT	BOOT BARN HLDGS INC COM
BORN	CHINA NEW BORUN CORP ADR
BOS	DEUTSCHE BK AG LONDON BRH DB BASE MET SHRT
BOSC	BOS BETTER ONLINE SOLUTIONS SHS NEW NIS 80
BOSS	Global X Founder-Run Companies ETF
BOTJ	BANK OF THE ST JAMES FINL GP COM
BOTZ	GLOBAL X FDS RBTCS ARTFL INTE
BOX	BOX INC CL A
BOXL	BOXLIGHT CORP COM CL A
BP	BP PLC SPONSORED ADR
BPFH	BOSTON PRIVATE FINL HLDGS INC COM
BPFHW	BOSTON PRIVATE FINL HLDGS INC WT EXP 112118
BPI	BRIDGEPOINT ED INC COM
BPK	BLACKROCK MUNI 2018 TERM TR COM
BPL	BUCKEYE PARTNERS L P UNIT LTD PARTN
BPMC	BLUEPRINT MEDICINES CORP COM
BPMP	BP MIDSTREAM PARTNERS LP UNIT LTD PTNR
BPMX	BIOPHARMX CORP COM
BPOP	POPULAR INC COM NEW
BPOPM	POPULAR CAP TR II PFD GTD 6.125%
BPOPN	POPULAR CAP TR I PFD 6.70% GTD
BPRN	BANK PRINCETON NEW JERSEY COM
BPT	BP PRUDHOE BAY RTY TR UNIT BEN INT
BPTH	BIO PATH HOLDINGS INC COM NEW
BPY	BROOKFIELD PPTY PARTNERS L P UNIT LTD PARTN
BQH	BLACKROCK NY MUNICIPAL BOND TR COM
BR	BROADRIDGE FINL SOLUTIONS INC COM
BRAC	BLACK RIDGE ACQUISITION CORP COM

BRACR	BLACK RIDGE ACQUISITION CORP RT
BRACU	BLACK RIDGE ACQUISITION CORP UNIT EXP 100522
BRACW	BLACK RIDGE ACQUISITION CORP WT EXP 071024
BRC	BRADY CORP CL A
BREW	CRAFT BREW ALLIANCE INC COM
BRF	VANECK VECTORS ETF TR BRAZIL SMALL CP
BRFS	BRF SA SPONSORED ADR
BRG	BLUEROCK RESIDENTIAL GRW REIT COM CL A
BRG-A	BLUEROCK RESIDENTIAL GRW REIT RED PFD SER A
BRG-C	BLUEROCK RESIDENTIAL GRW REIT PFD SER C
BRG-D	BLUEROCK RESIDENTIAL GRW REIT PFD SER D
BRGL	Bernstein Global Research Fund
BRID	BRIDGFORD FOODS CORP COM
BRK.A	BERKSHIRE HATHAWAY INC DEL CL A
BRK.B	BERKSHIRE HATHAWAY INC DEL CL B NEW
BRKL	BROOKLINE BANCORP INC DEL COM
BRKR	BRUKER CORP COM
BRKS	BROOKS AUTOMATION INC COM
BRN	BARNWELL INDS INC COM
BRO	BROWN & BROWN INC COM
BRPA	BIG ROCK PARTNERS ACQUISI CORP COM
BRPAR	BIG ROCK PARTNERS ACQUISI CORP RT
BRPAU	BIG ROCK PARTNERS ACQUISI CORP UNIT EX 112022
BRPAW	BIG ROCK PARTNERS ACQUISI CORP WT EXP 120122
BRQS	BORQS TECHNOLOGIES INC SHS
BRS	BRISTOW GROUP INC COM
BRSS	GLOBAL BRASS & COPPR HLDGS INC COM
BRT	BRT APARTMENTS CORP COM
BRX	BRIXMOR PPTY GROUP INC COM
BRZU	DIREXION SHS ETF TR BRZ BL 3X SH NEW
BSA	BRIGHTSPHERE INVT GROUP LLC NT
BSAC	BANCO SANTANDER CHILE NEW SP ADR REP COM
BSBR	BANCO SANTANDER BRASIL S A ADS REP 1 UNIT
BSCI	INVESCO EXCH TRD SLF IDX FD TR BULSHS2018 COR
BSCJ	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2019 CB
BSCK	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2020 CB
BSCL	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2021 CB
BSCM	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2022 CB
BSCN	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2023 CB

BSCO	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2024 CB
BSCP	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2025 CB
BSCQ	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2026 CB
BSCR	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2027 CB
BSD	BLACKROCK STRATEGIC MUN TR COM
BSE	BLACKROCK NY MUNI INC QLTY TR COM
BSET	BASSETT FURNITURE INDS INC COM
BSIG	BRIGHTSPHERE INVESTMNT GRP PLC SHS
BSJI	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2018 HY
BSJJ	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2019 HY
BSJK	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2020 HY
BSJL	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2021 HY
BSJM	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2022 HY
BSJN	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2023 HY
BSJO	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2024 HY
BSJP	INVESCO EXCH TRD SLF IDX FD TR BULSHS 2025 HY
BSL	BLACKSTONE GSO FLTING RTE FUND COM
BSM	BLACK STONE MINERALS L P COM UNIT
BSMX	BANCO SANTANDER S A SPONSORED ADR B
BSPM	BIOSTAR PHARMACEUTICALS INC COM PAR
BSQR	BSQUARE CORP COM NEW
BSRR	SIERRA BANCORP COM
BST	BLACKROCK SCIENCE & TECH TR SHS
BSTC	BIOSPECIFICS TECHNOLOGIES CORP COM
BSTI	BEST INC SPONSORED ADS
BSV	VANGUARD BD INDEX FD INC SHORT TRM BOND
BSWN	UBS AG LONDON BRH VELOCITYSHS TAIL
BSX	BOSTON SCIENTIFIC CORP COM
BT	BT GROUP PLC ADR
BTA	BLACKROCK LONG-TERM MUNI ADVNT COM
BTAI	BIOXCEL THERAPEUTICS INC COM
BTAL	FQF TR AGFIQ US MK ANTI
BTE	BAYTEX ENERGY CORP COM
BTEC	PRINCIPAL EXCHANGE TRADED FDS HELTHCARE INDX
BTG	B2GOLD CORP COM
BTI	BRITISH AMERN TOB PLC SPONSORED ADR
BTN	BALLANTYNE STRONG INC COM
BTO	HANCOCK JOHN FINL OPPTY FD SH BEN INT NEW
BTT	BLACKROCK MUN 2030 TAR TERM TR COM SHS BEN IN

BTU	PEABODY ENERGY CORP NEW COM
BTX	BIOTIME INC COM
BTX+	BIOTIME INC WT EXP 100118
BTZ	BLACKROCK CR ALLCTN INC TR COM
BUD	ANHEUSER BUSCH INBEV SA/NV SPONSORED ADR
BUI	BLACKROCK UTILITIES INFRSTRCTR COM
BURG	CHANTICLEER HLDGS INC COM PAR
BURL	BURLINGTON STORES INC COM
BUSE	FIRST BUSEY CORP COM NEW
BUY	USCF ETF TR SUMERHAVEN PVT
BUYN	USCF ETF TR SUMERHAVEN EQT
BUZ	ALPS ETF TR BUZZ US SMT LDR
BVAL	ETF SER SOLUTIONS BRAND VALUE
BVN	COMPANIA DE MINAS BUENAVENTURA SPONSORED ADR
BVSN	BROADVISION INC COM PAR
BVX	BOVIE MEDICAL CORP COM
BVXV	BIONDVAX PHARMACEUTICALS LTD SPOND ADS
BVXVW	BIONDVAX PHARMACEUTICALS LTD WT EXP 051520
BW	BABCOCK & WILCOX ENTERPRIS INC COM
BWA	BORGWARNER INC COM
BWB	BRIDGEWATER BANCSHARES INC COM ACCD INV
BWEN	BROADWIND ENERGY INC COM NEW
BWFG	BANKWELL FINL GROUP INC COM
BWG	BRANDYWINEGBL GLBAL INM OPRTUN COM
BWINA	BALDWIN & LYONS INC CL A
BWINB	BALDWIN & LYONS INC CL B
BWL.A	BOWL AMER INC CL A
BWP	BOARDWALK PIPELINE PARTNERS LP UT LTD PARTNER
BWX	SPDR SERIES TRUST BLOMBERG INTL TR
BWXT	BWX TECHNOLOGIES INC COM
BWZ	SPDR SERIES TRUST BLOMBERG BRC INT
BX	BLACKSTONE GROUP L P COM UNIT LTD
BXC	BLUELINX HLDGS INC COM NEW
BXE	BELLATRIX EXPLORATION LTD COM NEW
BXG	BLUEGREEN VACATIONS CORP COM
BXMT	BLACKSTONE MTG TR INC COM CL A
BXMX	NUVEEN S&P 500 BUY-WRITE INC COM
BXP	BOSTON PROPERTIES INC COM
BXP-B	BOSTON PROPERTIES INC DEP 1/100 PF B



BXS	BANCORPSOUTH BK TUPELO MISS COM
BY	BYLINE BANCORP INC COM
BYD	BOYD GAMING CORP COM
BYFC	BROADWAY FINL CORP DEL COM
BYLD	ISHARES TR YLD OPTIM BD
BYM	BLACKROCK MUNICIPL INC QLTY TR COM
BYSI	BEYONDSRING INC SHS
BZF	WISDOMTREE TR BRAZILN RL FD
BZH	BEAZER HOMES USA INC COM NEW
BZM	BLACKROCK MD MUNICIPAL BOND TR COM
BZQ	PROSHARES TR ULT MSCIBZL CAPP
BZUN	BAOZUN INC SPONSORED ADR
C	CITIGROUP INC COM NEW
C+A	CITIGROUP INC WT EXP 010419
CA	CA INC COM
CAAP	CORPORACION AMER ARPTS S A COM
CAAS	CHINA AUTOMOTIVE SYS INC COM
CABO	CABLE ONE INC COM
CAC	CAMDEN NATL CORP COM
CACC	CREDIT ACCEP CORP MICH COM
CACG	LEGG MASON ETF INVT TR CLRBRG GWT ETF
CACI	CACI INTL INC CL A
CADC	CHINA ADVANCED CONSTR MATLS GP COM NEW
CADE	CADENCE BANCORPORATION CL A
CAE	CAE INC COM
CAF	MORGAN STANLEY CHINA A SH FD COM
CAG	CONAGRA BRANDS INC COM
CAH	CARDINAL HEALTH INC COM
CAI	CAI INTERNATIONAL INC COM
CAI-A	CAI INTERNATIONAL INC 8.50% RED PFD A
CAJ	CANON INC SPONSORED ADR
CAKE	CHEESECAKE FACTORY INC COM
CAL	CALERES INC COM
CALA	CALITHERA BIOSCIENCES INC COM
CALF	Pacer US Small Cap Cash Cows 100 ETF
CALI	CHINA AUTO LOGISTICS INC COM NEW
CALL	MAGICJACK VOCALTEC LTD SHS
CALM	CAL MAINE FOODS INC COM NEW
CALX	CALIX INC COM

CAMP	CALAMP CORP COM
CAMT	CAMTEK LTD ORD
CANE	TEUCRIUM COMMODITY TR SUGAR FD
CANF	CAN-FITE BIOPHARMA LTD SPONSORED ADR
CAPE	BARCLAYS BK PLC BARC ETN+SHILL
CAPL	CROSSAMERICA PARTNERS LP UT LTD PTN INT
CAPR	CAPRICOR THERAPEUTICS INC COM
CAR	AVIS BUDGET GROUP COM
CARA	CARA THERAPEUTICS INC COM
CARB	CARBONITE INC COM
CARG	CARGURUS INC COM CL A
CARO	CAROLINA FINL CORP NEW COM
CARS	CARS COM INC COM
CART	CAROLINA TR BANCSHARES INC COM
CARV	CARVER BANCORP INC COM NEW
CARZ	FIRST TR EXCHANGE TRADED FD II AUTO INDEX FD
CASA	CASA SYS INC COM
CASH	META FINL GROUP INC COM
CASI	CASI PHARMACEUTICALS INC COM
CASM	CAS MED SYS INC COM PAR
CASS	CASS INFORMATION SYS INC COM
CASY	CASEYS GEN STORES INC COM
CAT	CATERPILLAR INC DEL COM
CATB	CATABASIS PHARMACEUTICALS INC COM
CATC	CAMBRIDGE BANCORP COM
CATH	GLOBAL X FDS S&P 500 CATHOLIC
CATM	CARDTRONICS PLC SHS CL A
CATO	CATO CORP NEW CL A
CATS	CATASYS INC COM PAR
CATY	CATHAY GEN BANCORP COM
CATYW	CATHAY GEN BANCORP WT EXP 120518
CAVM	CAVIUM INC COM
CAW	CCA INDS INC COM
CB	CHUBB LIMITED COM
CBA	CLEARBRIDGE AMERN ENERG MLP FD COM
CBAK	CBAK ENERGY TECHNOLOGY INC COM
CBAN	COLONY BANCORP INC COM
CBAY	CYMABAY THERAPEUTICS INC COM
CBB	CINCINNATI BELL INC NEW COM NEW

CBB-B	CINCINNATI BELL INC NEW PFD CV DEP1/20
CBD	COMPANHIA BRASILEIRA DE DISTRB SPN ADR PFD CL A
CBFV	CB FINL SVCS INC COM
CBH	ALLIANZGI CON INCM 2024 TARGET COM
CBIO	CATALYST BIOSCIENCES INC COM NEW
CBK	CHRISTOPHER & BANKS CORP COM
CBL	CBL & ASSOC PPTYS INC COM
CBL-D	CBL & ASSOC PPTYS INC PFD 1/10 SER D
CBL-E	CBL & ASSOC PPTYS INC DEP 1/10TH PFD
CBLI	CLEVELAND BIOLABS INC COM NEW
CBLK	CARBON BLACK INC COM
CBM	CAMBREX CORP COM
CBMG	CELLULAR BIOMEDICINE GROUP INC COM NEW
CBND	SPDR SERIES TRUST BLOMBRG BRC CORP
CBOE	CBOE GLOBAL MARKETS INC COM
CBON	VANECK VECTORS ETF TR CHINAAMC CHINA B
CBPO	CHINA BIOLOGIC PRODS HLDGS INC COM
CBPX	CONTINENTAL BLDG PRODS INC COM
CBRE	CBRE GROUP INC CL A
CBRL	CRACKER BARREL OLD CTRY STORE COM
CBS	CBS CORP NEW CL B
CBS.A	CBS CORP NEW CL A
CBSH	COMMERCE BANCSHARES INC COM
CBSHP	COMMERCE BANCSHARES INC DEP SHS RP PFD B
CBT	CABOT CORP COM
CBTX	CBTX INC COM
CBU	COMMUNITY BK SYS INC COM
CBZ	CBIZ INC COM
CC	CHEMOURS CO COM
C-C	CITIGROUP INC DEP SHS 1/1000 C
CCA	MFS CALIF MUN FD COM
CCBG	CAPITAL CITY BK GROUP INC COM
CCCL	CHINA CERAMICS CO LTD SHS NEW
CCCR	CHINA COML CR INC COM
CCD	CALAMOS DYNAMIC CONV & INCOME COM
CCE	COCA COLA EUROPEAN PARTNERS P SHS
CCF	CHASE CORP COM
CCI	CROWN CASTLE INTL CORP NEW COM
CCI-A	CROWN CASTLE INTL CORP NEW 6.875% CON PFD A

CCIH	CHINACACHE INTL HLDG LTD SPONSORED ADR
CCJ	CAMECO CORP COM
CCK	CROWN HOLDINGS INC COM
CCL	CARNIVAL CORP PAIRED CTF
CCLP	CSI COMPRESSCO LP COM UNIT
CCM	CONCORD MED SVCS HLDGS LTD SPON ADR CL A
CCMP	CABOT MICROELECTRONICS CORP COM
CCNE	CNB FINL CORP PA COM
CCNI	COMMAND CENTER INC COM NEW
CCO	CLEAR CHANNEL OUTDOOR HLDGS IN CL A
CCOI	COGENT COMMUNICATIONS HLDGS IN COM NEW
CCOR	CAMBRIA ETF TR CORE EQUITY
CCR	CONSOL COAL RES LP COM UNIT
CCRC	CHINA CUST RELATIONS CNTR INC COM
CCRN	CROSS CTRY HEALTHCARE INC COM
CCS	CENTURY CMNTYS INC COM
CCT	CORPORATE CAP TR INC COM
CCU	COMPANIA CERVECERIAS UNIDAS SA SPONSORED ADR
CCXI	CHEMOCENTRYX INC COM
CCZ	COMCAST HOLDINGS CORP ZONES CV2% PCS
CDAY	CERIDIAN HCM HLDG INC COM
CDC	VICTORY PORTFOLIOS II SHS US EQ INCM
CDE	COEUR MNG INC COM NEW
CDEV	CENTENNIAL RESOURCE DEV INC CL A
CDK	CDK GLOBAL INC COM
CDL	VICTORY PORTFOLIOS II SHS US LRG CAP
CDLX	CARDLYTICS INC COM
CDMO	AVID BIOSERVICES INC COM
CDMOP	AVID BIOSERVICES INC 10.50% CON PFD E
CDNA	CAREDX INC COM
CDNS	CADENCE DESIGN SYSTEM INC COM
CDOR	CONDOR HOSPITALITY TR INC COM NEW
CDR	CEDAR REALTY TRUST INC COM NEW
CDR-B	CEDAR REALTY TRUST INC PFD-B 7.25%
CDR-C	CEDAR REALTY TRUST INC 6.50% CUM PFD C
CDTI	CDTI ADVANCED MATLS INC COM
CDTX	CIDARA THERAPEUTICS INC COM
CDW	CDW CORP COM
CDXC	CHROMADEX CORP COM NEW

CDXS	CODEXIS INC COM
CDZI	CADIZ INC COM NEW
CE	CELANESE CORP DEL COM SER A
CEA	CHINA EASTN AIRLS LTD SPON ADR CL H
CECE	CECO ENVIRONMENTAL CORP COM
CECO	CAREER EDUCATION CORP COM
CEE	THE CENTRAL AND EASTERN EU INC COM
CEF	SPROTT PHYSICAL GOLD & SILVER TR UNIT
CEFL	UBS AG LONDON BRH ETRACS MTH 2XLV
CEFS	Saba Closed-End Funds ETF
CEI	CAMBER ENERGY INC COM NEW
CEIX	CONSOL ENERGY INC NEW COM
CEL	CELLCOM ISRAEL LTD SHS
CELC	CELCUITY INC COM
CELG	CELGENE CORP COM
CELGZ	CELGENE CORP CONTIN VAL RT
CELH	CELSIUS HOLDINGS INC COM NEW
CELP	CYPRESS ENERGY PARTNERS LP LTD PARTNER INT
CEM	CLEARBRIDGE ENERGY MLP FD INC COM
CEMB	iShares J.P. Morgan EM Corporate Bond ETF
CEMI	CHEMBIO DIAGNOSTICS INC COM NEW
CEN	CENTER COAST BRKFLD MLP ENRGY SHS BEN INT
CENT	CENTRAL GARDEN & PET CO COM
CENTA	CENTRAL GARDEN & PET CO CL A NON-VTG
CENX	CENTURY ALUM CO COM
CEO	CNOOC LTD SPONSORED ADR
CEPU	CENTRAL PUERTO S A SPONSORED ADR
CEQP	CRESTWOOD EQUITY PARTNERS LP UNIT LTD PARTNER
CERC	CERECOR INC COM
CERCW	CERECOR INC WT A EXP 102018
CERN	CERNER CORP COM
CERS	CERUS CORP COM
CET	CENTRAL SECS CORP COM
CETV	CENTRAL EUROPEAN MEDIA ENTRPRS CL A NEW
CETX	CENTREX INC COM PAR \$.001
CETXP	CENTREX INC PFD
CETXW	CENTREX INC WT EXP 120222
CEV	EATON VANCE CA MUNI INCOME TR SH BEN INT
CEVA	CEVA INC COM

CEW	WISDOMTREE TR EMERG CUR STR FD
CEY	VICTORY PORTFOLIOS II VICOTRYSHS EMG
CEZ	VICTORY PORTFOLIOS II SHS EMRG MKT ETF
CF	CF INDS HLDGS INC COM
CFA	VICTORY PORTFOLIOS II SHS US 500 VOLA
CFBI	COMMUNITY FIRST BANCSHARES INC COM
CFBK	CENTRAL FED CORP COM NEW
CFFI	C & F FINL CORP COM
CFFN	CAPITOL FED FINL INC COM
CFG	CITIZENS FINL GROUP INC COM
CFMS	CONFORMIS INC
CFO	VICTORY PORTFOLIOS II SHS US 500 ENHA
CFR	CULLEN FROST BANKERS INC COM
CFR-A	CULLEN FROST BANKERS INC PERP PFD SER A %
CFRX	CONTRAFECT CORP COM
CFX	COLFAX CORP COM
CG	CARLYLE GROUP L P COM UTS LTD PTN
CGA	CHINA GREEN AGRICULTURE INC COM
CGBD	TCG BDC INC COM
CGC	CANOPY GROWTH CORP COM
CGEN	COMPUGEN LTD ORD
CGG	CGG SPON ADR NEW
CGIX	CANCER GENETICS INC COM
CGNX	COGNEX CORP COM
CGO	CALAMOS GLOBAL TOTAL RETURN FD COM SH BEN INT
CGW	INVESCO EXCHNG TRADED FD TR II S&P GBL WATER
CHA	CHINA TELECOM CORP LTD SPON ADR H SHS
CHAD	DIREXION SHS ETF TR CSI300 CHINA1X
CHAU	DIREXION SHS ETF TR CSI 300 BULL2X
CHCI	COMSTOCK HLDG COS INC CL A NEW
CHCO	CITY HLDG CO COM
CHCT	COMMUNITY HEALTHCARE TR INC COM
CHD	CHURCH & DWIGHT INC COM
CHDN	CHURCHILL DOWNS INC COM
CHE	CHEMED CORP NEW COM
CHEF	CHEFS WHSE INC COM
CHEK	CHECK CAP LTD SHS
CHEKW	CHECK CAP LTD WT EXP 022820
CHEKZ	CHECK CAP LTD WT C EXP 050323

CHEP	FQF TR AGFIQ US MKT VLU
CHFC	CHEMICAL FINL CORP COM
CHFN	CHARTER FINL CORP MD COM
CHFS	CHF SOLUTIONS INC COM NEW
CHGG	CHEGG INC COM
CHGX	ETF SER SOLUTIONS CHANG FIN US LRG
CHH	CHOICE HOTELS INTL INC COM
CHI	CALAMOS CONV OPP AND INC FD SH BEN INT
CHIE	GLOBAL X FDS CHINA ENRG ETF
CHII	GLOBAL X FDS CHINA INDL ETF
CHIM	GLOBAL X FDS GBLX CHIMATL NEW
CHIQ	GLOBAL X FDS CHINA CONS ETF
CHIX	GLOBAL X FDS CHINA FINL ETF
CHK	CHESAPEAKE ENERGY CORP COM
CHK-D	CHESAPEAKE ENERGY CORP PFD CONV
CHKE	CHEROKEE INC DEL NEW COM
CHKP	CHECK POINT SOFTWARE TECH LTD ORD
CHKR	CHESAPEAKE GRANITE WASH TR COM SH BEN INT
CHL	CHINA MOBILE LIMITED SPONSORED ADR
CHMA	CHIASMA INC COM
CHMG	CHEMUNG FINL CORP COM
CHMI	CHERRY HILL MTG INVT CORP COM
CHMI-A	CHERRY HILL MTG INVT CORP 8.20% CUM PFD A
CHN	CHINA FD INC COM
CHNR	CHINA NATURAL RESOURCES INC COM
CHRA	CHARAH SOLUTIONS INC COM
CHRS	COHERUS BIOSCIENCES INC COM
CHRW	C H ROBINSON WORLDWIDE INC COM NEW
CHS	CHICOS FAS INC COM
CHSCL	CHS INC CLASS B SER 4
CHSCM	CHS INC RED PFD SER3 CLB
CHSCN	CHS INC PFD B SR 2 RST
CHSCO	CHS INC PFD CL B
CHSCP	CHS INC PFD 8%
CHSP	CHESAPEAKE LODGING TR SH BEN INT
CHT	CHUNGWA TELECOM CO LTD SPON ADR NEW11
CHTR	CHARTER COMMUNICATIONS INC NEW CL A
CHU	CHINA UNICOM (HONG KONG) LTD SPONSORED ADR
CHUY	CHUYS HLDGS INC COM

CHW	CALAMOS GBL DYN INCOME FUND COM
CHY	CALAMOS CONV & HIGH INCOME FD COM SHS
CI	CIGNA CORPORATION COM
CIA	CITIZENS INC CL A
CIB	BANCOLOMBIA S A SPON ADR PREF
CIBR	FIRST TR EXCHANGE TRADED FD II NASDAQ CYB ETF
CIC	CAPITOL INVT CORP IV CL A ORD
CIC+	CAPITOL INVT CORP IV WT A EXP 010125
CIC=	CAPITOL INVT CORP IV UNIT EX
CID	VICTORY PORTFOLIOS II SHS INTL HGH DIV
CIDM	CINEDIGM CORP COM NEW
CIEN	CIENA CORP COM NEW
CIF	MFS INTERMEDIATE HIGH INC FD SH BEN INT
CIFS	CHINA INTERNET NATIONWIDE FINL SHS
CIG	COMPANHIA ENERGETICA DE MINAS SP ADR N-V PFD
CIG.C	COMPANHIA ENERGETICA DE MINAS SPONSORED ADR
CIGI	COLLIERS INTL GROUP INC SUB VTG SHS
CII	BLACKROCK ENH CAP & INC FD INC COM
CIK	CREDIT SUISSE ASSET MGMT INCOM COM
CIL	VICTORY PORTFOLIOS II SHS INTL VOLA
CIM	CHIMERA INVT CORP COM NEW
CIM-A	CHIMERA INVT CORP PFD SER A
CIM-B	CHIMERA INVT CORP PFD SER B
CINF	CINCINNATI FINL CORP COM
CINR	CINER RES LP COM UNIT LTD
CIO	CITY OFFICE REIT INC COM
CIO-A	CITY OFFICE REIT INC RED PFD SER A
CIR	CIRCOR INTL INC COM
CISN	CISION LTD SHS
CIT	CIT GROUP INC COM NEW
CIU	ISHARES TR INTRMD CR BD ETF
CIVB	CIVISTA BANCSHARES INC COM NO PAR
CIVBP	CIVISTA BANCSHARES INC 6.50% PFD SER B
CIVI	CIVITAS SOLUTIONS INC COM
CIX	COMPX INTERNATIONAL INC CL A
CIZ	VICTORY PORTFOLIOS II SHS DEVP ENH VOL
CIZN	CITIZENS HLDG CO MISS COM
CJ	C&J ENERGY SVCS INC NEW COM
C-J	CITIGROUP INC DEP SHS 1/1000 J



CJJD	CHINA JO-JO DRUGSTORES INC COM NEW
CJNK	SPDR SER TR ICE BOFAML ETF
C-K	CITIGROUP INC DEP SHS RP PFD K
CKH	SEACOR HOLDINGS INC COM
CKPT	CHECKPOINT THERAPEUTICS INC COM
CKX	CKX LANDS INC COM
CL	COLGATE PALMOLIVE CO COM
C-L	CITIGROUP INC DEP 1/1000 PFD L
CLAR	CLARUS CORP NEW COM
CLB	CORE LABORATORIES N V COM
CLBK	COLUMBIA FINL INC COM
CLBS	CALADRIUS BIOSCIENCES INC COM NEW
CLCT	COLLECTORS UNIVERSE INC COM NEW
CLD	CLOUD PEAK ENERGY INC COM
CLDC	CHINA LENDING CORP SHS
CLDR	CLOUDERA INC COM
CLDT	CHATHAM LODGING TR COM
CLDX	CELLDEX THERAPEUTICS INC NEW COM
CLF	CLEVELAND CLIFFS INC COM
CLFD	CLEARFIELD INC COM
CLGN	COLLPLANT HLDGS LTD SPONSORED ADR NE
CLGX	CORELOGIC INC COM
CLH	CLEAN HARBORS INC COM
CLI	MACK CALI RLTY CORP COM
CLIR	CLEARSIGN COMBUSTION CORP COM
CLIRW	CLEARSIGN COMBUSTION CORP WT EXP 012519
CLIX	PROSHARES TR LONG ONLINE SHRT
CLLS	CELLECTIS S A SPONSORED ADS
CLM	CORNERSTONE STRATEGIC VALUE FD COM
CLMT	CALUMET SPECIALTY PRODS PTNRS UT LTD PARTNER
CLNC	COLONY NORTHSTAR CR REAL ESTAT COM CL A
CLNE	CLEAN ENERGY FUELS CORP COM
CLNS	COLONY NORTHSTAR INC CL A COM
CLNS-B	COLONY NORTHSTAR INC PFD B 8.25%
CLNS-E	COLONY NORTHSTAR INC PFD SER E 8.75%
CLNS-G	COLONY NORTHSTAR INC 7.5% PFD SER G
CLNS-H	COLONY NORTHSTAR INC 7.125% PFD SER H
CLNS-I	COLONY NORTHSTAR INC 7.15% CUM RED I
CLNS-J	COLONY NORTHSTAR INC 7.125% CUM PFD J

CLPR	CLIPPER RLTY INC COM
CLPS	CLPS INCORPORATION COM
CLR	CONTINENTAL RESOURCES INC COM
CLRB	CELLECTAR BIOSCIENCES INC COM
CLRBW	CELLECTAR BIOSCIENCES INC WT EXP 082019
CLRBZ	CELLECTAR BIOSCIENCES INC WT EXP 040821
CLRG	INDEXIQ ETF TR IQ CHAIKIN US
CLRO	CLEARONE INC COM
CLS	CELESTICA INC SUB VTG SHS
CLSD	CLEARSIDE BIOMEDICAL INC COM
CLSN	CELSION CORPORATION COM PAR NEW
CLTL	INVESCO EXCHNG TRADED FD TR II TREAS COLATERL
CLUB	TOWN SPORTS INTL HLDGS INC COM
CLVS	CLOVIS ONCOLOGY INC COM
CLW	CLEARWATER PAPER CORP COM
CLWT	EURO TECH HOLDINGS CO LTD SHS NEW
CLX	CLOROX CO DEL COM
CLXT	CALYXT INC COM
CLY	ISHARES TR 10+ YR CR BD ETF
CLYH	ISHARES US ETF TR INT RT HD 10YR
CM	CDN IMPERIAL BK COMM TORONTO O COM
CMA	COMERICA INC COM
CMA+	COMERICA INC WT EXP 111418
CMBS	ISHARES TR CMBS ETF
CMC	COMMERCIAL METALS CO COM
CMCL	CALEDONIA MNG CORP PLC SHS NEW
CMCM	CHEETAH MOBILE INC ADR
CMCO	COLUMBUS MCKINNON CORP N Y COM
CMCSA	COMCAST CORP NEW CL A
CMCT	CIM COML TR CORP COM
CMCTP	CIM COML TR CORP PFD SER L
CMD	CANTEL MEDICAL CORP COM
CMDT	ISHARES DOW JONES UBS ROLL SEL SHS BEN INT
CMDY	ISHARES US ETF TR BLOOMBERG ROLL
CME	CME GROUP INC COM CL A
CMF	ISHARES TR CALIF MUN BD ETF
CMFN	CM FIN INC COM
CMG	CHIPOTLE MEXICAN GRILL INC COM
CMI	CUMMINS INC COM

CMO	CAPSTEAD MTG CORP COM NO PAR
CMO-E	CAPSTEAD MTG CORP PFD SER E
CMP	COMPASS MINERALS INTL INC COM
CMPR	CIMPRESS N V SHS EURO
CMRE	COSTAMARE INC SHS
CMRE-B	COSTAMARE INC PERP PFD SER B
CMRE-C	COSTAMARE INC PERP PFD SER C
CMRE-D	COSTAMARE INC PFD SER D
CMRE-E	COSTAMARE INC 8.87% CUM PFD E
CMRX	CHIMERIX INC COM
CMS	CMS ENERGY CORP COM
CMSA	CMS ENERGY CORP 5.6% JRSUB NT 78
CMS-B	CONSUMERS ENERGY CO PFD \$4.50
CMSS	CM SEVEN STAR ACQUISITION CORP SHS
CMSSR	CM SEVEN STAR ACQUISITION CORP RT
CMSSU	CM SEVEN STAR ACQUISITION CORP UNIT EX 082122
CMSSW	CM SEVEN STAR ACQUISITION CORP WT EXP 082122
CMT	CORE MOLDING TECHNOLOGIES INC COM
CMTA	CLEMENTIA PHARMACEUTICALS INC COM
CMTL	COMTECH TELECOMMUNICATIONS CP COM NEW
CMU	MFS HIGH YIELD MUN TR SH BEN INT
CN	DBX ETF TR XTRACK MSCI CHNA
C-N	CITIGROUP CAP XIII TR PFD SECS
CNA	CNA FINL CORP COM
CNAC	CONSTELLATION ALPHA CAP CORP SHS
CNACR	CONSTELLATION ALPHA CAP CORP RT
CNACU	CONSTELLATION ALPHA CAP CORP UT 1SH 1WT 1RT
CNACW	CONSTELLATION ALPHA CAP CORP WT EXP 032324
CNAT	CONATUS PHARMACEUTICALS INC COM
CNBKA	CENTURY BANCORP INC MASS CL A NON VTG
CNC	CENTENE CORP DEL COM
CNCE	CONCERT PHARMACEUTICALS INC COM
CNCR	ETF SER SOLUTIONS LONCAR CANCER
CNDF	iShares Edge MSCI Multifactor Consumer Discretionary ETF
CNDT	CONDUENT INC COM
CNET	CHINANET ONLINE HLDGS INC COM NEW
CNFR	CONIFER HLDGS INC COM
CNHI	CNH INDL N V SHS
CNHX	CSOP ETF TR MSCI CHINA A I

CNI	CANADIAN NATL RY CO COM
CNK	CINEMARK HOLDINGS INC COM
CNMD	CONMED CORP COM
CNNE	CANNAE HLDGS INC COM
CNO	CNO FINL GROUP INC COM
CNOB	CONNECTONE BANCORP INC NEW COM
CNP	CENTERPOINT ENERGY INC COM
CNQ	CANADIAN NAT RES LTD COM
CNS	COHEN & STEERS INC COM
CNSF	iShares Edge MSCI Multifactor Consumer Staples ETF
CNSL	CONSOLIDATED COMM HLDGS INC COM
CNTF	CHINA TECHFAITH WIRLS COMM TEC SPON ADR NEW
CNTY	CENTURY CASINOS INC COM
CNX	CNX RESOURCES CORPORATION COM
CNXM	CNX MIDSTREAM PARTNERS LP COM UNIT REPST
CNXN	PC CONNECTION INC COM
CNXT	VANECK VECTORS ETF TR CHINAAMC SME CHI
CNY	MORGAN STANLEY RENMIN/USD ETN
CNYA	iShares MSCI China A ETF
CO	GLOBAL CORD BLOOD CORPORATION SHS
COBZ	COBIZ FINANCIAL INC COM
COCP	COCRYSTAL PHARMA INC COM PAR
CODA	CODA OCTOPUS GROUP INC COM NEW
CODI	COMPASS DIVERSIFIED HOLDINGS SH BEN INT
CODI-A	COMPASS DIVERSIFIED HOLDINGS 7.250% PFD SER A
CODI-B	COMPASS DIVERSIFIED HOLDINGS 7.87% CUM PFD B
CODX	CO DIAGNOSTICS INC COM
COE	CHINA ONLINE ED GROUP SPONSORED ADR
COF	CAPITAL ONE FINL CORP COM
COF+	CAPITAL ONE FINL CORP WT EXP 111418
COF-C	CAPITAL ONE FINL CORP DEP SHS PFD C
COF-D	CAPITAL ONE FINL CORP DEP SHS 1/40
COF-F	CAPITAL ONE FINL CORP PFD SER F
COF-G	CAPITAL ONE FINL CORP DEP SHS PFD G
COF-H	CAPITAL ONE FINL CORP DEP SHS PFD H
COF-P	CAPITAL ONE FINL CORP DEP SHS 1/40TH
COG	CABOT OIL & GAS CORP COM
COHN	COHEN & CO INC NEW COM
COHR	COHERENT INC COM

COHU	COHU INC COM
COKE	COCA COLA BOTTLING CO CONS COM
COL	ROCKWELL COLLINS INC COM
COLB	COLUMBIA BKG SYS INC COM
COLD	AMERICOLD RLTY TR COM
COLL	COLLEGIUM PHARMACEUTICAL INC COM
COLM	COLUMBIA SPORTSWEAR CO COM
COM	DIREXION SHS ETF TR AUSEPCE CMD STG
COMB	GRANITESHARES ETF TR BBG COMMD K 1
COMG	GRANITESHARES ETF TR S&P GSCI CM K 1
COMM	COMMSCOPE HLDG CO INC COM
COMT	ISHARES US ETF TR COMMOD SEL STG
CONE	CYRUSONE INC COM
CONN	CONNS INC COM
COO	COOPER COS INC COM NEW
COOL	POLARITYTE INC COM
COP	CONOCOPHILLIPS COM
COPX	GLOBAL X FDS GLOBAL X COPPER
COR	CORESITE RLTY CORP COM
CORE	CORE MARK HOLDING CO INC COM
CORI	CORIUM INTL INC COM
CORN	TEUCRIUM COMMODITY TR CORN FD SHS
CORP	PIMCO ETF TR INV GRD CRP BD
CORR	COREENERGY INFRASTRUCTURE TR IN COM NEW
CORR-A	COREENERGY INFRASTRUCTURE TR IN DEP SHS REPSTG
CORT	CORCEPT THERAPEUTICS INC COM
CORV	CORREVIO PHARMA CORP COM
COST	COSTCO WHSL CORP NEW COM
COT	COTT CORP QUE COM
COTV	COTIVITI HLDGS INC COM
COTY	COTY INC COM CL A
COUP	COUPA SOFTWARE INC COM
COWB	BARCLAYS BK PLC IPATH B LIVESTCK
COWN	COWEN INC CL A NEW
COWNL	COWEN INC 7.75% SRNT 33
COWNZ	COWEN INC 7.35% SR NT 27
COWZ	Pacer US Cash Cows 100 ETF
CP	CANADIAN PAC RY LTD COM
CPA	COPA HOLDINGS SA CL A

CPAC	CEMENTOS PACASMAYO S A A SPONSORED ADR
CPAH	COUNTERPATH CORP COM PAR
CPB	CAMPBELL SOUP CO COM
CPE	CALLON PETE CO DEL COM
CPE-A	CALLON PETE CO DEL PFD SER A 10%
CPER	UNITED STS COMMODITY IDX FDTR CM REP COPP FD
CPF	CENTRAL PAC FINL CORP COM NEW
CPG	CRESCENT PT ENERGY CORP COM
CPHC	CANTERBURY PARK HOLDING CORP COM
CPHI	CHINA PHARMA HLDGS INC COM
CPI	INDEXIQ ETF TR IQ REAL RTN ETF
CPIX	CUMBERLAND PHARMACEUTICALS INC COM
CPK	CHESAPEAKE UTILS CORP COM
CPL	CPFL ENERGIA S A SPONSORED ADR
CPLA	CAPELLA EDUCATION COMPANY COM
CPLG	COREPOINT LODGING INC COM
CPLP	CAPITAL PRODUCT PARTNERS L P COM UNIT LP
CPRT	COPART INC COM
CPRX	CATALYST PHARMACEUTICALS INC COM
CPS	COOPER STD HLDGS INC COM
CPSH	CPS TECHNOLOGIES CORP COM
CPSI	COMPUTER PROGRAMS & SYS INC COM
CPSS	CONSUMER PORTFOLIO SVCS INC COM
CPST	CAPSTONE TURBINE CORP COM NEW
CPT	CAMDEN PPTY TR SH BEN INT
CPTA	CAPITALA FIN CORP COM
CPTAG	CAPITALA FIN CORP 5.75% NT CV 22
CPTAL	CAPITALA FIN CORP 6% NT 22
CQH	CHENIERE ENERGY PTNRS LP HLDGC COM REP LLC IN
CQP	CHENIERE ENERGY PARTNERS LP COM UNIT
CQQQ	INVESCO EXCHNG TRADED FD TR II CHINA TECHN LGY
CR	CRANE CO COM
CRAI	CRA INTL INC COM
CRAK	VANECK VECTORS ETF TR OIL REFINERS ETF
CRAY	CRAY INC COM NEW
CRBN	ISHARES TR MSCI LW CRB TG
CRBP	CORBUS PHARMACEUTICALS HLDGS COM
CRC	CALIFORNIA RES CORP COM NEW
CRCM	CARE COM INC COM

CRD.A	CRAWFORD & CO CL A
CRD.B	CRAWFORD & CO CL B
CRED	ISHARES TR US CR BD ETF
CREE	CREE INC COM
CREG	CHINA RECYCLING ENERGY CORP COM NEW
CRESY	CRESUD S A C I F Y A SPONSORED ADR
CRF	CORNERSTONE TOTAL RTRN FD INC COM
CRH	CRH PLC ADR
CRHM	CRH MEDICAL CORP COM
CRI	CARTER INC COM
CRIS	CURIS INC COM NEW
CRK	COMSTOCK RES INC COM
CRL	CHARLES RIV LABS INTL INC COM
CRM	SALESFORCE COM INC COM
CRMD	CORMEDIX INC COM
CRMT	AMERICAS CAR MART INC COM
CRNT	CERAGON NETWORKS LTD ORD
CROC	PROSHARES TR II PROSHS U/SHAUS
CRON	CRONOS GROUP INC COM
CROP	INDEXIQ ETF TR GLB AGRI SM CP
CROX	CROCS INC COM
CRR	CARBO CERAMICS INC COM
CRS	CARPENTER TECHNOLOGY CORP COM
CRSP	CRISPR THERAPEUTICS AG NAMEN AKT
CRT	CROSS TIMBERS RTY TR TR UNIT
CRTO	CRITEO S A SPONS ADS
CRUS	CIRRUS LOGIC INC COM
CRVL	CORVEL CORP COM
CRVS	CORVUS PHARMACEUTICALS INC COM
CRWS	CROWN CRAFTS INC COM
CRY	CRYOLIFE INC COM
CRZO	CARRIZO OIL & GAS INC COM
CS	CREDIT SUISSE GROUP SPONSORED ADR
C-S	CITIGROUP INC DEP SHS PFD S
CSA	VICTORY PORTFOLIOS II SHS US SML CAP
CSB	VICTORY PORTFOLIOS II SHS US SML CP HG
CSBR	CHAMPIONS ONCOLOGY INC COM NEW
CSCO	CISCO SYS INC COM
CSD	INVESCO EXCHANGE TRADED FD TR S&P SPIN OFF

CSF	VICTORY PORTFOLIOS II SHS US DISCOVERY
CSFL	CENTERSTATE BK CORP COM
CSGP	COSTAR GROUP INC COM
CSGS	CSG SYS INTL INC COM
CSII	CARDIOVASCULAR SYS INC DEL COM
CSIQ	CANADIAN SOLAR INC COM
CSJ	ISHARES TR 1 3 YR CR BD ETF
CSL	CARLISLE COS INC COM
CSLT	CASTLIGHT HEALTH INC CL B
CSM	ProShares Large Cap Core Plus
CSML	INDEXIQ ETF TR IQ CHAIKIN US
CSOD	CORNERSTONE ONDEMAND INC COM
CSPI	CSP INC COM
CSQ	CALAMOS STRATEGIC TOTL RETN FD COM SH BEN INT
CSS	CSS INDS INC COM
CSSE	CHICKEN SOUP FOR THE SOUL ENTM CL A
CSTE	CAESARSTONE LTD ORD SHS
CSTM	CONSTELLIUM NV CL A
CSTR	CAPSTAR FINL HLDGS INC COM
CSU	CAPITAL SR LIVING CORP COM
CSV	CARRIAGE SVCS INC COM
CSWC	CAPITAL SOUTHWEST CORP COM
CSWCL	CAPITAL SOUTHWEST CORP 5.95% NT 22
CSWI	CSW INDUSTRIALS INC COM
CSX	CSX CORP COM
CTAA	QWEST CORP NT 7% 2056
CTAS	CINTAS CORP COM
CTB	COOPER TIRE & RUBR CO COM
CTBB	QWEST CORP NT
CTBI	COMMUNITY TR BANCORP INC COM
CTDD	QWEST CORP 6.75% NT 57
CTEK	CYNERGISTEK INC COM
CTG	COMPUTER TASK GROUP INC COM
CTHR	CHARLES & COLVARD LTD COM
CTIB	CTI INDUSTRIES CORP COM NEW
CTIC	CTI BIOPHARMA CORP COM NEW
CTL	CENTURYLINK INC COM
CTLT	CATALENT INC COM
CTMX	CYTOMX THERAPEUTICS INC COM



CTO	CONSOLIDATED TOMOKA LD CO COM
CTR	CLEARBRIDGE ENERGY MLP TR FD COM
CTRE	CARETRUST REIT INC COM
CTRL	CONTROL4 CORP COM
CTRN	CITI TRENDS INC COM
CTRP	CTRIP COM INTL LTD AMERICAN DEP SHS
CTRV	CONTRAVIR PHARMACEUTICALS INC COM NEW
CTS	CTS CORP COM
CTSH	COGNIZANT TECHNOLOGY SOLUTIONS CL A
CTSO	CYTOSORBENTS CORP COM NEW
CTT	CATCHMARK TIMBER TR INC CL A
CTU	QWEST CORP NT 7% 25
CTV	QWEST CORP NT 10/01/54
CTW	QWEST CORP NOTES 7.5%
CTWS	CONNECTICUT WTR SVC INC COM
CTX	QWEST CORP NT 52
CTXR	CITIUS PHARMACEUTICALS INC COM NEW
CTXRW	CITIUS PHARMACEUTICALS INC WT EXP 080822
CTXS	CITRIX SYS INC COM
CTY	QWEST CORP NT
CTZ	QWEST CORP NT
CUB	CUBIC CORP COM
CUBA	HERZFELD CARIBBEAN BASIN FD COM
CUBE	CUBESMART COM
CUBI	CUSTOMERS BANCORP INC COM
CUBI-C	CUSTOMERS BANCORP INC PFD-C FIX/FLT
CUBI-D	CUSTOMERS BANCORP INC PFD-D FIX/FLT
CUBI-E	CUSTOMERS BANCORP INC PFD CUM SER E
CUBI-F	CUSTOMERS BANCORP INC PFD NONCUM SER F
CUBS	CUSTOMERS BANCORP INC SR NT 18
CUE	CUE BIOPHARMA INC COM
CUI	CUI GLOBAL INC COM NEW
CUK	CARNIVAL PLC ADR
CULP	CULP INC COM
CUMB	ETFIS SER TR I VIRTUS CUMBRAND
CUO	CONTINENTAL MATLS CORP COM PAR \$0.25
CUR	NEURALSTEM INC COM NEW
CURE	DIREXION SHS ETF TR HEALTHCARE BUL
CURO	CURO GROUP HLDGS CORP COM

CUT	INVESCO EXCHNG TRADED FD TR II MSCI GBL TIMBR
CUTR	CUTERA INC COM
CUZ	COUSINS PPTYS INC COM
CVA	COVANTA HLDG CORP COM
CVBF	CVB FINL CORP COM
CVCO	CAVCO INDS INC DEL COM
CVCY	CENTRAL VALLEY CMNTY BANCORP COM
CVE	CENOVUS ENERGY INC COM
CVEO	CIVEO CORP CDA COM
CVG	CONVERGYS CORP COM
CVGI	COMMERCIAL VEH GROUP INC COM
CVGW	CALAVO GROWERS INC COM
CVI	CVR ENERGY INC COM
CVIA	COVIA HLDGS CORP COM
CVLT	COMMVAULT SYSTEMS INC COM
CVLY	CODORUS VY BANCORP INC COM
CVM	CEL SCI CORP COM PAR NEW
CVM+	CEL SCI CORP WT EXP 101118
CVNA	CARVANA CO CL A
CVON	CONVERGEONE HLDGS INC COM CL A
CVONW	CONVERGEONE HLDGS INC WT EXP 041224
CVR	CHICAGO RIVET & MACH CO COM
CVRR	CVR REFNG LP COMUNIT REP LT
CVRS	CORINDUS VASCULAR ROBOTICS INC COM
CVS	CVS HEALTH CORP COM
CVTI	COVENANT TRANSN GROUP INC CL A
CVU	CPI AEROSTRUCTURES INC COM NEW
CVV	CVD EQUIPMENT CORP COM
CVX	CHEVRON CORP NEW COM
CVY	INVESCO EXCHANGE TRADED FD TR ZACKS MULT AST
CW	CURTISS WRIGHT CORP COM
CWAI	CWA Income ETF
CWAY	COASTWAY BANCORP INC COM
CWB	SPDR SERIES TRUST BLMBRG BRC CNVRT
CWBC	COMMUNITY WEST BANCSHARES COM
CWBR	COHBAR INC COM
CWCO	CONSOLIDATED WATER CO INC ORD
CWEB	DIREXION SHS ETF TR DAILY CS 2X SH
CWH	CAMPING WORLD HLDGS INC CL A

CWI	SPDR INDEX SHS FDS MSCI ACWI EXUS
CWS	ADVISORSHARES TR ADVISORSHS ETF
CWST	CASELLA WASTE SYS INC CL A
CWT	CALIFORNIA WTR SVC GROUP COM
CX	CEMEX SAB DE CV SPON ADR NEW
CXDC	CHINA XD PLASTICS CO LTD COM
CXE	MFS HIGH INCOME MUN TR SH BEN INT
CXH	MFS INVT GRADE MUN TR SH BEN INT
CXO	CONCHO RES INC COM
CXP	COLUMBIA PPTY TR INC COM NEW
CXSE	WISDOMTREE TR CHINADIV EX FI
CXW	CORECIVIC INC COM
CY	CYPRESS SEMICONDUCTOR CORP COM
CYAD	CELYAD SA ADR
CYAN	CYANOTECH CORP COM PAR \$0.02
CYB	WISDOMTREE TR CHINESE YUAN FD
CYBE	CYBEROPTICS CORP COM
CYBR	CYBERARK SOFTWARE LTD SHS
CYCC	CYCLACEL PHARMACEUTICALS INC COM PAR
CYCCP	CYCLACEL PHARMACEUTICALS INC PFD CONV EX 6%
CYD	CHINA YUCHAI INTL LTD COM
CYH	COMMUNITY HEALTH SYS INC NEW COM
CYHHZ	COMMUNITY HEALTH SYS INC NEW CONTINGENT VL RT
CYOU	CHANGYOU COM LTD ADS REP CL A
CYRN	CYREN LTD SHS
CYRX	CRYOPORT INC COM PAR \$0.001
CYRXW	CRYOPORT INC WT EXP 072920
CYS	CYS INVTS INC COM
CYS-A	CYS INVTS INC CUM REDEEMABLE P
CYS-B	CYS INVTS INC PFD SER B
CYTK	CYTOKINETICS INC COM NEW
CYTR	CYTRX CORP COM PAR
CYTX	CYTORI THERAPEUTICS INC COM PAR
CYTXW	CYTORI THERAPEUTICS INC WT EXP 120918
CYTXZ	CYTORI THERAPEUTICS INC WT S EXP 052820
CZA	INVESCO EXCHANGE TRADED FD TR ZACKS MID CAP
CZFC	CITIZENS FIRST CORP COM
CZNC	CITIZENS & NORTHN CORP COM
CZR	CAESARS ENTMT CORP COM

CZWI	CITIZENS CMNTY BANCORP INC MD COM
CZZ	COSAN LTD SHS A
D	DOMINION ENERGY INC COM
DAC	DANAOS CORPORATION SHS
DAG	DEUTSCHE BK AG LDN BRH DB AGRIC DBL LN
DAIO	DATA I O CORP COM
DAKT	DAKTRONICS INC COM
DAL	DELTA AIR LINES INC DEL COM NEW
DALI	FIRST TR EXCHANGE TRADED FD VI DORSEYWRGT ETF
DALT	Anfield Capital Diversified Alternatives ETF
DAN	DANA INCORPORATED COM
DAR	DARLING INGREDIENTS INC COM
DARE	DARE BIOSCIENCE INC COM
DATA	TABLEAU SOFTWARE INC CL A
DAUD	CITIGROUP GLOBAL MKT HLDGS INC VELCTYSHS AUDUSD
DAVE	FAMOUS DAVES AMER INC COM
DAX	HORIZONS ETF TR I HORIZONS DAX GER
DB	DEUTSCHE BANK AG NAMEN AKT
DBA	INVESCO DB MLTI SECTR CMMTY TR AGRICULTURE FD
DBAP	DBX ETF TR XTRACK MSCI ASIA
DBAW	DBX ETF TR XTRACK MSCI ALL
DBB	INVESCO DB MLTI SECTR CMMTY TR BASE METALS FD
DBC	INVESCO DB COMMDY INDX TRCK FD UNIT
DBD	DIEBOLD NXDF INC COM
DBE	INVESCO DB MLTI SECTR CMMTY TR ENERGY FD
DBEF	DBX ETF TR XTRACK MSCI EAFE
DBEM	DBX ETF TR XTRACK MSCI EMRG
DBEU	DBX ETF TR XTRACK MSCI EURP
DBEZ	DBX ETF TR XTRACK MSCI EURO
DBGR	DBX ETF TR XTRACK MSCI GRMY
DBJP	DBX ETF TR XTRACK MSCI JAPN
DBKO	DBX ETF TR XTRACK MSCI SOUT
DBL	DOUBLELINE OPPORTUNISTIC CR FD COM
DBO	INVESCO DB MLTI SECTR CMMTY TR OIL FD
DBP	INVESCO DB MLTI SECTR CMMTY TR PRECIOUS METAL
DBRT	CREDIT SUISSE AG NASSAU BRH AXELATDR 3X INVR
DBS	INVESCO DB MLTI SECTR CMMTY TR SILVER FD
DBUK	DBX ETF TR XTRACK MSCI UK
DBV	INVESCO DB G10 CURRENCY HRVST UNIT

DBVT	DBV TECHNOLOGIES S A SPONSORED ADR
DBX	DROPBOX INC CL A
DCAR	DROPCAR INC COM
DCF	DREYFUS ALCENTRA GBL CR INCOME COM
DCHF	CITIGROUP GLOBAL MKT HLDGS INC VELCTYSHS CHFUSD
DCI	DONALDSON INC COM
DCIX	DIANA CONTAINERSHIPS INC SHS PAR
DCO	DUCOMMUN INC DEL COM
DCOM	DIME CMNTY BANCSHARES COM
DCP	DCP MIDSTREAM LP COM UT LTD PTN
DCP-B	DCP MIDSTREAM LP 7.875 CUM RED B
DCPH	DECIPHERA PHARMACEUTICALS INC COM
DCT	DCT INDUSTRIAL TRUST INC COM NEW
DCUD	DOMINION ENERGY INC UT SER A 081519
DD-A	DU PONT E I DE NEMOURS & CO PFD \$3.50
DD-B	DU PONT E I DE NEMOURS & CO PFD \$4.50
DDBI	LEGG MASON ETF INVESTMENT TR DEV EX US ETF
DDD	3-D SYS CORP DEL COM NEW
DDE	DOVER DOWNS GAMING & ENTMT INC COM
DDEZ	WisdomTree Dynamic Currency Hedged Europe Equity Fund
DDF	DELAWARE INVTS DIV & INCOME FD COM
DDG	PROSHARES TR PSHS SHT OIL&GAS
DDJP	WisdomTree Dynamic Currency Hedged Japan Equity Fund
DDLS	WisdomTree Dynamic Currency Hedged International SmallCap Equity Fund
DDM	PROSHARES TR PSHS ULTRA DOW30
DDOC	DERMADOCTOR INC COM
DDP	DEUTSCHE BK AG LDN BRH DB COMMOD SHRT
DDR	DDR CORP COM
DDR-A	DDR CORP DEP SHS CUM A
DDR-J	DDR CORP DEPSHS1/20 CLJ
DDR-K	DDR CORP DEP 1/20TH CL K
DDS	DILLARDS INC CL A
DDT	DILLARDS CAP TR I CAP SECS 7.5%
DDWM	WisdomTree Dynamic Currency Hedged International Equity Fund
DE	DEERE & CO COM
DEA	EASTERLY GOVT PPTYS INC COM
DECK	DECKERS OUTDOOR CORP COM
DEE	DEUTSCHE BK AG LDN BRH DB COM DBL SHT
DEEF	DBX ETF TR XTRACK FTSE US

DEF	INVESCO EXCH TRD SLF IDX FD TR DEFENSIVE EQTY
DEFA	iShares Adaptive Currency Hedged MSCI EAFE ETF
DEI	DOUGLAS EMMETT INC COM
DELT	DELTA TECHNOLOGY HLDGS LTD USD ORD SHS
DEM	WISDOMTREE TR EMER MKT HIGH FD
DEMG	DBX ETF TR XTRACK FTSE EMRG
DENN	DENNYS CORP COM
DEO	DIAGEO P L C SPON ADR NEW
DEPO	DEPOMED INC COM
DERM	DERMIRA INC COM
DES	WISDOMTREE TR US SMALLCAP DIVD
DESC	DBX ETF TR XTRACK RUSS 2000
DESP	DESPEGAR COM CORP ORD SHS
DEST	DESTINATION MATERNITY CORP COM
DEUR	CITIGROUP GLOBAL MKT HLDGS INC VELCTYSHS EURUSD
DEUS	DBX ETF TR XTRACK RUSS 1000
DEW	WISDOMTREE TR GLB HIGH DIV FD
DEWJ	iShares Adaptive Currency Hedged MSCI Japan ETF
DEX	DELAWARE ENHANCED GBL DIV & IN COM
DEZU	iShares Adaptive Currency Hedged MSCI Eurozone ETF
DF	DEAN FOODS CO NEW COM NEW
DFBG	DIFFERENTIAL BRANDS GROUP INC COM
DFBH	DFB HEALTHCARE ACQUISTION CORP COM
DFBHU	DFB HEALTHCARE ACQUISTION CORP UNIT EXP 013023
DFBHW	DFB HEALTHCARE ACQUISTION CORP WT EXP 041123
DFE	WISDOMTREE TR EUROPE SMCP DV
DFEN	DIREXION SHS ETF TR DLY AEROSPC 3X
DFFN	DIFFUSION PHARMACEUTICALS INC COM NEW
DFIN	DONNELLEY FINL SOLUTIONS INC COM
DFJ	WISDOMTREE TR JP SMALLCP DIV
DFND	Reality Shares DIVCON Dividend Defender ETF
DFNL	DAVIS FUNDAMENTAL ETF TR SELECT FINL
DFP	FLAHERTY & CRUMRINE DYN PFD SHS
DFRG	DEL FRISCOS RESTAURANT GROUP I COM
DFS	DISCOVER FINL SVCS COM
DFVL	BARCLAYS BK PLC TRES 5YR BULL
DFVS	BARCLAYS BK PLC TRES 5YR BEAR
DG	DOLLAR GEN CORP NEW COM
DGAZ	CREDIT SUISSE NASSAU BRH VELOCITY SHS 3X

DGBP	CITIGROUP GLOBAL MKT HLDGS INC VELCTYSHS GBPUSD
DGICA	DONEGAL GROUP INC CL A
DGICB	DONEGAL GROUP INC CL B
DGII	DIGI INTL INC COM
DGL	INVESCO DB MLTI SECTR CMMTY TR GOLD FD
DGLD	CREDIT SUISSE NASSAU BRH 3X INVERS GOLD
DGLY	DIGITAL ALLY INC COM NEW
DGP	DEUTSCHE BK AG LDN BRH DB GOLD DBL LNG
DGRE	WISDOMTREE TR EM MKTS QTLY DIV
DGRO	ISHARES TR CORE DIV GRWTH
DGRS	WISDOMTREE TR US S CAP QTY DIV
DGRW	WISDOMTREE TR US QTLY DIV GRT
DGS	WISDOMTREE TR EMG MKTS SMCAP
DGSE	DGSE COMPANIES INC COM
DGT	SPDR SERIES TRUST GLB DOW ETF
DGX	QUEST DIAGNOSTICS INC COM
DGZ	DEUTSCHE BK AG LDN BRH DB GOLD SHORT
DHCP	DITECH HLDG CORP COM
DHDG	WisdomTree Dynamic Currency Hedged International Quality Dividend Growth Fund
DHF	DREYFUS HIGH YIELD STRATEGIES SH BEN INT
DHI	D R HORTON INC COM
DHIL	DIAMOND HILL INVESTMENT GROUP COM NEW
DHR	DANAHER CORP DEL COM
DHS	WISDOMTREE TR US HIGH DIVIDEND
DHT	DHT HOLDINGS INC SHS NEW
DHVW	ETF SER SOLUTIONS DMND HILL VAL
DHX	DHI GROUP INC COM
DHXM	DHX MEDIA LTD COM VAR VTG
DHY	CREDIT SUISSE HIGH YLD BND FD SH BEN INT
DIA	SPDR DOW JONES INDL AVRG ETF UT SER 1
DIAL	COLUMBIA ETF TR I DIVERSIFID FXD
DIAX	NUVEEN DOW 30 DYN OVERWRITE SHS
DIG	PROSHARES TR PSHS ULTRA O&G
DIM	WISDOMTREE TR INTL MIDCAP DV
DIN	DINE BRANDS GLOBAL INC COM
DINT	DAVIS FUNDAMENTAL ETF TR SELCT INTL ETF
DIOD	DIODES INC COM
DIS	DISNEY WALT CO COM DISNEY
DISCA	DISCOVERY INC COM SER A

DISCB	DISCOVERY INC COM SER B
DISCK	DISCOVERY INC COM SER C
DISH	DISH NETWORK CORP CL A
DIT	AMCON DISTRG CO COM NEW
DIV	GLOBAL X FDS GLOBX SUPDV US
DIVA	FQF TR AGFIQ HEDGED DIV
DIVB	iShares U.S. Dividend and Buyback ETF
DIVC	CITIGROUP INC NEW HOW STRAT DIV
DIVO	AMPLIFY ETF TR YIELDSHARES CW
DIVY	REALITY SHS ETF TR DIVS ETF
DJCI	UBS AG JERSEY BRH DJ COMMD ETN39
DJCO	DAILY JOURNAL CORP COM
DJD	INVESCO EXCHANGE TRADED FD TR DJ INDL AVG DV
DJP	BARCLAYS BK PLC DJUBS CMDT ETN36
DJPY	CITIGROUP GLOBAL MKT HLDGS INC VELCTYSHS JPYUSD
DK	DELEK US HLDGS INC NEW COM
DKL	DELEK LOGISTICS PARTNERS LP COM UNT RP INT
DKS	DICKS SPORTING GOODS INC COM
DKT	DEUTSCHE BK CONTINGNT CAP TR V TR PFD SEC 8.05%
DL	CHINA DISTANCE ED HLDGS LTD SPONS ADR
DLA	DELTA APPAREL INC COM
DLB	DOLBY LABORATORIES INC COM
DLBL	BARCLAYS BK PLC 30 YR TREAS BULL
DLBR	CITIGROUP GBL MKTS HLDGS INC VELOCITYSHS SHRT
DLBS	BARCLAYS BK PLC 30 YR TREAS BEAR
DLHC	DLH HLDGS CORP COM
DLN	WISDOMTREE TR US LARGE CAP DIVD
DLNG	DYNAGAS LNG PARTNERS LP COM UNIT LTD PT
DLNG-A	DYNAGAS LNG PARTNERS LP CUM PFD SER A
DLPH	DELPHI TECHNOLOGIES PLC SHS
DLPN	DOLPHIN ENTMT INC COM
DLPNW	DOLPHIN ENTMT INC WT EXP 122620
DLR	DIGITAL RLTY TR INC COM
DLR-C	DIGITAL RLTY TR INC 6.625% PFD SER C
DLR-G	DIGITAL RLTY TR INC PFD SER G 5.875%
DLR-H	DIGITAL RLTY TR INC PFD SER H
DLR-I	DIGITAL RLTY TR INC 6.35% PFD I CUM
DLR-J	DIGITAL RLTY TR INC 5.250% PFD SER J
DLS	WISDOMTREE TR INTL SMCAP DIV



DLTH	DULUTH HLDGS INC COM CL B
DLTR	DOLLAR TREE INC COM
DLX	DELUXE CORP COM
DM	DOMINION ENERGY MIDSTRM PRTNRS COM UT REP LTD
DMB	DREYFUS MUN BD INFRSTRCTR FD SHS
DMF	DREYFUS MUN INCOME INC COM
DMLP	DORCHESTER MINERALS LP COM UNIT
DMO	WESTERN ASSET MTG DEF OPPTY FD COM
DMPI	DELMAR PHARMACEUTICALS INC COM NEW
DMRC	DIGIMARC CORP NEW COM
DMRI	TRANSAMERICA ETF TR DELTASHS S&P INT
DMRL	TRANSAMERICA ETF TR DELTASHS S&P 500
DMRM	TRANSAMERICA ETF TR DELTASHS S&P 400
DMRS	TRANSAMERICA ETF TR DELTASHS S&P 600
DNB	DUN & BRADSTREET CORP DEL NEW COM
DNBF	DNB FINL CORP COM
DNI	DIVIDEND & INCOME FUND COM NEW
DNJR	GOLDEN BULL LTD SHS
DNKN	DUNKIN BRANDS GROUP INC COM
DNL	WISDOMTREE TR GLB US QTLY DIV
DNLI	DENALI THERAPEUTICS INC COM
DNN	DENISON MINES CORP COM
DNO	UNITED STS SHORT OIL FD LP UNITS
DNOW	NOW INC COM
DNP	DNP SELECT INCOME FD COM
DNR	DENBURY RES INC COM NEW
DO	DIAMOND OFFSHORE DRILLING INC COM
DOC	PHYSICIANS RLTY TR COM
DOCU	DOCUSIGN INC COM
DOD	DEUTSCHE BK AG LONDON ETN DJ HY 2022
DOG	PROSHARES TR PSHS SHORT DOW30
DOGS	ARROW INVTS TR DOGS OF THE
DOGZ	DOGNESS INTERNATIONAL CORP COM CL A
DOL	WISDOMTREE TR INTL LRGCAP DV
DON	WISDOMTREE TR US MIDCAP DIVID
DOO	WISDOMTREE TR INTL DIV EX FINL
DOOR	MASONITE INTL CORP NEW COM
DORM	DORMAN PRODUCTS INC COM
DOTA	DRAPER OAKWOOD TECHNOLOGY COM CL A

DOTAR	DRAPER OAKWOOD TECHNOLOGY RT
DOTAU	DRAPER OAKWOOD TECHNOLOGY UNIT EX 093024
DOTAW	DRAPER OAKWOOD TECHNOLOGY WT EXP 091923
DOV	DOVER CORP COM
DOVA	DOVA PHARMACEUTICALS INC COM
DOX	AMDOCS LTD SHS
DPG	DUFF & PHELPS GLB UTL INC FD COM
DPK	DIREXION SHS ETF TR DLY DEV MKT BEAR
DPLO	DIPLOMAT PHARMACY INC COM
DPS	DR PEPPER SNAPPLE GROUP INC COM
DPST	DIREXION SHS ETF TR DAILY RGNAL BULL
DPW	DPW HLDGS INC COM
DPZ	DOMINOS PIZZA INC COM
DQ	DAQO NEW ENERGY CORP SPNSRD ADR NEW
DRAD	DIGIRAD CORP COM
DRD	DRDGOLD LIMITED SPON ADR REPSTG
DRE	DUKE REALTY CORP COM NEW
DRH	DIAMONDROCK HOSPITALITY CO COM
DRI	DARDEN RESTAURANTS INC COM
DRIO	DARIOHEALTH CORP COM
DRIOW	DARIOHEALTH CORP WT EXP 030821
DRIP	DIREXION SHS ETF TR DAILY S&P OIL
DRIV	GLOBAL X FDS AUTONMOUS EV ETF
DRN	DIREXION SHS ETF TR DLY R/E BULL3X
DRNA	DICERNA PHARMACEUTICALS INC COM
DRQ	DRIL-QUIP INC COM
DRR	MORGAN STANLEY SHRT EUR ETN20
DRRX	DURECT CORP COM
DRUA	DOMINION ENERGY INC ENHCD SUB NT16 A
DRV	DIREXION SHS ETF TR DLY R/E BEAR3X
DRW	WISDOMTREE TR GLB EX US RL EST
DRYS	DRYSHIPS INC COM PAR NEW
DS	DRIVE SHACK INC COM
DS-B	DRIVE SHACK INC PFD SER B
DS-C	DRIVE SHACK INC PFD SER C 8.05%
DS-D	DRIVE SHACK INC PFD SER D 8.375%
DSE	DUFF & PHELPS SLCT ENGY MLP FD COM
DSGX	DESCARTES SYS GROUP INC COM
DSI	ISHARES TR MSCI KLD400 SOC

DSKE	DASEKE INC COM
DSKEW	DASEKE INC WT EXP 022722
DSL	DOUBLELINE INCOME SOLUTIONS FD COM
DSLX	CREDIT SUISSE NASSAU BRH 3X INVERS SILV
DSM	DREYFUS STRATEGIC MUN BD FD COM
DSPG	DSP GROUP INC COM
DSS	DOCUMENT SEC SYS INC COM NEW
DSU	BLACKROCK DEBT STRAT FD INC COM NEW
DSUM	INVESCO EXCHNG TRADED FD TR II CHINS YUAN DIM
DSW	DSW INC CL A
DSWL	DESWELL INDS INC COM
DSX	DIANA SHIPPING INC COM
DSX-B	DIANA SHIPPING INC PERP PFD SER B
DSXN	DIANA SHIPPING INC 8.5% SR NT 20
DTD	WISDOMTREE TR US TOTAL DIVIDND
DTE	DTE ENERGY CO COM
DTEA	DAVIDSTEA INC COM
DTEC	ALPS Disruptive Technologies ETF
DTF	DTF TAX-FREE INCOME INC COM
DTH	WISDOMTREE TR ITL HIGH DIV FD
DTJ	DTE ENERGY CO JR SUB DEB 76
DTLA-	BROOKFIELD DTLA FD OFFICE TR I PFD SER A 7.625%
DTN	WISDOMTREE TR US DIVID EX FNCL
DTO	DEUTSCHE BK AG LONDON BRH DB CRUDE OIL DBL
DTQ	DTE ENERGY CO SUB DEB 62
DTRM	DETERMINE INC COM
DTUL	BARCLAYS BK PLC 2 YR TREAS BULL
DTUS	BARCLAYS BK PLC 2 YR TREAS BEAR
DTV	DTE ENERGY CO CORPORATE UNIT
DTW	DTE ENERGY CO JR SUB DB 2017 E
DTY	DTE ENERGY CO JR SUB DB 2016 F
DTYL	BARCLAYS BK PLC 10 YR TREAS BULL
DTYS	BARCLAYS BK PLC 10 YR TREAS BEAR
DUC	DUFF & PHELPS UTIL CORP BD TR COM
DUG	PROSHARES TR ULSHOIL&GASNEW13
DUK	DUKE ENERGY CORP NEW COM NEW
DUKH	DUKE ENERGY CORP NEW JR SUB DEB 73
DUSA	DAVIS FUNDAMENTAL ETF TR SELECT US EQTY
DUSL	DIREXION SHS ETF TR DLY INDL BU 3X

DUST	DIREXION SHS ETF TR DAILY GOLD MINER
DVA	DAVITA INC COM
DVAX	DYNAVAX TECHNOLOGIES CORP COM NEW
DVCR	DIVERSICARE HEALTHCARE SVCS IN COM
DVD	DOVER MOTORSPORTS INC COM
DVEM	WisdomTree Emerging Markets Dividend Fund
DVHL	UBS AG LONDON BRH ETRAC MP2X LEV
DVMT	DELL TECHNOLOGIES INC COM CL V
DVN	DEVON ENERGY CORP NEW COM
DVP	ETF SER SOLUTIONS DEEP VALUE ETF
DVY	ISHARES TR SELECT DIVID ETF
DVYA	ISHARES INC ASIA/PAC DIV ETF
DVYE	ISHARES INC EM MKTS DIV ETF
DVYL	UBS AG LONDON BRH ETRACS MP2X DJ
DWAQ	INVESCO EXCHANGE TRADED FD TR DWA NASDAQ MNT
DWAS	INVESCO EXCHNG TRADED FD TR II DWA SMLCP MENT
DWAT	ARROW INVTS TR DWA TACTICAL ETF
DWCH	DATAWATCH CORP COM NEW
DWCR	ARROW INVTS TR DWA COUNTRY ETF
DWDP	DOWDUPONT INC COM
DWFI	SPDR SER TR DORSEY WRGT FI
DWIN	INVESCO EXCHNG TRADED FD TR II DWA TACTCL MLT
DWLD	DAVIS FUNDAMENTAL ETF TR SELECT WRLD WI
DWLV	INVESCO EXCHNG TRADED FD TR II DWA MOMENT LOW
DWM	WISDOMTREE TR INTL EQUITY FD
DWPP	FIRST TR EXCHANGE TRADED FD DORSEY WRIGHT PE
DWSN	DAWSON GEOPHYSICAL CO NEW COM
DWT	CITIGROUP GLOBAL MKTS HLDGS IN INVERSE LVRG ETN
DWTR	INVESCO EXCHNG TRADED FD TR II DWA TACTCL SCT
DWX	SPDR INDEX SHS FDS S&P INTL ETF
DX	DYNEX CAP INC COM NEW
DX-A	DYNEX CAP INC PFD SER A
DXB	DEUTSCHE BK CONTINGENT CAP TR TR PFD SEC 6.55%
DX-B	DYNEX CAP INC PFD SER B 7.625%
DXC	DXC TECHNOLOGY CO COM
DXCM	DEXCOM INC COM
DXD	PROSHARES TR PSHS ULDO30 NEW
DXF	DUNXIN FINL HLDGS LTD SPONSORED ADS
DXGE	WISDOMTREE TR GERMANY HEDEQ FD

DXJ	WISDOMTREE TR JAPN HEDGE EQT
DXJF	WISDOMTREE TR JAPAN HDG FINL
DXJS	WISDOMTREE TR JPN SCAP HDG EQT
DXLG	DESTINATION XL GROUP INC COM
DXPE	DXP ENTERPRISES INC NEW COM NEW
DXR	DAXOR CORP COM
DXYN	DIXIE GROUP INC CL A
DY	DYCOM INDS INC COM
DYB	WisdomTree Dynamic Bearish U.S. Equity Fund
DYLS	WisdomTree Dynamic Long/Short U.S. Equity Fund
DYNC	VISTRA ENERGY CORP TANGIBLE EQUITY
DYNT	DYNATRONICS CORP COM NEW
DYSL	DYNASIL CORP AMER COM
DYY	DEUTSCHE BK AG LDN BRH DB COM DBLE LNG
DZK	DIREXION SHS ETF TR DLY DEV MKT BULL
DZSI	DASAN ZHONG SOLUTIONS INC COM NEW
DZZ	DEUTSCHE BK AG LDN BRH GOLD DOUBLE SHOR
E	ENI S P A SPONSORED ADR
EA	ELECTRONIC ARTS INC COM
EAB	ENTERGY ARK INC 1MTG BD 52
EACQ	EASTERLY ACQUISITION CORP COM
EACQU	EASTERLY ACQUISITION CORP UNIT EX 072920
EACQW	EASTERLY ACQUISITION CORP WT EXP 072920
EAD	WELLS FARGO INCOME OPPORTUNITI WF INC OPPTY FD
EAE	ENTERGY ARK INC 1STMTG BD4.75%63
EAF	GRAFTECH INTL LTD COM
EAGL	PLATINUM EAGLE ACQUISITIN CORP SHS CL A
EAGLU	PLATINUM EAGLE ACQUISITIN CORP UNIT EXP 010923
EAGLW	PLATINUM EAGLE ACQUISITIN CORP WT EXP 011720
EAI	ENTERGY ARK INC 1M BD 4.875%66
EARN	ELLINGTON RESIDENTIAL MTG REIT COM SHS BEN INT
EARS	AURIS MED HLDG AG COM
EASI	AMPLIFY ETF TR EASI TACTICAL
EAST	EASTSIDE DISTILLING INC COM PAR
EASTW	EASTSIDE DISTILLING INC WT EXP 081022
EAT	BRINKER INTL INC COM
EBAY	EBAY INC COM
EBAYL	EBAY INC NT 56
EBF	ENNIS INC COM

EBIX	EBIX INC COM NEW
EBMT	EAGLE BANCORP MONT INC COM
EBND	SPDR SERIES TRUST BLOMBRG BRC EMRG
EBR	CENTRAIS ELETRICAS BRASILEIRAS SPONSORED ADR
EBR.B	CENTRAIS ELETRICAS BRASILEIRAS SPON ADR PFD B
EBS	EMERGENT BIOSOLUTIONS INC COM
EBSB	MERIDIAN BANCORP INC MD COM
EBTC	ENTERPRISE BANCORP INC MASS COM
EC	ECOPETROL S A SPONSORED ADS
ECA	ENCANA CORP COM
ECC	EAGLE PT CR CO LLC COM
ECCA	EAGLE PT CR CO INC PFD SER A
ECCB	EAGLE PT CR CO INC PFD STK SER B
ECCX	EAGLE PT CR CO INC 6.6875% NT 28
ECCY	EAGLE PT CR CO INC 6.75% NT DE 2027
ECF	ELLSWORTH GRWTH AND INCOME LTD COM
ECF-A	ELLSWORTH GRWTH AND INCOME LTD 5.25% PFD SER A
ECH	iShares MSCI Chile ETF
ECHO	ECHO GLOBAL LOGISTICS INC COM
ECL	ECOLAB INC COM
ECNS	ISHARES TR CHINA SM-CAP ETF
ECOL	US ECOLOGY INC COM
ECOM	CHANNELADVISOR CORP COM
ECON	COLUMBIA ETF TR II EMRG MARKETS ETF
ECOR	ELECTROCORE INC COM
ECPG	ENCORE CAP GROUP INC COM
ECR	ECLIPSE RES CORP COM
ECT	ECA MARCELLUS TR I COM UNIT
ECYT	ENDOCYTE INC COM
ED	CONSOLIDATED EDISON INC COM
EDAP	EDAP TMS S A SPONSORED ADR
EDBI	LEGG MASON ETF INVESTMENT TR EMRG MKT DIV ETF
EDC	DIREXION SHS ETF TR DLY EMG MK BL 3X
EDD	MORGAN STANLEY EM MKTS DM DEBT COM
EDEN	iShares MSCI Denmark ETF
EDF	STONE HBR EMERG MRKTS INC FD COM
EDGE	EDGE THERAPEUTICS INC COM
EDGW	EDGEWATER TECHNOLOGY INC COM
EDI	STONE HBR EMERG MKTS TL INC FD COM

EDIT	EDITAS MEDICINE INC COM
EDIV	SPDR INDEX SHS FDS S&P EM MKT DIV
EDN	EMPRESA DIST Y COMERCIAL NORTE SPON ADR
EDOG	ALPS ETF TR EM SECT DIV DG
EDOM	WisdomTree Europe Domestic Economy Fund
EDOW	FIRST TR EXCHANGE TRADED FD DOW 30 EQL WGT
EDR	EDUCATION RLTY TR INC COM NEW
EDRY	EURODRY LTD COM
EDU	NEW ORIENTAL ED & TECH GRP INC SPON ADR
EDUC	EDUCATIONAL DEV CORP COM
EDV	VANGUARD WORLD FD EXTENDED DUR
EDZ	DIREXION SHS ETF TR DAILY MSCI EMERG
EE	EL PASO ELEC CO COM NEW
EEA	EUROPEAN EQUITY FUND COM
EEB	INVESCO EXCHANGE TRADED FD TR BRIC ETF
EEFT	EURONET WORLDWIDE INC COM
EEH	SWEDISH EXPT CR CORP ELEMENT USETN22
EEI	ECOLOGY & ENVIRONMENT INC CL A
EELV	INVESCO EXCHNG TRADED FD TR II S&P EMRNG MKTS
EEM	ISHARES TR MSCI EMG MKT ETF
EEMA	ISHARES INC MSCI EM ASIA ETF
EEMD	ETF SER SOLUTIONS AAM S&P EMRG
EEMO	INVESCO EXCHNG TRADED FD TR II S&P EMRNG MMTM
EEMS	ISHARES INC EM MKT SM-CP ETF
EEMV	iShares Edge MSCI Min Vol Emerging Markets ETF
EEMX	SPDR INDEX SHS FDS MSCI EMR MKT ETF
EEP	ENBRIDGE ENERGY PARTNERS L P COM
EEQ	ENBRIDGE ENERGY MANAGEMENT LLC SHS UNITS LLI
EES	WISDOMTREE TR US SMALLCP ERNGS
EET	PROSHARES TR MSCI EMRG ETF
EEV	PROSHARES TR SHT MSCI NEW
EEX	EMERALD EXPOSITIONS EVENTS INC COM
EFA	ISHARES TR MSCI EAFE ETF
EFAD	ProShares MSCI EAFE Dividend Growers ETF
EFAS	GLOBAL X FDS MSCI SUPDIV EA
EFAV	iShares Edge MSCI Min Vol EAFE ETF
EFAX	SPDR INDEX SHS FDS MSCI EAFE FS ETF
EFBI	EAGLE FINL BANCORP INC COM
EFC	ELLINGTON FINANCIAL LLC COM

EFF	EATON VANCE FLTG RATE INCOM FD COM SHS BEN INT
EFFE	GLOBAL X FDS GBL X JPM EFF
EFG	iShares MSCI EAFE Growth ETF
EFII	ELECTRONICS FOR IMAGING INC COM
EFL	EATON VANCE FLTNG RATE 2022 TR COM
EFNL	iShares MSCI Finland ETF
EFO	PROSHARES TR ULTR MSCI ETF
EFOI	ENERGY FOCUS INC COM NEW
EFR	EATON VANCE SR FLTNG RTE TR COM
EFSC	ENTERPRISE FINL SVCS CORP COM
EFT	EATON VANCE FLTING RATE INC TR COM
EFU	PROSHARES TR ULSH MSCIEAF NEW
EFV	iShares MSCI EAFE Value ETF
EFX	EQUIFAX INC COM
EFZ	PROSHARES TR PSHS SH MSCI EAF
EGAN	EGAIN CORP COM NEW
EGBN	EAGLE BANCORP INC MD COM
EGC	ENERGY XXI GULF COAST INC COM
EGF	BLACKROCK ENHANCED GOVT FD INC COM
EGHT	8X8 INC NEW COM
EGI	ENTREE RES LTD COM
EGIF	EAGLE GRWTH & INCOME OPPTY FD COM SHS BEN IN
EGL	ENGILITY HLDGS INC NEW COM
EGLE	EAGLE BULK SHIPPING INC SHS NEW
EGLT	EGALET CORP COM
EGN	ENERGEN CORP COM
EGO	ELDORADO GOLD CORP NEW COM
EGOV	NIC INC COM
EGP	EASTGROUP PPTY INC COM
EGPT	VANECK VECTORS ETF TR EGYPT INDX ETF
EGRX	EAGLE PHARMACEUTICALS INC COM
EGY	VAALCO ENERGY INC COM NEW
EHC	ENCOMPASS HEALTH CORP COM
EHI	WESTERN ASSET GLB HI INCOME FD COM
EHIC	EHI CAR SVCS LTD SPON ADS CL A
EHT	EATON VANCE HIGH INCOME 2021 COM SH BEN INT
EHTH	EHEALTH INC COM
EIA	EATON VANCE CALIF MUN BD FD II COM
EIDO	ISHARES TR MSCI INDONESIA ETF



EIDX	EIDOS THERAPEUTICS INC COM
EIG	EMPLOYERS HOLDINGS INC COM
EIGI	ENDURANCE INTL GROUP HLDGS INC COM
EIGR	EIGER BIOPHARMACEUTICALS INC COM
EIM	EATON VANCE MUN BD FD COM
EIO	EATON VANCE OHIO MUNICIPAL BD COM
EIP	EATON VANCE PA MUN BD FD COM
EIRL	ISHARES TR MSCI IRELAND ETF
EIS	ISHARES INC MSCI ISRAEL ETF
EIV	EATON VANCE MUN BD FD II COM
EIX	EDISON INTL COM
EKAR	EXCHANGE TRADED CONCEPTS TR INNOVATION SHS
EKSO	EKSO BIONICS HLDGS INC COM NEW
EL	LAUDER ESTEE COS INC CL A
ELC	ENTERGY LA LLC COLLATERAL TR MT
ELD	WISDOMTREE TR EM LCL DEBT FD
ELF	E L F BEAUTY INC COM
ELGX	ENDOLOGIX INC COM
ELJ	ENTERGY LA LLC 1ST MTG5.25%
ELLI	ELLIE MAE INC COM
ELLO	ELLOMAY CAPITAL LIMITED SHS
ELMD	ELECTROMED INC COM
ELON	ECHELON CORP COM NEW
ELOX	ELOXX PHARMACEUTICALS INC COM
ELP	COMPANHIA PARANAENSE ENERG COP SPON ADR PFD
ELS	EQUITY LIFESTYLE PPTYS INC COM
ELSE	ELECTRO-SENSORS INC COM
ELTK	ELTEK LTD SHS
ELU	ENTERGY LA LLC 1ST MTG BD
ELVT	ELEVATE CREDIT INC COM
ELY	CALLAWAY GOLF CO COM
EMAG	VANECK VECTORS ETF TR EMERGING MKTS AG
EMAN	EMAGIN CORP COM NEW
EMB	ISHARES TR JPMORGAN USD EMG
EMBH	ISHARES US ETF TR INT RT HD EMRG
EMBU	DIREXION SHS ETF TR DAILY EMG MKT 3X
EMCB	WISDOMTREE TR WSDM EMKTBD FD
EMCF	EMCLAIRE FINL CORP COM
EMCG	WISDOMTREE TR E MKTS CNSMR GR

EMCI	EMC INS GROUP INC COM
EMD	WESTERN ASSET EMRG MKT DEBT FD COM
EMDV	ProShares MSCI Emerging Markets Dividend Growers ETF
EME	EMCOR GROUP INC COM
EMEM	ETFIS SER TR I VIRTUS GLOVIST
EMES	EMERGE ENERGY SVCS LP COM REP PARTN
EMF	TEMPLETON EMERGING MKTS FD INC COM
EMFM	GLOBAL X FDS GLB X NXT EMRG
EMGF	iShares Edge MSCI Multifactor Emerging Markets ETF
EMHY	iShares Emerging Markets High Yield Bond ETF
EMI	EATON VANCE MI MUNI INCOME TR SH BEN INT
EMIF	ISHARES TR EMGR MKT INF ETF
EMIH	Xtrackers Emerging Markets Bond - Interest Rate Hedged ETF
EMITF	ELBIT IMAGING LTD SHS
EMJ	EATON VANCE N J MUN BD FD COM
EMKR	EMCORE CORP COM NEW
EML	EASTERN CO COM
EMLC	VANECK VECTORS ETF TR JP MORGAN MKTS
EMLP	FIRST TR EXCHANGE TRADED FD IV NO AMER ENERGY
EMMS	EMMIS COMMUNICATIONS CORP COM NEW CL A
EMN	EASTMAN CHEM CO COM
EMO	CLEARBRIDGE ENERGY MLP OPP FD COM
EMP	ENTERGY MISS INC 1M BD 66
EMQQ	EXCHANGE TRADED CONCEPTS TR EMQQ EM INTERN
EMR	EMERSON ELEC CO COM
EMSH	ProShares Short Term USD Emerging Markets Bond ETF
EMTL	SPDR DoubleLine Emerging Markets Fixed Income ETF
EMTY	PROSHARES TR DECLINE RETAIL
EMX	EMX RTY CORP COM
EMXC	ISHARES INC MSCI EMRG CHN
ENB	ENBRIDGE INC COM
ENBA	ENBRIDGE INC 6.375 SNT18 B 78
ENBL	ENABLE MIDSTREAM PARTNERS LP COM UNIT RP IN
ENDP	ENDO INTL PLC SHS
ENFC	ENTEGRA FINL CORP COM
ENFR	ALPS ETF TR ALERIAN ENERGY
ENG	ENGLOBAL CORP COM
ENIA	ENEL AMERICAS S A SPONSORED ADR
ENIC	ENEL CHILE S A SPONSORED ADR

ENJ	ENTERGY NEW ORLEANS LLC 1ST MTG 5% 52
ENLC	ENLINK MIDSTREAM LLC COM UNIT REP LTD
ENLK	ENLINK MIDSTREAM PARTNERS LP COM UNIT REP LTD
ENO	ENTERGY NEW ORLEANS LLC 1ST MTG BD 66
ENOR	iShares MSCI Norway ETF
ENPH	ENPHASE ENERGY INC COM
ENR	ENERGIZER HLDGS INC NEW COM
ENS	ENERSYS COM
ENSG	ENSIGN GROUP INC COM
ENSV	ENSERVCO CORP COM
ENT	GLOBAL EAGLE ENTMT INC COM
ENTA	ENANTA PHARMACEUTICALS INC COM
ENTG	ENTEGRIS INC COM
ENTR	ENTREPRENEURSHARES SER TRUST ERSHARES 30 ETF
ENV	ENVESTNET INC COM
ENVA	ENOVA INTL INC COM
ENX	EATON VANCE NEW YORK MUN BD FD COM
ENY	INVESCO EXCHNG TRADED FD TR II CDN ENERGY INM
ENZ	ENZO BIOCHEM INC COM
ENZL	ISHARES TR NEW ZEALAND ETF
EOCC	ENEL GENERACION CHILE S A SPONSORED ADR
EOD	WELLS FARGO GLOBAL DIVIDEND OP COM
EOG	EOG RES INC COM
EOI	EATON VANCE ENHANCED EQ INC FD COM
EOLS	EVOLUS INC COM
EOS	EATON VANCE ENH EQTY INC FD II COM
EOT	EATON VANCE NATL MUN OPPORT TR COM SHS
EPAM	EPAM SYS INC COM
EPAY	BOTTOMLINE TECH DEL INC COM
EPC	EDGEWELL PERS CARE CO COM
EP-C	EL PASO ENERGY CAP TR I PFD CV TR SECS
EPD	ENTERPRISE PRODS PARTNERS L P COM
EPE	EP ENERGY CORP CL A
EPHE	ISHARES TR MSCI PHILIPS ETF
EPI	WISDOMTREE TR INDIA ERNGS FD
EPIX	ESSA PHARMA INC COM NEW
EPM	EVOLUTION PETROLEUM CORP COM
EPOL	ISHARES TR MSCI POLAND ETF
EPP	ISHARES INC MSCI PAC JP ETF

EPR	EPR PPTYS COM SH BEN INT
EPR-C	EPR PPTYS PFD C CNV 5.75%
EPR-E	EPR PPTYS CONV PFD 9% SR E
EPRF	Innovator S&P High Quality Preferred ETF
EPR-G	EPR PPTYS 5.750% CUM PFD G
EPRT	ESSENTIAL PPTYS RLTY TR INC COM
EPS	WISDOMTREE TR US EARNINGS 500
EPU	ISHARES TR MSCI PERU ETF
EPV	PROSHARES TR ULTSHT FTSE EURO
EPZM	EPIZYME INC COM
EQAL	INVESCO EXCHNG TRADED FD TR II RUSEL 1000 EQL
EQBK	EQUITY BANCSHARES INC COM CL A
EQC	EQUITY COMWLTH COM SH BEN INT
EQC-D	EQUITY COMWLTH CUM PFD S D 6.5%
EQFN	EQUITABLE FINL CORP NEW COM
EQGP	EQT GP HLDGS LP COM UNIT REP
EQH	AXA EQUITABLE HLDGS INC COM
EQIX	EQUINIX INC COM PAR \$0.001
EQL	ALPS ETF TR EQUAL SEC ETF
EQLT	ALPS ETF TR WRKPLC EQL PRT
EQM	EQT MIDSTREAM PARTNERS LP UNIT LTD PARTN
EQNR	EQUINOR ASA SPONSORED ADR
EQR	EQUITY RESIDENTIAL SH BEN INT
EQRR	PROSHARES TR EQTS FOR RISIN
EQS	EQUUS TOTAL RETURN INC COM
EQT	EQT CORP COM
EQWL	INVESCO EXCHANGE TRADED FD TR RUSSEL 200 EQL
EQWM	INVESCO EXCHANGE TRADED FD TR RUSEL MDCP EQL
EQWS	INVESCO EXCHANGE TRADED FD TR RUSEL 2000 EQL
ERA	ERA GROUP INC COM
ERC	WELLS FARGO MULTI SECTOR INCOM COM
ERF	ENERPLUS CORP COM
ERGF	iShares Edge MSCI Multifactor Energy ETF
ERH	WELLS FARGO UTILITIES AND HIGH WF UTILITIES INC
ERI	ELDORADO RESORTS INC COM
ERIC	ERICSSON ADR B SEK 10
ERIE	ERIE INDTY CO CL A
ERII	ENERGY RECOVERY INC COM
ERJ	EMBRAER S A SP ADR REP 4 COM

ERM	FIRST TR EXCHNG TRADED FD VIII EQUITYCOMPASS
EROS	EROS INTL PLC SHS NEW
ERUS	ISHARES INC MSCI RUSSIA ETF
ERX	DIREXION SHS ETF TR DLY ENRGY BULL3X
ERY	DIREXION SHS ETF TR DAILY ENERGY BEA
ERYP	ERYTECH PHARMA SPONSORED ADR
ES	EVERSOURCE ENERGY COM
ESBA	EMPIRE ST RLTY OP L P UNIT LTD PRTNSP
ESBK	ELMIRA SVGS BK ELMIRA N Y COM
ESCA	ESCALADE INC COM
ESE	ESCO TECHNOLOGIES INC COM
ESEA	EUROSEAS LTD SHS NEW
ESES	ECO STIM ENERGY SOLUTIONS INC COM
ESG	FLEXSHARES TR STOX ESG INDEX
ESGD	ISHARES TR MSCI EAFE ESG OP
ESGE	ISHARES INC MSCI EM ESG OPZ
ESGF	OPPENHEIMER ETF TR GLOBAL ESG ETF
ESGG	FLEXSHARES TR STOX GLB INDEX
ESGL	OPPENHEIMER ETF TR ESG REV ETF
ESGN	COLUMBIA ETF TR I SUSTNBLE INTL
ESGR	ENSTAR GROUP LIMITED SHS
ESGS	COLUMBIA ETF TR I SUSTANABLE US
ESGU	ISHARES TR ETF MSCI USA
ESGW	COLUMBIA ETF TR I SUSTANBLE GLBL
ESIO	ELECTRO SCIENTIFIC INDS COM
ESL	ESTERLINE TECHNOLOGIES CORP COM
ESLT	ELBIT SYS LTD ORD
ESML	iShares MSCI USA Small-Cap ESG Optimized ETF
ESNC	ENSYNC INC COM
ESND	ESSENDANT INC COM
ESNT	ESSENT GROUP LTD COM
ESP	ESPEY MFG & ELECTRS CORP COM
ESPR	ESPERION THERAPEUTICS INC NEW COM
ESQ	ESQUIRE FINL HLDGS INC COM
ESRT	EMPIRE ST RLTY TR INC CL A
ESRX	EXPRESS SCRIPTS HLDG CO COM
ESS	ESSEX PPTY TR INC COM
ESSA	ESSA BANCORP INC COM
ESTE	EARTHSTONE ENERGY INC CL A

ESTR	ESTRE AMBIENTAL INC SHS
ESTRW	ESTRE AMBIENTAL INC WT EXP 122122
ESV	ENSCO PLC SHS CLASS A
ESXB	COMMUNITY BANKERS TR CORP COM
ETB	EATON VANCE TAX MNGED BUY WRIT COM
ETE	ENERGY TRANSFER EQUITY L P COM UT LTD PTN
ETFC	E TRADE FINANCIAL CORP COM NEW
ETG	EATON VANCE TX ADV GLBL DIV FD COM
ETH	ETHAN ALLEN INTERIORS INC COM
ETHO	ETF MANAGERS TR ETHO CLIMATE LEA
ETJ	EATON VANCE RISK MNGD DIV EQTY COM
ETM	ENTERCOM COMMUNICATIONS CORP CL A
ETN	EATON CORP PLC SHS
ETO	EATON VANCE TX ADV GLB DIV OP COM
ETP	ENERGY TRANSFER PARTNERS LP UNIT LTD PRT INT
ETP-C	ENERGY TRANSFER PARTNERS LP PFD UNIT SER C
ETR	ENTERGY CORP NEW COM
ETSY	ETSY INC COM
ETV	EATON VANCE TX MNG BY WRT OPP COM
ETW	EATON VANCE TXMGD GL BUYWR OPP COM
ETX	EATON VANCE MUN INCOME 2028 TE SHS
ETY	EATON VANCE TX MGD DIV EQ INCM COM
EUDG	WISDOMTREE TR EURO QTLY DIV GR
EUDV	ProShares MSCI Europe Dividend Growers ETF
EUFL	DIREXION SHS ETF TR DAILY EUROPEAN
EUFN	ISHARES TR MSCI EURO FL ETF
EUFX	PROSHARES TR II PROSHS SHT EUR
EUM	PROSHARES TR PSHS SH MSCI EMR
EUMV	ISHARES TR MIN VOL EUROPE
EUO	PROSHARES TR II ULTRASHRT EURO
EURL	DIREXION SHS ETF TR DLY FTS BUL 3X
EURN	EURONAV NV ANTWERPEN SHS
EURZ	Xtrackers Eurozone Equity ETF
EUSA	ISHARES INC MSCI EQUAL WEITE
EUSC	WISDOMTREE TR EUR HDG SMLCAP
EUXL	DIREXION SHS ETF TR DLY EUR STX 3X
EV	EATON VANCE CORP COM NON VTG
EVA	ENVIVA PARTNERS LP COM UNIT
EVBG	EVERBRIDGE INC COM

EVBN	EVANS BANCORP INC COM NEW
EVC	ENTRAVISION COMMUNICATIONS CP CL A
EVF	EATON VANCE SR INCOME TR SH BEN INT
EVFM	EVOFEM BIOSCIENCES INC COM
EVG	EATON VANCE SH TM DR DIVR INCM COM
EVGN	EVOGENE LTD SHS
EVH	EVOLENT HEALTH INC CL A
EVHC	ENVISION HEALTHCARE CORP COM
EVI	ENVIROSTAR INC COM
EVIX	VelocityShares 1x Long VSTOXX Futures ETN
EVJ	EATON VANCE NJ MUNI INCOME TR SH BEN INT
EVK	EVER GLORY INTL GRP INC COM NEW
EVLO	EVELO BIOSCIENCES INC COM
EVLV	EVINE LIVE INC CL A
EVM	EATON VANCE CALIF MUN BD FD COM
EVN	EATON VANCE MUNI INCOME TRUST SH BEN INT
EVO	EATON VANCE OH MUNI INCOME TR SH BEN INT
EVOK	EVOKE PHARMA INC COM
EVOL	EVOLVING SYS INC COM NEW
EVOP	EVO PMTS INC CL A COM
EVP	EATON VANCE PA MUNI INCOME TR SH BEN INT
EVR	EVERCORE INC CLASS A
EVRG	EVERGY INC COM
EVRI	EVERI HLDGS INC COM
EVT	EATON VANCE TAX ADVT DIV INCM COM
EVTC	EVERTEC INC COM
EVV	EATON VANCE LTD DUR INCOME FD COM
EVX	VANECK VECTORS ETF TR ENVIRONMENTAL SV
EVY	EATON VANCE NY MUNI INCOME TR SH BEN INT
EW	EDWARDS LIFESCIENCES CORP COM
EWA	ISHARES INC MSCI AUST ETF
EWBC	EAST WEST BANCORP INC COM
EWC	ISHARES INC MSCI CDA ETF
EWD	ISHARES INC MSCI SWEDEN ETF
EWEM	INVESCO EXCHNG TRADED FD TR II MSCI EMRNG MKT
EWG	ISHARES INC MSCI GERMANY ETF
EWGS	iShares MSCI Germany Small-Cap ETF
EWH	ISHARES INC MSCI HONG KG ETF
EWI	ISHARES INC MSCI ITALY ETF

EWJ	ISHARES INC MSCI JPN ETF NEW
EWK	ISHARES INC MSCI BELGIUM ETF
EWL	ISHARES INC MSCI SWITZERLAND
EWM	ISHARES INC MSCI MLY ETF NEW
EWMC	INVESCO EXCHANGE TRADED FD TR S&P MDCP400 EQ
EWN	ISHARES INC MSCI NETHERL ETF
EWO	ISHARES INC MSCI AUSTRIA ETF
EWP	ISHARES INC MSCI SPAIN ETF
EWQ	ISHARES INC MSCI FRANCE ETF
EWRE	INVESCO EXCHANGE TRADED FD TR S&P500 EQL REL
EWS	ISHARES INC MSCI SINGPOR ETF
EWSC	INVESCO EXCHANGE TRADED FD TR S&P SML 600 EQ
EWT	ISHARES INC MSCI TAIWAN ETF
EWU	ISHARES TR MSCI UK ETF NEW
EWUS	iShares MSCI United Kingdom Small-Cap ETF
EWV	PROSHARES TR ULTSHT MSCI JAP
EWW	ISHARES INC MSCI MEXICO ETF
EWX	SPDR INDEX SHS FDS S&P EMKTSC ETF
EWY	ISHARES INC MSCI STH KOR ETF
EWZ	ISHARES INC MSCI BRAZIL ETF
EWZS	ISHARES TR BRAZIL SM-CP ETF
EXAS	EXACT SCIENCES CORP COM
EXC	EXELON CORP COM
EXD	EATON VANCE TAX ADV BD OPT STG COM SH BEN INT
EXEL	EXELIXIS INC COM
EXFO	EXFO INC SUB VTG SHS
EXG	EATON VANCE TAX MNGD GBL DV EQ COM
EXI	ISHARES TR GLOB INDSTRL ETF
EXIV	VelocityShares 1x Daily Inverse VSTOXX Futures ETN
EXK	ENDEAVOUR SILVER CORP COM
EXLS	EXLSERVICE HOLDINGS INC COM
EXP	EAGLE MATERIALS INC COM
EXPD	EXPEDITORS INTL WASH INC COM
EXPE	EXPEDIA GROUP INC COM NEW
EXPI	EXP WORLD HOLDINGS INC COM
EXPO	EXPONENT INC COM
EXPR	EXPRESS INC COM
EXR	EXTRA SPACE STORAGE INC COM
EXT	WISDOMTREE TR US TOTAL EARNING



EXTN	EXTERRAN CORP COM
EXTR	EXTREME NETWORKS INC COM
EYE	NATIONAL VISION HLDGS INC COM
EYEG	EYEGATE PHARMACEUTICALS INC COM
EYEGW	EYEGATE PHARMACEUTICALS INC WT EXP 080520
EYEN	EYENOVIA INC COM
EYES	SECOND SIGHT MED PRODS INC COM
EYESW	SECOND SIGHT MED PRODS INC WT EXP 030622
EYLD	Cambria Emerging Shareholder Yield ETF
EYPT	EYEPOINT PHARMACEUTICALS INC COM
EZA	ISHARES INC MSCI STH AFR ETF
EZJ	PROSHARES TR UL MSCI JP ETF
EZM	WISDOMTREE TR US MIDCP EARNING
EZPW	EZCORP INC CL A NON VTG
EZT	ENTERGY TEXAS INC 1ST MTG BD 64
EZU	iShares MSCI Eurozone ETF
F	FORD MTR CO DEL COM PAR \$0.01
FAAR	FIRST TR EXCHNG TRADED FD VII ALT ABSLT STRG
FAB	FIRST TR MULTI CP VAL ALPHA FD COM SHS
FAD	FIRST TR MULTI CAP VALUE ALPHA COM SHS
FAF	FIRST AMERN FINL CORP COM
FALN	ISHARES TR FALN ANGLS USD
FAM	FIRST TR ABERDEEN GLBL OPP FD COM SHS
FAMI	FARMMI INC SHS
FAN	FIRST TR EXCHANGE TRADED FD II GBL WND ENRG ETF
FANG	DIAMONDBACK ENERGY INC COM
FANH	FANHUA INC SPONSORED ADR
FANZ	ProSports Sponsors ETF
FARM	FARMER BROS CO COM
FARO	FARO TECHNOLOGIES INC COM
FAS	DIREXION SHS ETF TR DLY FIN BULL NEW
FAST	FASTENAL CO COM
FAT	FAT BRANDS INC COM
FATE	FATE THERAPEUTICS INC COM
FAUS	FIRST TR EXCH TRD ALPHA FD II AUSTRALIA ALPH
FAX	ABERDEEN ASIA PACIFIC INCOM FD COM
FAZ	DIREXION SHS ETF TR DAILY FINL BEAR
FB	FACEBOOK INC CL A
FBC	FLAGSTAR BANCORP INC COM PAR .001

FBGX	UBS AG LONDON BRH EN LG CP GRWTH
FBHS	FORTUNE BRANDS HOME & SEC INC COM
FBIO	FORTRESS BIOTECH INC COM
FBIOP	FORTRESS BIOTECH INC 9.375% CUM PFD A
FBIZ	FIRST BUS FINL SVCS INC WIS COM
FBK	FB FINL CORP COM
FBM	FOUNDATION BLDG MATLS INC COM
FBMS	FIRST BANCSHARES INC MS COM
FBNC	FIRST BANCORP N C COM
FBND	FIDELITY TOTAL BD ETF
FBNK	FIRST CONN BANCORP INC MD COM
FBP	FIRST BANCORP P R COM NEW
FBR	FIBRIA CELULOSE S A SP ADR REP COM
FBSS	FAUQUIER BANKSHARES INC VA COM
FBT	FIRST TR EXCHANGE TRADED FD NY ARCA BIOTECH
FBZ	FIRST TR EXCH TRD ALPHA FD II BRAZIL ALPHADIX
FC	FRANKLIN COVEY CO COM
FCA	FIRST TR EXCH TRD ALPHA FD II CHINA ALPHADIX
FCAL	FIRST TR EXCH TRADED FD III CALIF MUN INCM
FCAN	FIRST TR EXCH TRD ALPHA FD II CANADA ALPHA
FCAP	FIRST CAPITAL INC COM
FCAU	FIAT CHRYSLER AUTOMOBILES N V SHS
FCB	FCB FINL HLDGS INC CL A
FCBC	FIRST CMNTY BANCSHARES INC NEV COM
FCBP	FIRST CHOICE BANCORP COM
FCCO	FIRST CMNTY CORP S C COM
FCCY	1ST CONSTITUTION BANCORP COM
FCE.A	FOREST CITY RLTY TR INC COM CL A
FCEF	FIRST TR EXCHNG TRADED FD VIII CEF INCM OPPTY
FCEL	FUELCELL ENERGY INC COM NEW
FCF	FIRST COMWLTH FINL CORP PA COM
FCFS	FIRSTCASH INC COM
FCG	FIRST TR EXCHANGE TRADED FD NAT GAS ETF
FCN	FTI CONSULTING INC COM
FCNCA	FIRST CTZNS BANCSHARES INC N C CL A
FCO	ABERDEEN GLOBAL INCOME FD INC COM
FCOM	FIDELITY TELECOMM SVCS
FCOR	FIDELITY CORP BOND ETF
FCPT	FOUR CORNERS PPTY TR INC COM

FCSC	FIBROCELL SCIENCE INC COM PAR
FCT	FIRST TR SR FLG RTE INCM FD II COM
FCVT	FIRST TR EXCHANGE TRADED FD IV SSI STRG ETF
FCX	FREEPORT-MCMORAN INC CL B
FDBC	FIDELITY D & D BANCORP INC COM
FDC	FIRST DATA CORP NEW COM CL A
FDD	FIRST TR STOXX EURO DIV FD COMMON SHS
FDEF	FIRST DEFIANCE FINL CORP COM
FDEU	FIRST TR DYNAMIC EUROPE EQT FD COM SHS
FDHY	FIDELITY HIGH YILD ETF
FDIS	FIDELITY MSCI CONSM DIS
FDIV	FIRST TR EXCHANGE TRADED FD IV FT STRG INCM ETF
FDL	FIRST TR MORNINGSTAR DIV LEADR SHS
FDLO	FIDELITY LOW VOLITY ETF
FDM	FIRST TR DJS MICROCAP INDEX FD COM SHS ANNUAL
FDMO	FIDELITY MOMENTUM FACTR
FDN	FIRST TR EXCHANGE TRADED FD DJ INTERNT IDX
FDP	FRESH DEL MONTE PRODUCE INC ORD
FDRR	FIDELITY DIVID ETF RISI
FDS	FACTSET RESH SYS INC COM
FDT	FIRST TR EXCH TRD ALPHA FD II DEV MRK EX US
FDT5	FIRST TR EXCH TRD ALPHA FD II EX US SML CP
FDUS	FIDUS INVT CORP COM
FDUSL	FIDUS INVT CORP 5.875% NT 23
FDVV	FIDELITY HIGH DIVID ETF
FDX	FEDEX CORP COM
FE	FIRSTENERGY CORP COM
FEDU	FOUR SEASONS ED CAYMAN INC ADR
FEI	FIRST TR MLP & ENERGY INCOME COM
FEIM	FREQUENCY ELECTRS INC COM
FELE	FRANKLIN ELEC INC COM
FELP	FORESIGHT ENERGY LP COM UNT RP INT
FEM	FIRST TR EXCH TRD ALPHA FD II EMERG MKT ALPH
FEMB	FIRST TR EXCH TRADED FD III EME MRK BD ETF
FEMS	FIRST TR EXCH TRD ALPHA FD II EM SML CP ALPH
FEN	FIRST TR ENERGY INCOME & GRW COM
FENC	FENNEC PHARMACEUTICALS INC COM
FENG	PHOENIX NEW MEDIA LTD SPONSORED ADS
FENY	FIDELITY MSCI ENERGY IDX

FEO	FIRST TR/ABERDEEN EMERG OPT FD COM
FEP	FIRST TR EXCH TRD ALPHA FD II EUROPE ALPHADEX
FET	FORUM ENERGY TECHNOLOGIES INC COM
FEU	SPDR INDEX SHS FDS STOXX EUR 50 ETF
FEUL	CREDIT SUISSE AG NASSAU BRH FI ENHNCD EUR 50
FEUZ	FIRST TR EXCH TRD ALPHA FD II EURO ALPHADEX
FEX	FIRST TR LRGE CP CORE ALPHA FD COM SHS
FEYE	FIREEYE INC COM
FEZ	SPDR INDEX SHS FDS EURO STOXX 50
FF	FUTUREFUEL CORPORATION COM
FFA	FIRST TR ENHANCED EQTY INC FD COM
FFBC	FIRST FINL BANCORP OH COM
FFBCW	FIRST FINL BANCORP OH WT EXP 122318
FFBW	FFBW INC COM
FFC	FLAHERTY&CRMN PFD SEC INCOM FD COM
FFEU	BARCLAYS BK PLC ENHANCED EURP C
FFG	FBL FINL GROUP INC CL A
FFHG	Formula Folios Hedged Growth ETF
FFHL	FUWEI FILMS HLDGS CO LTD SHS NEW
FFIC	FLUSHING FINL CORP COM
FFIN	FIRST FINL BANKSHARES COM
FFIU	SPINNAKER ETF TR FIELDSTONE UVA
FFIV	F5 NETWORKS INC COM
FFKT	FARMERS CAP BK CORP COM
FFNW	FIRST FINANCIAL NORTHWEST INC COM
FFR	FIRST TR FTSE EPRA/NAREIT DEVL COM
FFSG	FormulaFolios Smart Growth ETF
FFTG	FormulaFolios Tactical Growth ETF
FFTl	FormulaFolios Tactical Income ETF
FFTY	INNOVATOR ETFS TR IBD 50 ETF
FFWM	FIRST FNDTN INC COM
FG	FGL HLDGS ORD SHS
FG+	FGL HLDGS WT EXP 113022
FGB	FIRST TRUST SPECIALTY FINANCE COM BEN INTR
FGBI	FIRST GTY BANCSHARES INC COM
FGD	FIRST TR EXCHANGE TRADED FD II DJ GLBL DIVID
FGEN	FIBROGEN INC COM
FGM	FIRST TR EXCH TRD ALPHA FD II GERMANY ALPHA
FGP	FERRELLGAS PARTNERS L.P. UNIT LTD PART

FHB	FIRST HAWAIIAN INC COM
FHK	FIRST TR EXCH TRD ALPHA FD II HONG KONG ALPH
FHLC	FIDELITY MSCI HLTH CARE I
FHN	FIRST HORIZON NATL CORP COM
FHN-A	FIRST HORIZON NATL CORP DEP SHS
FHY	FIRST TR STRATEGIC HIGH INC FD COM SHS NEW
FI	FRANKS INTL N V COM
FIBK	FIRST INTST BANCSYSTEM INC COM CL A
FIBR	iShares Edge U.S. Fixed Income Balanced Risk ETF
FICO	FAIR ISAAC CORP COM
FIDI	FIDELITY INT HG DIV ETF
FIDU	FIDELITY MSCI INDL INDX
FIEE	UBS AG LONDON BRH FI ENHAN EUR ETN
FIEG	DEUTSCHE BK AG LONDON BRH FI ENH GLOBAL HY
FIEU	CREDIT SUISSE NASSAU BRH ETN STOXX EUR 50
FIF	FIRST TR ENERGY INFRASTRCTR FD COM
FIHD	UBS AG LONDON BRH FI ENHANCD ETN
FII	FEDERATED INVS INC PA CL B
FILL	ISHARES INC GLB ENR PROD ETF
FINU	PROSHARES TR ULTRAPRO FIN SEL
FINX	GLOBAL X FDS FINTECH ETF
FINZ	PROSHARES TR ULTRPRO SHRT NEW
FIS	FIDELITY NATL INFORMATION SVCS COM
FISI	FINANCIAL INSTNS INC COM
FISK	EMPIRE ST RLTY OP L P UNIT LTD PRT 250
FISV	FISERV INC COM
FIT	FITBIT INC CL A
FITB	FIFTH THIRD BANCORP COM
FITBI	FIFTH THIRD BANCORP DEP 1/1000 PFD
FIV	FIRST TR SR FLOATING RATE 2022 COM SHS
FIVA	FIDELITY INT VL FCT ETF
FIVE	FIVE BELOW INC COM
FIVN	FIVE9 INC COM
FIW	FIRST TR EXCHANGE TRADED FD WTR ETF
FIX	COMFORT SYS USA INC COM
FIXD	FIRST TR EXCHNG TRADED FD VIII TCW OPPORTUNIS
FIXX	HOMOLOGY MEDICINES INC COM
FIYY	BARCLAYS BK PLC ENHANCED GLBL B
FIZZ	NATIONAL BEVERAGE CORP COM

FJP	FIRST TR EXCH TRD ALPHA FD II JAPAN ALPHADEX
FKO	FIRST TR EXCH TRD ALPHA FD II STH KOREA ALPH
FKU	FIRST TR EXCH TRD ALPHA FD II UNIT KING ALPH
FL	FOOT LOCKER INC COM
FLAG	EXCHANGE TRADED CONCEPTS TR FLAG FRNSIC ACC
FLAT	BARCLAYS BK PLC US TRES FLATT
FLAU	FRANKLIN TEMPLETON ETF TR FTSE AUSTRALIA
FLAX	FRANKLIN TEMPLETON ETF TR FRANKLIN ASIA
FLBL	Franklin Liberty Senior Loan ETF
FLBR	FRANKLIN TEMPLETON ETF TR FTSE BRAZIL
FLC	FLAHERTY & CRUMRINE TOTAL RETU COM
FLCA	FRANKLIN TEMPLETON ETF TR FTSE CANADA
FLCH	FRANKLIN TEMPLETON ETF TR FTSE CHINA
FLCO	FRANKLIN TEMPLETON ETF TR LIBERTY INVT
FLDM	FLUIDIGM CORP DEL COM
FLDR	Fidelity Low Duration Bond Factor ETF
FLEE	FRANKLIN TEMPLETON ETF TR FTSE EUROPE
FLEH	FRANKLIN TEMPLETON ETF TR FTSE EUROPE HG
FLEU	BARCLAYS BK PLC NT LKD SER B26
FLEX	FLEX LTD ORD
FLFR	FRANKLIN TEMPLETON ETF TR FTSE FRANCE
FLGB	FRANKLIN TEMPLETON ETF TR FTSE UNTD KGDM
FLGE	CREDIT SUISSE NASSAU BRH LG CP GRTH ENH
FLGR	FRANKLIN TEMPLETON ETF TR FTSE GERMANY
FLGT	FULGENT GENETICS INC COM
FLHK	FRANKLIN TEMPLETON ETF TR FTSE HONG KONG
FLHY	Franklin Liberty High Yield Corporate ETF
FLIA	Franklin Liberty International Aggregate Bond ETF
FLIC	FIRST LONG IS CORP COM
FLIN	FRANKLIN TEMPLETON ETF TR FRANKLIN INDIA
FLIO	FRANKLIN TEMPLETON ETF TR LIBRT INT OPPT
FLIR	FLIR SYS INC COM
FLIY	FRANKLIN TEMPLETON ETF TR FTSE ITALY ETF
FLJH	FRANKLIN TEMPLETON ETF TR FTSE JAPAN HDG
FLJP	FRANKLIN TEMPLETON ETF TR FTSE JAPAN ETF
FLKR	FRANKLIN TEMPLETON ETF TR FTSE SOUTH KOREA
FLKS	FLEX PHARMA INC COM
FLL	FULL HOUSE RESORTS INC COM
FLLV	FRANKLIN TEMPLETON ETF TR LIBERTY US ETF

FLM	FIRST TR EXCHANGE TRADED FD II GLOBAL ENGR ETF
FLMB	FRANKLIN TEMPLETON ETF TR LIBERTY MN ETF
FLMI	FRANKLIN TEMPLETON ETF TR LIBERTY INTER
FLMX	FRANKLIN TEMPLETON ETF TR FTSE MEXICO
FLN	FIRST TR EXCH TRD ALPHA FD II LATIN AMER ALP
FLNT	FLUENT INC COM
FLO	FLOWERS FOODS INC COM
FLOT	iShares Floating Rate Bond ETF
FLOW	SPX FLOW INC COM
FLQD	FRANKLIN TEMPLETON ETF TR LIBERTYQ GBL
FLQE	FRANKLIN TEMPLETON ETF TR LIBERTYQ EMERG
FLQG	FRANKLIN TEMPLETON ETF TR LIBERTYQ EQUITY
FLQH	FRANKLIN TEMPLETON ETF TR LIBERTYQ INTL
FLQL	Franklin LibertyQ U.S. Equity ETF
FLQM	Franklin LibertyQ U.S. Mid Cap Equity ETF
FLQS	Franklin LibertyQ U.S. Small Cap Equity ETF
FLR	FLUOR CORP NEW COM
FLRN	SPDR SER TR BLOMBERG BRC INV
FLRT	ADVISORSHARES TR PAC EN FLTG RT
FLRU	FRANKLIN TEMPLETON ETF TR FRANKLIN RUSIA
FLS	FLOWSERVE CORP COM
FLSW	FRANKLIN TEMPLETON ETF TR FRANKLN SWZLND
FLT	FLEETCOR TECHNOLOGIES INC COM
FLTB	FIDELITY LTD TRM BD ETF
FLTR	VANECK VECTORS ETF TR INVT GRADE FLTG
FLTW	FRANKLIN TEMPLETON ETF TR FTSE TAIWAN
FLWS	FLWS/1-800 FLOWERS CL A
FLXN	FLEXION THERAPEUTICS INC COM
FLXS	FLEXSTEEL INDS INC COM
FLY	FLY LEASING LTD SPONSORED ADR
FM	ISHARES INC MSCI FRNTR100ETF
FMAO	FARMER & MERCHANTS BANCORP INC COM
FMAT	FIDELITY MSCI MATLS INDEX
FMB	FIRST TR EXCHANG TRADED FD III MANAGD MUN ETF
FMBH	FIRST MID ILL BANCSHARES INC COM
FMBI	FIRST MIDWEST BANCORP DEL COM
FMC	F M C CORP COM NEW
FMDG	SPINNAKER ETF TR FIELDSTONE MERLN
FMF	FIRST TR EXCHANGE TRADED FD V FIRST TR MNGSTR

FMHI	FIRST TR EXCH TRADED FD III MUNI HI INCM ETF
FMI	FOUNDATION MEDICINE INC COM
FMK	FIRST TR EXCNGE TRD ALPHADDEX MEGA CAP ALPHA
FMN	FEDERATED PREM MUN INC FD COM
FMNB	FARMERS NATL BANC CORP COM
FMO	FIDUCIARY CLAYMORE MLP OPP FD COM
FMS	FRESENIUS MED CARE AG&CO KGAA SPONSORED ADR
FMX	FOMENTO ECONOMICO MEXICANO SAB SPON ADR UNITS
FMY	FIRST TRUST MORTGAGE INCM FD COM SHS
FN	FABRINET SHS
FNB	FNB CORP PA COM
FNB-E	F N B CORP FLA DEP SHS 1/40 PFD
FNBG	FNB BANCORP CALIF COM
FNCB	FNCB BANCORP INC COM
FNCF	iShares Edge MSCI Multifactor Financials ETF
FNCL	FIDELITY MSCI FINLS IDX
FND	FLOOR & DECOR HLDGS INC CL A
FNDA	SCHWAB STRATEGIC TR SCHWAB FDT US SC
FNDB	SCHWAB STRATEGIC TR SCHWAB FDT US BM
FNDC	SCHWAB STRATEGIC TR SCHWB FDT INT SC
FNDE	SCHWAB STRATEGIC TR SCHWB FDT EMK LG
FNDF	SCHWAB STRATEGIC TR SCHWB FDT INT LG
FNDX	SCHWAB STRATEGIC TR SCHWAB FDT US LG
FNF	FIDELITY NATIONAL FINANCIAL IN FNF GROUP COM
FNG	ADVISORSHARES TR NEW TECH MEDIA
FNGD	BANK OF MONTREAL BMO REX INVERS
FNGN	FINANCIAL ENGINES INC COM
FNGU	BANK OF MONTREAL BMO REX LEVERA
FNHC	FEDNAT HLDG CO COM
FNI	FIRST TR EXCHANGE TRADED FD CHINDIA ETF
FNJN	FINJAN HLDGS INC COM NEW
FNK	FIRST TR EXCNGE TRD ALPHADDEX MID CAP VAL FD
FNKO	FUNKO INC COM CL A
FNLC	FIRST BANCORP INC ME COM
FNSR	FINISAR CORP COM NEW
FNTE	FINTECH ACQUISITION CORP II COM
FNTEU	FINTECH ACQUISITION CORP II UNIT 1 COM WT
FNTEW	FINTECH ACQUISITION CORP II WT EXP 011922
FNV	FRANCO NEVADA CORP COM



FNWB	FIRST NORTHWEST BANCORP COM
FNX	FIRST TR MID CAP CORE ALPHADDEX COM SHS
FNYP	FIRST TR EXCNGE TRD ALPHADDEX MID CP GR ALPH
FOE	FERRO CORP COM
FOF	COHEN & STEERS CLOSED END OPPO COM
FOLD	AMICUS THERAPEUTICS INC COM
FOMX	FOAMIX PHARMACEUTICALS LTD SHS
FONE	FIRST TR EXCHANGE TRADED FD II NASDAQ SMRTPHONE
FONR	FONAR CORP COM NEW
FOR	FORESTAR GROUP INC COM
FORD	FORWARD INDS INC N Y COM NEW
FORK	FULING GLOBAL INC SHS
FORM	FORMFACTOR INC COM
FORR	FORRESTER RESH INC COM
FORTY	FORMULA SYS 1985 LTD SPONSORED ADS
FOSL	FOSSIL GROUP INC COM
FOX	TWENTY FIRST CENTY FOX INC CL B
FOXA	TWENTY FIRST CENTY FOX INC CL A
FOXF	FOX FACTORY HLDG CORP COM
FPA	FIRST TR EXCH TRD ALPHA FD II ASIA EX JAPAN
FPAC=	FAR PT ACQUISITION CORP UNIT EX 060125
FPAY	FLEXSHOPPER INC COM NEW
FPE	FIRST TR EXCHANGE-TRADED FD PFD SECS INC ETF
FPEI	FIRST TR EXCH TRADED FD III INSTL PFD SECS
FPF	FIRST TR INTER DUR PFD & IN FD COM
FPH	FIVE POINT HOLDINGS LLC COM CL A
FPI	FARMLAND PARTNERS INC COM
FPI-B	FARMLAND PARTNERS INC 6% PFD SER B
FPL	FST TR NEW OPPORT MLP & ENE FD COM
FPRX	FIVE PRIME THERAPEUTICS INC COM
FPX	FIRST TR EXCHANGE TRADED FD US EQTY OPPT ETF
FPXI	FIRST TR EXCHANGE TRADED FD II INTL IPO ETF
FQAL	FIDELITY QLTY FCTOR ETF
FR	FIRST INDUSTRIAL REALTY TRUST COM
FRA	BLACKROCK FLOAT RATE OME STRAT COM
FRAC	KEANE GROUP INC COM
FRAK	VANECK VECTORS ETF TR UNCVTL OIL GAS
FRAN	FRANDESCAS HLDGS CORP COM
FRBA	FIRST BANK WILLIAMSTOWN NJ COM

FRBK	REPUBLIC FIRST BANCORP INC COM
FRC	FIRST REP BK SAN FRANCISCO CAL COM
FRC-D	FIRST REP BK SAN FRANCISCO CAL DEP 1/40 PFD D %
FRC-E	FIRST REP BK SAN FRANCISCO CAL DEP 1/40TH PFD E
FRC-F	FIRST REP BK SAN FRANCISCO CAL DEP SHS 1/40 P
FRC-G	FIRST REP BK SAN FRANCISCO CAL DEP PFD SER G
FRC-H	FIRST REP BK SAN FRANCISCO CAL DEP SHS RP PFD H
FRC-I	FIRST REP BK SAN FRANCISCO 5.50% NCUM PFD I
FRD	FRIEDMAN INDS INC COM
FRED	FREDS INC CL A
FREL	FIDELITY MSCI RL EST ETF
FRGI	FIESTA RESTAURANT GROUP INC COM
FRI	FIRST TR S&P REIT INDEX FD COM
FRLG	GS FIN CORP MEDIUM TERM NTS
FRME	FIRST MERCHANTS CORP COM
FRN	INVESCO EXCHNG TRADED FD TR II FRONTIER MKTS
FRO	FRONTLINE LTD SHS NEW
FRPH	FRP HLDGS INC COM
FRPT	FRESHPET INC COM
FRSH	PAPA MURPHYS HLDGS INC COM
FRSX	FORESIGHT AUTONOMOUS HLDGS LTD SPONSORED ADS
FRT	FEDERAL REALTY INVT TR SH BEN INT NEW
FRTA	FORTERRA INC COM
FRT-C	FEDERAL REALTY INVT TR 5% CUM PFD C
FSAC	FEDERAL STR ACQUISITION CORP CL A
FSACU	FEDERAL STR ACQUISITION CORP UNIT EXP 000022
FSACW	FEDERAL STR ACQUISITION CORP WT EXP 072422
FSB	FRANKLIN FINL NETWORK INC COM
FSBC	FSB BANCORP INC COM
FSBW	FS BANCORP INC COM
FSCT	FORESCOUT TECHNOLOGIES INC COM
FSD	FIRST TR HIGH INCOME L/S FD COM
FSFG	FIRST SAVINGS FINL GROUP INC COM
FSI	FLEXIBLE SOLUTIONS INTL INC COM
FSIC	FS INVT CORP COM
FSLR	FIRST SOLAR INC COM
FSM	FORTUNA SILVER MINES INC COM
FSNN	FUSION CONNECT INC COM
FSP	FRANKLIN STREET PPTYS CORP COM

FSS	FEDERAL SIGNAL CORP COM
FSTA	FIDELITY CONSMR STAPLES
FSTR	FOSTER L B CO COM
FSV	FIRSTSERVICE CORP NEW SUB VTG SH
FSZ	FIRST TR EXCH TRD ALPHA FD II SWITZLND ALPHA
FT	FRANKLIN UNVL TR SH BEN INT
FTA	FIRST TR LRG CP VL ALPHADDEX FD COM SHS
FTAG	FIRST TR EXCHANGE TRADED FD II INDXX GLOBAL AGR
FTAI	FORTRESS TRANS INFRST INVS LLC COM REP LTD LIAB
FTC	FIRST TR LRG CP GRWTH ALPHADDEX COM SHS
FTCS	FIRST TR EXCHANGE TRADED FD CAP STRENGTH ETF
FTD	FTD COS INC COM
FTEC	FIDELITY MSCI INFO TECH I
FTEK	FUEL TECH INC COM
FTEO	FRONTEO INC SPONSORED ADR
FTF	FRANKLIN LTD DURATION INC TR COM
FTFT	FUTURE FINTECH GROUP INC COM PAR
FTGC	FIRST TR EXCHAN TRADED FD VII FST TR GLB FD
FTHI	FIRST TR EXCHANGE TRADED FD VI BUYWRIT INCM ETF
FTI	TECHNIPFMC PLC COM
FTK	FLOTEK INDS INC DEL COM
FTLB	FIRST TR EXCHANGE TRADED FD VI HEDGED BUYWRITE
FTLS	FIRST TR EXCH TRADED FD III LNG/SHT EQUITY
FTNT	FORTINET INC COM
FTNW	FTE NETWORKS INC COM PAR
FTR	FRONTIER COMMUNICATIONS CORP COM NEW
FTRI	FIRST TR EXCHANGE TRADED FD II INDXX NAT RE ETF
FTRPR	FRONTIER COMMUNICATIONS CORP PFD CONV SER-A
FTS	FORTIS INC COM
FTSD	FRANKLIN ETF TR LIBERTY SHRT ETF
FTSI	FTS INTERNATIONAL INC COM
FTSL	FIRST TR EXCHANGE TRADED FD IV SENIOR LN FD
FTSM	FIRST TR EXCHANGE TRADED FD IV FIRST TR ENH NEW
FTV	FORTIVE CORP COM
FTVA	Aptus Fortified Value ETF
FTXD	FIRST TR EXCHANGE TRADED FD VI NASDAQ RETAIL
FTXG	FIRST TR EXCHANGE TRADED FD VI NASDQ FOD BVRG
FTXH	FIRST TR EXCHANGE TRADED FD VI NASDQ PHRMTCLS
FTXL	FIRST TR EXCHANGE TRADED FD VI NASDQ SEMCNDTR

FTXN	FIRST TR EXCHANGE TRADED FD VI NASDQ OIL GAS
FTXO	FIRST TR EXCHANGE TRADED FD VI NASDAQ BK ETF
FTXR	FIRST TR EXCHANGE TRADED FD VI NASDAQ TRANSN
FUD	UBS AG JERSEY BRH CMCI FOOD ETN
FUE	SWEDISH EXPT CR CORP MLCX BIO ETN23
FUL	FULLER H B CO COM
FULT	FULTON FINL CORP PA COM
FUN	CEDAR FAIR L P DEPOSITRY UNIT
FUNC	FIRST UTD CORP COM
FUND	SPROTT FOCUS TR INC COM
FUSB	FIRST US BANCSHARES INC COM
FUT	PROSHARES MANAGED FUTURES STRATEGY ETF
FUTY	FIDELITY MSCI UTILS INDEX
FUV	ARCIMOTO INC COM
FV	FIRST TR EXCHANGE TRADED FD VI DORSEY WRT 5 ETF
FVAL	FIDELITY VLU FACTOR ETF
FVC	FIRST TR EXCHANGE TRADED FD VI DORSEY WRIGHT
FVD	FIRST TR VALUE LINE DIVID INDX SHS
FVE	FIVE STAR SENIOR LIVING INC COM
FVL	FIRST TR VALUE LINE 100 ETF COM SHS
FWDB	ADVISORSHARES TR MADRONA GLB BD
FWDD	ADVISORSHARES TR MADRONA DOMESTIC
FWDI	ADVISORSHARES TR MADRONA INTL ETF
FWONA	LIBERTY MEDIA CORP DELAWARE COM SER A FRMLA
FWONK	LIBERTY MEDIA CORP DELAWARE COM SER C FRMLA
FWP	FORWARD PHARMA A/S SPONSORED ADR
FWRD	FORWARD AIR CORP COM
FXA	INVESCO CURNCYSHS AUSTRLA DLR AUSTRALIAN DOL
FXB	INVESCO CURNCYSHS BRIT PND STR BRIT POUN STRL
FXC	INVESCO CURNCYSHS CDN DLR TR CDN DLR SHS
FXCH	INVESCO CURNCYSHS CHINESE RENM CHINESE RENMIN
FXD	FIRST TR EXCHANGE TRADED FD II CONSUMR DISCRE
FXE	INVESCO CURRENCYSHARES EURO TR EURO SHS
FXF	INVESCO CURNCYSHS SWISS FRANC SWISS FRANC
FXG	FIRST TR EXCHANGE TRADED FD II CONSUMR STAPLE
FXH	FIRST TR EXCHANGE TRADED FD II HLTH CARE ALPH
FXI	ISHARES TR CHINA LG-CAP ETF
FXL	FIRST TR EXCHANGE TRADED FD II TECH ALPHADIX
FXN	FIRST TR EXCHANGE TRADED FD II ENERGY ALPHADIX

FXO	FIRST TR EXCHANGE TRADED FD II FINLS ALPHADEx
FXP	PROSHARES TR ULTSHT FT CH 50
FXR	FIRST TR EXCHANGE TRADED FD II INDLS PROD DUR
FXS	INVESCO CURNCYSHS SWEDSH KRONA SWEDISH KRONA
FXSG	INVESCO CURNCYSHS SNGPORE DLR SINGAPORE DLR
FXU	FIRST TR EXCHANGE TRADED FD II UTILITIES ALPH
FXY	INVESCO CURNCYSHS JAPANESE YEN JAPANESE YEN
FXZ	FIRST TR EXCHANGE TRADED FD II MATERIALS ALPH
FYC	FIRST TR EXCNGE TRD ALPHADEx SML CP GRW ALP
FYLD	Cambria Foreign Shareholder Yield ETF
FYT	FIRST TR EXCNGE TRD ALPHADEx SML CAP VAL AL
FYX	FIRST TR SML CP CORE ALPHA FD COM SHS
G	GENPACT LIMITED SHS
GAA	Cambria Global Asset Allocation ETF
GAB	GABELLI EQUITY TR INC COM
GABC	GERMAN AMERN BANCORP INC COM
GAB-D	GABELLI EQUITY TR INC PFD D 5.875%
GAB-G	GABELLI EQUITY TR INC PFD-G
GAB-H	GABELLI EQUITY TR INC PFD SER H 5.00%
GAB-J	GABELLI EQUITY TR INC PFD CUM SER J
GAIA	GAIA INC NEW CL A
GAIN	GLADSTONE INVT CORP COM
GAINM	GLADSTONE INVT CORP PFD SER D
GAINN	GLADSTONE INVT CORP PFD SER C
GAINO	GLADSTONE INVT CORP CUM PFD SER-B
GAL	SSGA ACTIVE ETF TR GLOBL ALLO ETF
GALT	GALECTIN THERAPEUTICS INC COM NEW
GAM	GENERAL AMERN INVS INC COM
GAM-B	GENERAL AMERN INVS INC PFD B 5.95%
GAMR	ETF MANAGERS TR VIDEO GAME TECH
GARD	Reality Shares DIVCON Dividend Guard ETF
GARS	GARRISON CAP INC COM
GASL	DIREXION SHS ETF TR DLY NATRL GAS 3X
GASS	STEALTHGAS INC SHS
GASX	DIREXION SHS ETF TR DAILY NAT GAS RE
GATX	GATX CORP COM
GAZB	BARCLAYS BK PLC IPATH B BG ETN
GBAB	GUGGENHEIM TAXABLE MUN MNGD DU COM
GBCI	GLACIER BANCORP INC NEW COM

GBDC	GOLUB CAP BDC INC COM
GBF	ISHARES TR GOV/CRED BD ETF
GBIL	GOLDMAN SACHS ETF TR TREASURYACCESS
GBL	GAMCO INVESTORS INC CL A COM
GBLI	GLOBAL INDTY LTD CAYMAN USD CL A SHS
GBLIL	GLOBAL INDTY LTD CAYMAN SUB NT 47
GBLIZ	GLOBAL INDTY LTD CAYMAN SUB NT
GBNK	GUARANTY BANCORP DEL COM NEW
GBR	NEW CONCEPT ENERGY INC COM
GBT	GLOBAL BLOOD THERAPEUTICS INC COM
GBX	GREENBRIER COS INC COM
GCAP	GAIN CAP HLDGS INC COM
GCBC	GREENE COUNTY BANCORP INC COM
GCC	WISDOMTREE CONTINUOUS COMMODIT SHS BEN INT
GCE	GS FIN CORP ETN CLAYMORE37
GCI	GANNETT CO INC COM
GCO	GENESCO INC COM
GCOW	Pacer Global Cash Cows Dividend ETF
GCP	GCP APPLIED TECHNOLOGIES INC COM
GCV	GABELLI CONV&INCOM SECS FD INC COM
GCV-B	GABELLI CONV&INCOM SECS FD INC PFD SER B
GCVRZ	SANOFI CONTGNT VAL RT
GD	GENERAL DYNAMICS CORP COM
GDDY	GODADDY INC CL A
GDEN	GOLDEN ENTMT INC COM
GDI	GARDNER DENVER HLDGS INC COM
GDL	GDL FUND COM SH BEN IT
GDL-C	GDL FUND 4% CUM PFD SER C
GDO	WESTERN ASSET GLOBAL CP DEFINE COM
GDOT	GREEN DOT CORP CL A
GDP	GOODRICH PETE CORP COM PAR
GDS	GDS HLDGS LTD SPONSORED ADR
GDV	GABELLI DIVD & INCOME TR COM
GDV-A	GABELLI DIVD & INCOME TR PFD SER A
GDVD	Principal Active Global Dividend Income ETF
GDV-D	GABELLI DIVD & INCOME TR PFD SER D
GDV-G	GABELLI DIVD & INCOME TR PFD SER G
GDX	VANECK VECTORS ETF TR GOLD MINERS ETF
GDXJ	VANECK VECTORS ETF TR JR GOLD MINERS E

GDXS	PROSHARES TR ULTRASHORT GOLD
GDXX	PROSHARES TR ULTRA GLD MNR NW
GE	GENERAL ELECTRIC CO COM
GEC	GREAT ELM CAP GROUP INC COM NEW
GECC	GREAT ELM CAP CORP COM
GECCL	GREAT ELM CAP CORP 6.5% NT DUE 2022
GECCM	GREAT ELM CAP CORP 6.75% NT 25
GEF	GREIF INC CL A
GEF.B	GREIF INC CL B
GEL	GENESIS ENERGY L P UNIT LTD PARTN
GEM	GOLDMAN SACHS ETF TR ACTIVEBETA EME
GEMP	GEMPHIRE THERAPEUTICS INC COM
GEN	GENESIS HEALTHCARE INC CL A COM
GENC	GENCOR INDS INC COM
GENE	GENETIC TECHNOLOGIES LTD SPONSORED ADR
GENY	PRINCIPAL EXCHANGE TRADED FDS PRCPL MIL INDX
GEO	GEO GROUP INC NEW COM
GEOS	GEOSPACE TECHNOLOGIES CORP COM
GER	GOLDMAN SACHS MLP ENERGY RENAI COM
GERN	GERON CORP COM
GES	GUESS INC COM
GEVO	GEVO INC COM PAR
GEX	VANECK VECTORS ETF TR GLOBAL ALTER ETF
GF	NEW GERMANY FD INC COM
GFA	GAFISA S A UNSPONSORED ADR
GFED	GUARANTY FED BANCSHARES INC COM
GFF	GRIFFON CORP COM
GFI	GOLD FIELDS LTD NEW SPONSORED ADR
GFN	GENERAL FIN CORP DEL COM
GFNCP	GENERAL FIN CORP DEL RED PRP PFD C
GFNSL	GENERAL FIN CORP DEL SR NT
GFY	WESTERN ASSET VAR RT STRG FD COM
GG	GOLDCORP INC NEW COM
GGAL	GRUPO FINANCIERO GALICIA S A SP ADR 10 SH B
GGB	GERDAU S A SPON ADR REP PFD
GGG	GRACO INC COM
GGM	GUGGENHEIM CR ALLOCATION FD COM
GGN	GAMCO GLOBAL GOLD NAT RES & IN COM SH BEN INT
GGN-B	GAMCO GLOBAL GOLD NAT RES & IN PFD SER B 5.00%

GGO	GABELLI GO ANYWHERE TR COM
GGO-A	GABELLI GO ANYWHERE TR CUM PUTT PFD A
GGP	GGP INC COM
GGP-A	GGP INC PFD SER A 6.375%
GGT	GABELLI MULTIMEDIA TR INC COM
GGT-B	GABELLI MULTIMEDIA TR INC PFD B 6%
GGT-E	GABELLI MULTIMEDIA TR INC 5.125% PFD SER E
GGZ	GABELLI GLB SML & MD CP VAL TR COM
GGZ-A	GABELLI GLB SML & MD CP VAL TR PFD CUM SER A
GHC	GRAHAM HLDGS CO COM
GHDX	GENOMIC HEALTH INC COM
GHG	GREENTREE HOSPITALTY GROUP LTD SPONSORED ADS
GHII	INVESCO EXCHNG TRADED FD TR II S&P HIGH INCOM
GHL	GREENHILL & CO INC COM
GHM	GRAHAM CORP COM
GHY	PGIM GLOBAL SHORT DURATION HIG COM
GHYB	GOLDMAN SACHS ETF TR ACCESS HIG YLD
GHYG	iShares US & Intl High Yield Corp Bond ETF
GIB	GROUPE CGI INC CL A SUB VTG
GIFI	GULF ISLAND FABRICATION INC COM
GIG	GIGCAPITAL INC COM
GIG^	GIGCAPITAL INC RT
GIG+	GIGCAPITAL INC WT EXP 060824
GIG=	GIGCAPITAL INC UNIT EX 030625
GIGB	GOLDMAN SACHS ETF TR ACCESS INVT GR
GIGM	GIGAMEDIA LTD SHS NEW
GII	SPDR INDEX SHS FDS S&P GBLINF ETF
GIII	G-III APPAREL GROUP LTD COM
GIL	GILDAN ACTIVEWEAR INC COM
GILD	GILEAD SCIENCES INC COM
GILT	GILAT SATELLITE NETWORKS LTD SHS NEW
GIM	TEMPLETON GLOBAL INCOME FD COM
GIS	GENERAL MLS INC COM
GJH	STRATS TR UTD STS CELLULAR CP STRATS 6.375
GJO	STRATS TR WAL MART STORES INC STRT CTF 05-4
GJP	STRATS TR FOR DOMINION RES INC STRT CTF 05-6
GJR	STRATS TR FOR PROCTR&GAMBL SEC CTF 2006-1
GJS	STRATS TR GOLDMAN SACHS GROUP STRATS CTF 33
GJT	STRATS TR ALLSTATE CORP 06-3 ASSET BKD



GJV	STRATS TR NEWS CORP SECS 2006 CTF 7% CL A-1
GKOS	GLAUKOS CORP COM
GLAD	GLADSTONE CAPITAL CORP COM
GLADN	GLADSTONE CAPITAL CORP 6% PFD 2024
GLBS	GLOBUS MARITIME LIMITED NEW SHS NEW
GLBZ	GLEN BURNIE BANCORP COM
GLD	SPDR GOLD TRUST GOLD SHS
GLDD	GREAT LAKES DREDGE & DOCK CORP COM
GLDI	CREDIT SUISSE NASSAU BRH X LINK GOLD SHS
GLDW	WORLD GOLD TR SPDR LNG DLR GLD
GLF	GULFMARK OFFSHORE INC COM
GLF+	GULFMARK OFFSHORE INC WT EXP 111424
GLIBA	GCI LIBERTY INC COM CLASS A
GLIBP	GCI LIBERTY INC CUM PFD SER A
GLL	PROSHARES TR II ULTRASHRT NEW
GLMD	GALMED PHARMACEUTICALS LTD SHS
GLNG	GOLAR LNG LTD BERMUDA SHS
GLO	CLOUGH GLOBAL OPPORTUNITIES FD SH BEN INT
GLOB	GLOBANT S A COM
GLOG	GASLOG LTD SHS
GLOG-A	GASLOG LTD PFD SHS SER A
GLOP	GASLOG PARTNERS LP UNIT LTD PTNRP
GLOP-A	GASLOG PARTNERS LP PFD UNIT SER A
GLOP-B	GASLOG PARTNERS LP 8.20% PFD UNIT B
GLOW	GLOWPOINT INC COM NEW
GLP	GLOBAL PARTNERS LP COM UNITS
GLPG	GALAPAGOS NV SPON ADR
GLPI	GAMING & LEISURE PPTYS INC COM
GLQ	CLOUGH GLOBAL EQUITY FD COM
GLRE	GREENLIGHT CAPITAL RE LTD CLASS A
GLT	GLATFELTER COM
GLTR	ETFS PRECIOUS METALS BASKET TR PHYS PM BSKT
GLU	GABELLI GLOBL UTIL & INCOME TR COM SH BEN INT
GLU-A	GABELLI GLOBL UTIL & INCOME TR PFD A PUTT CAL
GLUU	GLU MOBILE INC COM
GLV	CLOUGH GLOBAL DIVND AND INC FD COM
GLW	CORNING INC COM
GLYC	GLYCOMIMETICS INC COM
GM	GENERAL MTRS CO COM

GM+B	GENERAL MTRS CO WT EXP 071019
GME	GAMESTOP CORP NEW CL A
GMED	GLOBUS MED INC CL A
GMF	SPDR INDEX SHS FDS ASIA PACIF ETF
GMFL	INVESCO EXCH TRD SLF IDX FD TR MULT FACT LRG
GMLP	GOLAR LNG PARTNERS LP COM UNIT LPI
GMLPP	GOLAR LNG PARTNERS LP 8.75% CUM PFD A
GMO	GENERAL MOLY INC COM
GMOM	CAMBRIA ETF TR GLB MOMENT ETF
GMRE	GLOBAL MED REIT INC COM NEW
GMRE-A	GLOBAL MED REIT INC 7.50% CUM PFD A
GMS	GMS INC COM
GMTA	GATX CORP SR NT 2066
GMZ	GOLDMAN SACHS MLP INC OPP FD COM SHS
GNBC	GREEN BANCORP INC COM
GNC	GNC HLDGS INC COM CL A
GNCA	GENOCEA BIOSCIENCES INC COM
GNE	GENIE ENERGY LTD CL B
GNE-A	GENIE ENERGY LTD PFD-2012-A
GNK	GENCO SHIPPING & TRADING LTD SHS
GNL	GLOBAL NET LEASE INC COM NEW
GNL-A	GLOBAL NET LEASE INC 7.25% CUM PFD A
GNMA	ISHARES TR GNMA BOND ETF
GNMK	GENMARK DIAGNOSTICS INC COM
GNMX	AEVI GENOMIC MEDICINE INC COM
GNPX	GENPREX INC COM
GNR	SPDR INDEX SHS FDS GLB NAT RESRCE
GNRC	GENERAC HLDGS INC COM
GNRX	VANECK VECTORS ETF TR GEN DRUGS ETF
GNT	GAMCO NAT RES GOLD & INCOME TR SH BEN INT
GNT-A	GAMCO NAT RES GOLD & INCOME TR 5.20% PFD SER A
GNTX	GENTEX CORP COM
GNTY	GUARANTY BANCSHARES INC TEX COM
GNUS	GENIUS BRANDS INTL INC COM PAR
GNW	GENWORTH FINL INC COM CL A
GOAU	ETF SER SOLUTIONS US GBL GLD PRE
GOEX	GLOBAL X FDS GLOBAL X GOLD EX
GOF	GUGGENHEIM STRATEGIC OPP FD COM SBI
GOGL	GOLDEN OCEAN GROUP LTD SHS NEW

GOGO	GOGO INC COM
GOL	GOL LINHAS AEREAS INTLG S A SPON ADR PFD NEW
GOLD	RANDGOLD RES LTD ADR
GOLF	ACUSHNET HOLDINGS CORP COM
GOOD	GLADSTONE COML CORP COM
GOODM	GLADSTONE COML CORP PFD SER D
GOODO	GLADSTONE COML CORP PFD B 7.50%
GOODP	GLADSTONE COML CORP PFD SER A
GOOG	ALPHABET INC CAP STK CL C
GOOGL	ALPHABET INC CAP STK CL A
GOOS	CANADA GOOSE HOLDINGS INC SHS SUB VTG
GORO	GOLD RESOURCE CORP COM
GOV	GOVERNMENT PPTYS INCOME TR COM SHS BEN INT
GOVNI	GOVERNMENT PPTYS INCOME TR SR NT 46
GOVT	iShares U.S. Treasury Bond ETF
GPAQ	GORDON POINTE ACQUISITION CORP COM CLASS A
GPAQU	GORDON POINTE ACQUISITION CORP UNIT EXP 011823
GPAQW	GORDON POINTE ACQUISITION CORP WT EXP 073024
GPC	GENUINE PARTS CO COM
GPI	GROUP 1 AUTOMOTIVE INC COM
GPIC	GAMING PARTNERS INTL CORP COM
GPJA	GEORGIA PWR CO 5% JR SUB NT 77
GPK	GRAPHIC PACKAGING HLDG CO COM
GPL	GREAT PANTHER SILVER LTD COM
GPM	GUGGENHEIM ENHNCD EQTY INCM FD COM
GPMT	GRANITE PT MTG TR INC COM
GPN	GLOBAL PMTS INC COM
GPOR	GULFPORT ENERGY CORP COM NEW
GPP	GREEN PLAINS PARTNERS LP COM REP PTR IN
GPRE	GREEN PLAINS INC COM
GPRK	GEOPARK LTD USD SHS
GPRO	GOPRO INC CL A
GPS	GAP INC DEL COM
GPT	GRAMERCY PPTY TR COM NEW
GPT-A	GRAMERCY PPTY TR 7.125 RED PFD A
GPX	GP STRATEGIES CORP COM
GQRE	FLEXSHARES TR GLB QLT R/E IDX
GRA	GRACE W R & CO DEL NEW COM
GRBK	GREEN BRICK PARTNERS INC COM

GRC	GORMAN RUPP CO COM
GREK	GLOBAL X FDS MSCI GREECE ETF
GRES	INDEXIQ ETF TR IQ GLB RES ETF
GRF	EAGLE CAP GROWTH FD INC COM
GRFS	GRIFOLS S A SP ADR REP B NVT
GRI	ALPS ETF TR C&S GLOBL ETF
GRID	FIRST TR EXCH TRADED FD II NASDQ CLN EDGE
GRIF	GRIFFIN INL RLTY INC COM
GRIN	GRINDROD SHIPPING HOLDINGS LTD SHS
GRMN	GARMIN LTD SHS
GRMY	Xtrackers Germany Equity ETF
GRNB	VANECK VECTORS ETF TR GREEN BD ETF
GRNQ	GREENPRO CAP CORP COM
GROW	U S GLOBAL INVS INC CL A
GRP=	GRANITE REAL ESTATE INVNT TR STAPLED UNIT
GRPN	GROUPON INC COM
GRU	SWEDISH EXPT CR CORP MLCX GRN ETN23
GRUB	GRUBHUB INC COM
GRVY	GRAVITY CO LTD SPONSORED ADR NE
GRX	GABELLI HLTHCARE & WELLNESS TR SHS
GRX-A	GABELLI HLTHCARE & WELLNESS TR PFD SER A
GRX-B	GABELLI HLTHCARE & WELLNESS TR PFD SER B 5.875%
GS	GOLDMAN SACHS GROUP INC COM
GS-A	GOLDMAN SACHS GROUP INC PFD A 1/1000
GSAH=	GS ACQUISITION HLDGS CORP UNIT EX 061223
GSAT	GLOBALSTAR INC COM
GSB	GLOBALSCAPE INC COM
GS-B	GOLDMAN SACHS GROUP INC PFD 1/1000 B
GSBC	GREAT SOUTHN BANCORP INC COM
GSBD	GOLDMAN SACHS BDC INC SHS
GSC	GOLDMAN SACHS GROUP INC SP ENHCMD37ETN
GS-C	GOLDMAN SACHS GROUP INC PFD 1/1000 C
GSD	WisdomTree Global SmallCap Dividend Fund
GS-D	GOLDMAN SACHS GROUP INC SHS D 1/1000
GSEU	GOLDMAN SACHS ETF TR ACTIVEBETA EUR
GSEW	Goldman Sachs Equal Weight U.S. Large Cap Equity ETF
GSG	ISHARES S&P GSCI COMMODITY IDX UNIT BEN INT
GSH	GUANGSHEN RY LTD SPONSORED ADR
GSHD	GOOSEHEAD INS INC COM CL A

GSHT	GORES HLDGS II INC COM CL A
GSHTU	GORES HLDGS II INC UNIT 1 COM WT
GSHTW	GORES HLDGS II INC WT EXP 011322
GSIE	GOLDMAN SACHS ETF TR ACTIVEBETA INT
GSIT	GSI TECHNOLOGY COM
GS-J	GOLDMAN SACHS GROUP INC DEP 1/1000 PFD J
GSJY	GOLDMAN SACHS ETF TR ACTIVEBETA JAP
GSK	GLAXOSMITHKLINE PLC SPONSORED ADR
GS-K	GOLDMAN SACHS GROUP INC DEP 1/1000 SER K
GSKY	GREENSKY INC CL A
GSL	GLOBAL SHIP LEASE INC NEW SHS A
GSL-B	GLOBAL SHIP LEASE INC NEW DEP SH SER-B
GSLC	GOLDMAN SACHS ETF TR EQUITY ETF
GSM	FERROGLOBE PLC SHS
GS-N	GOLDMAN SACHS GROUP INC DEP 1/1000 SER N
GSP	BARCLAYS BK PLC IPSPGS TTL ETN
GSS	GOLDEN STAR RES LTD CDA COM
GSSC	GOLDMAN SACHS ETF TR ACTIVEBETA US
GST	GASTAR EXPL INC NEW COM
GST-A	GASTAR EXPLORATION INC PFD-A 8.625%
GST-B	GASTAR EXPLORATION INC PFD SER B %
GSUM	GRIDSUM HLDG INC SPONSORED ADR
GSV	GOLD STD VENTURES CORP COM
GSVC	GSV CAP CORP COM
GSY	INVESCO ACTIVELY MANAGD ETF TR ULTRA SHRT DUR
GT	GOODYEAR TIRE & RUBR CO COM
GTE	GRAN TIERRA ENERGY INC COM
GTES	GATES INDUSTRIAL CORPRATIN PLC ORD SHS
GTHX	G1 THERAPEUTICS INC COM
GTIM	GOOD TIMES RESTAURANTS INC COM PAR \$.001NEW
GTLS	CHART INDS INC COM PAR \$0.01
GTN	GRAY TELEVISION INC COM
GTN.A	GRAY TELEVISION INC CL A
GTO	INVESCO ACTIVELY MANAGD ETF TR TOTAL RETURN
GTS	TRIPLE-S MGMT CORP CL B
GTT	GTT COMMUNICATIONS INC COM
GTXI	GTX INC DEL COM NEW
GTY	GETTY RLTY CORP NEW COM
GTYH	GTY TECHNOLOGY HOLDINGS INC CL A

GTYHU	GTY TECHNOLOGY HOLDINGS INC UT 1CLA 1/3 WT
GTYHW	GTY TECHNOLOGY HOLDINGS INC WT EXP 102521
GUDB	Sage ESG Intermediate Credit ETF
GULF	WISDOMTREE TR MID EAST DIVD
GUNR	FLEXSHARES TR MORNSTAR UPSTR
GURE	GULF RESOURCES INC COM PAR \$0.0005
GURU	GLOBAL X FDS GLB X GURU INDEX
GUSH	DIREXION SHS ETF TR OIL GAS BL 3X SH
GUT	GABELLI UTIL TR COM
GUT-A	GABELLI UTIL TR PFD A 5.625%
GUT-C	GABELLI UTIL TR PFD CUM SER C
GV	GOLDFIELD CORP COM
GVA	GRANITE CONSTR INC COM
GVAL	CAMBRIA ETF TR GLOBAL VALUE ETF
GVI	iShares Intermediate Government/Credit Bond ETF
GVIP	GOLDMAN SACHS ETF TR HEDGE IND ETF
GVP	GSE SYS INC COM
GWB	GREAT WESTN BANCORP INC COM
GWGH	GWG HLDGS INC COM
GWPH	GW PHARMACEUTICALS PLC ADS
GWR	GENESEE & WYO INC CL A
GWRE	GUIDEWIRE SOFTWARE INC COM
GWRS	GLOBAL WTR RES INC COM
GWW	GRAINGER W W INC COM
GWX	SPDR INDEX SHS FDS S&P INTL SMLCP
GXC	SPDR INDEX SHS FDS S&P CHINA ETF
GXF	GLOBAL X FDS FTSE NORDIC REG
GXG	GLOBAL X FDS GLBX MSCI COLUM
GYB	CABCO SER 2004-101 TR GOLDMAN CTF CALL 6.345
GYC	CABCO SER 2004-102 TR SBC CTF FLT RATE
GYLD	ARROW ETF TR ARROW DJ GLB YLD
GYRO	GYRODYNE LLC COM
GZT	GAZIT GLOBE LTD SHS
H	HYATT HOTELS CORP COM CL A
HA	HAWAIIAN HOLDINGS INC COM
HABT	HABIT RESTAURANTS INC COM CL A
HACK	ETF MANAGERS TR PRIME CYBR SCRTY
HACV	iShares Edge MSCI Min Vol Global Currency Hedged ETF
HACW	ISHARES TR MSCI ACWI ETF

HAE	HAEMONETICS CORP COM
HAFC	HANMI FINL CORP COM NEW
HAHA	CSOP ETF TR CHINA CSI 300
HAIN	HAIN CELESTIAL GROUP INC COM
HAIR	RESTORATION ROBOTICS INC COM
HAL	HALLIBURTON CO COM
HALL	HALLMARK FINL SVCS INC EC COM NEW
HALO	HALOZYME THERAPEUTICS INC COM
HAO	INVESCO EXCHNG TRADED FD TR II CHINA SMALL CP
HAP	VANECK VECTORS ETF TR NAT RES ETF
HAS	HASBRO INC COM
HASI	HANNON ARMSTRONG SUST INFR CAP COM
HAUD	ISHARES TR MSCI AUSTRALIA
HAWX	ISHARES TR MSCI ACWI EXUS
HAYN	HAYNES INTERNATIONAL INC COM NEW
HBAN	HUNTINGTON BANCSHARES INC COM
HBANN	HUNTINGTON BANCSHARES INC DSHS 1/40 PFD
HBANO	HUNTINGTON BANCSHARES INC DEP SHS PFD D
HBB	HAMILTON BEACH BRANDS HLDG CO COM CL A
HBCP	HOME BANCORP INC COM
HBI	HANESBRANDS INC COM
HBIO	HARVARD BIOSCIENCE INC COM
HBK	HAMILTON BANCORP INC MD COM
HBM	HUDBAY MINERALS INC COM
HBM+	HUDBAY MINERALS INC WT EXP 072018
HBMD	HOWARD BANCORP INC COM
HBNC	HORIZON BANCORP INC COM
HBP	HUTTIG BLDG PRODS INC COM
HCA	HCA HEALTHCARE INC COM
HCAC	HENNESSY CAP ACQUSTON CORP III COM
HCAC+	HENNESSY CAP ACQUSTON CORP III WT EXP 061524
HCAC=	HENNESSY CAP ACQUSTON CORP III UT 1 COM 3/4 WT
HCAP	HARVEST CAP CR CORP COM
HCAPZ	HARVEST CAP CR CORP 6.125% NT 2022
HCC	WARRIOR MET COAL INC COM
HCCI	HERITAGE CRYSTAL CLEAN INC COM
HCFT	HUNT COS FIN TR INC COM
HCFT-A	HUNT COS FIN TR INC 8.75% RED PFD A
HCHC	HC2 HLDGS INC COM

HCI	HCI GROUP INC COM
HCKT	HACKETT GROUP INC COM
HCLP	HI-CRUSH PARTNERS LP COM UNIT LTD
HCM	HUTCHISON CHINA MEDITECH LTD SPONSORED ADR
HCOM	HAWAIIAN TELCOM HOLDCO INC COM
HCOR	HARTFORD FDS EXCHANGE TRADE TR CORPORATE BD ETF
HCP	HCP INC COM
HCRF	iShares Edge MSCI Multifactor Healthcare ETF
HCSG	HEALTHCARE SVCS GRP INC COM
HCXZ	HERCULES CAPITAL INC 5.25% NT 25
HD	HOME DEPOT INC COM
HDAW	DBX ETF TR XTRACK MSCI ALL
HDB	HDFC BANK LTD ADR REPS 3 SHS
HDEF	DBX ETF TR XTRACK MSCI EAFE
HDG	PROSHARES TR HD REPLICATION
HDGE	ADVISORSHARES TR RANGER EQUITY BE
HDLV	UBS AG LONDON BRH 2XLEV US HG DV
HDMV	FIRST TR EXCH TRADED FD III HORIZON MNGD ETF
HDP	HORTONWORKS INC COM
HDS	HD SUPPLY HLDGS INC COM
HDSN	HUDSON TECHNOLOGIES INC COM
HDV	ISHARES TR CORE HIGH DV ETF
HE	HAWAIIAN ELEC INDUSTRIES COM
HEAR	TURTLE BEACH CORP COM NEW
HEB	HEMISPHERX BIOPHARMA INC COM NEW
HEBT	HEBRON TECHNOLOGY CO LTD COM CLASS A
HECO	STRATEGY SHS ECOL STRAT ETF
HEDJ	WISDOMTREE TR EUROPE HEDGED EQ
HEEM	iShares Currency Hedged MSCI Emerging Markets ETF
HEES	H & E EQUIPMENT SERVICES INC COM
HEFA	iShares Currency Hedged MSCI EAFE ETF
HEFV	iShares Edge MSCI Min Vol EAFE Currency Hedged ETF
HEI	HEICO CORP NEW COM
HEI.A	HEICO CORP NEW CL A
HELE	HELEN OF TROY CORP LTD COM
HEMV	iShares Edge MSCI Min Vol EM Currency Hedged ETF
HEP	HOLLY ENERGY PARTNERS L P COM UT LTD PTN
HEQ	JOHN HANCOCK HDG EQ & INC FD COM
HES	HESS CORP COM



HES-A	HESS CORP DEP PDF SR A
HESM	HESS MIDSTREAM PARTNERS LP UNIT LTD PR INT
HE-U	HECO CAP TR III QUIPS 6.5% 04
HEUS	iShares Currency Hedged MSCI Europe Small-Cap ETF
HEUV	iShares Edge MSCI Min Vol Europe Currency Hedged ETF
HEWC	ISHARES TR MSCI CDA ETF
HEWG	ISHARES TR CUR HED MSCI GER
HEWI	ISHARES TR MSCI ITALY ETF
HEWJ	ISHARES TR HDG MSCI JAPAN
HEWL	ISHARES TR MSCI SWITZERLD
HEWP	ISHARES TR MSCI SPAIN ETF
HEWU	ISHARES TR MSCI UN KNGDOM
HEWW	ISHARES TR MSCI MEXICO
HEWY	ISHARES TR MSCI SO KOREA
HEZU	ISHARES TR CUR HD EURZN ETF
HF	HFF INC CL A
HFBC	HOPFED BANCORP INC COM
HFBL	HOME FED BANCORP INC LA NEW COM
HFC	HOLLYFRONTIER CORP COM
HFRO	HIGHLAND FLOATNG RATE OPprt II SHS BEN INT
HFWA	HERITAGE FINL CORP WASH COM
HFXE	INDEXIQ ETF TR HDGD FTSE EURO
HFXI	INDEXIQ ETF TR HDGD FTSE INTL
HFXJ	INDEXIQ ETF TR HDGD FTSE JAPN
HGH	HARTFORD FINL SVCS GROUP INC D DEB FIX/FLT 42
HGI	INVESCO EXCHNG TRADED FD TR II ZACKS INTL MLT
HGSD	WisdomTree Global Hedged SmallCap Dividend Fund
HGSH	CHINA HGS REAL ESTATE INC COM
HGT	HUGOTON RTY TR TEX UNIT BEN INT
HGV	HILTON GRAND VACATIONS INC COM
HHC	HOWARD HUGHES CORP COM
HHS	HARTE-HANKS INC COM
HHYX	ISHARES TR CURR HD INTL HI
HI	HILLENBRAND INC COM
HIBB	HIBBETT SPORTS INC COM
HIE	MILLER HOWARD HIGH INC EQTY FD COM SHS BEN IN
HIFR	INFRAREIT INC COM
HIFS	HINGHAM INSTN SVGS MASS COM
HIG	HARTFORD FINL SVCS GROUP INC COM

HIG+	HARTFORD FINL SVCS GROUP INC WT EXP 062619
HIHO	HIGHWAY HLDGS LTD ORD
HII	HUNTINGTON INGALLS INDS INC COM
HIHQ	HEALTH INS INNOVATIONS INC COM CL A
HIL	HILL INTERNATIONAL INC COM
HILO	COLUMBIA ETF TR II EM QUALITY ETF
HIMX	HIMAX TECHNOLOGIES INC SPONSORED ADR
HIO	WESTERN ASSET HIGH INCM OPP FD COM
HIPS	GRANITESHARES ETF TR HIPS US HIGH INC
HIVE	AEROHIVE NETWORKS INC COM
HIW	HIGHWOODS PPTYS INC COM
HIX	WESTERN ASSET HIGH INCM FD II COM
HJLI	HANCOCK JAFFE LABORATORIES INC COM
HJLIW	HANCOCK JAFFE LABORATORIES INC WT EXP 053023
HJPX	ISHARES TR JPX NIKKEI 400
HJV	SATURNS TR NO 2007-1 NT CL A 7%
HK	HALCON RES CORP COM PAR NEW
HK+	HALCON RES CORP WT EXP 090920
HL	HECLA MNG CO COM
HL-B	HECLA MNG CO PFD CV SER B
HLF	HERBALIFE NUTRITION LTD COM SHS
HLG	HAILIANG ED GROUP INC SPONSORED ADR
HLI	HOULIHAN LOKEY INC CL A
HLIT	HARMONIC INC COM
HLM-	HILLMAN GROUP CAP TR PFD TR 11.6%
HLNE	HAMILTON LANE INC CL A
HLT	HILTON WORLDWIDE HLDGS INC COM
HLTH	NOBILIS HEALTH CORP COM
HLX	HELIX ENERGY SOLUTIONS GRP INC COM
HMC	HONDA MOTOR LTD AMERN SHS
HMG	HMG COURTLAND PPTYS INC COM
HMHC	HOUGHTON MIFFLIN HARCOURT CO COM
HMI	HUAMI CORP SPONSORED ADS
HMLP	HOEGH LNG PARTNERS LP COM UNIT LTD
HMLP-A	HOEGH LNG PARTNERS LP 8.75% CUM PFD A
HMN	HORACE MANN EDUCATORS CORP NEW COM
HMNF	HMN FINL INC COM
HMNY	HELIOS & MATHESON ANALYTICS IN COM NEW
HMOP	HARTFORD FDS EXCHANGE TRADE TR MUN OPORTUNITE

HMST	HOMESTREET INC COM
HMSY	HMS HLDGS CORP COM
HMTA	HOMETOWN BANKSHARES CORP COM
HMTV	HEMISPHERE MEDIA GROUP INC CL A
HMY	HARMONY GOLD MNG LTD SPONSORED ADR
HNDL	STRATEGY SHS NS 7HANDL IDX
HNI	HNI CORP COM
HNNA	HENNESSY ADVISORS INC COM
HNP	HUANENG PWR INTL INC SPON ADR H SHS
HNRG	HALLADOR ENERGY COMPANY COM
HNW	PIONEER DIV HIGH INCOME TRUST COM
HOFT	HOOKER FURNITURE CORP COM
HOG	HARLEY DAVIDSON INC COM
HOLD	ADVISORSHARES TR SAGE CORE ETF
HOLI	HOLLYSYS AUTOMATION TECHNOLOGI SHS
HOLX	HOLOGIC INC COM
HOMB	HOME BANCSHARES INC COM
HOME	AT HOME GROUP INC COM
HOML	UBS AG LONDON BRANCH MNT REST 2X LV
HON	HONEYWELL INTL INC COM
HONE	HARBORONE BANCORP INC COM
HONR	EXCHANGE LISTED FDS TR INSIGHTSHARES
HOPE	HOPE BANCORP INC COM
HOS	HORNBECK OFFSHORE SVCS INC NEW COM
HOV	HOVNANIAN ENTERPRISES INC CL A
HOVNP	HOVNANIAN ENTERPRISES INC PFD DEP1/1000A
HP	HELMERICH & PAYNE INC COM
HPE	HEWLETT PACKARD ENTERPRISE CO COM
HPF	HANCOCK JOHN PFD INCOME FD II COM
HPI	HANCOCK JOHN PFD INCOME FD SH BEN INT
HPJ	HIGHPOWER INTL INC COM
HPP	HUDSON PAC PPTYS INC COM
HPQ	HP INC COM
HPR	HIGHPOINT RES CORP COM
HPS	HANCOCK JOHN PFD INCOME FD III COM
HPT	HOSPITALITY PPTYS TR COM SH BEN INT
HQBD	HARTFORD FDS EXCHANGE TRADE TR QUALITY BD ETF
HQCL	HANWHA Q CELL CO LTD SPONSORED ADR NE
HQH	TEKLA HEALTHCARE INVS SH BEN INT

HQL	TEKLA LIFE SCIENCES INVS SH BEN INT
HQY	HEALTHEQUITY INC COM
HR	HEALTHCARE RLTY TR COM
HRB	BLOCK H & R INC COM
HRC	HILL ROM HLDGS INC COM
HRG	HRG GROUP INC COM
HRI	HERC HLDGS INC COM
HRL	HORMEL FOODS CORP COM
HRS	HARRIS CORP DEL COM
HRTG	HERITAGE INS HLDGS INC COM
HRTX	HERON THERAPEUTICS INC COM
HRZN	HORIZON TECHNOLOGY FIN CORP COM
HSBC	HSBC HLDGS PLC SPON ADR NEW
HSBC-A	HSBC HLDGS PLC ADR A 1/40PF A
HSC	HARSCO CORP COM
HSCZ	ISHARES TR MSCI EAFE SMCP
HSDT	HELIUS MED TECHNOLOGIES INC COM CL A
HSGX	HISTOGENICS CORP COM
HSIC	SCHEIN HENRY INC COM
HSII	HEIDRICK & STRUGGLES INTL INC COM
HSKA	HESKA CORP COM RESTRC NEW
HSO	HUDSON GLOBAL INC COM
HSPX	HORIZONS ETF TR I HRZNS S&P500 COV
HSRT	Hartford Short Duration ETF
HST	HOST HOTELS & RESORTS INC COM
HSTM	HEALTHSTREAM INC COM
HSY	HERSHEY CO COM
HT	HERSHA HOSPITALITY TR PR SHS BEN INT
HTA	HEALTHCARE TR AMER INC CL A NEW
HTAB	HARTFORD FDS EXCHANGE TRADE TR SCHRDRS TAX BD
HTBI	HOMETRUST BANCSHARES INC COM
HTBK	HERITAGE COMMERCE CORP COM
HTBX	HEAT BIOLOGICS INC COM NEW
HT-C	HERSHA HOSPITALITY TR PFD SER C 6.875%
HTD	HANCOCK JOHN TAX-ADV DIV INCM COM
HT-D	HERSHA HOSPITALITY TR RED PFD SER D
HT-E	HERSHA HOSPITALITY TR PFD CUM RED E
HTFA	HORIZON TECHNOLOGY FIN CORP 6.25% NT 22
HTGC	HERCULES CAPITAL INC COM

HTGM	HTG MOLECULAR DIAGNOSTICS INC COM
HTGX	HERCULES CAPITAL INC 6.25 SR NTS 24
HTH	HILLTOP HOLDINGS INC COM
HTHT	HUAZHU GROUP LTD SPONSORED ADS
HTLD	HEARTLAND EXPRESS INC COM
HTLF	HEARTLAND FINL USA INC COM
HTRB	HARTFORD FDS EXCHANGE TRADE TR TOTAL RTRN ETF
HTUS	EXCHANGE TRADED CONCEPTS TR HULL TACTIC US
HTY	HANCOCK JOHN INV TRUST TAX ADV GLB SH
HTZ	HERTZ GLOBAL HLDGS INC COM
HUBB	HUBBELL INC COM
HUBG	HUB GROUP INC CL A
HUBS	HUBSPOT INC COM
HUD	HUDSON LTD COM CL A
HUM	HUMANA INC COM
HUN	HUNTSMAN CORP COM
HUNT	HUNTER MARITIME ACQUISITION CO CL A
HUNTU	HUNTER MARITIME ACQUISITION CO UT 1CL A 1/2WT
HUNTW	HUNTER MARITIME ACQUISITION CO WT EXP 111721
HURC	HURCO COMPANIES INC COM
HURN	HURON CONSULTING GROUP INC COM
HUSA	HOUSTON AMERN ENERGY CORP COM
HUSE	STRATEGY SHS US MKT ROT STRAT
HUSV	FIRST TR EXCH TRADED FD III HORIZON DMST ETF
HUYA	HUYA INC ADS REP SHS A
HVBC	HV BANCORP INC COM
HVT	HAVERTY FURNITURE INC COM
HVT.A	HAVERTY FURNITURE INC CL A
HWBK	HAWTHORN BANCSHARES INC COM
HWC	HANCOCK WHITNEY CORPORATION COM
HWCC	HOUSTON WIRE & CABLE CO COM
HCWPL	HANCOCK WHITNEY CORPORATION 5.95% SUB NT 45
HWKN	HAWKINS INC COM
HX	HEXINDAI INC ADR
HXL	HEXCEL CORP NEW COM
HY	HYSTER YALE MATLS HANDLING INC CL A
HYAC	HAYMAKER ACQUISITION CORP COM CLASS A
HYACU	HAYMAKER ACQUISITION CORP UNIT EX 101922
HYACW	HAYMAKER ACQUISITION CORP WT EXP 102724

HYB	NEW AMER HIGH INCOME FD INC COM NEW
HYD	VANECK VECTORS ETF TR HIGH YLD MUN ETF
HYDB	iShares Edge High Yield Defensive Bond ETF
HYDD	DIREXION SHS ETF TR DAILY HIGH YLD
HYDW	DBX ETF TR XTRACKERS LOW
HYEM	VANECK VECTORS ETF TR EMERGING MKTS HI
HYG	ISHARES TR IBOXX HI YD ETF
HYGH	ISHARES US ETF TR IT RT HDG HGYL
HYGS	HYDROGENICS CORP NEW COM NEW
HYH	HALYARD HEALTH INC COM
HYHG	ProShares High Yield-Interest Rate Hedged ETF
HYI	WESTERN ASSET HGH YLD DFNDFD COM
HYIH	Xtrackers High Yield Corporate Bond - Interest Rate Hedged ETF
HYLB	DBX ETF TR XTRACK USD HIGH
HYLD	ADVISORSHARES TR PERITUS HG YLD
HYLS	FIRST TR EXCHANGE TRADED FD IV FIRST TR TA HIYL
HYLV	INDEXIQ ETF TR IQ S&P HGH YLD
HYMB	SPDR SERIES TRUST NUV HGHYLD MUN
HYND	WISDOMTREE TR NEGTV DUR HIG YLD
HYS	PIMCO ETF TR 0-5 HIGH YIELD
HYT	BLACKROCK CORPOR HI YLD FD INC COM
HYUP	DBX ETF TR XTRACKERS HIGH
HYXE	ISHARES TR IBOXX HIG YLD EX
HYXU	iShares International High Yield Bond ETF
HYZD	WISDOMTREE TR HEDGED HI YLD BD
HZN	HORIZON GLOBAL CORP COM
HZNP	HORIZON PHARMA PLC SHS
HZO	MARINEMAX INC COM
I	INTELSAT S A COM
IAC	IAC INTERACTIVECORP COM
IAE	VOYA ASIA PAC DIVID EQUITY IN COM
IAF	ABERDEEN AUSTRALIA EQTY FD INC COM
IAG	IAMGOLD CORP COM
IAGG	iShares Core International Aggregate Bond Fund
IAI	ISHARES TR US BR DEL SE ETF
IAK	ISHARES TR U.S. INSRNCE ETF
IAM	I AM CAP ACQUISITION CO COM
IAMXR	I AM CAP ACQUISITION CO RT
IAMXW	I AM CAP ACQUISITION CO WT EXP 052224

IART	INTEGRA LIFESCENCES HLDGS CP COM NEW
IAT	ISHARES TR US REGNL BKS ETF
IAU	ISHARES GOLD TRUST ISHARES
IAUF	iShares Gold Strategy ETF
IBA	INDUSTRIAS BACHOCO S A B DE CV SPON ADR B
IBB	ISHARES TR NASDAQ BIOTECH
IBCD	ISHARES TR IBNDS MAR20 ETF
IBCE	ISHARES TR IBNDS MAR23 ETF
IBCP	INDEPENDENT BANK CORP MICH COM NEW
IBD	NORTHERN LTS FD TR IV INSPIRE CORP
IBDC	ISHARES TR IBONDS MAR20 ETF
IBDD	ISHARES TR IBONDS MAR23 ETF
IBDH	ISHARES TR IBONDS DEC18 ETF
IBDK	ISHARES TR IBONDS DEC19 ETF
IBDL	ISHARES TR IBONDS DEC20 ETF
IBDM	ISHARES TR IBONDS DEC21 ETF
IBDN	ISHARES TR IBONDS DEC22 ETF
IBDO	ISHARES TR IBONDS DEC23 ETF
IBDP	ISHARES TR IBONDS DEC24 ETF
IBDQ	ISHARES TR IBONDS DEC25 ETF
IBDR	ISHARES TR IBONDS DEC2026
IBDS	ISHARES TR IBONDS ETF
IBIO	IBIO INC COM NEW
IBKC	IBERIABANK CORP COM
IBKCO	IBERIABANK CORP DSHS 1/400 PFD
IBKCP	IBERIABANK CORP SHS PFD SR B%
IBKR	INTERACTIVE BROKERS GROUP INC COM
IBM	INTERNATIONAL BUSINESS MACHS COM
IBMG	ISHARES TR IBONDS SEP18 ETF
IBMH	ISHARES TR IBONDS SEP19 ETF
IBMI	ISHARES TR IBONDS SEP20 ETF
IBMJ	ISHARES TR IBONDS DEC21 ETF
IBMK	ISHARES TR IBONDS DEC22 ETF
IBML	iShares iBonds Dec 2023 Term Muni Bond ETF
IBMM	iShares iBonds Dec 2024 Term Muni Bond ETF
IBN	ICICI BK LTD ADR
IBND	SPDR SERIES TRUST BLOMBRG BRC INTL
IBOC	INTERNATIONAL BANCSHARES CORP COM
IBP	INSTALLED BLDG PRODS INC COM

IBTX	INDEPENDENT BK GROUP INC COM
IBUY	AMPLIFY ETF TR ONLIN RETL ETF
ICAD	ICAD INC COM NEW
ICAN	ETF SER SOLUTIONS SERENITYSHS IM
ICBK	COUNTY BANCORP INC COM
ICCC	IMMUCELL CORP COM PAR
ICCH	ICC HLDGS INC COM
ICD	INDEPENDENCE CONTRACT DRIL INC COM
ICE	INTERCONTINENTAL EXCHANGE INC COM
ICF	iShares Cohen & Steers REIT ETF
ICFI	ICF INTL INC COM
ICHR	ICHOR HOLDINGS SHS
ICL	ISRAEL CHEMICALS LTD SHS
ICLK	ICLICK INTRACTIVE ASIA GRP LTD SPONSORED ADR
ICLN	ISHARES TR GL CLEAN ENE ETF
ICLR	ICON PLC SHS
ICOL	ISHARES INC MSCI COLMBIA ETF
ICON	ICONIX BRAND GROUP INC COM
ICOW	Pacer Developed Markets International Cash Cows 100 ETF
ICPT	INTERCEPT PHARMACEUTICALS INC COM
ICSH	iShares Ultra Short-Term Bond ETF
ICUI	ICU MED INC COM
ICVT	iShares Convertible Bond ETF
IDA	IDACORP INC COM
IDCC	INTERDIGITAL INC COM
IDE	VOYA INFRASTRUCTURE INDLS & MT COM
IDEV	ISHARES TR CORE MSCI INTL
IDHD	Invesco S&P International Developed High Dividend Low Volatility ETF
IDHQ	INVESCO EXCHNG TRADED FD TR II S&P INTL QULTY
IDIV	METAURUS EQUITY COMPONENT TR US EQT CUM 2027
IDLB	INVESCO EXCHNG TRADED FD TR II FTSE INTL LOW
IDLV	INVESCO EXCHNG TRADED FD TR II S&P INTL LOW
IDMO	INVESCO EXCHNG TRADED FD TR II S&P INTL MOMNT
IDN	INTELLICHECK INC COM NEW
IDOG	ALPS ETF TR INTL SEC DV DOG
IDRA	IDERA PHARMACEUTICALS INC COM NEW
IDSA	INDUSTRIAL SVCS AMER INC FLA COM
IDSY	I D SYSTEMS INC COM
IDT	IDT CORP CL B NEW



IDTI	INTEGRATED DEVICE TECHNOLOGY COM
IDU	ISHARES TR U.S. UTILITS ETF
IDV	iShares International Select Dividend ETF
IDX	VANECK VECTORS ETF TR INDONESIA INDEX
IDXG	INTERPACE DIAGNOSTICS GROUP IN COM NEW
IDXX	IDEXX LABS INC COM
IEA	INFRA AND ENERGY ALTRNTIVE INC COM
IEAWW	INFRA AND ENERGY ALTRNTIVE INC WT EXP 052021
IEC	IEC ELECTRS CORP NEW COM
IECS	iShares Evolved U.S. Consumer Staples ETF
IEDI	iShares Evolved U.S. Discretionary Spending ETF
IEF	ISHARES TR BARCLAYS 7 10 YR
IEFA	iShares Core MSCI EAFE ETF
IEFN	iShares Evolved U.S. Financials ETF
IEHS	iShares Evolved U.S. Healthcare Staples ETF
IEI	ISHARES TR 3 7 YR TREAS BD
IEIH	iShares Evolved U.S. Innovative Healthcare ETF
IEME	iShares Evolved U.S. Media and Entertainment ETF
IEMG	ISHARES INC CORE MSCI EMKT
IEO	iShares U.S. Oil & Gas Exploration & Production ETF
IEP	ICAHN ENTERPRISES LP DEPOSITARY UNIT
IESC	IES HLDGS INC COM
IETC	iShares Evolved U.S. Technology ETF
IEUR	ISHARES TR CORE MSCI EURO
IEUS	ISHARES TR DEVSMCP EXNA ETF
IEV	ISHARES TR EUROPE ETF
IEX	IDEX CORP COM
IEZ	ISHARES TR US OIL EQ&SV ETF
IFEU	ISHARES TR EUR DEV RE ETF
IFF	INTERNATIONAL FLAVORS&FRAGRANC COM
IFGL	ISHARES TR INTL DEV RE ETF
IFIX	Xtrackers Barclays International Corporate Bond Hedged ETF
IFLY	ETF MANAGERS TR DRONE ECONMY STG
IFMK	IFRESH INC COM
IFN	INDIA FD INC COM
IFON	COOL HLDGS INC COM
IFRA	iShares U.S. Infrastructure ETF
IFRX	INFLARX NV COM
IFV	FIRST TR EXCHANGE TRADED FD VI DORSEY WRIGHT

IG	PRINCIPAL EXCHANGE TRADED FDS PRNC INVT GRAD
IGA	VOYA GLBL ADV & PREM OPP FD COM
IGC	INDIA GLOBALIZATION CAP INC COM NEW
IGD	VOYA GLBL EQTY DIV & PREM OPP COM
IGE	iShares North American Natural Resources ETF
IGEB	iShares Edge Investment Grade Enhanced Bond ETF
IGEM	VANECK VECTORS ETF TR EM INVT GRD PL
IGF	ISHARES TR GLB INFRASTR ETF
IGHG	ProShares Investment Grade-Interest Rate Hedged
IGI	WESTERN ASSET INVT GRADE DEFIN COM
IGIH	Xtrackers Investment Grade Bond - Interest Rate Hedged ETF
IGLD	INTERNET GOLD-GOLDEN LINES LTD ORD
IGM	ISHARES TR N AMER TECH ETF
IGN	ISHARES TR NA TEC MULTM ETF
IGOV	ISHARES TR INTL TREA BD ETF
IGR	CBRE CLARION GLOBAL REAL ESTAT COM
IGRO	iShares International Dividend Growth ETF
IGT	INTERNATIONAL GAME TECHNOLOGY SHS USD
IGV	iShares North American Tech-Software ETF
IGVT	Xtrackers Barclays International Treasury Bond Hedged ETF
IHC	INDEPENDENCE HLDG CO NEW COM NEW
IHD	VOYA EMERGING MKTS HIGH DIVID COM
IHDG	WISDOMTREE TR ITL HDG QTLY DIV
IHE	ISHARES TR U.S. PHARMA ETF
IHF	ISHARES TR US HLTHCR PR ETF
IHG	INTERCONTINENTAL HOTELS GROUP SPONSORED ADR
IHI	ISHARES TR U.S. MED DVC ETF
IHIT	INVESCO HIGH INCOME 2023 TARGE COM
IHT	INNSUITES HOSPITALITY TR SH BEN INT
IHTA	INVESCO HIGH INCOME 2024 TARGE COM
IHY	VANECK VECTORS ETF TR INTL HIGH YIELD
IID	VOYA INTL HIGH DIVID EQTY INC COM
IIF	MORGAN STANLEY INDIA INVS FD COM
III	INFORMATION SERVICES GROUP INC COM
IIIN	INSTEEL INDUSTRIES INC COM
IIIV	I3 VERTICALS INC COM CL A
IIJI	INTERNET INITIATIVE JAPAN INC SPONSORED ADR
IIM	INVESCO VALUE MUN INCOME TR COM
IIN	INTRICON CORP COM

IIPR	INNOVATIVE INDL PPTYS INC COM
IIPR-A	INNOVATIVE INDL PPTYS INC 9% CUM PFD SER A
IIVI	II VI INC COM
IJH	ISHARES TR CORE S&P MCP ETF
IJJ	ISHARES TR S&P MC 400VL ETF
IJK	ISHARES TR S&P MC 400GR ETF
IJR	ISHARES TR CORE S&P SCP ETF
IJS	ISHARES TR SP SMCP600VL ETF
IJT	ISHARES TR S&P SML 600 GWT
IKNX	IKONICS CORP COM
ILF	ISHARES TR LATN AMER 40 ETF
ILG	ILG INC COM
ILMN	ILLUMINA INC COM
ILPT	INDUSTRIAL LOGISTICS PPTYS TR COM SHS BEN INT
ILTB	ISHARES TR CORE LT USDB ETF
IMAX	IMAX CORP COM
IMDZ	IMMUNE DESIGN CORP COM
IMGN	IMMUNOGEN INC COM
IMH	IMPAC MTG HLDGS INC COM NEW
IMI	INTERMOLECULAR INC COM
IMKTA	INGLES MKTS INC CL A
IMLP	BARCLAYS BK PLC IPATH S&P MLP
IMMP	IMMUTEP LTD SPONSORED ADR
IMMR	IMMERSION CORP COM
IMMU	IMMUNOMEDICS INC COM
IMMY	IMPRIMIS PHARMACEUTICALS INC COM NEW
IMNP	IMMUNE PHARMACEUTICALS INC COM NEW
IMO	IMPERIAL OIL LTD COM NEW
IMOM	Alpha Architect International Quantitative Momentum ETF
IMOS	CHIPMOS TECHNOLOGIES INC SPONSORED ADR
IMPV	IMPERVA INC COM
IMRN	IMMURON LTD SPONSORED ADR
IMRNW	IMMURON LTD WT EXP 051222
IMTB	ISHARES TR CR 5 10 YR ETF
IMTE	INTEGRATED MEDIA TECHNOLOGY LTD SHS
IMTM	ISHARES TR INTL MOMENTUM FT
IMUC	IMMUNOCELLULAR THERAPEUTICS COM NEW
IMUC+	IMMUNOCELLULAR THERAPEUTICS WT EXP 081221
IMV	IMV INC COM

INAP	INTERNAP CORP COM PAR
INB	COHEN & STEERS GLOBAL INC BLDR COM
INBK	FIRST INTERNET BANCORP COM
INBKL	FIRST INTERNET BANCORP SB NT FXD FLG MA
INCO	COLUMBIA ETF TR II INDIA CONSMR ETF
INCY	INCYTE CORP COM
INDA	iShares MSCI India ETF
INDB	INDEPENDENT BANK CORP MASS COM
INDF	iShares Edge MSCI Multifactor Industrials ETF
INDL	DIREXION SHS ETF TR DAILY IND BUL 3X
INDS	PACER FDS TR BNCHMRK INDSTR
INDU	INDUSTREA ACQUISITION CORP CL A
INDUU	INDUSTREA ACQUISITION CORP UNIT EXP 072124
INDUW	INDUSTREA ACQUISITION CORP WT EXP 080124
INDY	ISHARES TR INDIA 50 ETF
INF	BROOKFIELD GLOBL LISTED INFRAS COM SHS
INFI	INFINITY PHARMACEUTICALS INC COM
INFN	INFINERA CORPORATION COM
INFO	IHS MARKIT LTD SHS
INFR	LEGG MASON ETF INVESTMENT TR GLOBAL INFSTRU
INFU	INFUSYSTEM HLDGS INC COM
INFY	INFOSYS LTD SPONSORED ADR
ING	ING GROEP N V SPONSORED ADR
INGN	INOGEN INC COM
INGR	INGREDION INC COM
INKM	SSGA ACTIVE ETF TR INCOM ALLO ETF
INN	SUMMIT HOTEL PPTYS INC COM
INN-D	SUMMIT HOTEL PPTYS INC RED PFD SER D
INN-E	SUMMIT HOTEL PPTYS INC 6.250% CUM PFD E
INNT	INNOVATE BIOPHARMACEUTICLS INC COM PAR
INO	INOVIO PHARMACEUTICALS INC COM NEW
INOD	INNODATA INC COM NEW
INOV	INOVALON HLDGS INC COM CL A
INPX	INPIXON COM NEW
INR	MORGAN STANLEY RUPEE/USD ETN
INS	INTELLIGENT SYS CORP NEW COM
INSE	INSPIRED ENTMT INC COM
INSG	INSEEGO CORP COM
INSI	INSIGHT SELECT INCOME FD COM

INSM	INSMED INC COM PAR \$.01
INSP	INSPIRE MED SYS INC COM
INST	INSTRUCTURE INC COM
INSW	INTERNATIONAL SEAWAYS INC COM
INSW-A	INTERNATIONAL SEAWAYS INC 8.50% SN NT 23
INSY	INSYS THERAPEUTICS INC NEW COM NEW
INT	WORLD FUEL SVCS CORP COM
INTC	INTEL CORP COM
INTF	ISHARES TR MULTIFACTOR INTL
INTG	INTERGROUP CORP COM
INTL	INTL FCSTONE INC COM
INTT	INTEST CORP COM
INTU	INTUIT COM
INTX	INTERSECTIONS INC COM
INUV	INUVO INC COM NEW
INVA	INNOVIVA INC COM
INVE	IDENTIV INC COM NEW
INVH	INVITATION HOMES INC COM
INWK	INNERWORKINGS INC COM
INXN	INTERXION HOLDING N.V SHS
INXX	COLUMBIA ETF TR II INDIA INFRSR ETF
IO	ION GEOPHYSICAL CORP COM NEW
IONS	IONIS PHARMACEUTICALS INC COM
IOO	ISHARES TR GLOBAL 100 ETF
IOR	INCOME OPPORTUNITY RLTY INVS COM
IOSP	INNOSPEC INC COM
IOTS	ADESTO TECHNOLOGIES CORP COM
IOVA	IOVANCE BIOTHERAPEUTICS INC COM
IP	INTL PAPER CO COM
IPAC	ISHARES TR CORE MSCI PAC
IPAR	INTER PARFUMS INC COM
IPAS	IPASS INC COM
IPAY	ETF MANAGERS TR PRIME MOBILE PAY
IPB	INDEXPLUS TR SER 03-1 TR
IPCC	INFINITY PPTY & CAS CORP COM
IPCI	INTELLIPHARMACEUTICS INTL INC COM
IPDN	PROFESSIONAL DIVERSITY NET INC COM NEW
IPE	SPDR SERIES TRUST BLOMBRG BRC TIPS
IPFF	iShares International Preferred Stock ETF

IPG	INTERPUBLIC GROUP COS INC COM
IPGP	IPG PHOTONICS CORP COM
IPHI	INPHI CORP COM
IPHS	INNOPHOS HOLDINGS INC COM
IPI	INTREPID POTASH INC COM
IPIC	IPIC ENTMT INC COM CL A
IPKW	INVESCO EXCHNG TRADED FD TR II INTL BUYBACK
IPL-D	INTERSTATE PWR & LT CO PERP PFD SER D
IPO	RENAISSANCE CAP GREENWICH FDS IPO ETF
IPOA	SOCIAL CAP HEDOSOPHIA HLDGS CO CL A
IPOA+	SOCIAL CAP HEDOSOPHIA HLDGS CO WT EXP 091422
IPOA=	SOCIAL CAP HEDOSOPHIA HLDGS CO UNIT EX
IPOS	RENAISSANCE CAP GREENWICH FDS INTNTL IPO ETF
IPWR	IDEAL PWR INC COM
IQ	IQIYI INC SPONSORED ADS
IQDE	FLEXSHARES TR INTL QLTDV DEF
IQDF	FLEXSHARES TR INTL QLTDV IDX
IQDG	WisdomTree International Quality Dividend Growth Fund
IQDY	FLEXSHARES TR INT QLTDVDYNAM
IQI	INVESCO QUALITY MUNI INC TRST COM
IQLT	ISHARES TR INTL QLTY FACTOR
IQV	IQVIA HLDGS INC COM
IR	INGERSOLL-RAND PLC SHS
IRBT	IROBOT CORP COM
IRCP	IRSA PROPIEADAES COMERCIALES S SPONSORED ADR
IRDM	IRIDIUM COMMUNICATIONS INC COM
IRDMB	IRIDIUM COMMUNICATIONS INC PERP PFD CNV B
IRET	INVESTORS REAL ESTATE TR SH BEN INT
IRET-C	INVESTORS REAL ESTATE TR 6.625% CUM PFD C
IRIX	IRIDEX CORP COM
IRL	NEW IRELAND FUND INC COM
IRM	IRON MTN INC NEW COM
IRMD	IRADIMED CORP COM
IROQ	IF BANCORP INC COM
IRR	VOYA RISK MANAGED NAT RES FD COM
IRS	IRSA INVERSIONES Y REP S A GLOBL DEP RCPT
IRT	INDEPENDENCE RLTY TR INC COM
IRTC	IRHYTHM TECHNOLOGIES INC COM
IRWD	IRONWOOD PHARMACEUTICALS INC COM CL A

ISBC	INVESTORS BANCORP INC NEW COM
ISCA	INTERNATIONAL SPEEDWAY CORP CL A
ISCF	ISHARES TR MLTFCTR INTL SML
ISD	PGIM SHORT DURATION HIGH YIELD COM
ISDR	ISSUER DIRECT CORPORATION COM NEW
ISF	ING GROEP N V PERP HYB6.375%
ISG	ING GROEP N V PERP DBT 6.125
ISHG	ISHARES TR 3YRTB ETF
ISIG	INSIGNIA SYS INC COM
ISMD	NORTHERN LTS FD TR IV INSPIRE SMAL ETF
ISNS	IMAGE SENSING SYS INC COM
ISR	ISORAY INC COM
ISRA	VANECK VECTORS ETF TR ISRAEL ETF
ISRG	INTUITIVE SURGICAL INC COM NEW
ISRL	ISRAMCO INC COM NEW
ISSC	INNOVATIVE SOLUTIONS & SUPPORT COM
ISTB	ISHARES TR CORE 1 5 YR USD
ISTR	INVESTAR HLDG CORP COM
ISZE	ISHARES TR INTL SIZE FACTOR
IT	GARTNER INC COM
ITA	iShares U.S. Aerospace & Defense ETF
ITB	iShares U.S. Home Construction ETF
ITCB	ITAU CORPBANCA SPONSORED ADR
ITCI	INTRA CELLULAR THERAPIES INC COM
ITE	SPDR SERIES TRUST BLMBRG BRC INTRM
ITEQ	ETF MANAGERS TR BLUESTAR ISRAEL
ITG	INVESTMENT TECHNOLOGY GRP NEW COM
ITGR	INTEGER HLDGS CORP COM
ITI	ITERIS INC COM
ITIC	INVESTORS TITLE CO COM
ITM	VANECK VECTORS ETF TR AMT FREE INT ETF
ITOT	ISHARES TR CORE S&P TTL STK
ITRI	ITRON INC COM
ITRM	ITERUM THERAPEUTICS PLC SHS
ITRN	ITURAN LOCATION AND CONTROL SHS
ITT	ITT INC COM
ITUB	ITAU UNIBANCO HLDG SA SPON ADR REP PFD
ITUS	ITUS CORP COM NEW
ITW	ILLINOIS TOOL WKS INC COM

IUSB	ISHARES TR CORE TOTAL USD
IUSG	ISHARES TR CORE S&P US GWT
IUSV	ISHARES TR CORE S&P US VLU
IVAC	INTEVAC INC COM
IVAL	Alpha Architect International Quantitative Value ETF
IVC	INVACARE CORP COM
IVE	ISHARES TR S&P 500 VAL ETF
IVH	IVY HIGH INC OPPORTUNITIES FD COM
IVLU	ISHARES TR INTL VALUE FACTR
IVOG	VANGUARD ADMIRAL FDS INC MIDCP 400 GRTH
IVOO	VANGUARD ADMIRAL FDS INC MIDCP 400 IDX
IVOV	VANGUARD ADMIRAL FDS INC MIDCP 400 VAL
IVR	INVESCO MORTGAGE CAPITAL INC COM
IVR-A	INVESCO MORTGAGE CAPITAL INC PFD SER A 7.75%
IVR-B	INVESCO MORTGAGE CAPITAL INC PFD-B FX/FLT
IVR-C	INVESCO MORTGAGE CAPITAL INC 7.5% PFD SER C
IVTY	INVUITY INC COM NEW
IVV	ISHARES TR CORE S&P500 ETF
IVW	ISHARES TR S&P 500 GRWT ETF
IVZ	INVESCO LTD SHS
IWB	ISHARES TR RUS 1000 ETF
IWC	ISHARES TR MICRO-CAP ETF
IWD	ISHARES TR RUS 1000 VAL ETF
IWF	ISHARES TR RUS 1000 GRW ETF
IWL	ISHARES TR RUS TOP 200 ETF
IWM	ISHARES TR RUSSELL 2000 ETF
IWN	ISHARES TR RUS 2000 VAL ETF
IWO	ISHARES TR RUS 2000 GRW ETF
IWP	ISHARES TR RUS MD CP GR ETF
IWR	ISHARES TR RUS MID CAP ETF
IWS	ISHARES TR RUS MDCP VAL ETF
IWV	ISHARES TR RUSSELL 3000 ETF
IWX	ISHARES TR RUS TP200 VL ETF
IWY	ISHARES TR RUS TP200 GR ETF
IX	ORIX CORP SPONSORED ADR
IXC	ISHARES TR GLOBAL ENERG ETF
IXG	ISHARES TR GLOBAL FINLS ETF
IXJ	ISHARES TR GLOB HLTHCRE ETF
IXN	ISHARES TR GLOBAL TECH ETF



IXP	ISHARES TR GLOB TELECOM ETF
IXUS	ISHARES TR CORE MSCI TOTAL
IYC	ISHARES TR U.S. CNSM SV ETF
IYE	ISHARES TR U.S. ENERGY ETF
IYF	ISHARES TR U.S. FINLS ETF
IYG	ISHARES TR U.S. FIN SVC ETF
IYH	ISHARES TR US HLTHCARE ETF
IYJ	iShares U.S. Industrials ETF
IYK	ISHARES TR U.S. CNSM GD ETF
IYLD	iShares Morningstar Multi-Asset Income ETF
IYM	ISHARES TR U.S. BAS MTL ETF
IYR	ISHARES TR U.S. REAL ES ETF
IYT	iShares Transportation Average ETF
IYW	ISHARES TR U.S. TECH ETF
IYY	ISHARES TR DOW JONES US ETF
IYZ	iShares U.S. Telecommunications ETF
IZEA	IZEA INC COM
IZRL	ARK Israel Innovative Technology ETF
JACK	JACK IN THE BOX INC COM
JAG	JAGGED PEAK ENERGY INC COM
JAGX	JAGUAR HEALTH INC COM NEW
JAKK	JAKKS PAC INC COM
JASN	JASON INDS INC COM
JASNW	JASON INDS INC WT EXP 063019
JASO	JA SOLAR HOLDINGS CO LTD SPON ADR REP5ORD
JAX	J ALEXANDERS HLDGS INC COM
JAZZ	JAZZ PHARMACEUTICALS PLC SHS USD
JBGS	JBG SMITH PPTYS COM
JBHT	HUNT J B TRANS SVCS INC COM
JBK	CORPORATE BACKED TR CTFS 04-6 A1 3.50
JBL	JABIL INC COM
JBLU	JETBLUE AIRWAYS CORP COM
JBN	CORPORATE BACKED CALL TR CTFS CORTS A-1 7%
JBR	CORPORATE BACKED CALL TR CTFS JCP 06-1CTF A1
JBRI	James Biblically Responsible Investment ETF
JBSS	SANFILIPPO JOHN B & SON INC COM
JBTE	JOHN BEAN TECHNOLOGIES CORP COM
JCAP	JERNIGAN CAP INC COM
JCAP-B	JERNIGAN CAP INC 7.0% CUM PFD B

JCE	NUVEEN CORE EQUITY ALPHA FUND COM
JCI	JOHNSON CTLS INTL PLC SHS
JCO	NUVEEN CR OPPORTUNITIES 2022 COM
JCOM	J2 GLOBAL INC COM
JCP	PENNEY J C INC COM
JCS	COMMUNICATIONS SYS INC COM
JCTCF	JEWETT CAMERON TRADING LTD COM NEW
JD	JD COM INC SPON ADR CL A
JDD	NUVEEN DIVERSIFIED DIV INCM FD COM
JDIV	JP MORGAN EXCHANGE TRADED FD US DIVIDEND
JDST	DIREXION SHS ETF TR DLY JR GOLD 3X
JE	JUST ENERGY GROUP INC COM
JE-A	JUST ENERGY GROUP INC RED PFD SER A
JEC	JACOBS ENGR GROUP INC DEL COM
JEF	JEFFERIES FINL GROUP INC COM
JELD	JELD-WEN HLDG INC COM
JEMD	NUVEEN EMERGING MKTS DEBT 2022 COM
JEQ	ABERDEEN JAPAN EQUITY FD INC COM
JETS	ETF SER SOLUTIONS US GLB JETS
JFR	NUVEEN FLOATING RATE INCOME FD COM
JGH	NUVEEN GLOBAL HIGH INCOME FD SHS
JHA	NUVEEN HGH INC DEC18 TRGT TR COM
JHB	NUVEEN HIGH INCOME NOVEMBER 20 COM
JHD	NUVEEN HIGH INCOME DECMBR 2019 COM
JHDG	WISDOMTREE TR JAP HDG QTLY DIV
JHG	JANUS HENDERSON GROUP PLC ORD SHS
JHI	HANCOCK JOHN INVS TR COM
JHMA	JOHN HANCOCK EXCHANGE TRADED F MLTFACTR MATLS
JHMC	JOHN HANCOCK EXCHANGE TRADED F MULTIFACTOR CO
JHMD	JOHN HANCOCK EXCHANGE TRADED F MULTI INTL ETF
JHME	JOHN HANCOCK EXCHANGE TRADED F MLTFACTOR ENRG
JHMF	JOHN HANCOCK EXCHANGE TRADED F MULTIFACTOR FI
JHMH	JOHN HANCOCK EXCHANGE TRADED F MULTIFACTOR HE
JHMI	JOHN HANCOCK EXCHANGE TRADED F MLTFACTR INDLS
JHML	JOHN HANCOCK EXCHANGE TRADED F MLTFACTR LRG CAP
JHMM	JOHN HANCOCK EXCHANGE TRADED F MULTIFACTOR MI
JHMS	JOHN HANCOCK EXCHANGE TRADED F MLTFACTR CONSMR
JHMT	JOHN HANCOCK EXCHANGE TRADED F MULTIFACTOR TE
JHMU	JOHN HANCOCK EXCHANGE TRADED F MLTFACTR UTILS

JHS	HANCOCK JOHN INCOME SECS TR COM
JHSC	JOHN HANCOCK EXCHANGE TRADED F MULTIFACTR SML
JHX	JAMES HARDIE INDS PLC SPONSORED ADR
JHY	NUVEEN HIGH INCOME 2020 TARGET COM
JILL	J JILL INC COM
JJAB	BARCLAYS BK PLC IPATH B AGRICULTR
JJCB	BARCLAYS BK PLC IPATH B COPPER
JJEB	BARCLAYS BK PLC IPATH B ENERGY
JJGB	BARCLAYS BK PLC IPATH B GRAINS
JJMB	BARCLAYS BK PLC IPATH B INDL MTL
JJPB	BARCLAYS BK PLC IPATH B PRECIOUS
JJSB	BARCLAYS BK PLC IPATH B SFTS SUB
JJSF	J & J SNACK FOODS CORP COM
JJTB	BARCLAYS BK PLC IPATH B TIN SUB
JJUB	BARCLAYS BK PLC IPATH B ALUMI
JKD	ISHARES TR MRNGSTR LG-CP ET
JKE	ISHARES TR MRNGSTR LG-CP GR
JKF	ISHARES TR MRNGSTR LG-CP VL
JKG	ISHARES TR MRGSTR MD CP ETF
JKH	ISHARES TR MRGSTR MD CP GRW
JKHY	HENRY JACK & ASSOC INC COM
JKI	ISHARES TR MRGSTR MD CP VAL
JKJ	ISHARES TR MRGSTR SM CP ETF
JKK	ISHARES TR MRGSTR SM CP GR
JKL	ISHARES TR MRNING SM CP ETF
JKS	JINKOSOLAR HLDG CO LTD SPONSORED ADR
JLL	JONES LANG LASALLE INC COM
JLS	NUVEEN MTG OPPORTUNITY TERM FD COM
JMBA	JAMBA INC COM NEW
JMEI	JUMEI INTL HLDG LTD SPONSORED ADR
JMF	NUVEEN ENERGY MLP TOTL RTRNFD COM
JMIN	JP MORGAN EXCHANGE TRADED FD US MINMUM VOLT
JMLP	NUVEEN ALL CAP ENE MLP OPPO FD COM
JMM	NUVEEN MULTI MKT INCOME FD COM
JMOM	JP MORGAN EXCHANGE TRADED FD US MOMENTUM
JMP	JMP GROUP LLC COM
JMPB	JMP GROUP LLC SR NT 23
JMPD	JMP GROUP INC 7.25% SR NT 27
JMT	NUVEEN MTG OPPTY TERM FD 2 COM

JMU	JMU LTD SPONSORED ADR
JNCE	JOUNCE THERAPEUTICS INC COM
JNJ	JOHNSON & JOHNSON COM
JNK	SPDR SERIES TRUST BLOOMBERG BRCLYS
JNP	JUNIPER PHARMACEUTICALS INC COM
JNPR	JUNIPER NETWORKS INC COM
JNUG	DIREXION SHS ETF TR DAILY JR BULL 3X
JOB	GEE GROUP INC COM
JOBS	51JOB INC SP ADR REP COM
JOE	ST JOE CO COM
JOF	JAPAN SMALLER CAPTLZTN FD INC COM
JONE	JONES ENERGY INC COM CL A
JOUT	JOHNSON OUTDOORS INC CL A
JP	JUPAI HLDGS LTD ADS
JPC	NUVEEN PFD & INCM OPPORTNYS FD COM
JPED	JP MORGAN EXCHANGE TRADED FD EVENT DRIVEN
JPEH	JP MORGAN EXCHANGE TRADED FD DIVRSFD RT EUR
JPEM	JP MORGAN EXCHANGE TRADED FD DIV RTN EM EQT
JPEU	JP MORGAN EXCHANGE TRADED FD DIV RTN EU ETF
JPGB	JPMorgan Global Bond Opportunities ETF
JPGE	JP MORGAN EXCHANGE TRADED FD DIV RTN GLB EQ
JPHF	JP MORGAN EXCHANGE TRADED FD DIVERSIFIED ET
JPHY	JPMorgan Disciplined High Yield ETF
JPI	NUVEEN PFD & INCOME TERM FD COM
JPIH	JP MORGAN EXCHANGE TRADED FD DIVRSFD RT INT
JPIN	JP MORGAN EXCHANGE TRADED FD DIV RTN INT EQ
JPLS	JP MORGAN EXCHANGE TRADED FD LONG SHORT ETF
JPM	JPMORGAN CHASE & CO COM
JPM+	JPMORGAN CHASE & CO WT EXP 102818
JPM-A	JPMORGAN CHASE & CO DEP 1/400 PFD P
JPMB	JP MORGAN EXCHANGE TRADED FD USD EMRNG MKT
JPM-B	JPMORGAN CHASE & CO DEP SHS RP PFD T
JPME	JP MORGAN EXCHANGE TRADED FD DIVERSFED RTRN
JPM-E	JPMORGAN CHASE & CO DEP SHS PFD W
JPMF	JP MORGAN EXCHANGE TRADED FD MANAGED FUTURE
JPM-F	JPMORGAN CHASE & CO DEP SHS 1/400
JPM-G	JPMORGAN CHASE & CO DEP SHS PFD
JPM-H	JPMORGAN CHASE & CO DEP SHS REP PFD
JPMV	ISHARES TR MIN VOL JAPN ETF

JPN	DBX ETF TR XTRACK JAPAN JPX
JPNL	DIREXION SHS ETF TR DLY JPN BULL 3X
JPS	NUVEEN PFD & INCM SECURTIES FD COM
JPSE	JP MORGAN EXCHANGE TRADED FD DIVERSFD EQT ETF
JPST	JPMorgan Ultra-Short Income ETF
JPT	NUVEEN PFD & INCOME 2022 TERM COM
JPUS	JP MORGAN EXCHANGE TRADED FD JPMORGAN DIVER
JPXN	ISHARES TR JPX NIKKEI 400
JQC	NUVEEN CR STRATEGIES INCM FD COM SHS
JQUA	JP MORGAN EXCHANGE TRADED FD US QUALTY FCTR
JRI	NUVEEN REAL ASSET INM AND GWTH COM
JRJC	CHINA FIN ONLINE CO LTD SPONSORED ADR
JRO	NUVEEN FLTNG RTE INCM OPP FD COM SHS
JRS	NUVEEN REAL ESTATE INCOME FD COM
JRSH	JERASH HLDGS US INC COM
JRVR	JAMES RIV GROUP LTD COM
JSD	NUVEEN SHT DUR CR OPP FD COM
JSM	NAVIENT CORPORATION SR NT 6% 121543
JSMD	JANUS DETROIT STR TR HENDERSN SML ETF
JSML	JANUS DETROIT STR TR HENDERSN CAP ETF
JSYN	JENSYN ACQUISITION CORP COM
JSYNR	JENSYN ACQUISITION CORP RT
JSYNU	JENSYN ACQUISITION CORP UT 1 COM 1 WT 1
JSYNW	JENSYN ACQUISITION CORP WT EXP 030721
JT	JIANPU TECHNOLOGY INC ADR
JTA	NUVEEN TX ADV TOTAL RET STRGY COM
JTD	NUVEEN TAX ADVANTAGED DIV GRWT COM
JTPY	JETPAY CORP COM
JUST	GOLDMAN SACHS ETF TR JUST US LRG CP
JVA	COFFEE HLDGS INC COM
JVAL	JP MORGAN EXCHANGE TRADED FD US VALUE FACTR
JW.A	WILEY JOHN & SONS INC CL A
JW.B	WILEY JOHN & SONS INC CL B
JWN	NORDSTROM INC COM
JXI	ISHARES TR GLOB UTILITS ETF
JYNT	JOINT CORP COM
K	KELLOGG CO COM
KAAC	KAYNE ANDERSON ACQUISITION COM CL A
KAACU	KAYNE ANDERSON ACQUISITION UNIT EXP063022

KAACW	KAYNE ANDERSON ACQUISITION WT EXP 063022
KAI	KADANT INC COM
KALA	KALA PHARMACEUTICALS INC COM
KALU	KAISER ALUMINUM CORP COM PAR \$0.01
KALV	KALVISTA PHARMACEUTICALS INC COM
KAMN	KAMAN CORP COM
KANG	IKANG HEALTHCARE GROUP INC SPONSORED ADR
KAP	KCAP FINL INC SR NT 19
KAR	KAR AUCTION SVCS INC COM
KARS	KRANESHARES TR ELEC VEH FUTUR
KB	KB FINANCIAL GROUP INC SPONSORED ADR
KBA	KRANESHARES TR BOSERA MSCI CH
KBAL	KIMBALL INTL INC CL B
KBE	SPDR SERIES TRUST S&P BK ETF
KBH	KB HOME COM
KBLM	KBL MERGER CORP IV COM
KBLMR	KBL MERGER CORP IV RT
KBLMU	KBL MERGER CORP IV UNIT EX 011524
KBLMW	KBL MERGER CORP IV WT EXP 011524
KBR	KBR INC COM
KBSF	KBS FASHION GROUP LTD COM NEW
KBWB	INVESCO EXCHNG TRADED FD TR II KBW BK
KBWD	INVESCO EXCHNG TRADED FD TR II KBW HIG DV YLD
KBWP	INVESCO EXCHNG TRADED FD TR II KBW PPTY CASUT
KBWR	INVESCO EXCHNG TRADED FD TR II KBW REGL BKG
KBWY	INVESCO EXCHNG TRADED FD TR II KBW PREM YIELD
KCAP	KCAP FINL INC COM
KCAPL	KCAP FINL INC 6.125% NT 2022
KCE	SPDR SERIES TRUST S&P CAP MKTS
KCNY	KRANESHARES TR CHIN COM PAPER
KDMN	KADMON HLDGS INC COM
KE	KIMBALL ELECTRONICS INC COM
KED	KAYNE ANDERSON ENERGY DEV CO COM
KEG	KEY ENERGY SVCS INC DEL COM
KELYA	KELLY SVCS INC CL A
KELYB	KELLY SVCS INC CL B
KEM	KEMET CORP COM NEW
KEMP	KraneShares FTSE Emerging Markets Plus ETF
KEMQ	KRANESHARES TR EMRNG MKT CONS

KEN	KENON HLDGS LTD SHS
KEP	KOREA ELECTRIC PWR SPONSORED ADR
KEQU	KEWAUNEE SCIENTIFIC CORP COM
KERX	KERYX BIOPHARMACEUTICALS INC COM
KEX	KIRBY CORP COM
KEY	KEYCORP NEW COM
KEY-I	KEYCORP NEW DEP SHS 1/40 E
KEYS	KEYSIGHT TECHNOLOGIES INC COM
KEYW	KEYW HLDG CORP COM
KF	KOREA FD COM NEW
KFFB	KENTUCKY FIRST FED BANCORP COM
KFRC	KFORCE INC COM
KFS	KINGSWAY FINL SVCS INC COM NEW
KFY	KORN FERRY INTL COM NEW
KFYP	KRANESHARES TR ZACKS NEW CHINA
KGC	KINROSS GOLD CORP COM NO PAR
KGJI	KINGOLD JEWELRY INC COM NEW
KGRN	KRANESHARES TR MSCI CHINA ENV
KHC	KRAFT HEINZ CO COM
KIDS	ORTHOPEDIATRICS CORP COM
KIE	SPDR SERIES TRUST S&P INS ETF
KIM	KIMCO RLTY CORP COM
KIM-I	KIMCO RLTY CORP DEP 1/1000 PFD I
KIM-J	KIMCO RLTY CORP DEP 1/1000 PFD J
KIM-K	KIMCO RLTY CORP DEP1/1000PFD K%
KIM-L	KIMCO RLTY CORP 5.125% DEP PFD L
KIM-M	KIMCO RLTY CORP 5.25% DEP SHS M
KIN	KINDRED BIOSCIENCES INC COM
KINS	KINGSTONE COS INC COM
KIO	KKR INCOME OPPORTUNITIES FD COM
KIQ	KELSO TECHNOLOGIES INC COM NEW
KIRK	KIRKLANDS INC COM
KKR	KKR & CO L P DEL COM UNITS
KKR-A	KKR & CO L P DEL PFD UNIT SER A
KKR-B	KKR & CO L P DEL PFD UT SER B
KL	KIRKLAND LAKE GOLD LTD COM
KLAC	KLA-TENCOR CORP COM
KLDW	EXCHANGE LISTED FDS TR KNLDG LD WD ETF
KLDX	KLONDEX MNS LTD COM

KLIC	KULICKE & SOFFA INDS INC COM
KLXI	KLX INC COM
KMB	KIMBERLY CLARK CORP COM
KMDA	KAMADA LTD SHS
KMF	KAYNE ANDERSON MDSTM ENERGY FD COM
KMG	KMG CHEMICALS INC COM
KMI	KINDER MORGAN INC DEL COM
KMI-A	KINDER MORGAN INC DEL PFD SER A
KMM	DEUTSCHE MULTI-MKT INCOME TR SHS
KMPA	KEMPER CORP DEL SUB NT 54
KMPH	KEMPHARM INC COM
KMPR	KEMPER CORP DEL COM
KMT	KENNAMETAL INC COM
KMX	CARMAX INC COM
KN	KNOWLES CORP COM
KND	KINDRED HEALTHCARE INC COM
KNDI	KANDI TECHNOLOGIES GROUP INC COM
KNG	Cboe Vest S&P 500 Dividend Aristocrats Target Income ETF
KNL	KNOLL INC COM NEW
KNOP	KNOT OFFSHORE PARTNERS LP COM UNITS
KNOW	DIREXION SHS ETF TR ALL CP INSIDER
KNSA	KINIKSA PHARMACEUTICALS LTD COM CL A
KNSL	KINSALE CAP GROUP INC COM
KNX	KNIGHT SWIFT TRANSN HLDGS INC CL A
KO	COCA COLA CO COM
KODK	EASTMAN KODAK CO COM NEW
KODK+	EASTMAN KODAK CO WT EXP 090318
KODK+A	EASTMAN KODAK CO WT EXP 090318
KOF	COCA COLA FEMSA S A B DE C V SPON ADR REP L
KOIN	EXCHANGE TRADED CONCEPTS TR INNOVATION SHS
KOL	VANECK VECTORS ETF TR COAL ETF
KOLD	PROSHARES TR II ULSHT BLOOMB GAS
KONA	KONA GRILL INC COM
KONE	KINGTONE WIRELESSINFO SOL HLDG SPONSORED ADR NE
KOOL	CESCA THERAPEUTICS INC COM NEW
KOP	KOPPERS HOLDINGS INC COM
KOPN	KOPIN CORP COM
KOR	ADVISORSHARES TR KIM KOREA EQT
KORP	AMERICAN CENTY ETF TR DIVERSIFID CRP



KORS	MICHAEL KORS HLDGS LTD SHS
KORU	DIREXION SHS ETF TR DRX DLYSOKOR3X
KOS	KOSMOS ENERGY LTD SHS
KOSS	KOSS CORP COM
KPTI	KARYOPHARM THERAPEUTICS INC COM
KR	KROGER CO COM
KRA	KRATON CORPORATION COM
KRC	KILROY RLTY CORP COM
KRE	SPDR SERIES TRUST S&P REGL BKG
KREF	KKR REAL ESTATE FIN TR INC COM
KRG	KITE RLTY GROUP TR COM NEW
KRMA	GLOBAL X FDS CONSCIOUS COS
KRNT	KORNIT DIGITAL LTD SHS
KRNY	KEARNY FINL CORP MD COM
KRO	KRONOS WORLDWIDE INC COM
KRP	KIMBELL RTY PARTNERS LP UNIT
KRYS	KRYSTAL BIOTECH INC COM
KS	KAPSTONE PAPER & PACKAGING CRP COM
KSA	ISHARES TR MSCI SAUDI ARBIA
KSM	DEUTSCHE STRATEGIC MUN INCOME COM
KSS	KOHL'S CORP COM
KST	DEUTSCHE STRATEGIC INCOME TR SHS
KSU	KANSAS CITY SOUTHERN COM NEW
KSU-	KANSAS CITY SOUTHERN PFD 4%
KT	KT CORP SPONSORED ADR
KTCC	KEY TRONIC CORP COM
KTF	DEUTSCHE MUN INCOME COM
KTH	CORTS TR PECO ENERGY CAP TRIII CORTS 8.00%
KTN	CREDIT-ENHANCED CORTS TR AON CORTS 8.205%
KTOS	KRATOS DEFENSE & SEC SOLUTIONS COM NEW
KTOV	KITOV PHARMA LTD SPONSORED ADR
KTOVW	KITOV PHARMA LTD WT EXP 112520
KTP	CORTS TR J C PENNEY CORTS 7.625%
KTWO	K2M GROUP HLDGS INC COM
KURA	KURA ONCOLOGY INC COM
KURE	KRANESHARES TR MSCI ALL CHINA
KVHI	KVH INDS INC COM
KW	KENNEDY-WILSON HLDGS INC COM
KWEB	KRANESHARES TR CSI CHI INTERNET

KWR	QUAKER CHEM CORP COM
KXI	ISHARES TR GLB CNSM STP ETF
KYE	KAYNE ANDERSON ENRGY TTL RT FD COM
KYN	KAYNE ANDERSON MLP INVT CO COM
KYN-F	KAYNE ANDERSON MLP INVT CO PFD 3.50 SER F
KYO	KYOCERA CORP ADR
KZIA	KAZIA THERAPEUTICS LTD SPONSORED ADR
KZR	KEZAR LIFE SCIENCES INC COM
L	LOEWS CORP COM
LABD	DIREXION SHS ETF TR DAILY S&P BIOTEC
LABL	MULTI COLOR CORP COM
LABU	DIREXION SHS ETF TR SP BIOTCH BL NEW
LAC	LITHIUM AMERS CORP NEW COM NEW
LACQ	LEISURE ACQUISITION CORP COM
LACQU	LEISURE ACQUISITION CORP UNIT EXP 000022
LACQW	LEISURE ACQUISITION CORP WT EXP 120519
LAD	LITHIA MTRS INC CL A
LADR	LADDER CAP CORP CL A
LAKE	LAKELAND INDS INC COM
LALT	INVESCO ACTIVELY MANAGD ETF TR MLT STRGY ALTE
LAMR	LAMAR ADVERTISING CO NEW CL A
LANC	LANCASTER COLONY CORP COM
LAND	GLADSTONE LD CORP COM
LANDP	GLADSTONE LD CORP RED PFD SER A
LARK	LANDMARK BANCORP INC COM
LASR	NLIGHT INC COM
LAUR	LAUREATE EDUCATION INC CL A
LAWS	LAWSON PRODS INC COM
LAZ	LAZARD LTD SHS A
LAZY	LAZYDAYS HLDGS INC COM
LB	L BRANDS INC COM
LBAI	LAKELAND BANCORP INC COM
LBC	LUTHER BURBANK CORP COM
LBDC	UBS AG LONDON BRH 2XLEVE ETRACS WF
LBIX	LEADING BRANDS INC COM NEW
LBJ	DIREXION SHS ETF TR LTN AM BL 3X NEW
LBRDA	LIBERTY BROADBAND CORP COM SER A
LBRDK	LIBERTY BROADBAND CORP COM SER C
LBRT	LIBERTY OILFIELD SVCS INC COM CL A

LBTYA	LIBERTY GLOBAL PLC SHS CL A
LBTYB	LIBERTY GLOBAL PLC SHS CL B
LBTYK	LIBERTY GLOBAL PLC SHS CL C
LBY	LIBBEY INC COM
LC	LENDINGCLUB CORP COM
LCA	LANDCADIA HLDGS INC CL A
LCAHU	LANDCADIA HLDGS INC UNIT 1 CL A 1 WT
LCAHW	LANDCADIA HLDGS INC WT EXP 060123
LCI	LANNET INC COM
LCII	LCI INDS COM
LCM	ADVENT CLAYMORE ENH GRW & INC COM
LCNB	LCNB CORP COM
LCUT	LIFETIME BRANDS INC COM
LD	BARCLAYS BANK PLC ETN DJUBSLEAD 38
LDF	LATIN AMERN DISCOVERY FD INC COM
LDL	LYDALL INC DEL COM
LDOS	LEIDOS HLDGS INC COM
LDP	COHEN & STEERS LTD DUR PFD INC COM
LDRI	INVESCO EXCHNG TRADED FD TR II LADERITE 0-5YR
LDRS	INNOVATOR ETFS TR IBD ETF LEADERS
LDUR	PIMCO ETF TR ENHNCD LW DUR AC
LE	LANDS END INC NEW COM
LEA	LEAR CORP COM NEW
LEAD	Reality Shares DIVCON Leaders Dividend ETF
LECO	LINCOLN ELEC HLDGS INC COM
LEDS	SEMILEDS CORP COM NEW
LEE	LEE ENTERPRISES INC COM
LEG	LEGGETT & PLATT INC COM
LEGR	FIRST TR EXCHANGE TRADED FD VI INDXX INOVTV ETF
LEJU	LEJU HLDGS LTD SPONSORED ADS
LEMB	ISHARES INC JP MORGAN EM ETF
LEN	LENNAR CORP CL A
LEN.B	LENNAR CORP CL B
LENS	PRESBIA PLC SHS
LEO	DREYFUS STRATEGIC MUNS INC COM
LEU	CENTRUS ENERGY CORP CL A
LEVB	LEVEL BRANDS INC COM NEW
LEVL	LEVEL ONE BANCORP INC COM
LEXEA	LIBERTY EXPEDIA HOLDINGS SER A COM

LEXEB	LIBERTY EXPEDIA HOLDINGS SER B COM
LFACU	LF CAP ACQUISITION CORP UNIT EXP 061925
LFC	CHINA LIFE INS CO LTD SPON ADR REP H
LFEQ	VANECK VECTORS ETF TR NDR CMG LN FLT
LFGR	LEAF GROUP LTD COM
LFUS	LITTELFUSE INC COM
LFVN	LIFEVANTAGE CORP COM NEW
LGC	LEGACY ACQUISITION CORP COM CL A
LGC+	LEGACY ACQUISITION CORP WT EXP 113022
LGC=-	LEGACY ACQUISITION CORP UNIT EXP 053124
LGCY	LEGACY RESVS LP UNIT LP INT
LGCYO	LEGACY RESVS LP PERP PFD UNIT
LGCYP	LEGACY RESVS LP PFD UNIT SER A
LGF.A	LIONS GATE ENTMNT CORP CL A VTG
LGF.B	LIONS GATE ENTMNT CORP CL B NON VTG
LGI	LAZARD GLB TTL RET&INCM FD INC COM
LGIH	LGI HOMES INC COM
LGL	LGL GROUP INC COM
LGLV	SPDR SER TR SSGA US LRG ETF
LGND	LIGAND PHARMACEUTICALS INC COM NEW
LH	LABORATORY CORP AMER HLDGS COM NEW
LHC	LEO HOLDINGS CORP COM CL A
LHC+	LEO HOLDINGS CORP WT EXP 020720
LHC=-	LEO HOLDINGS CORP UNIT EXP 000023
LHCG	LHC GROUP INC COM
LHO	LASALLE HOTEL PPTYS COM SH BEN INT
LHO-I	LASALLE HOTEL PPTYS PFD SER I SHS
LHO-J	LASALLE HOTEL PPTYS PFD SER J BEN
LIFE	ATYR PHARMA INC COM
LII	LENNOX INTL INC COM
LILA	LIBERTY LATIN AMERICA LTD COM CL A
LILAK	LIBERTY LATIN AMERICA LTD COM CL C
LINC	LINCOLN EDL SVCS CORP COM
LIND	LINDBLAD EXPEDITIONS HLDGS IN COM
LINDW	LINDBLAD EXPEDITIONS HLDGS IN WT EXP 070820
LINK	INTERLINK ELECTRS INC COM NEW
LION	FIDELITY SOUTHERN CORP NEW COM
LIQT	LIQTECH INTL INC COM
LIT	GLOBAL X FDS LITHIUM BTRY ETF

LITB	LIGHTINTHEBOX HLDG CO LTD SPONSORED ADR
LITE	LUMENTUM HLDGS INC COM
LIVE	LIVE VENTURES INC COM NEW
LIVN	LIVANOVA PLC SHS
LIVX	LIVEXLIVE MEDIA INC COM NEW
LJPC	LA JOLLA PHARMACEUTICAL CO COM PAR \$.0001 2
LKFN	LAKELAND FINL CORP COM
LKM	LINK MOTION INC SPONSRD ADS CL A
LKOR	FLEXSHARES TR CR SCORED LONG
LKQ	LKQ CORP COM
LKSD	LSC COMMUNICATIONS INC COM
LL	LUMBER LIQUIDATORS HLDGS INC COM
LLEX	LILIS ENERGY INC COM NEW
LLIT	LIANLUO SMART LTD SHS
LLL	L3 TECHNOLOGIES INC COM
LLNW	LIMELIGHT NETWORKS INC COM
LLQD	iShares 10+ Year Investment Grade Corporate Bond ETF
LLY	LILLY ELI & CO COM
LM	LEGG MASON INC COM
LMAT	LEMAITRE VASCULAR INC COM
LMB	LIMBACH HLDGS INC COM
LMBS	FIRST TR EXCHANGE TRADED FD IV FST LOW OPPT EFT
LMFA	LM FDG AMER INC COM
LMFAW	LM FDG AMER INC WT EXP 103120
LMHA	LEGG MASON INC JR SUB NT 56
LMHB	LEGG MASON INC JR SUB NT 56
LMLP	UBS AG LONDON BRH MLP EX ENERGY
LMNR	LIMONEIRA CO COM
LMNX	LUMINEX CORP DEL COM
LMRK	LANDMARK INFRASTRUCTURE LP COM UNIT LTD
LMRKN	LANDMARK INFRASTRUCTURE LP 7% CNV PFD UNT C
LMRKO	LANDMARK INFRASTRUCTURE LP PFD UT SER B
LMRKP	LANDMARK INFRASTRUCTURE LP RED PFD SER A
LMST	LIMESTONE BANCORP INC COM
LMT	LOCKHEED MARTIN CORP COM
LN	LINE CORP SPONSORED ADR
LNC	LINCOLN NATL CORP IND COM
LNC+	LINCOLN NATL CORP IND WT EXP 071019
LND	BRASILAGRO BRAZILIAN AGRIC REA SPONSORED ADR

LNDC	LANDEC CORP COM
LNG	CHENIERE ENERGY INC COM NEW
LNGR	GLOBAL X FDS LNTY THMTC ETF
LNN	LINDSAY CORP COM
LNT	ALLIANT ENERGY CORP COM
LNTH	LANTHEUS HLDGS INC COM
LOAN	MANHATTAN BRIDGE CAPITAL INC COM
LOB	LIVE OAK BANCSHARES INC COM
LOCO	EL POLLO LOCO HLDGS INC COM
LODE	COMSTOCK MNG INC COM NEW
LOGI	LOGITECH INTL S A SHS
LOGM	LOGMEIN INC COM
LOGO	Global X Iconic U.S. Brands ETF
LOMA	LOMA NEGRA CORP SPONSORED ADS
LONE	LONESTAR RES US INC CL A VTG
LOOP	LOOP INDS INC COM
LOPE	GRAND CANYON ED INC COM
LOR	LAZARD WORLD DIVID & INCOME FD COM
LORL	LORAL SPACE & COMMUNICATNS INC COM
LOV	SPARK NETWORKS SE SPONSORED ADR
LOW	LOWES COS INC COM
LOWC	SPDR INDEX SHS FDS LOW CARBON ETF
LOXO	LOXO ONCOLOGY INC COM
LPCN	LIPOCINE INC NEW COM
LPG	DORIAN LPG LTD SHS USD
LPI	LAREDO PETROLEUM INC COM
LPL	LG DISPLAY CO LTD SPONS ADR REP
LPLA	LPL FINL HLDGS INC COM
LPNT	LIFEPOINT HEALTH INC COM
LPSN	LIVEPERSON INC COM
LPT	LIBERTY PPTY TR SH BEN INT
LPTH	LIGHTPATH TECHNOLOGIES INC CL A NEW
LPTX	LEAP THERAPEUTICS INC COM
LPX	LOUISIANA PAC CORP COM
LQD	ISHARES TR IBOXX INV CP ETF
LQDH	ISHARES US ETF TR INT RT HDG C B
LQDI	iShares Inflation Hedged Corporate Bond ETF
LQDT	LIQUIDITY SERVICES INC COM
LRAD	LRAD CORP COM

LRCX	LAM RESEARCH CORP COM
LRET	UBS AG LONDON BRH 2X LEV MSCI US
LRGE	LEGG MASON ETF INVT TR CLEARBRIDEG LR
LRGF	ISHARES TR MULTIFACTOR USA
LRN	K12 INC COM
LSBK	LAKE SHORE BANCORP INC COM
LSCC	LATTICE SEMICONDUCTOR CORP COM
LSI	LIFE STORAGE INC COM
LSST	NATIXIS ETF TR LOOMIS SAYLES
LSTR	LANDSTAR SYS INC COM
LSVX	UBS AG LONDON BRH VELOCITYSHS LONG
LSXMA	LIBERTY MEDIA CORP DELAWARE COM A SIRIUSXM
LSXMB	LIBERTY MEDIA CORP DELAWARE COM B SIRIUSXM
LSXMK	LIBERTY MEDIA CORP DELAWARE COM C SIRIUSXM
LTBR	LIGHTBRIDGE CORP COM NEW
LTC	LTC PPTYS INC COM
LTL	PROSHARES TR PSHS UL TELE ETF
LTM	LATAM AIRLS GROUP S A SPONSORED ADR
LTN	UNION ACQUISITION CORP SHS
LTN^	UNION ACQUISITION CORP RT
LTN+	UNION ACQUISITION CORP WT EXP 070125
LTN=	UNION ACQUISITION CORP UNIT
LTPZ	PIMCO ETF TR 15+ YR US TIPS
LTRPA	LIBERTY TRIPADVISOR HLDGS INC COM SER A
LTRPB	LIBERTY TRIPADVISOR HLDGS INC COM SER B
LTRX	LANTRONIX INC COM NEW
LTS	LADENBURG THALMAN FIN SVCS INC COM
LTS-A	LADENBURG THALMAN FIN SVCS INC PFD SER A %
LTSF	LADENBURG THALMAN FIN SVCS INC 7.00% SN NT 28
LTSL	LADENBURG THALMAN FIN SVCS INC 6.50% NT 27
LTXB	LEGACY TEX FINL GROUP INC COM
LUB	LUBYS INC COM
LULU	LULULEMON ATHLETICA INC COM
LUNA	LUNA INNOVATIONS COM
LUV	SOUTHWEST AIRLS CO COM
LVHB	Innovator Lunt Low Vol/High Beta Tactical ETF
LVHD	LEGG MASON ETF INVESTMENT TR LOW DIVI ETF
LVHE	Legg Mason Emerging Markets Low Volatility High Dividend ETF
LVHI	Legg Mason International Low Volatility High Dividend ETF

LVIN	Hartford Multifactor Low Volatility International Equity ETF
LVL	INVESCO EXCHNG TRADED FD TR II S&P GLOBL DIVI
LVS	LAS VEGAS SANDS CORP COM
LVUS	Hartford Multifactor Low Volatility US Equity ETF
LW	LAMB WESTON HLDGS INC COM
LWAY	LIFEWAY FOODS INC COM
LX	LEXINFINTCH HLDGS LTD ADR
LXFR	LUXFER HOLDINGS PLC SHS
LXFT	LUXOFT HLDG INC ORD SHS CL A
LXP	LEXINGTON REALTY TRUST COM
LXP-C	LEXINGTON REALTY TRUST PFD CONV SER C
LXRX	LEXICON PHARMACEUTICALS INC COM NEW
LXU	LSB INDS INC COM
LYB	LYONDELLBASELL INDUSTRIES N V SHS - A -
LYG	LLOYDS BANKING GROUP PLC SPONSORED ADR
LYL	DRAGON VICTORY INTL LTD SHS
LYTS	LSI INDS INC COM
LYV	LIVE NATION ENTERTAINMENT INC COM
LZB	LA Z BOY INC COM
M	MACYS INC COM
MA	MASTERCARD INCORPORATED CL A
MAA	MID AMER APT CMNTYS INC COM
MAA-I	MID AMER APT CMNTYS INC PFD SER I
MAB	EATON VANCE MASS MUN BD FD COM
MAC	MACERICH CO COM
MACK	MERRIMACK PHARMACEUTICALS INC COM NEW
MACQ	M I ACQUISITIONS INC COM
MACQU	M I ACQUISITIONS INC UT 1COM 1WT EX
MACQW	M I ACQUISITIONS INC WT EXP 111521
MAG	MAG SILVER CORP COM
MAGA	Point Bridge GOP Stock Tracker ETF
MAGS	MAGAL SECURITY SYS LTD ORD
MAIN	MAIN STREET CAPITAL CORP COM
MAMS	MAM SOFTWARE GROUP INC COM NEW
MAN	MANPOWERGROUP INC COM
MANH	MANHATTAN ASSOCS INC COM
MANT	MANTECH INTL CORP CL A
MANU	MANCHESTER UTD PLC NEW ORD CL A
MAR	MARRIOTT INTL INC NEW CL A



MARA	MARATHON PATENT GROUP INC COM PAR
MARK	REMARK HLDGS INC COM
MARPS	MARINE PETE TR UNIT BEN INT
MAS	MASCO CORP COM
MASI	MASIMO CORP COM
MAT	MATTEL INC COM
MATF	iShares Edge MSCI Multifactor Materials ETF
MATR	MATTERSIGHT CORP COM
MATW	MATTHEWS INTL CORP CL A
MATX	MATSON INC COM
MAV	PIONEER MUN HIGH INCOME ADV TR COM
MAXR	MAXAR TECHNOLOGIES LTD COM
MAYS	MAYS J W INC COM
MB	MINDBODY INC COM CL A
MBB	ISHARES TR MBS ETF
MBCN	MIDDLEFIELD BANC CORP COM NEW
MBFI	MB FINANCIAL INC NEW COM
MBFIO	MB FINANCIAL INC NEW 1/40 NON CM PF C
MBG	SPDR SERIES TRUST BLOMBRG BRC MRTG
MBI	MBIA INC COM
MBII	MARRONE BIO INNOVATIONS INC COM
MBIN	MERCHANTS BANCORP IND COM
MBIO	MUSTANG BIO INC COM
MBOT	MICROBOT MED INC COM
MBRX	MOLECULIN BIOTECH INC COM
MBSD	FLEXSHARES TR DISCP DUR MBS
MBT	MOBILE TELESYSTEMS PJSC SPONSORED ADR
MBTF	MBT FINL CORP COM
MBUU	MALIBU BOATS INC COM CL A
MBVX	MABVAX THERAPEUTICS HLDGS INC COM PAR
MBWM	MERCANTILE BANK CORP COM
MC	MOELIS & CO CL A
MCA	BLACKROCK MUNIYIELD CALI QLTY COM
MCB	METROPOLITAN BK HLDG CORP COM
MCBC	MACATAWA BK CORP COM
MCC	MEDLEY CAP CORP COM
MCD	MCDONALDS CORP COM
MCEF	FIRST TR EXCHNG TRADED FD VIII MUN CEF IN OPT
MCEP	MID CON ENERGY PARTNERS LP COM UNIT REPST

MCF	CONTANGO OIL & GAS COMPANY COM NEW
MCFT	MCBC HLDGS INC COM
MCHI	ISHARES TR MSCI CHINA ETF
MCHP	MICROCHIP TECHNOLOGY INC COM
MCHX	MARCHEX INC CL B
MCI	BARINGS CORPORATE INVS COM
MCK	MCKESSON CORP COM
MCN	MADISON CVRED CALL & EQ STR FD COM
MCO	MOODYS CORP COM
MCR	MFS CHARTER INCOME TR SH BEN INT
MCRB	SERES THERAPEUTICS INC COM
MCRI	MONARCH CASINO & RESORT INC COM
MCRN	MILACRON HLDGS CORP COM
MCRO	INDEXIQ ETF TR HDG MACTRK ETF
MCS	MARCUS CORP COM
MCV	MEDLEY CAP CORP SR NT 23
MCX	MEDLEY CAP CORP 6.50 NT 013021
MCY	MERCURY GENL CORP NEW COM
MD	MEDNAX INC COM
MDB	MONGODB INC CL A
MDC	M D C HLDGS INC COM
MDCA	MDC PARTNERS INC CL A SUB VTG
MDCO	MEDICINES CO COM
MDGL	MADRIGAL PHARMACEUTICALS INC COM
MDGS	MEDIGUS LTD SPONSORD ADR NEW
MDIV	FIRST TR EXCHANGE TRADED FD VI MULTI ASSET DI
MDLQ	MEDLEY LLC NT 24
MDLX	MEDLEY LLC SR NT 26
MDLY	MEDLEY MGMT INC CL A COM
MDLZ	MONDELEZ INTL INC CL A
MDP	MEREDITH CORP COM
MDR	MCDERMOTT INTL INC COM
MDRX	ALLSCRIPTS HEALTHCARE SOLUTNS COM
MDSO	MEDIDATA SOLUTIONS INC COM
MDT	MEDTRONIC PLC SHS
MDU	MDU RES GROUP INC COM
MDWD	MEDIWOUND LTD ORD SHS
MDXG	MIMEDX GROUP INC COM
MDY	SPDR S&P MIDCAP 400 ETF TR UTSER1 S&PDCRP

MDYG	SPDR SERIES TRUST S&P 400 MDCP GRW
MDYV	SPDR SERIES TRUST S&P 400 MDCP VAL
MEAR	iShares Short Maturity Municipal Bond ETF
MED	MEDIFAST INC COM
MEDP	MEDPACE HLDGS INC COM
MEET	MEET GROUP INC COM
MEI	METHODE ELECTRS INC COM
MEIP	MEI PHARMA INC COM NEW
MELI	MERCADOLIBRE INC COM
MELR	MELROSE BANCORP INC COM
MEN	BLACKROCK MUNIENHANCED FD INC COM
MEOH	METHANEX CORP COM
MERC	MERCER INTL INC COM
MER-K	MERRILL LYNCH CAP TR I GTD CAP 6.45%
MESO	MESOBLAST LTD SPONS ADR
MET	METLIFE INC COM
MET-A	METLIFE INC PFD A FLT RATE
METC	RAMACO RES INC COM
MET-E	METLIFE INC 5.625 NCUM PFD E
MEXX	DIREXION SHS ETF TR DLY MSCI MX 3X
MFA	MFA FINL INC COM
MFA-B	MFA FINL INC PFD SER B
MFC	MANULIFE FINL CORP COM
MFCB	MFC BANCORP LTD USD MFC SHS
MFD	MACQUARIE FT TR GB INF UT DIV COM
MFDX	PIMCO EQUITY SER RAFI DYN MULTI
MFEM	PIMCO EQUITY SER RAFI DYN EMERG
MFG	MIZUHO FINL GROUP INC SPONSORED ADR
MFGP	MICRO FOCUS INTERNATIONAL PLC SPON ADR NEW
MFIN	MEDALLION FINL CORP COM
MFINL	MEDALLION FINL CORP NT
MFL	BLACKROCK MUNIHLDS INVSTM QLTY COM
MFM	MFS MUN INCOME TR SH BEN INT
MFNC	MACKINAC FINL CORP COM
MFO	MFA FINL INC SR NT 42
MFSF	MUTUALFIRST FINL INC COM
MFT	BLACKROCK MUNIYLD INVST QLTY COM
MFUS	PIMCO EQUITY SER RAFI DYN ML US
MFV	MFS SPL VALUE TR SH BEN INT

MG	MISTRAS GROUP INC COM
MGA	MAGNA INTL INC COM
MGC	VANGUARD WORLD FD MEGA CAP INDEX
MGEE	MGE ENERGY INC COM
MGEN	MIRAGEN THERAPEUTICS INC COM
MGF	MFS GOVT MKTS INCOME TR SH BEN INT
MGI	MONEYGRAM INTL INC COM NEW
MGIC	MAGIC SOFTWARE ENTERPRISES LTD ORD
MGK	VANGUARD WORLD FD MEGA GRWTH IND
MGLN	MAGELLAN HEALTH INC COM NEW
MGM	MGM RESORTS INTERNATIONAL COM
MGNX	MACROGENICS INC COM
MGP	MGM GROWTH PPTYS LLC CL A COM
MGPI	MGP INGREDIENTS INC NEW COM
MGRC	MCGRATH RENTCORP COM
MGTA	MAGENTA THERAPEUTICS INC COM
MGTX	MEIRAGTX HOLDINGS PLC COM
MGU	MACQUARIE GLBL INFRA TOTL RETN COM
MGV	VANGUARD WORLD FD MEGA CAP VAL ETF
MGYR	MAGYAR BANCORP INC COM
MH-A	MAIDEN HOLDINGS LTD PREF SHS SER A
MH-C	MAIDEN HOLDINGS LTD PFD SHS SER C
MHD	BLACKROCK MUNIHOLDINGS FD INC COM
MH-D	MAIDEN HOLDINGS LTD PFD SERIES D
MHE	BLACKROCK MASS TAX-EXEMPT TR SH BEN INT
MHF	WESTERN ASSET MUN HI INCM FD COM
MHH	MASTECH DIGITAL INC COM
MHI	PIONEER MUN HIGH INCOME TR COM SHS
MHK	MOHAWK INDS INC COM
MHLA	MAIDEN HLDGS LTD 6.625 NT 2046
MHLD	MAIDEN HOLDINGS LTD SHS
MHN	BLACKROCK MUNIHLDS NY QLTY FD COM
MHNC	MAIDEN HLDGS NORTH AMER LTD GTD NT 7.75%43
MHO	M/I HOMES INC COM
MIC	MACQUARIE INFRASTRUCTURE CORP COM
MICR	MICRON SOLUTIONS INC COM
MICT	MICRONET ENERTEC TECH INC COM
MIDD	MIDDLEBY CORP COM
MIDU	DIREXION SHS ETF TR DLY MIDCAP ETF3X

MIDZ	DIREXION SHS ETF TR MD CP BEAR 3X NW
MIE	COHEN & STEERS MLP INC & ENRGY COM SHS
MIK	MICHAELS COS INC COM
MILN	GLOBAL X FDS MILL THEMCF ETF
MIME	MIMECAST LTD ORD SHS
MIN	MFS INTER INCOME TR SH BEN INT
MINC	ADVISORSHARES TR NEWFLT MULSINC
MIND	MITCHAM INDS INC COM
MINDP	MITCHAM INDS INC PFD SER A
MINI	MOBILE MINI INC COM
MINT	PIMCO ETF TR ENHAN SHRT MA AC
MITK	MITEK SYS INC COM NEW
MITL	MITEL NETWORKS CORP COM
MITT	AG MTG INVT TR INC COM
MITT-A	AG MTG INVT TR INC 8.25% PFD SER A
MITT-B	AG MTG INVT TR INC PFD SER B 8.00%
MIW	EATON VANCE MICH MUN BD FD COM
MIXT	MIX TELEMATICS LTD SPONSORED ADR
MIY	BLACKROCK MUNIYLD MICH QLTY FD COM
MJ	ETF MANAGERS TR ETFMG ALTR HRVST
MJCO	MAJESCO COM
MKC	MCCORMICK & CO INC COM NON VTG
MKC.V	MCCORMICK & CO INC COM VTG
MKGI	MONAKER GROUP INC COM NEW
MKL	MARKEL CORP COM
MKSI	MKS INSTRUMENT INC COM
MKTX	MARKETAXESS HLDGS INC COM
MLAB	MESA LABS INC COM
MLCO	MELCO RESORT ENTERTAINMENT LTD ADR
MLHR	MILLER HERMAN INC COM
MLI	MUELLER INDS INC COM
MLM	MARTIN MARIETTA MATLS INC COM
MLN	VANECK VECTORS ETF TR AMT FREE LONG MU
MLNT	MELINTA THERAPEUTICS INC COM
MLNX	MELLANOX TECHNOLOGIES LTD SHS
MLP	MAUI LD & PINEAPPLE INC COM
MLPA	GLOBAL X FDS GLBL X MLP ETF
MLPB	UBS AG LONDON BRH ETRACS ALER MLP
MLPC	CITIGROUP INC NEW CTRAKS ETN MILLR

MLPE	CITIGROUP GLOBAL MKTS HLDGS IN GEN VAR 26
MLPG	UBS AG JERSEY BRH LKD ALRN NTGAS
MLPI	UBS AG JERSEY BRH ALERIAN INFRST
MLPO	CREDIT SUISSE AG NASSAU BRH ETN LKD 34
MLPQ	UBS AG LONDON BRH NT AMZI 46
MLPS	UBS AG JERSEY BRH AG MNTH SHR EX
MLPX	GLOBAL X FDS GLB X MLP ENRG I
MLPY	MORGAN STANLEY CUSHNG MLP ETN
MLPZ	UBS AG LONDON BRH NT SPMLP 46
MLQD	iShares 5-10 Year Investment Grade Corporate Bond ETF
MLR	MILLER INDS INC TENN COM NEW
MLSS	MILESTONE SCIENTIFIC INC COM NEW
MLTI	CREDIT SUISSE AG NASSAU BRH X LNKS MLT ASST
MLVF	MALVERN BANCORP INC COM
MMAC	MMA CAP MGMT LLC COM
MMC	MARSH & MCLENNAN COS INC COM
MMD	MAINSTAY MACKAY DEFINDTRM MUNI COM
MMDM	MODERN MEDIA ACQUISITION COM
MMDMR	MODERN MEDIA ACQUISITION RT
MMDMU	MODERN MEDIA ACQUISITION UT EXP 000022
MMDMW	MODERN MEDIA ACQUISITION WT EXP 051722
MMI	MARCUS & MILLICHAP INC COM
MMIN	INDEXIQ ACTIVE ETF TR IQ MACKAY SHLD
MMIT	INDEXIQ ACTIVE ETF TR IQ MACKAY SHLD
MMLP	MARTIN MIDSTREAM PRTNRS L P UNIT L P INT
MMM	3M CO COM
MMP	MAGELLAN MIDSTREAM PRTNRS LP COM UNIT RP LP
MMS	MAXIMUS INC COM
MMSI	MERIT MED SYS INC COM
MMT	MFS MULTIMARKET INCOME TR SH BEN INT
MMTM	SPDR SER TR S&P1500MOMTILT
MMU	WESTERN ASST MNGD MUN FD INC COM
MMV	EATON VANCE MA MUNI INCOME TR SH BEN INT
MMYT	MAKEMYTRIP LIMITED MAURITIUS SHS
MN	MANNING & NAPIER INC CL A
MNA	INDEXIQ ETF TR IQ MRGR ARB ETF
MNDO	MIND C T I LTD ORD
MNE	BLACKROCK MUNI N Y INTER DURAT COM
MNGA	MAGNEGAS CORP COM PAR

MNI	MCCLATCHY CO CL A NEW
MNK	MALLINCKRODT PUB LTD CO SHS
MNKD	MANNKIND CORP COM NEW
MNLO	MENLO THERAPEUTICS INC COM
MNOV	MEDICINOVA INC COM NEW
MNP	WESTERN ASST MN PRT FD INC COM
MNR	MONMOUTH REAL ESTATE INVT CORP CL A
MNR-C	MONMOUTH REAL ESTATE INVT CORP PFD SER C
MNRO	MONRO INC COM
MNST	MONSTER BEVERAGE CORP NEW COM
MNTA	MOMENTA PHARMACEUTICALS INC COM
MNTX	MANITEX INTL INC COM
MO	ALTRIA GROUP INC COM
MOAT	VANECK VECTORS ETF TR MORNINGSTAR WIDE
MOBL	MOBILEIRON INC COM NEW
MOC	COMMAND SEC CORP COM
MOD	MODINE MFG CO COM
MODN	MODEL N INC COM
MOFG	MIDWESTONE FINL GROUP INC NEW COM
MOG.A	MOOG INC CL A
MOG.B	MOOG INC CL B
MOGO	MOGO FIN TECHNOLOGY INC COM
MOH	MOLINA HEALTHCARE INC COM
MOM	FQF TR AGFIQ US MK MNTM
MOMO	MOMO INC ADR
MOO	VANECK VECTORS ETF TR AGRIBUSINESS ETF
MOR	MORPHOSYS AG SPONSORED ADS
MORL	UBS AG LONDON BRH ETRACS MTH2XRE
MORN	MORNINGSTAR INC COM
MORT	VANECK VECTORS ETF TR MTG REIT INCOME
MOS	MOSAIC CO NEW COM
MOSC	MOSAIC ACQUISITION CORP SHS CL A
MOSC+	MOSAIC ACQUISITION CORP WT EXP 102322
MOSC=	MOSAIC ACQUISITION CORP UNIT EX
MOSY	MOSYS INC COM NEW
MOTI	VANECK VECTORS ETF TR MORNINGSTAR INTL
MOTS	MOTUS GI HLDGS INC COM
MOV	MOVADO GROUP INC COM
MOXC	MOXIAN INC COM NEW

MPA	BLACKROCK MUNIYIELD PA QLTY FD COM
MPAA	MOTORCAR PTS AMER INC COM
MPAC	MATLIN & PARTNERS ACQUISITION CL A
MPACU	MATLIN & PARTNERS ACQUISITION UT 1COM 1WT CL A
MPACW	MATLIN & PARTNERS ACQUISITION WT EXP 052821
MPB	MID PENN BANCORP INC COM
MPC	MARATHON PETE CORP COM
MPCT	ISHARES TR MSCI GLOBAL IMP
MP-D	MISSISSIPPI POWER CO PFD 1/4 5.25%
MPLX	MPLX LP COM UNIT REP LTD
MPO	MIDSTATES PETE CO INC COM PAR
MPV	BARINGS PARTN INVS SH BEN INT
MPVD	MOUNTAIN PROV DIAMONDS INC COM NEW
MPW	MEDICAL PPTYS TRUST INC COM
MPWR	MONOLITHIC PWR SYS INC COM
MPX	MARINE PRODS CORP COM
MQT	BLACKROCK MUNIY QUALITY FD II COM
MQY	BLACKROCK MUNIYIELD QUALITY FD COM
MRAM	EVERSPIN TECHNOLOGIES INC COM
MRBK	MERIDIAN BK PAOLI PA COM
MRC	MRC GLOBAL INC COM
MRCC	MONROE CAP CORP COM
MRCY	MERCURY SYS INC COM
MRGR	ProShares Merger ETF
MRIN	MARIN SOFTWARE INC COM NEW
MRK	MERCK & CO INC COM
MRLN	MARLIN BUSINESS SVCS CORP COM
MRNS	MARINUS PHARMACEUTICALS INC COM
MRO	MARATHON OIL CORP COM
MRRL	UBS AG LONDON BRH ETRACS MNTLY PAY
MRSN	MERSANA THERAPEUTICS INC COM
MRT	MEDEQUITIES RLTY TR INC COM
MRTN	MARTEN TRANS LTD COM
MRTX	MIRATI THERAPEUTICS INC COM
MRUS	MERUS N V COM
MRVL	MARVELL TECHNOLOGY GROUP LTD ORD
MS	MORGAN STANLEY COM NEW
MSA	MSA SAFETY INC COM
MS-A	MORGAN STANLEY PFD A 1/1000



MSB	MESABI TR CTF BEN INT
MSBF	MSB FINL CORP NEW COM
MSBI	MIDLAND STS BANCORP INC ILL COM
MSCI	MSCI INC COM
MSD	MORGAN STANLEY EMER MKTS DEBT COM
MS-E	MORGAN STANLEY DEP SHS 1/1000 E
MSEX	MIDDLESEX WATER CO COM
MSF	MORGAN STANLEY EMER MKTS FD COM
MS-F	MORGAN STANLEY DEP SHS 1/1000TH
MSFT	MICROSOFT CORP COM
MSG	MADISON SQUARE GARDEN CO NEW CL A
MS-G	MORGAN STANLEY DEP 1/1000 PFD G
MSGN	MSG NETWORK INC CL A
MSI	MOTOROLA SOLUTIONS INC COM NEW
MS-I	MORGAN STANLEY DEP FIX/FLT
MS-K	MORGAN STANLEY SH NONCM PFD K
MSL	MIDSOUTH BANCORP INC COM
MSM	MSC INDL DIRECT INC CL A
MSN	EMERSON RADIO CORP COM NEW
MSON	MISONIX INC COM
MSP	MADISON STRTG SECTOR PREM FD COM
MSTR	MICROSTRATEGY INC CL A NEW
MSUS	LHA Market State U.S. Tactical ETF
MT	ARCELORMITTAL SA LUXEMBOURG NY REGISTRY SH
MTB	M & T BK CORP COM
MTB-	M & T BK CORP PERP PFD-A
MTB+	M & T BK CORP WT EXP 122318
MTBC	MEDICAL TRANSCRIPTION BLG CORP COM
MTB-C	M & T BK CORP PERP PFD-C
MTBCP	MEDICAL TRANSCRIPTION BLG CORP PFD SER A 11%
MTCH	MATCH GROUP INC COM
MTD	METTLER TOLEDO INTERNATIONAL COM
MTDR	MATADOR RES CO COM
MTEC	MTECH ACQUISITION CORP COM CLASS A
MTECU	MTECH ACQUISITION CORP UNIT EX 011923
MTECW	MTECH ACQUISITION CORP WT EXP 080124
MTEM	MOLECULAR TEMPLATES INC COM
MTEX	MANNATECH INC COM NEW
MTFB	MOTIF BIO PLC SPONSORED ADR

MTFBW	MOTIF BIO PLC WT EXP 110921
MTG	MGIC INVT CORP WIS COM
MTGE	MTGE INVT CORP COM
MTGEP	MTGE INVT CORP PFD SER A
MTH	MERITAGE HOMES CORP COM
MTL	MECHEL PAO SPONSORED ADR NE
MTL-	MECHEL PAO SPON ADR PFD
MTLS	MATERIALISE NV SPONSORED ADS
MTN	VAIL RESORTS INC COM
MTNB	MATINAS BIOPHARMA HLDGS INC COM
MTOR	MERITOR INC COM
MTP	MIDATECH PHARMA PLC SPONSORED ADS
MTR	MESA RTY TR UNIT BEN INT
MTRN	MATERION CORP COM
MTRX	MATRIX SVC CO COM
MTSC	MTS SYS CORP COM
MTSI	MACOM TECH SOLUTIONS HLDGS INC COM
MTSL	MER TELEMANAGEMENT SOLUTIONS SHS
MTT	WESTERN ASSET MUN DEF OPP TR COM
MTUM	iShares Edge MSCI USA Momentum Factor ETF
MTW	MANITOWOC CO INC COM NEW
MTX	MINERALS TECHNOLOGIES INC COM
MTZ	MASTEC INC COM
MU	MICRON TECHNOLOGY INC COM
MUA	BLACKROCK MUNIASSETS FD INC COM
MUB	ISHARES TR NATIONAL MUN ETF
MUC	BLACKROCK MUNIHLDNCS CALI QLTY COM
MUDS	MUDRICK CAP ACQUISITION CORP COM CLASS A
MUDSU	MUDRICK CAP ACQUISITION CORP UNT EXP 020123
MUDSW	MUDRICK CAP ACQUISITION CORP WT EXP 021225
MUE	BLACKROCK MUNIHLDNCS QLTY II COM
MUFG	MITSUBISHI UFJ FINL GROUP INC SPONSORED ADS
MUH	BLACKROCK MUNIHLDNCS FD II INC COM
MUI	BLACKROCK MUNI INTER DR FD INC COM
MUJ	BLACKROCK MUNIHLDNCS NJ QLTY FD COM
MUNI	PIMCO ETF TR INTER MUN BD ACT
MUR	MURPHY OIL CORP COM
MUS	BLACKROCK MUNIHOLDNCS QLTY INC COM
MUSA	MURPHY USA INC COM

MUX	MCEWEN MNG INC COM
MVBF	MVB FINANCIAL CORP COM
MVC	MVC CAPITAL INC COM
MVCD	MVC CAPITAL INC 6.25% SR NT 22
MVF	BLACKROCK MUNIVEST FD INC COM
MVIN	NATIXIS ETF TR SEEYOND INTL ETF
MVIS	MICROVISION INC DEL COM NEW
MVO	MV OIL TR TR UNITS
MVT	BLACKROCK MUNIVEST FD II INC COM
MVV	PROSHARES TR PSHS ULT MDCAP400
MWA	MUELLER WTR PRODS INC COM SER A
MX	MAGNACHIP SEMICONDUCTOR CORP N COM
MXC	MEXCO ENERGY CORP COM
MXDE	ETF SER SOLUTIONS NATIONWIDE MAX
MXDU	ETF SER SOLUTIONS NATIONWIDE MAX
MXE	MEXICO EQUITY & INCOME FD COM
MXF	MEXICO FD INC COM
MXI	ISHARES TR GLOBAL MATER ETF
MXIM	MAXIM INTEGRATED PRODS INC COM
MXL	MAXLINEAR INC COM
MXWL	MAXWELL TECHNOLOGIES INC COM
MYC	BLACKROCK MUNIYIELD CALIF FD I COM
MYD	BLACKROCK MUNIYIELD FD INC COM
MYE	MYERS INDS INC COM
MYF	BLACKROCK MUNIYIELD INVST FD COM
MYGN	MYRIAD GENETICS INC COM
MYI	BLACKROCK MUNIYIELD QLTY FD 3 COM
MYJ	BLACKROCK MUNIYIELD N J FD INC COM
MYL	MYLAN N V SHS EURO
MYN	BLACKROCK MUNIYIELD NY QLTY FD COM
MYND	MYND ANALYTICS INC COM NEW
MYNDW	MYND ANALYTICS INC WT EXP 062922
MYO	MYOMO INC COM
MYOK	MYOKARDIA INC COM
MYOS	MYOS RENS TECHNOLOGY INC COM
MYOV	MYOVANT SCIENCES LTD COM
MYRG	MYR GROUP INC DEL COM
MYSZ	MY SIZE INC COM
MYY	PROSHARES TR PSHS SH MDCAP400

MZA	BLACKROCK MUNIYIELD ARIZ FD IN COM
MZF	MANAGED DURATION INVNT GRD FUND COM
MZOR	MAZOR ROBOTICS LTD SPONSORED ADS
MZZ	PROSHARES TR ULTSHT MIDCAP400
NAC	NUVEEN CA QUALTY MUN INCOME FD COM
NAD	NUVEEN QUALITY MUNCP INCOME FD COM
NAII	NATURAL ALTERNATIVES INTL INC COM NEW
NAIL	DIREXION SHS ETF TR DALY HOM B&S BUL
NAK	NORTHERN DYNASTY MINERALS LTD COM NEW
NAKD	NAKED BRAND GROUP LIMITED ORD SHS
NAN	NUVEEN NEW YORK QLT MUN INC FD COM
NANO	NANOMETRICS INC COM
NANR	SPDR INDEX SHS FDS S&P NORTH AMER
NAO	NORDIC AMERN OFFSHORE LTD SHS
NAOV	NANOVIBRONIX INC COM
NAP	NAVIOS MARITIME MIDSTREAM LP COM UNIT LTD
NAT	NORDIC AMERICAN TANKERS LIMITE COM
NATH	NATHANS FAMOUS INC NEW COM
NATI	NATIONAL INSTRS CORP COM
NATR	NATURES SUNSHINE PRODUCTS INC COM
NAUH	NATIONAL AMERN UNIV HLDGS INC COM
NAV	NAVISTAR INTL CORP NEW COM
NAV-B	NAVIDEA BIOPHARMACEUTICALS INC COM
NAV-D	NAVISTAR INTL CORP PFD SR D CONV
NAV-G	NAVIGATORS GROUP INC COM
NAVI	NAVIENT CORPORATION COM
NAZ	NUVEEN ARIZONA QLT MUN INC FD COM
NBB	NUVEEN BUILD AMER BD FD COM
NBD	NUVEEN BUILD AMER BD OPPTNY FD COM
NBEV	NEW AGE BEVERAGES CORP COM
NBH	NEUBERGER BERMAN INTER MUNI FD COM
NBHC	NATIONAL BK HLDGS CORP CL A
NBIX	NEUROCRINE BIOSCIENCES INC COM
NBL	NOBLE ENERGY INC COM
NBLX	NOBLE MIDSTREAM PARTNERS LP COM UNIT REPST
NBN	NORTHEAST BANCORP COM NEW
NBO	NEUBERGER BERMAN NY INT MUN FD COM
NBR	NABORS INDUSTRIES LTD SHS
NBR-A	NABORS INDUSTRIES LTD 6% PFD CNV SR A

NBRV	NABRIVA THERAPEUTICS PLC SHS
NBTB	NBT BANCORP INC COM
NBW	NEUBERGER BERMAN CA INT MUN FD COM
NBY	NOVABAY PHARMACEUTICALS INC COM NEW
NC	NACCO INDS INC CL A
NCA	NUVEEN CALIF MUN VALUE FD COM
NCB	NUVEEN CALIF MUNICIPAL VALU FD2 COM
NCBS	NICOLET BANKSHARES INC COM
NCI	NAVIGANT CONSULTING INC COM
NCLH	NORWEGIAN CRUISE LINE HLDG LTD SHS
NCMI	NATIONAL CINEMEDIA INC COM
NCNA	NUCANA PLC SPONSORED ADR
NCOM	NATIONAL COMM CORP COM
NCR	NCR CORP NEW COM
NCS	NCI BUILDING SYS INC COM NEW
NCSM	NCS MULTISTAGE HLDGS INC COM
NCTY	THE9 LTD SPONSORED ADS
NCV	ALLIANZGI CONV & INCOME FD COM
NCZ	ALLIANZGI CONV & INCOME FD II COM
NDAQ	NASDAQ INC COM
NDLS	NOODLES & CO COM CL A
NDP	TORTOISE ENERGY INDEPENDENC FD COM
NDRA	ENDRA LIFE SCIENCES INC COM
NDRAW	ENDRA LIFE SCIENCES INC WT EXP 050822
NDRO	ENDURO RTY TR TR UNIT
NDSN	NORDSON CORP COM
NE	NOBLE CORP PLC SHS USD
NEA	NUVEEN AMT FREE QLTY MUN INCME COM
NEAR	iShares Short Maturity Bond ETF
NEBU	NEBULA ACQUISITION CORP COM CLASS A
NEBUU	NEBULA ACQUISITION CORP UNIT EXP 031225
NEBUW	NEBULA ACQUISITION CORP WT EXP 031225
NEE	NEXTERA ENERGY INC COM
NEE-I	NEXTERA ENERGY CAP HLDGS INC SUB DEB 72
NEE-J	NEXTERA ENERGY CAP HLDGS INC SUB DEB SER J 73
NEE-K	NEXTERA ENERGY CAP HLDGS INC JR SUB DEB 76
NEE-Q	NEXTERA ENERGY INC UNIT CORP
NEE-R	NEXTERA ENERGY INC UT EX 090119
NEM	NEWMONT MINING CORP COM

NEN	NEW ENGLAND RLTY ASSOC LTD PAR DEPOSITRY RCPT
NEO	NEOGENOMICS INC COM NEW
NEOG	NEOGEN CORP COM
NEON	NEONODE INC COM NEW
NEOS	NEOS THERAPEUTICS INC COM
NEP	NEXTERA ENERGY PARTNERS LP COM UNIT PART IN
NEPT	NEPTUNE TECHNOLOGIES BIORESOUR COM
NERV	MINERVA NEUROSCIENCES INC COM
NES	NUVERRA ENVIRONMENTAL SOLUTION COM PAR
NESR	NATIONAL ENERGY SERVICES REUNI SHS
NESRW	NATIONAL ENERGY SERVICES REUNI WT EXP 050522
NETE	NET ELEMENT INC COM PAR
NETS	NETSHOES CAYMAN LTD COM
NEU	NEWMARKET CORP COM
NEV	NUVEEN ENHANCED MUN VALUE FD COM
NEW	PUXIN LTD ADS
NEWA	NEWATER TECHNOLOGY INC SHS
NEWM	NEW MEDIA INVT GROUP INC COM
NEWR	NEW RELIC INC COM
NEWT	NEWTEK BUSINESS SVCS CORP COM NEW
NEWTI	NEWTEK BUSINESS SVCS CORP 6.25% NT 23
NEWTZ	NEWTEK BUSINESS SVCS CORP NT 22
NEXA	NEXA RES S A COM
NEXT	NEXTDECADE CORP COM
NFBK	NORTHFIELD BANCORP INC DEL COM
NFEC	NF ENERGY SAVING CORP COM PAR
NFG	NATIONAL FUEL GAS CO N J COM
NFJ	ALLIANZGI NFJ DIVID INT & PREM COM
NFLT	ETFIS SER TR I VIRTUS NEWFLEET
NFLX	NETFLIX INC COM
NFO	INVESCO EXCHANGE TRADED FD TR INSIDER SENMINT
NFRA	FLEXSHARES TR STOXX GLOBR INF
NFTY	FIRST TR EXCH TRD ALPHA FD II INDIA NFTY50 EQW
NFX	NEWFIELD EXPL CO COM
NG	NOVAGOLD RES INC COM NEW
NGD	NEW GOLD INC CDA COM
NGE	GLOBAL X FDS GBL X MSCI NIGER
NGG	NATIONAL GRID PLC SPONSORED ADR NE
NGHC	NATIONAL GEN HLDGS CORP COM

NGHCN	NATIONAL GEN HLDGS CORP DEP SHS PFD C
NGHCO	NATIONAL GEN HLDGS CORP DEP SHS PFD-B
NGHCP	NATIONAL GEN HLDGS CORP PFD SER A %
NGHCZ	NATIONAL GEN HLDGS CORP SUB NT
NGL	NGL ENERGY PARTNERS LP COM UNIT REPST
NGL-B	NGL ENERGY PARTNERS LP PFD UNIT CL B
NGLS-A	TARGA RESOURCES PARTNERS LP PFD SER A
NGS	NATURAL GAS SERVICES GROUP COM
NGVC	NATURAL GROCERS BY VITAMIN COT COM
NGVT	INGEVITY CORP COM
NH	NANTHEALTH INC COM
NHA	NUVEEN MUN 2021 TARGET TERM FD COM
NHC	NATIONAL HEALTHCARE CORP COM
NHF	NEXPOINT STRATEGIC OPORTUNT FD COM NEW
NHI	NATIONAL HEALTH INVS INC COM
NHLD	NATIONAL HOLDINGS CORP COM NEW
NHLDW	NATIONAL HOLDINGS CORP WT EXP 011822
NHS	NEUBERGER BERMAN HGH YLD FD COM
NHTC	NATURAL HEALTH TRENDS CORP COM PAR \$.001
NI	NISOURCE INC COM
NIB	BARCLAYS BANK PLC ETN DJUBSCOCO 38
NICE	NICE LTD SPONSORED ADR
NICK	NICHOLAS FINANCIAL INC COM NEW
NID	NUVEEN INTER DURATION MN TMFD COM
NIE	ALLIANZGI EQUITY & CONV INCOME COM
NIHD	NII HLDGS INC COM PAR
NIM	NUVEEN SELECT MAT MUN FD SH BEN INT
NINE	NINE ENERGY SVC INC COM
NIQ	NUVEEN INT DUR QUAL MUN TRM FD COM
NITE	NIGHTSTAR THERAPEUTICS PLC ADR
NJR	NEW JERSEY RES COM
NJV	NUVEEN NEW JERSEY MUN VALUE FD SHS
NK	NANTKWEST INC COM
NKE	NIKE INC CL B
NKG	NUVEEN GEORGIA QLTY MUN INC FD COM
NKSH	NATIONAL BANKSHARES INC VA COM
NKTR	NEKTAR THERAPEUTICS COM
NKX	NUVEEN CALIFORNIA AMT QLT MUN COM
NL	NL INDS INC COM NEW

NLNK	NEWLINK GENETICS CORP COM
NLR	VANECK VECTORS ETF TR URANIUM NUCLEAR
NLS	NAUTILUS INC COM
NLSN	NIELSEN HLDGS PLC SHS EUR
NLST	NETLIST INC COM
NLY	ANNALY CAP MGMT INC COM
NLY-C	ANNALY CAP MGMT INC PFD STK C 7.625%
NLY-D	ANNALY CAP MGMT INC PFD SER D %
NLY-F	ANNALY CAP MGMT INC 6.95% FXD FLT 22
NLY-G	ANNALY CAP MGMT INC PFD SER G
NM	NAVIOS MARITIME HOLDINGS INC COM
NMFC	NEW MTN FIN CORP COM
NM-G	NAVIOS MARITIME HLDGS INC SPN ADR RP PFD G
NM-H	NAVIOS MARITIME HLDGS INC SPON ADR PFD H
NMI	NUVEEN MUN INCOME FD INC COM
NMIH	NMI HLDGS INC CL A
NMK-B	NIAGARA MOHAWK PWR CORP PFD 3.60%
NMK-C	NIAGARA MOHAWK PWR CORP PFD 3.90%
NML	NEUBERGER BERMAN MLP INCOME FD COM
NMM	NAVIOS MARITIME PARTNERS L P UNIT LPI
NMR	NOMURA HLDGS INC SPONSORED ADR
NMRD	NEMAURA MED INC COM
NMRK	NEWMARK GROUP INC CL A
NMS	NUVEEN MINNESOTA QLT MUN INC FD SHS
NMT	NUVEEN MASSACHUSETTS QLT MUN FD COM
NMY	NUVEEN MARYLAND QLT MUN INC FD COM
NMZ	NUVEEN MUN HIGH INCOME OPP FD COM
NNA	NAVIOS MARITIME ACQUIS CORP SHS
NNBR	NN INC COM
NNC	NUVEEN NORTH CAROLINA QLT MUN COM
NNDM	NANO DIMENSION LTD SPONS ADR
NNI	NELNET INC CL A
NNN	NATIONAL RETAIL PPTYS INC COM
NNN-E	NATIONAL RETAIL PPTYS INC DEP SHS REP1/100
NNN-F	NATIONAL RETAIL PPTYS INC DEP SHS PFD F
NNVC	NANOVIRICIDES INC COM NEW
NNY	NUVEEN NY MUN VALUE FD COM
NOA	NORTH AMERICAN CONST COM
NOAH	NOAH HLDGS LTD SPON ADS CL A



NOBL	ProShares S&P 500 Dividend Aristocrats ETF
NOC	NORTHROP GRUMMAN CORP COM
NODK	NI HLDGS INC COM
NOG	NORTHERN OIL & GAS INC NEV COM
NOK	NOKIA CORP SPONSORED ADR
NOM	NUVEEN MISSOURI QLT MUN INC FD COM
NOMD	NOMAD FOODS LTD USD ORD SHS
NORW	GLOBAL X FDS GLBX MSCI NORW
NOV	NATIONAL OILWELL VARCO INC COM
NOVN	NOVAN INC COM
NOVT	NOVANTA INC COM
NOW	SERVICENOW INC COM
NP	NEENAH INC COM
NPK	NATIONAL PRESTO INDS INC COM
NPN	NUVEEN PA MUN VALUE FD COM
NPO	ENPRO INDS INC COM
NPTN	NEOPHOTONICS CORP COM
NPV	NUVEEN VIRGINIA QLTY MUNCPL FD COM
NQP	NUVEEN PENNSYLVANIA QLT MUN FD COM
NR	NEWPARK RES INC COM PAR \$.01NEW
NRC	NATIONAL RESH CORP COM NEW
NRE	NORTHSTAR REALTY EUROPE CORP COM
NRG	NRG ENERGY INC COM NEW
NRIM	NORTHRIM BANCORP INC COM
NRK	NUVEEN NEW YORK AMT QLT MUNICP COM
NRO	NEUBERGER BERMAN RE ES SEC FD COM
NRP	NATURAL RESOURCE PARTNERS L P COM UNIT LTD PAR
NRT	NORTH EUROPEAN OIL RTY TR SH BEN INT
NRZ	NEW RESIDENTIAL INVT CORP COM NEW
NS	NUSTAR ENERGY LP UNIT COM
NSA	NATIONAL STORAGE AFFILIATES TR COM SHS BEN IN
NS-A	NUSTAR ENERGY LP PFD UNIT SER A
NSA-A	NATIONAL STORAGE AFFILIATES TR 6% PFD BEN INT A
NS-B	NUSTAR ENERGY LP RED PFD SER B
NSC	NORFOLK SOUTHERN CORP COM
NS-C	NUSTAR ENERGY LP 9.00% CUM PFD C
NSEC	NATIONAL SEC GROUP INC COM
NSH	NUSTAR GP HOLDINGS LLC UNIT RESTG LLC
NSIT	INSIGHT ENTERPRISES INC COM

NSL	NUVEEN SR INCOME FD COM
NSM	NATIONSTAR MTG HLDGS INC COM
NSP	INSPERITY INC COM
NSPR	INSPIREMD INC COM PAR
NSPR+	INSPIREMD INC WT EXP 070721
NSPR+B	INSPIREMD INC WT B EXP 031422
NSS	NUSTAR LOGISTICS L P SB NT FX/FL 43
NSSC	NAPCO SEC TECHNOLOGIES INC COM
NSTG	NANOSTRING TECHNOLOGIES INC COM
NSU	NEVSUN RES LTD COM
NSYS	NORTECH SYS INC COM
NTAP	NETAPP INC COM
NTB	BANK OF NT BUTTERFIELD&SON LTD SHS NEW
NTC	NUVEEN CONNECTICUT QLTY MUN FD COM
NTCT	NETSCOUT SYS INC COM
NTEC	INTEC PHARMA LTD JERUSALEM SHS
NTES	NETEASE INC SPONSORED ADR
NTG	TORTOISE MLP FD INC COM
NTG^	TORTOISE MLP FD INC RT
NTGR	NETGEAR INC COM
NTIC	NORTHERN TECH INTL CORP COM
NTIP	NETWORK 1 TECHNOLOGIES INC COM
NTLA	INTELLIA THERAPEUTICS INC COM
NTN	NTN BUZZTIME INC COM PAR
NTNX	NUTANIX INC CL A
NTP	NAM TAI PPTY INC SHS
NTR	NUTRIEN LTD COM
NTRA	NATERA INC COM
NTRI	NUTRI SYS INC NEW COM
NTRP	NEUROTROPE INC COM NEW
NTRS	NORTHERN TR CORP COM
NTRSP	NORTHERN TR CORP DEP SHS RP PFD C
NTWK	NETSOL TECHNOLOGIES INC COM PAR \$.001
NTX	NUVEEN TEXAS QLTY MUN INCME FD COM
NTZ	NATUZZI S P A ADR
NUAG	NUSHARES ETF TR ENHANCED YIELD
NUAN	NUANCE COMMUNICATIONS INC COM
NUBD	NUSHARES ETF TR ESG US AGGRGTE
NUDM	NuShares ESG International Developed Markets Equity ETF

NUE	NUCOR CORP COM
NUEM	NuShares ESG Emerging Markets Equity ETF
NUGT	DIREXION SHS ETF TR DLY GOLD INDX 3X
NULG	NuShares ESG Large-Cap Growth ETF
NULV	NuShares ESG Large-Cap Value ETF
NUM	NUVEEN MICHIGAN QLT MUN INC FD COM
NUMG	NuShares ESG Mid-Cap Growth ETF
NUMV	NuShares ESG Mid-Cap Value ETF
NUO	NUVEEN OHIO QLTQ MUN INCOME FD COM
NURE	NuShares Short-Term REIT ETF
NURO	NEUROMETRIX INC COM PAR
NUROW	NEUROMETRIX INC WT EXP 052920
NUS	NU SKIN ENTERPRISES INC CL A
NUSA	NUSHARES ETF TR ENHANCD 1 5 YR
NUSC	NuShares ESG Small-Cap ETF
NUV	NUVEEN MUN VALUE FD INC COM
NUVA	NUVASIVE INC COM
NUW	NUVEEN AMT-FREE MUN VALUE FD COM
NVAX	NOVAVAX INC COM
NVCN	NEOVASC INC COM
NVCR	NOVOCURE LTD ORD SHS
NVDA	NVIDIA CORP COM
NVEC	NVE CORP COM NEW
NVEE	NV5 GLOBAL INC COM
NVfy	NOVA LIFESTYLE INC COM
NVG	NUVEEN AMT FREE MUN CR INC FD COM
NVGS	NAVIGATOR HOLDINGS LTD SHS
NVIV	INVIVO THERAPEUTICS HLDGS CORP COM PAR
NVLN	NOVELION THERAPEUTICS INC COM NEW
NVMI	NOVA MEASURING INSTRUMENTS LTD COM
NVMM	NOVUME SOLUTIONS INC COM
NVO	NOVO-NORDISK A S ADR
NVR	NVR INC COM
NVRO	NEVRO CORP COM
NVS	NOVARTIS A G SPONSORED ADR
NVT	NVENT ELECTRIC PLC SHS
NVTA	INVITAE CORP COM
NVTR	NUVECTRA CORP COM
NVUS	NOVUS THERAPEUTICS INC COM

NWBI	NORTHWEST BANCSHARES INC MD COM
NWE	NORTHWESTERN CORP COM NEW
NWFL	NORWOOD FINANCIAL CORP COM
NWHM	NEW HOME CO INC COM
NWL	NEWELL BRANDS INC COM
NWLI	NATIONAL WESTN LIFE GROUP INC CL A
NWN	NORTHWEST NAT GAS CO COM
NWPX	NORTHWEST PIPE CO COM
NWS	NEWS CORP NEW CL B
NWSA	NEWS CORP NEW CL A
NWY	NEW YORK & CO INC COM
NX	QUANEX BUILDING PRODUCTS CORP COM
NXC	NUVEEN CA SELECT TAX FREE PRTF SH BEN INT
NXE	NEXGEN ENERGY LTD COM
NXEO	NEXEO SOLUTIONS INC COM SHS
NXEOU	NEXEO SOLUTIONS INC UNIT 1 COM 1 WT
NXEOW	NEXEO SOLUTIONS INC WT EXP 060921
NXJ	NUVEEN NEW JERSEY QULT MUN FD COM
NXN	NUVEEN NY SELECT TAX FREE PRTF SH BEN INT
NXP	NUVEEN SELECT TAX FREE INCM PT SH BEN INT
NXPI	NXP SEMICONDUCTORS N V COM
NXQ	NUVEEN SELECT TAX FREE INCM PT SH BEN INT
NXR	NUVEEN SELECT TAX FREE INCM 3 SH BEN INT
NXRT	NEXPOINT RESIDENTIAL TR INC COM
NXST	NEXSTAR MEDIA GROUP INC CL A
NXTD	NXT ID INC COM NEW
NXTDW	NXT ID INC WT EXP 020919
NXTM	NXSTAGE MEDICAL INC COM
NYCB	NEW YORK CMNTY BANCORP INC COM
NYCB-A	NEW YORK CMNTY BANCORP INC DEP SHS REPSTG A
NYCB-U	NEW YORK CMNTY CAP TR V BONUSES UNIT
NYF	ISHARES TR NEW YORK MUN ETF
NYH	EATON VANCE N Y MUN BD FD II COM
NYLD	NRG YIELD INC CL C
NYLD.A	NRG YIELD INC CL A NEW
NYMT	NEW YORK MTG TR INC COM PAR \$.02
NYMTN	NEW YORK MTG TR INC 8% RED PFD D
NYMTO	NEW YORK MTG TR INC PFD-C CONV
NYMTP	NEW YORK MTG TR INC RED PFD B 7.75%

NYMX	NYMOX PHARMACEUTICAL CORP COM
NYNY	EMPIRE RESORTS INC COM PAR \$0 01
NYRT	NEW YORK REIT INC COM NEW
NYT	NEW YORK TIMES CO CL A
NYV	NUVEEN NEW YORK MUN VALUE FD 2 COM
NZF	NUVEEN MUNICIPAL CREDIT INC FD COM SH BEN INT
O	REALTY INCOME CORP COM
OAK	OAKTREE CAP GROUP LLC UNIT CL A
OAK-A	OAKTREE CAP GROUP LLC 6.625% PFD UT A
OAS	OASIS PETE INC NEW COM
OASI	FQF TR O SHARES ASIA
OASM	OASMIA PHARMACEUTICAL AB ADR
OBAS	OPTIBASE LTD SHS NEW NIS0.13
OBCI	OCEAN BIO CHEM INC COM
OBE	OBSIDIAN ENERGY LTD COM
OBLN	OBALON THERAPEUTICS INC COM
OBNK	ORIGIN BANCORP INC COM
OBOR	KRANESHARES TR MSCI ONE BELT
OBSV	OBSEVA SA COM
OC	OWENS CORNING NEW COM
OCC	OPTICAL CABLE CORP COM NEW
OCFC	OCEANFIRST FINL CORP COM
OCIO	ETF SER SOLUTIONS CLEARSHS OCIO
OCIP	OCI PARTNERS LP COM UNIT REP LP
OCLR	OCLARO INC COM NEW
OCN	OCWEN FINL CORP COM NEW
OCSI	OAKTREE STRATEGIC INCOME CORP COM
OCSL	OAKTREE SPECIALTY LENDING CORP COM
OCSLL	OAKTREE SPECIALTY LENDING CORP 6.125% SR NT 28
OCUL	OCULAR THERAPEUTIX INC COM
OCX	ONCOCYTE CORPORATION COM
ODC	OIL DRI CORP AMER COM
ODFL	OLD DOMINION FGHT LINES INC COM
ODP	OFFICE DEPOT INC COM
ODT	ODONATE THERAPEUTICS INC COM
OEC	ORION ENGINEERED CARBONS S A COM
OEF	ISHARES TR S&P 100 ETF
OESX	ORION ENERGY SYSTEMS INC COM
OEUR	FQF TR O SHS FTSE EUR

OEWE	INVESCO EXCHANGE TRADED FD TR S&P100 EQL WGT
OFC	CORPORATE OFFICE PPTYS TR SH BEN INT
OFED	OCONEE FED FINL CORP COM
OFG	OFG BANCORP COM
OFG-A	OFG BANCORP PFD A 7.125%
OFG-B	OFG BANCORP 7% PFD SER B
OFG-D	OFG BANCORP PERP PFD-D
OFIX	ORTHOFIX INTL N V COM
OFLX	OMEGA FLEX INC COM
OFS	OFS CAP CORP COM
OFSSL	OFS CAP CORP 6.375% NT 25
OGCP	EMPIRE ST RLTY OP L P UNIT LTD PRT 60
OGE	OGE ENERGY CORP COM
OGEN	ORAGENICS INC COM PAR
OGIG	OSI ETF TR OSHS GBL INTER
OGS	ONE GAS INC COM
OHA	OHA INVT CORP COM
OHGI	ONE HORIZON GROUP INC COM PAR
OHI	OMEGA HEALTHCARE INVS INC COM
OHRP	OHR PHARMACEUTICAL INC COM NEW
OI	OWENS ILL INC COM NEW
OIA	INVESCO MUNI INCOME OPP TRST COM
OIBR.C	OI S A SPONSORED ADR NE
OIH	VANECK VECTORS ETF TR OIL SVCS ETF
OII	OCEANEERING INTL INC COM
OIIL	CREDIT SUISSE AG NASSAU BRH NT BCOMCL 36
OIIM	O2MICRO INTERNATIONAL LTD SPONS ADR
OILB	BARCLAYS BK PLC IPATH SER B GSCI
OILD	PROSHARES TR II ULTRAPRO 3X SHOR
OILK	ProShares K-1 Free Crude Oil Strategy ETF
OILU	PROSHARES TR II ULTRAPRO 3X CR
OILX	UBS AG LONDON BRH SER B LKD 46
OIS	OIL STS INTL INC COM
OKDCC	EATON VANCE NEXTSHARES TR II OAKTREE DIVER CR
OKE	ONEOK INC NEW COM
OKTA	OKTA INC CL A
OLBK	OLD LINE BANCSHARES INC COM
OLD	JANUS DETROIT STR TR LONG TERM CARE
OLED	UNIVERSAL DISPLAY CORP COM

OLEM	BARCLAYS BK PLC IPTH CRUDE OIL
OLLI	OLLIES BARGAIN OUTLT HLDGS INC COM
OLN	OLIN CORP COM PAR \$1
OLO	DEUTSCHE BK AG LONDON BRH DB CRUDE OIL LNG
OLP	ONE LIBERTY PPTYS INC COM
OMAB	GRUPO AEROPORTUARIO CTR NORTE SPON ADR
OMAD	ONE MADISON CORP COM CL A
OMAD+	ONE MADISON CORP WT EXP 000023
OMAD=	ONE MADISON CORP UNIT EX
OMC	OMNICOM GROUP INC COM
OMCL	OMNICELL INC COM
OMED	ONCOMED PHARMACEUTICALS INC COM
OMER	OMEROS CORP COM
OMEX	ODYSSEY MARINE EXPLORATION INC COM NEW
OMF	ONEMAIN HLDGS INC COM
OMFL	Oppenheimer Russell 1000 Dynamic Multifactor ETF
OMFS	Oppenheimer Russell 2000 Dynamic Multifactor ETF
OMI	OWENS & MINOR INC NEW COM
OMN	OMNOVA SOLUTIONS INC COM
OMOM	Oppenheimer Russell 1000 Momentum Factor ETF
OMP	OASIS MIDSTREAM PARTNERS LP COM UNITS REPS
ON	ON SEMICONDUCTOR CORP COM
ONB	OLD NATL BANCORP IND COM
ONCE	SPARK THERAPEUTICS INC COM
ONCS	ONCOSEC MED INC COM NEW
ONCY	ONCOLYTICS BIOTECH INC COM NEW
ONDK	ON DECK CAP INC COM
ONE	ONESMART INTL ED GROUP LTD SPONSORED ADS
ONEO	SPDR SER TR RUSSELL MOMENTUM
ONEQ	FIDELITY COMWLTH TR NDQ CP IDX TRK
ONEV	SPDR SER TR RUSSELL LOW VOL
ONEY	SPDR SER TR RUSSELL YIELD
ONP	ORIENT PAPER INC COM NEW
ONS	ONCOBIOLOGICS INC COM
ONSIW	ONCOBIOLOGICS INC WT EXP A 021819
ONTL	OSI ETF TR OSHARES FTSE
ONTX	ONCONOVA THERAPEUTICS INC COM NEW
ONTXW	ONCONOVA THERAPEUTICS INC WT EXP 071121
ONVO	ORGANOVO HLDGS INC COM

OOMA	OOMA INC COM
OPB	OPUS BK IRVINE CALIF COM
OPBK	OP BANCORP COM
OPES	OPES ACQUISITION CORP COM
OPESU	OPES ACQUISITION CORP UNIT EX 030723
OPESW	OPES ACQUISITION CORP WT EXP 031323
OPGN	OPGEN INC COM NEW
OPGNW	OPGEN INC WT EXP 050820
OPHC	OPTIMUMBANK HOLDINGS INC COM
OPHT	OPHTHOTECH CORP COM
OPK	OPKO HEALTH INC COM
OPNT	OPIANT PHARMACEUTICALS INC COM
OPOF	OLD POINT FINL CORP COM
OPP	RIVERNORTH DOUBLELINE STRATEGC COM
OPRX	OPTIMIZERX CORP COM NEW
OPTN	OPTINOSE INC COM
OPTT	OCEAN PWR TECHNOLOGIES INC COM PAR \$
OPY	OPPENHEIMER HLDGS INC CL A NON VTG
OQAL	Oppenheimer Russell 1000 Quality Factor ETF
OR	OSISKO GOLD ROYALTIES LTD COM
ORA	ORMAT TECHNOLOGIES INC COM
ORAN	ORANGE SPONSORED ADR
ORBC	ORBCOMM INC COM
ORBK	ORBOTECH LTD ORD
ORC	ORCHID IS CAP INC COM
ORCL	ORACLE CORP COM
ORG	JANUS DETROIT STR TR ORGANICS ETF
ORGS	ORGENESIS INC COM NEW
ORI	OLD REP INTL CORP COM
ORIG	OCEAN RIG UDW INC COM CL A
ORIT	ORITANI FINL CORP DEL COM
ORLY	O REILLY AUTOMOTIVE INC NEW COM
ORM	OWENS RLTY MTG INC COM
ORMP	ORAMED PHARM INC COM NEW
ORN	ORION GROUP HOLDINGS INC COM
ORPN	BIOBLAST PHARMA LTD SHS NEW
ORRF	ORRSTOWN FINL SVCS INC COM
OSB	NORBORD INC COM NEW
OSBC	OLD SECOND BANCORP INC ILL COM



OSBCP	OLD SECOND CAP TR I PFD TR SEC
OSG	OVERSEAS SHIPHOLDING GROUP INC CL A NEW
OSIS	OSI SYSTEMS INC COM
OSIZ	Oppenheimer Russell 1000 Size Factor ETF
OSK	OSHKOSH CORP COM
OSLE	OAKTREE SPECIALTY LENDING CORP 5.875% SR NT 24
OSN	OSSEN INNOVATION CO LTD SPONSORED ADR NE
OSPN	ONESPAN INC COM
OSPR	OSPREY ENERGY ACQUISITION CORP CL A COM
OSPRU	OSPREY ENERGY ACQUISITION CORP UNIT EXP 072122
OSPRW	OSPREY ENERGY ACQUISITION CORP WT EXP 072122
OSS	ONE STOP SYS INC COM
OSTK	OVERSTOCK COM INC DEL COM
OSUR	ORASURE TECHNOLOGIES INC COM
OTEL	OTELCO INC CL A NEW
OTEX	OPEN TEXT CORP COM
OTIC	OTONOMY INC COM
OTIV	ON TRACK INNOVATION LTD SHS
OTTR	OTTER TAIL CORP COM
OTTW	OTTAWA BANCORP INC COM
OUNZ	VANECK MERK GOLD TRUST GOLD TRUST
OUSA	FQF TR OSHARS FTSE US
OUSM	OSI ETF TR OSHARES FTSE
OUT	OUTFRONT MEDIA INC COM
OVAS	OVASCIENCE INC COM
OVBC	OHIO VY BANC CORP COM
OVID	OVID THERAPEUTICS INC COM
OVLG	INVESCO EXCH TRD SLF IDX FD TR US LRG CP OPTM
OVLU	Oppenheimer Russell 1000 Value Factor ETF
OVLV	OAK VALLEY BANCORP OAKDALE CAL COM
OVOL	Oppenheimer Russell 1000 Low Volatility Factor ETF
OXBR	OXBRIDGE RE HLDGS LTD SHS
OXBRW	OXBRIDGE RE HLDGS LTD WT EXP 032619
OXFD	OXFORD IMMUNOTEC GLOBAL PLC ORD SHS
OXLC	OXFORD LANE CAP CORP COM
OXLCM	OXFORD LANE CAP CORP 6.75% PF TRM 24
OXLCO	OXFORD LANE CAP CORP PFD SHS SER 2023
OXM	OXFORD INDS INC COM
OXSQ	OXFORD SQUARE CAP CORP COM

OXSQ	OXFORD SQUARE CAP CORP 6.50% NT 24
OXY	OCCIDENTAL PETE CORP DEL COM
OYLD	Oppenheimer Russell 1000 Yield Factor ETF
OZM	OCH ZIFF CAP MGMT GROUP CL A
OZRK	BANK OF THE OZARKS COM
P	PANDORA MEDIA INC COM
PAA	PLAINS ALL AMERN PIPELINE L P UNIT LTD PARTN
PAAS	PAN AMERICAN SILVER CORP COM
PAC	GPO AEROPORTUARIO DEL PAC SAB SPON ADR B
PACB	PACIFIC BIOSCIENCES CALIF INC COM
PACQ	PURE ACQUISITION CORP CL A
PACQU	PURE ACQUISITION CORP UNIT EXP 041323
PACQW	PURE ACQUISITION CORP WT EXP 041723
PACW	PACWEST BANCORP DEL COM
PAF	INVESCO EXCHNG TRADED FD TR II FTSE RAFI ASIA
PAG	PENSKE AUTOMOTIVE GRP INC COM
PAGG	INVESCO EXCHNG TRADED FD TR II GLOBAL AGRCLTR
PAGP	PLAINS GP HLDGS L P LTD PARTNR INT A
PAGS	PAGSEGURO DIGITAL LTD COM CL A
PAH	PLATFORM SPECIALTY PRODS CORP COM
PAHC	PHIBRO ANIMAL HEALTH CORP CL A COM
PAI	WESTERN ASSET INVESTMENT GRADE COM
PAK	GLOBAL X FDS MSCI PAKISTAN
PALL	ETFS PALLADIUM TR SH BEN INT
PAM	PAMPA ENERGIA S A SPONS ADR LVL I
PANL	PANGAEA LOGISTICS SOLUTION LTD SHS
PANW	PALO ALTO NETWORKS INC COM
PAR	PAR TECHNOLOGY CORP COM
PARR	PAR PACIFIC HOLDINGS INC COM NEW
PATI	PATRIOT TRANSN HLDG INC COM
PATK	PATRICK INDS INC COM
PAVE	Global X U.S. Infrastructure Development ETF
PAVM	PAVMED INC COM
PAVMW	PAVMED INC WT EXP 012922
PAVMZ	PAVMED INC WT Z EXP 043024
PAY	VERIFONE SYS INC COM
PAYC	PAYCOM SOFTWARE INC COM
PAYX	PAYCHEX INC COM
PB	PROSPERITY BANCSHARES INC COM

PBA	PEMBINA PIPELINE CORP COM
PBB	PROSPECT CAPITAL CORPORATION 6.25% NTS 2024
PBBI	PB BANCORP INC COM
PBCT	PEOPLES UNITED FINANCIAL INC COM
PBCTP	PEOPLES UNITED FINANCIAL INC PERP PFD SER A
PBD	INVESCO EXCHNG TRADED FD TR II GBL CLEAN ENRG
PBDM	Invesco PureBeta FTSE Developed ex-North America ETF
PBE	INVESCO EXCHANGE TRADED FD TR DYNMC BIOTECH
PBEE	Invesco PureBeta FTSE Emerging Markets ETF
PBF	PBF ENERGY INC CL A
PBFX	PBF LOGISTICS LP UNIT LTD PTNR
PBH	PRESTIGE BRANDS HLDGS INC COM
PBHC	PATHFINDER BANCORP INC MD COM
PBI	PITNEY BOWES INC COM
PBI-B	PITNEY BOWES INC NT 43
PBIP	PRUDENTIAL BANCORP INC NEW COM
PBJ	INVESCO EXCHANGE TRADED FD TR DYNMC FOOD BEV
PBND	Invesco PureBeta US Aggregate Bond ETF
PBP	INVESCO EXCHANGE TRADED FD TR S&P500 BUY WRT
PBPB	POTBELLY CORP COM
PBR	PETROLEO BRASILEIRO SA PETROBR SPONSORED ADR
PBR.A	PETROLEO BRASILEIRO SA PETROBR SP ADR NON VTG
PBS	INVESCO EXCHANGE TRADED FD TR DYNMC MEDIA
PBSK	POAGE BANKSHARES INC COM
PBSM	Invesco PureBeta MSCI USA Small Cap ETF
PBT	PERMIAN BASIN RTY TR UNIT BEN INT
PBTP	Invesco PureBeta 0-5 Yr US TIPS ETF
PBUS	Invesco PureBeta MSCI USA ETF
PBW	INVESCO EXCHANGE TRADED FD TR WILDERHIL CLAN
PBY	PROSPECT CAPITAL CORPORATION 6.25% NT 28
PBYI	PUMA BIOTECHNOLOGY INC COM
PCAR	PACCAR INC COM
PCEF	INVESCO EXCHNG TRADED FD TR II CEF INM COMPSI
PCF	PUTMAN HIGH INCOME SEC FUND SHS BEN INT
PCG	PG&E CORP COM
PCG-A	PACIFIC GAS & ELEC CO PFD 1ST 6%
PCG-B	PACIFIC GAS & ELEC CO PFD 1ST 5.50%
PCG-C	PACIFIC GAS & ELEC CO PFD 1ST 5%
PCG-D	PACIFIC GAS & ELEC CO PFD 1ST 5%

PCG-E	PACIFIC GAS & ELEC CO PFD 1 SER A 5%
PCG-G	PACIFIC GAS & ELEC CO PFD 1ST 4.80%
PCG-H	PACIFIC GAS & ELEC CO PFD 1ST 4.50%
PCG-I	PACIFIC GAS & ELEC CO PFD 1ST 4.36%
PCH	POTLATCHDELTIC CORPORATION COM
PCI	PIMCO DYNMIC CREDIT AND MRT IN COM SHS
PCK	PIMCO CALIF MUN INCOME FD II COM
PCM	PCM FUND INC COM
PCMI	PCM INC COM
PCN	PIMCO CORPORATE INCOME STRATEG COM
PCOM	POINTS INTL LTD COM NEW
PCQ	PIMCO CA MUNICIPAL INCOME FD COM
PCRX	PACIRA PHARMACEUTICALS INC COM
PCSB	PCSB FINL CORP COM
PCTI	PC-TEL INC COM
PCTY	PAYLOCITY HLDG CORP COM
PCY	INVESCO EXCHNG TRADED FD TR II EMRNG MKT SVRG
PCYG	PARK CITY GROUP INC COM NEW
PCYO	PURECYCLE CORP COM NEW
PDBC	INVESCO ACTIVELY MANAGD ETF TR OPTIMUM YIELD
PDCE	PDC ENERGY INC COM
PDCO	PATTERSON COMPANIES INC COM
PDEX	PRO-DEX INC COLO COM NEW
PDFS	PDF SOLUTIONS INC COM
PDI	PIMCO DYNAMIC INCOME FD SHS
PDLB	PDL CMNTY BANCORP COM
PDLI	PDL BIOPHARMA INC COM
PDM	PIEDMONT OFFICE REALTY TR INC COM CL A
PDN	INVESCO EXCHNG TRADED FD TR II FTSE RAFI SML
PDP	INVESCO EXCHANGE TRADED FD TR DWA MOMENTUM
PDS	PRECISION DRILLING CORP COM 2010
PDT	HANCOCK JOHN PREMUIM DIV FD COM SH BEN INT
PDVW	PDVWIRELESS INC COM
PE	PARSLEY ENERGY INC CL A
PEB	PEBBLEBROOK HOTEL TR COM
PEB-C	PEBBLEBROOK HOTEL TR PFD SER C 6.50%
PEB-D	PEBBLEBROOK HOTEL TR PFD SHS SER D
PEBK	PEOPLES BANCORP N C INC COM
PEBO	PEOPLES BANCORP INC COM

PED	PEDEVCO CORP COM PAR
PEG	PUBLIC SVC ENTERPRISE GROUP COM
PEGA	PEGASYSTEMS INC COM
PEGI	PATTERN ENERGY GROUP INC CL A
PEI	PENNSYLVANIA RL ESTATE INVNT TR SH BEN INT
PEI-B	PENNSYLVANIA RL ESTATE INVNT TR CUM RED PERP PFD
PEI-C	PENNSYLVANIA RL ESTATE INVNT TR RED PFD SER C
PEI-D	PENNSYLVANIA RL ESTATE INVNT TR 6.875% RED PFD D
PEIX	PACIFIC ETHANOL INC COM PAR \$.001
PEJ	INVESCO EXCHANGE TRADED FD TR DYNMC LEISURE
PEK	VANECK VECTORS ETF TR CHINAAMC CSI 300
PEN	PENUMBRA INC COM
PENN	PENN NATL GAMING INC COM
PEO	ADAM NAT RES FD INC COM
PEP	PEPSICO INC COM
PER	SANDRIDGE PERMIAN TR COM UNIT BEN INT
PERI	PERION NETWORK LTD SHS
PERY	ELLIS PERRY INTL INC COM
PES	PIONEER ENERGY SVCS CORP COM
PESI	PERMA-FIX ENVIRONMENTAL SVCS COM NEW
PETQ	PETIQ INC COM CL A
PETS	PETMED EXPRESS INC COM
PETX	ARATANA THERAPEUTICS INC COM
PETZ	TDH HLDGS INC SHS
PETZC	GABELLI PET PARENT FUND NEXTSHARES
PEX	Proshares Global Listed Private Equity ETF
PEY	INVESCO EXCHANGE TRADED FD TR HIG YLD EQ DIV
PEZ	INVESCO EXCHANGE TRADED FD TR DWA CYCLICALS
PF	PINNACLE FOODS INC DEL COM
PFBC	PREFERRED BK LOS ANGELES CA COM NEW
PFBI	PREMIER FINL BANCORP INC COM
PFD	FLAHERTY & CRUMRINE PFD INC FD COM
PFE	PFIZER INC COM
PFF	ISHARES TR S&P US PFD STK
PFFA	ETFIS SER TR I VIRTUS INFRCAP
PFFD	Global X U.S. Preferred ETF
PFFR	ETFIS SER TR I INFRACP REIT PFD
PFG	PRINCIPAL FINL GROUP INC COM
PFGC	PERFORMANCE FOOD GROUP CO COM

PFH	CABCO TR FOR J C PENNEY DEBS CTF TR 7.625%
PFI	INVESCO EXCHANGE TRADED FD TR DWA FINL MUMT
PFIE	PROFIRE ENERGY INC COM
PFIG	INVESCO EXCHNG TRADED FD TR II FNDMNTL IG CRP
PFIN	P & F INDS INC CL A NEW
PFIS	PEOPLES FINL SVCS CORP COM
PFL	PIMCO INCOME STRATEGY FUND COM
PFLT	PENNANTPARK FLOATING RATE CAP COM
PFM	INVESCO EXCHANGE TRADED FD TR DIVID ACHIEVEV
PFMT	PERFORMANT FINL CORP COM
PFN	PIMCO INCOME STRATEGY FUND II COM
PFNX	PFENEX INC COM
PFO	FLAHERTY & CRUMRINE PFD INC OP COM
PFPT	PROOFPOINT INC COM
PFS	PROVIDENT FINL SVCS INC COM
PFSI	PENNYMAC FINL SVCS INC CL A
PFSW	PFSWEB INC COM NEW
PFXF	VANECK VECTORS ETF TR PFD SECS EX FINL
PG	PROCTER AND GAMBLE CO COM
PGAL	GLOBAL X FDS GBL X MSCI PT ET
PGC	PEAPACK-GLADSTONE FINL CORP COM
PGF	INVESCO EXCHANGE TRADED FD TR FINL PFD ETF
PGHY	INVESCO EXCHNG TRADED FD TR II GBL SRT TRM HY
PGJ	INVESCO EXCHANGE TRADED FD TR GLOBAL DRGN CN
PGLC	PERSHING GOLD CORP COM NEW
PGMB	BARCLAYS BK PLC IPATH B PLATINUM
PGNX	PROGENICS PHARMACEUTICALS INC COM
PGP	PIMCO GLOBAL STOCKSPLS INCM FD COM
PGR	PROGRESSIVE CORP OHIO COM
PGRE	PARAMOUNT GROUP INC COM
PGTI	PGT INNOVATIONS INC COM
PGX	INVESCO EXCHNG TRADED FD TR II PFD ETF
PGZ	PRINCIPAL REAL ESTATE INCOME SHS BEN INT
PH	PARKER HANNIFIN CORP COM
PHB	INVESCO EXCHNG TRADED FD TR II FNDMNTL HY CRP
PHD	PIONEER FLOATING RATE TR COM
PHDG	INVESCO ACTIVELY MANAGD ETF TR S&P500 DOWNSID
PHG	KONINKLIJKE PHILIPS N V NY REG SH NEW
PHH	PHH CORP COM NEW

PHI	PLDT INC SPONSORED ADR
PHII	PHI INC COM VTG
PHIIK	PHI INC COM NON VTG
PHK	PIMCO HIGH INCOME FD COM SHS
PHM	PULTE GROUP INC COM
PHO	INVESCO EXCHANGE TRADED FD TR WATER RES ETF
PHT	PIONEER HIGH INCOME TR COM
PHX	PANHANDLE OIL AND GAS INC CL A
PHYS	SPROTT PHYSICAL GOLD TRUST UNIT
PI	IMPINJ INC COM
PICB	INVESCO EXCHNG TRADED FD TR II INTL CORP BD
PICK	iShares MSCI Global Metals & Mining Producers ETF
PICO	PICO HLDGS INC COM NEW
PID	INVESCO EXCHANGE TRADED FD TR INTL DIVI ACHI
PIE	INVESCO EXCHNG TRADED FD TR II DWA EMERG MKTS
PIH	1347 PPTY INS HLDGS INC COM
PIHPP	1347 PPTY INS HLDGS INC 8% PFD SER A
PII	POLARIS INDS INC COM
PILL	DIREXION SHS ETF TR DAILY PHARMA
PIM	PUTNAM MASTER INTER INCOME TR SH BEN INT
PIN	INVESCO INDIA EXCHG TRED FD TR INDIA ETF
PINC	PREMIER INC CL A
PIO	INVESCO EXCHNG TRADED FD TR II GLOBAL WATER
PIR	PIER 1 IMPORTS INC COM
PIRS	PIERIS PHARMACEUTICALS INC COM
PIXY	SHIFTPIXY INC COM
PIY	PREFERRED PLUS TR CZN-1 TR CTF
PIZ	INVESCO EXCHNG TRADED FD TR II DWA DEV MKTS
PJC	PIPER JAFFRAY COS COM
PJH	PRUDENTIAL FINL INC JR SUB NT 52
PJP	INVESCO EXCHANGE TRADED FD TR DYNMC PHRMCTLS
PJT	PJT PARTNERS INC COM CL A
PK	PARK HOTELS RESORTS INC COM
PKB	INVESCO EXCHANGE TRADED FD TR DYNMC BLDG CON
PKBK	PARKE BANCORP INC COM
PKD	PARKER DRILLING CO COM
PKE	PARK ELECTROCHEMICAL CORP COM
PKG	PACKAGING CORP AMER COM
PKI	PERKINELMER INC COM

PKO	PIMCO INCOME OPPORTUNITY FD COM
PKOH	PARK OHIO HLDGS CORP COM
PKW	INVESCO EXCHANGE TRADED FD TR BUYBACK ACHIEV
PKX	POSCO SPONSORED ADR
PLAB	PHOTRONICS INC COM
PLAY	DAVE & BUSTERS ENTMT INC COM
PLBC	PLUMAS BANCORP COM
PLCE	CHILDRENS PL INC COM
PLCY	EventShares U.S. Policy Alpha ETF
PLD	PROLOGIS INC COM
PLG	PLATINUM GROUP METALS LTD COM
PLLL	PIEDMONT LITHIUM LTD SPONSORED ADR
PLM	POLYMET MINING CORP COM
PLND	VANECK VECTORS ETF TR POLAND ETF
PLNT	PLANET FITNESS INC CL A
PLOW	DOUGLAS DYNAMICS INC COM
PLPC	PREFORMED LINE PRODS CO COM
PLSE	PULSE BIOSCIENCES INC COM
PLT	PLANTRONICS INC NEW COM
PLTM	GRANITESHARES PLATINUM TR SHS BEN INT
PLUG	PLUG POWER INC COM NEW
PLUS	EPLUS INC COM
PLW	INVESCO EXCHNG TRADED FD TR II 1 30 LADER TRE
PLX	PROTALIX BIOTHERAPEUTICS INC COM
PLXP	PLX PHARMA INC COM
PLXS	PLEXUS CORP COM
PLYA	PLAYA HOTELS & RESORTS NV SHS
PLYM	PLYMOUTH INDL REIT INC COM
PLYM-A	PLYMOUTH INDL REIT INC 7.50% PFD A
PM	PHILIP MORRIS INTL INC COM
PMBC	PACIFIC MERCANTILE BANCORP COM
PMD	PSYCHEMEDICS CORP COM NEW
PME	PINGTAN MARINE ENTERPRISE LTD SHS
PMF	PIMCO MUNICIPAL INCOME FD COM
PML	PIMCO MUN INCOME FD II COM
PMM	PUTNAM MANAGED MUN INCOM TR COM
PMO	PUTNAM MUN OPPORTUNITIES TR SH BEN INT
PMOM	PRINCIPAL EXCHANGE TRADED FDS SUSTINBLE MMNT
PMPT	ETFIS SER TR I ISECTR GRW ETF



PMR	INVESCO EXCHANGE TRADED FD TR DYNMC RETAIL
PMT	PENNYMAC MTG INVT TR COM
PMT-A	PENNYMAC MTG INVT TR PFD SER A
PMT-B	PENNYMAC MTG INVT TR CUM RED PFD B
PMTS	CPI CARD GROUP INC COM NEW
PMX	PIMCO MUN INCOME FD III COM
PNBK	PATRIOT NATL BANCORP INC COM NEW
PNC	PNC FINL SVCS GROUP INC COM
PNC+	PNC FINL SVCS GROUP INC WT EXP 123118
PNC-P	PNC FINL SVCS GROUP INC DEPOSITARY SHS P
PNC-Q	PNC FINL SVCS GROUP INC DEP REPSTG 1/400
PNF	PIMCO NY MUNICIPAL INCOME FD COM
PNFP	PINNACLE FINL PARTNERS INC COM
PNI	PIMCO NEW YORK MUN FD II COM
PNK	PINNACLE ENTMT INC NEW COM
PNM	PNM RES INC COM
PNNT	PENNANTPARK INVT CORP COM
PNQI	INVESCO EXCHANGE TRADED FD TR NASDAQ INTERNT
PNR	PENTAIR PLC SHS
PNRG	PRIMEENERGY CORP COM
PNTR	POINTER TELOCATION LTD SHS
PNW	PINNACLE WEST CAP CORP COM
PODD	INSULET CORP COM
POL	POLYONE CORP COM
POLA	POLAR PWR INC COM
POOL	POOL CORPORATION COM
POPE	POPE RES DEL LTD PARTNERSHIP DEPOSITRY RCPT
POR	PORTLAND GEN ELEC CO COM NEW
POST	POST HLDGS INC COM
POWI	POWER INTEGRATIONS INC COM
POWL	POWELL INDS INC COM
PPA	INVESCO EXCHANGE TRADED FD TR AEROSPACE DEFN
PPBI	PACIFIC PREMIER BANCORP COM
PPC	PILGRIMS PRIDE CORP NEW COM
PPDF	PPDAI GROUP INC SPONSORED ADR
PPDM	DIREXION SHS ETF TR PORTFOLIO DEV
PPEM	DIREXION SHS ETF TR PORTFOLIO EMGR
PPG	PPG INDS INC COM
PPH	VANECK VECTORS ETF TR PHARMACEUTICAL

PPIH	PERMA PIPE INTL HLDGS INC COM
PPL	PPL CORP COM
PPLC	DIREXION SHS ETF TR PORTFLIO S&P 500
PPLN	JPMORGAN CHASE FINL CO LLC CUSHING MLP 37
PPLT	ETFS PLATINUM TR SH BEN INT
PPMC	DIREXION SHS ETF TR PORTFOLIO MID
PPR	VOYA PRIME RATE TR SH BEN INT
PPSC	DIREXION SHS ETF TR PORTFLIO S&P SML
PPSI	PIONEER PWR SOLUTIONS INC COM NEW
PPT	PUTNAM PREMIER INCOME TR SH BEN INT
PPTB	DIREXION SHS ETF TR PORTFLIO TOTAL
PPTY	ETF SER SOLUTIONS US DIVERSIFIED
PPX	PPL CAP FDG INC JR SUB NT-B 73
PQG	PQ GROUP HLDGS INC COM
PRA	PROASSURANCE CORP COM
PRAA	PRA GROUP INC COM
PRAH	PRA HEALTH SCIENCES INC COM
PRAN	PRANA BIOTECHNOLOGY LTD SPON ADR NEW
PRB	VANECK VECTORS ETF TR PRE REFUNDED MUN
PRCP	PERCEPTRON INC COM
PREF	Principal Spectrum Preferred Securities Active ETF
PRE-F	PARTNERRE LTD REDPFD SHS SER F
PRE-G	PARTNERRE LTD PFD SER G 6.50%
PRE-H	PARTNERRE LTD PFD SER H 7.25%
PRE-I	PARTNERRE LTD PFD SER I 5.875%
PRF	INVESCO EXCHANGE TRADED FD TR FTSE RAFI 1000
PRFT	PERFICIENT INC COM
PRFZ	INVESCO EXCHANGE TRADED FD TR FTSE RAFI 1500
PRGO	PERRIGO CO PLC SHS
PRGS	PROGRESS SOFTWARE CORP COM
PRGX	PRGX GLOBAL INC COM NEW
PRH	PRUDENTIAL FINL INC JR SUB NT 53
PRI	PRIMERICA INC COM
PRID	EXCHANGE LISTED FDS TR INSIGHTSHARES
PRIM	PRIMORIS SVCS CORP COM
PRK	PARK NATL CORP COM
PRKR	PARKERVISION INC COM NEW
PRLB	PROTO LABS INC COM
PRME	FIRST TR EXCHANGE TRADED FD IV HEITMAN GLOBAL

PRMW	PRIMO WTR CORP COM
PRN	INVESCO EXCHANGE TRADED FD TR DWA INDLS MUMT
PRNT	The 3D Printing ETF
PRO	PROS HOLDINGS INC COM
PROV	PROVIDENT FINL HLDGS INC COM
PRPH	PROPHASE LABS INC COM
PRPL	PURPLE INNOVATION INC COM
PRPLW	PURPLE INNOVATION INC WT EXP 020223
PRPO	PRECIPIO INC COM
PRQR	PROQR THRAPEUTICS N V SHS EURO
PRSC	PROVIDENCE SVC CORP COM
PRSP	PERSPECTA INC COM
PRSS	CAFEPRESS INC COM
PRT	PERMROCK ROYALTY TRUST TR UNIT
PRTA	PROTHENA CORP PLC SHS
PRTK	PARATEK PHARMACEUTICALS INC COM
PRTO	PROTEON THERAPEUTICS INC COM
PRTS	U.S. AUTO PARTS NETWORK INC COM
PRTY	PARTY CITY HOLDCO INC COM
PRU	PRUDENTIAL FINL INC COM
PS	PLURALSIGHT INC COM CL A
PSA	PUBLIC STORAGE COM
PSA-A	PUBLIC STORAGE SHS REPSTG PFD
PSA-B	PUBLIC STORAGE DEP RPST PFD B
PSA-C	PUBLIC STORAGE DEP SHS PFD C
PSA-D	PUBLIC STORAGE DEP SHS PFD D
PSA-E	PUBLIC STORAGE PFD BEN INT E
PSA-F	PUBLIC STORAGE PFD SHS F 5.15%
PSA-G	PUBLIC STORAGE 5.05% CUM PFD G
PSAU	INVESCO EXCHNG TRADED FD TR II GLOBAL GLD PREC
PSA-U	PUBLIC STORAGE DEP SHS PFD-U
PSA-V	PUBLIC STORAGE DEP1/1000THPFD
PSA-W	PUBLIC STORAGE DEPSH1/1000PFD W
PSA-X	PUBLIC STORAGE DEP 1/1000 PFD X
PSA-Y	PUBLIC STORAGE DEP 1/1000 PFD Y
PSA-Z	PUBLIC STORAGE DEP SHS 1/1000 Z
PSB	PS BUSINESS PKS INC CALIF COM
PSB-U	PS BUSINESS PKS INC CALIF S R1/1000 PF U
PSB-V	PS BUSINESS PKS INC CALIF DEP1/1000 PFD V

PSB-W	PS BUSINESS PKS INC CALIF SHS PFD SER W
PSB-X	PS BUSINESS PKS INC CALIF 5.25% CUM PFD X
PSB-Y	PS BUSINESS PKS INC CALIF 5.20% SHS PFD Y
PSC	PRINCIPAL EXCHANGE TRADED FDS US SM MLT FC ETF
PSCC	INVESCO EXCHNG TRADED FD TR II S&P SMLCP STAP
PSCD	INVESCO EXCHNG TRADED FD TR II S&P SMLCP DISC
PSCE	INVESCO EXCHNG TRADED FD TR II S&P SMLCP ENGY
PSCF	INVESCO EXCHNG TRADED FD TR II S&P SMLCP FINL
PSCH	INVESCO EXCHNG TRADED FD TR II S&P SMLCP HELT
PSCI	INVESCO EXCHNG TRADED FD TR II S&P SMLCP INDL
PSCM	INVESCO EXCHNG TRADED FD TR II S&P SMLCP MATL
PSCT	INVESCO EXCHNG TRADED FD TR II S&P SMLCP INFO
PSCU	INVESCO EXCHNG TRADED FD TR II S&P SMLCP UTIL
PSDO	PRESIDIO INC COM
PSEC	PROSPECT CAPITAL CORPORATION COM
PSET	PRINCIPAL EXCHANGE TRADED FDS PRIN PRICE IDX
PSF	COHEN & STEERS SLT PFD INCM FD COM
PSI	INVESCO EXCHANGE TRADED FD TR DYNMC SEMICNDT
PSJ	INVESCO EXCHANGE TRADED FD TR DYNMC SOFTWARE
PSK	SPDR SERIES TRUST WELLS FG PFD ETF
PSL	INVESCO EXCHANGE TRADED FD TR DWA STAPLES
PSLV	SPROTT PHYSICAL SILVER TR TR UNIT
PSMB	Invesco Balanced Multi-Asset Allocation ETF
PSMC	Invesco Conservative Multi-Asset Allocation ETF
PSMG	Invesco Growth Multi-Asset Allocation ETF
PSMM	Invesco Moderately Conservative Multi-Asset Allocation ETF
PSMT	PRICESMART INC COM
PSO	PEARSON PLC SPONSORED ADR
PSP	INVESCO EXCHANGE TRADED FD TR GBL LISTED PVT
PSQ	PROSHARES TR SHORT QQQ NEW
PSR	INVESCO ACTIVELY MANAGD ETF TR ACTIVE US REAL
PST	PROSHARES TR PSHS ULSHT 7-10Y
PSTG	PURE STORAGE INC CL A
PSTI	PLURISTEM THERAPEUTICS INC COM
PSX	PHILLIPS 66 COM
PSXP	PHILLIPS 66 PARTNERS LP COM UNIT REP INT
PTC	PTC INC COM
PTCT	PTC THERAPEUTICS INC COM
PTEN	PATTERSON UTI ENERGY INC COM

PTEU	Pacer Trendpilot™ European Index ETF
PTF	INVESCO EXCHANGE TRADED FD TR DWA TECHNOLOGY
PTGX	PROTAGONIST THERAPEUTICS INC COM
PTH	INVESCO EXCHANGE TRADED FD TR DWA HEALTHCARE
PTI	PROTEOSTASIS THERAPEUTICS INC COM
PTIE	PAIN THERAPEUTICS INC COM NEW
PTLA	PORTOLA PHARMACEUTICALS INC COM
PTLC	Pacer Trendpilot US Large Cap ETF
PTMC	Pacer Trendpilot US Mid Cap ETF
PTN	PALATIN TECHNOLOGIES INC COM PAR \$ .01
PTNQ	PACER FDS TR TRENDP 100 ETF
PTNR	PARTNER COMMUNICATIONS CO LTD ADR
PTR	PETROCHINA CO LTD SPONSORED ADR
PTSI	P A M TRANSN SVCS INC COM
PTX	PERNIX THERAPEUTICS HLDGS INC COM NEW
PTY	PIMCO CORPORATE & INCOME OPP F COM
PUB	PEOPLES UTAH BANCORP COM
PUI	INVESCO EXCHANGE TRADED FD TR DWA UTILS MUMT
PUK	PRUDENTIAL PLC ADR
PUK-	PRUDENTIAL PLC 6.75% PERP SUB
PUK-A	PRUDENTIAL PLC PER SUB 6.50%
PULM	PULMATRIX INC COM
PULS	PGIM ETF TR ULTRA SHORT
PUMP	PROPETRO HLDG CORP COM
PUTW	WISDOMTREE TR CBOE S&P 500
PUW	INVESCO EXCHANGE TRADED FD TR WILDERHL PRGRS
PVAC	PENN VA CORP NEW COM
PVAL	PRINCIPAL EXCHANGE TRADED FDS CONTRARIAN VLU
PVBC	PROVIDENT BANCORP INC COM
PVG	PRETIUM RES INC COM
PVH	PVH CORP COM
PVI	INVESCO EXCHNG TRADED FD TR II VRDO TAX FREE
PVTL	PIVOTAL SOFTWARE INC COM CL A
PW	POWER REIT COM
PW-A	POWER REIT PFD SER A 7.75%
PWB	INVESCO EXCHANGE TRADED FD TR DYNMC LRG GWTH
PWC	INVESCO EXCHANGE TRADED FD TR DYNMC MKT ETF
PWOD	PENNS WOODS BANCORP INC COM
PWR	QUANTA SVCS INC COM

PWS	Pacer WealthShield ETF
PWV	INVESCO EXCHANGE TRADED FD TR DYNMC LRG VALU
PWZ	INVESCO EXCHNG TRADED FD TR II CALIF AMT MUN
PX	PRAXAIR INC COM
PXD	PIONEER NAT RES CO COM
PXE	INVESCO EXCHANGE TRADED FD TR DYNMC ENRG EXP
PXF	INVESCO EXCHNG TRADED FD TR II FTSE RAFI DEV
PXH	INVESCO EXCHNG TRADED FD TR II FTSE RAFI EMNG
PXI	INVESCO EXCHANGE TRADED FD TR DWA ENERGY MNT
PXJ	INVESCO EXCHANGE TRADED FD TR DYNMC OIL GAS
PXLG	INVESCO EXCHANGE TRADED FD TR RUSSEL 200 GWT
PXLV	INVESCO EXCHANGE TRADED FD TR RUSSEL 200 PUR
PXLW	PIXELWORKS INC COM NEW
PXMG	INVESCO EXCHANGE TRADED FD TR RUSEL MDCP GWT
PXMV	INVESCO EXCHANGE TRADED FD TR RUSEL MDCP PUR
PXQ	INVESCO EXCHANGE TRADED FD TR DYNMC NETWRNG
PXR	INVESCO EXCHNG TRADED FD TR II EMRNG MKT INFR
PXS	PYXIS TANKERS INC COM
PXSG	INVESCO EXCHANGE TRADED FD TR RUSEL 2000 PUR
PXSV	INVESCO EXCHANGE TRADED FD TR RUSEL 2000 VAL
PXUS	PRINCIPAL EXCHANGE TRADED FDS INTL MULT FACT
PY	PRINCIPAL EXCHANGE TRADED FDS PRIN SHRHLDR
PYDS	PAYMENT DATA SYS INC COM NEW
PYN	PIMCO NEW YORK MUN INCM FD 111 COM
PYPL	PAYPAL HLDGS INC COM
PYS	PPLUS TR RRD-1 CTF CL A
PYT	PPLUS TR GSC 2 CT FL RT
PYZ	INVESCO EXCHANGE TRADED FD TR DWA BASIC MATL
PZA	INVESCO EXCHNG TRADED FD TR II NATL AMT MUNI
PZC	PIMCO CALIF MUN INCOME FD III COM
PZD	INVESCO EXCHANGE TRADED FD TR CLEANTECH ETF
PZG	PARAMOUNT GOLD NEV CORP COM
PZI	INVESCO EXCHANGE TRADED FD TR ZACKS MICRO CP
PZN	PZENA INVESTMENT MGMT INC CLASS A
PZT	INVESCO EXCHNG TRADED FD TR II NY AMT FRE MUN
PZZA	PAPA JOHNS INTL INC COM
QABA	FIRST TR NASDAQ ABA CMNTY BK I UT COM SHS ETF
QADA	QAD INC CL A
QADB	QAD INC CL B

QAI	INDEXIQ ETF TR HEDGE MLTI ETF
QARP	DBX ETF TR XTRACKERS RUSE
QAT	ISHARES TR MSCI QATAR ETF
QBAK	QUALSTAR CORP COM NEW
QCAN	SPDR INDEX SHS FDS MSCI CDA STRTGIC
QCLN	FIRST TR EXCHANGE TRADED FD NAS CLNEDG GREEN
QCOM	QUALCOMM INC COM
QCP	QUALITY CARE PPTYS INC COM
QCRH	QCR HOLDINGS INC COM
QD	QUDIAN INC ADR
QDEF	FLEXSHARES TR QLT DIV DEF IDX
QDEL	QUIDEL CORP COM
QDEU	SPDR INDEX SHS FDS MSCI GER STRTGIC
QDF	FLEXSHARES TR QUALT DIVD IDX
QDYN	FLEXSHARES TR QLT DIVDYN IDX
QED	INDEXIQ ETF TR HDG EVE DRIV
QEFA	SPDR INDEX SHS FDS MSCI EAFE STRTGC
QEMM	SPDR INDEX SHS FDS MSCI EMRG MKTS
QEP	QEP RES INC COM
QES	QUINTANA ENERGY SVCS INC COM
QGBR	SPDR INDEX SHS FDS MSCI UK STRTGIC
QGEN	QIAGEN NV SHS NEW
QGTA	INDEXIQ ETF TR IQ LEADERS GTA
QHC	QUORUM HEALTH CORP COM
QID	PROSHARES TR ULTSHRT QQQ
QINC	FIRST TR EXCHANGE TRADED FD VI RBA QUALIN ETF
QIWI	QIWI PLC SPON ADR REP B
QJPN	SPDR INDEX SHS FDS MSCI JAP STRTGIC
QLC	FLEXSHARES TR US QUALITY CAP
QLD	PROSHARES TR PSHS ULTRA QQQ
QLS	INDEXIQ ETF TR LNG SHT TRACK
QLTA	ISHARES TR A RATE CP BD ETF
QLYS	QUALYS INC COM
QMN	INDEXIQ ETF TR IQ HEDGMKT NUT
QMOM	Alpha Architect U.S. Quantitative Momentum ETF
QNST	QUINSTREET INC COM
QQEW	FIRST TR NAS100 EQ WEIGHTED IX SHS
QQQ	INVESCO QQQ TR UNIT SER 1
QQQC	GLOBAL X FDS NASDQ CHINA TECH

QQQE	DIREXION SHS ETF TR NAS100 EQL WGT
QQQX	NUVEEN NASDAQ 100 DYNAMIC OVER COM SHS
QQXT	FIRST TR EXCHANGE TRADED FD NASDAQ 100 EX
QRHC	QUEST RESOURCE HLDG CORP COM NEW
QRTEA	QURATE RETAIL INC COM SER A
QRTEB	QURATE RETAIL INC COM SER B
QRVO	QORVO INC COM
QSII	QUALITY SYS INC COM
QSR	RESTAURANT BRANDS INTL INC COM
QSY	WISDOMTREE TR US QLT SHRHD YLD
QTEC	FIRST TR NASDAQ100 TECH INDEX SHS
QTM	QUANTUM CORP COM NEW
QTNA	QUANTENNA COMMUNICATIONS INC COM
QTNT	QUOTIENT LTD SHS
QTRH	QUARTERHILL INC COM
QTRX	QUANTERIX CORP COM
QTS	QTS RLTY TR INC COM CL A
QTS-A	QTS RLTY TR INC 7.12% CUM PFD A
QTWO	Q2 HLDGS INC COM
QUAD	QUAD / GRAPHICS INC COM CL A
QUAL	iShares Edge MSCI USA Quality Factor ETF
QUIK	QUICKLOGIC CORP COM
QUMU	QUMU CORP COM
QUOT	QUOTIENT TECHNOLOGY INC COM
QURE	UNIQUE NV SHS
QUS	SPDR SER TR MSCI USA STRTGIC
QVAL	Alpha Architect U.S. Quantitative Value ETF
QVM	ARROW INVTS TR QVM EQT FACTOR
QWLD	SPDR INDEX SHS FDS MSCI WRLD STRGIC
QXGG	QuantX Risk Managed Growth ETF
QXMI	QuantX Risk Managed Multi-Asset Income ETF
QXRR	QuantX Risk Managed Real Return ETF
QXTR	QuantX Risk Managed Multi-Asset Total Return ETF
QYLD	HORIZONS ETF TR I HORIZONS NASDAQ
R	RYDER SYS INC COM
RA	BROOKFIELD REAL ASSETS INCOME SHS BEN INT
RAAX	VANECK VECTORS ETF TR REAL ASSET ALC
RACE	FERRARI N V COM
RAD	RITE AID CORP COM



RADA	RADA ELECTR INDS LTD COM PAR NEW
RAIL	FREIGHTCAR AMER INC COM
RALS	PROSHARES TR RAFI LG SHT FD
RAND	RAND CAP CORP COM
RARE	ULTRAGENYX PHARMACEUTICAL INC COM
RARX	RA PHARMACEUTICALS INC COM
RAVE	RAVE RESTAURANT GROUP INC COM
RAVI	FLEXSHARES TR READY ACC VARI
RAVN	RAVEN INDS INC COM
RBA	RITCHIE BROS AUCTIONEERS COM
RBB	RBB BANCORP COM
RBBN	RIBBON COMMUNICATIONS INC COM
RBC	REGAL BELOIT CORP COM
RBCAA	REPUBLIC BANCORP KY CL A
RBCN	RUBICON TECHNOLOGY INC COM NEW
RBIN	ETF SER SOLUTIONS NATIONWIDE RSK
RBNC	RELIANT BANCORP INC COM
RBS	ROYAL BK SCOTLAND GROUP PLC SPONS ADR 2 ORD
RBS-S	ROYAL BK SCOTLAND GROUP PLC SP ADR PREF S
RBUS	ETF SER SOLUTIONS NATIONWIDE ETF
RCD	INVESCO EXCHANGE TRADED FD TR S&P500 EQL DIS
RCG	RENN FD INC COM
RCI	ROGERS COMMUNICATIONS INC CL B
RCII	RENT A CTR INC NEW COM
RCKT	ROCKET PHARMACEUTICALS INC COM
RCKY	ROCKY BRANDS INC COM
RCL	ROYAL CARIBBEAN CRUISES LTD COM
RCM	R1 RCM INC COM
RCMT	RCM TECHNOLOGIES INC COM NEW
RCON	RECON TECHNOLOGY LTD SHS
RCS	PIMCO STRATEGIC INCOME FD INC COM
RCUS	ARCUS BIOSCIENCES INC COM
RDC	ROWAN COMPANIES PLC SHS CL A
RDCM	RADCOM LTD SHS NEW
RDFN	REDFIN CORP COM
RDHL	REDHILL BIOPHARMA LTD SPONSORED ADS
RDI	READING INTERNATIONAL INC CL A
RDIB	READING INTERNATIONAL INC CL B
RDIV	OPPENHEIMER ETF TR S&P ULTRA DIVIDE

RDN	RADIAN GROUP INC COM
RDNT	RADNET INC COM
RDS.A	ROYAL DUTCH SHELL PLC SPONS ADR A
RDS.B	ROYAL DUTCH SHELL PLC SPON ADR B
RDUS	RADIUS HEALTH INC COM NEW
RDVT	RED VIOLET INC COM
RDVY	FIRST TR EXCHANGE TRADED FD VI RISNG DIVD ACHIV
RDWR	RADWARE LTD ORD
RDY	DR REDDYS LABS LTD ADR
RE	EVEREST RE GROUP LTD COM
RECN	RESOURCES CONNECTION INC COM
REDU	RISE ED CAYMAN LTD SPONSORED ADR
REED	REEDS INC COM
REEM	Oppenheimer Emerging Markets Revenue ETF
REET	ISHARES TR GLOBAL REIT ETF
REFA	Oppenheimer International Revenue ETF
REFR	RESEARCH FRONTIERS INC COM
REG	REGENCY CTRS CORP COM
REGI	RENEWABLE ENERGY GROUP INC COM NEW
REGL	ProShares S&P MidCap 400 Dividend Aristocrats ETF
REGN	REGENERON PHARMACEUTICALS COM
REI	RING ENERGY INC COM
REIS	REIS INC COM
REK	PROSHARES TR SHRT RL EST FD
RELL	RICHARDSON ELECTRS LTD COM
RELV	RELIV INTL INC COM NEW
RELX	RELX PLC SPONSORED ADR
REM	iShares Mortgage Real Estate ETF
REML	CREDIT SUISSE AG NASSAU BRH XLNKS REIT ETN36
REMX	VANECK VECTORS ETF TR RARE EARTH STRAT
REN	RESOLUTE ENERGY CORP COM NEW
RENN	RENREN INC SPON ADR A NEW
RENX	RELX NV SPONSORED ADR
REPH	RECRO PHARMA INC COM
RES	RPC INC COM
RESI	FRONT YD RESIDENTIAL CORP COM
RESN	RESONANT INC COM
RETA	REATA PHARMACEUTICALS INC CL A
RETL	DIREXION SHS ETF TR RETAIL BULL 3X

RETO	RETO ECO SOLUTIONS INC COM
REV	REVLON INC CL A NEW
REVG	REV GROUP INC COM
REW	PROSHARES TR ULSHRT TECH NEW
REX	REX AMERICAN RESOURCES CORP COM
REXR	REXFORD INDL RLTY INC COM
REXR-A	REXFORD INDL RLTY INC RED PFD SER A
REXR-B	REXFORD INDL RLTY INC 5.875% PFD SER B
REZ	ISHARES TR RESIDNL REAL EST
RF	REGIONS FINL CORP NEW COM
RF-A	REGIONS FINL CORP NEW DEPSHS1/40PF A
RFAP	FIRST TR EXCH TRADED FD III RIVRFRNT DY ASIA
RF-B	REGIONS FINL CORP NEW DEP SHS PFD B
RFCI	ALPS ETF TR RIVERFRONT DYM
RFDA	ALPS ETF TR RIVERFRNT DYMC
RFDI	FIRST TR EXCH TRADED FD III RIVRFRNT DYN DEV
RFEM	FIRST TR EXCH TRADED FD III RIVR FRNT DYN
RFEU	FIRST TR EXCH TRADED FD III RIVRFRNT DYN EUR
RFFC	ALPS ETF TR RIVERFRNT FLEX
RFG	INVESCO EXCHANGE TRADED FD TR S&P MDCP400 PR
RFI	COHEN & STEERS TOTAL RETURN FD COM
RFIL	RF INDS LTD COM PAR \$0.01
RFL	RAFAEL HLDGS INC COM CL B
RFP	RESOLUTE FST PRODS INC COM
RFUN	ALPS ETF TR RIVERFRONT UNC
RFV	INVESCO EXCHANGE TRADED FD TR S&P MDCP400 VL
RGA	REINSURANCE GROUP AMER INC COM NEW
RGCO	RGC RES INC COM
RGEN	REPLIGEN CORP COM
RGI	INVESCO EXCHANGE TRADED FD TR S&P500 EQL IND
RGLB	Oppenheimer Global Revenue ETF
RGLD	ROYAL GOLD INC COM
RGLS	REGULUS THERAPEUTICS INC COM
RGNX	REGENXBIO INC COM
RGR	STURM RUGER & CO INC COM
RGS	REGIS CORP MINN COM
RGSE	REAL GOODS SOLAR INC CL A 2017
RGT	ROYCE GLOBAL VALUE TR INC COM
RH	RH COM

RHE	REGIONAL HEALTH PPTYS INC COM
RHE-A	REGIONAL HEALTH PPTYS INC 10.875% PFD A
RHI	ROBERT HALF INTL INC COM
RHP	RYMAN HOSPITALITY PPTYS INC COM
RHS	INVESCO EXCHANGE TRADED FD TR S&P500 EQL STP
RHT	RED HAT INC COM
RIBT	RICEBRAN TECHNOLOGIES COM NEW
RIBTW	RICEBRAN TECHNOLOGIES WT EXP 121818
RICK	RCI HOSPITALITY HLDGS INC COM
RIF	RMR REAL ESTATE INCOME FUND COM
RIG	TRANSOCEAN LTD REG SHS
RIGL	RIGEL PHARMACEUTICALS INC COM NEW
RIGS	ALPS ETF TR RIVFRNT STR INC
RILY	B RILEY FINL INC COM
RILYG	B RILEY FINL INC SR NT 7.25% 27
RILYH	B RILEY FINL INC 7.375% SR NT 23
RILYL	B RILEY FINL INC SR NT 7.5% 21
RILYZ	B RILEY FINL INC SR NT 27
RINF	PROSHARES TR INFLATN EXPECTNS
RING	ISHARES INC MSCI GBL GOLD MN
RIO	RIO TINTO PLC SPONSORED ADR
RIOT	RIOT BLOCKCHAIN INC COM
RISE	ETF MANAGER GROUP COMMODITY TR SIT RISING RTE
RIV	RIVERNORTH OPPRTUNITIES FD INC COM
RJA	SWEDISH EXPT CR CORP ROG AGRI ETN22
RJF	RAYMOND JAMES FINANCIAL INC COM
RJI	SWEDISH EXPT CR CORP ROG TTL ETN 22
RJN	SWEDISH EXPT CR CORP RG ENRGY ETN22
RJZ	SWEDISH EXPT CR CORP RG METAL ETN22
RKDA	ARCADIA BIOSCIENCES INC COM NEW
RL	RALPH LAUREN CORP CL A
RLGT	RADIANT LOGISTICS INC COM
RLGT-A	RADIANT LOGISTICS INC 9.75% SER A PFD
RLGY	REALOGY HLDGS CORP COM
RLH	RED LION HOTELS CORP COM
RLI	RLI CORP COM
RLJ	RLJ LODGING TR COM
RLJ-A	RLJ LODGING TR CUM CONV PFD A
RLJE	RLJ ENTMT INC COM NEW

RLM	REALM THERAPEUTICS PLC SPONSORED ADS
RLY	SSGA ACTIVE ETF TR MULT ASS RLRTN
RM	REGIONAL MGMT CORP COM
RMAX	RE MAX HLDGS INC CL A
RMBL	RUMBLEON INC CL B
RMBS	RAMBUS INC DEL COM
RMCF	ROCKY MTN CHOCOLATE FACTORY COM
RMD	RESMED INC COM
RMGN	RMG NETWORKS HLDG CORP COM NEW
RMNI	RIMINI STR INC DEL COM
RMP	RICE MIDSTREAM PARTNERS LP UNIT LTD PARTN
RMPL-	RIVERNORTH MARKETPLACE LENDING 5.875% PFD A
RMR	RMR GROUP INC CL A
RMT	ROYCE MICRO-CAP TR INC COM
RMTI	ROCKWELL MED INC COM
RNDB	RANDOLPH BANCORP INC COM
RNDM	FIRST TR EXCHANGE TRADED FD VI DEVELOPED INTL
RNDV	FIRST TR EXCHANGE TRADED FD VI US EQTY DIVI
RNEM	FIRST TR EXCHANGE TRADED FD VI EMERGING MKTS
RNET	RIGNET INC COM
RNG	RINGCENTRAL INC CL A
RNGR	RANGER ENERGY SVCS INC COM CL A
RNLC	FIRST TR EXCHANGE TRADED FD VI LARGE CP US EQ
RNMC	FIRST TR EXCHANGE TRADED FD VI MID CAP US EQT
RNN	REXAHN PHARMACEUTICALS INC COM NEW
RNP	COHEN & STEERS REIT & PFD INCM COM
RNR	RENAISSANCERE HOLDINGS LTD COM
RNR-C	RENAISSANCERE HOLDINGS LTD PFD C 6.08%
RNR-E	RENAISSANCERE HOLDINGS LTD PREF SHS SER E
RNR-F	RENAISSANCERE HLDGS LTD 5.750% PFD F
RNSC	FIRST TR EXCHANGE TRADED FD VI SMAL CP US EQT
RNST	RENASANT CORP COM
RNWK	REALNETWORKS INC COM NEW
ROAD	CONSTRUCTION PARTNERS INC COM CL A
ROAM	LATTICE STRATEGIES TR HARTFRD EMRG ETF
ROBO	EXCHANGE TRADED CONCEPTS TR ROBO GLB ETF
ROBT	FIRST TR EXCHANGE TRADED FD VI NASDQ ARTFCIAL
ROCK	GIBRALTAR INDS INC COM
RODI	BARCLAYS BK PLC RTRN DISABILIT

RODM	LATTICE STRATEGIES TR HARTFORD MLT ETF
ROG	ROGERS CORP COM
ROGS	LATTICE STRATEGIES TR HARTFORD GBL ETF
ROIC	RETAIL OPPORTUNITY INVTS CORP COM
ROK	ROCKWELL AUTOMATION INC COM
ROKU	ROKU INC COM CL A
ROL	ROLLINS INC COM
ROLL	RBC BEARINGS INC COM
ROM	PROSHARES TR PSHS ULTRA TECH
ROOF	INDEXIQ ETF TR US RL EST SMCP
ROP	ROPER TECHNOLOGIES INC COM
RORE	LATTICE STRATEGIES TR HARTFRD REIT ETF
ROSE	ROSEHILL RES INC CL A
ROSEU	ROSEHILL RES INC UT 1CL A & 1WT
ROSEW	ROSEHILL RES INC WT EXP 091622
ROST	ROSS STORES INC COM
ROUS	LATTICE STRATEGIES TR HARTFORD US EQTY
ROX	CASTLE BRANDS INC COM
ROYT	PACIFIC COAST OIL TR UNIT BEN INT
RP	REALPAGE INC COM
RPAI	RETAIL PPTYS AMER INC CL A
RPD	RAPID7 INC COM
RPG	INVESCO EXCHANGE TRADED FD TR S&P500 PUR GWT
RPM	RPM INTL INC COM
RPT	RAMCO-GERSHENSON PPTYS TR COM SH BEN INT
RPT-D	RAMCO-GERSHENSON PPTYS TR PERP PFD-D CV
RPUT	WisdomTree CBOE Russell 2000 PutWrite Strategy Fund
RPV	INVESCO EXCHANGE TRADED FD TR S&P500 PUR VAL
RQI	COHEN & STEERS QUALITY RLTY FD COM
RRC	RANGE RES CORP COM
RRD	DONNELLEY R R & SONS CO COM
RRGB	RED ROBIN GOURMET BURGERS INC COM
RRR	RED ROCK RESORTS INC CL A
RRTS	ROADRUNNER TRNSN SVCS HLDG INC COM
RS	RELIANCE STEEL & ALUMINUM CO COM
RSG	REPUBLIC SVCS INC COM
RSLs	RESHAPE LIFESCIENCES INC COM NEW
RSP	INVESCO EXCHANGE TRADED FD TR S&P500 EQL WGT
RSPP	RSP PERMIAN INC COM

RST	ROSETTA STONE INC COM
RSX	VANECK VECTORS ETF TR RUSSIA ETF
RSXJ	VANECK VECTORS ETF TR RUSSIA SMALL CAP
RSYS	RADISYS CORP COM
RTEC	RUDOLPH TECHNOLOGIES INC COM
RTH	VANECK VECTORS ETF TR RETAIL ETF
RTIX	RTI SURGICAL INC COM
RTL	PACER FDS TR BNCHMRK RS ETF
RTM	INVESCO EXCHANGE TRADED FD TR S&P500 EQL MAT
RTN	RAYTHEON CO COM NEW
RTRX	RETROPHIN INC COM
RTTR	RITTER PHARMACEUTICALS INC COM NEW
RUBI	RUBICON PROJ INC COM
RUN	SUNRUN INC COM
RUSHA	RUSH ENTERPRISES INC CL A
RUSHB	RUSH ENTERPRISES INC CL B
RUSL	DIREXION SHS ETF TR DLY RUSSIA BL 3X
RUSS	DIREXION SHS ETF TR DAILY RUSSIA 3X
RUTH	RUTHS HOSPITALITY GROUP INC COM
RVEN	REVEN HSG REIT INC COM NEW
RVLT	REVOLUTION LIGHTING TECHNOLOGI COM NEW
RVNC	REVANCE THERAPEUTICS INC COM
RVNU	DBX ETF TR XTRACK MUN INFRA
RVP	RETRACTABLE TECHNOLOGIES INC COM
RVRS	Reverse Cap Weighted US Large Cap ETF
RVSB	RIVERVIEW BANCORP INC COM
RVT	ROYCE VALUE TR INC COM
RWGE	REGALWOOD GLOBAL ENERGY LTD COM CL A
RWGE+	REGALWOOD GLOBAL ENERGY LTD WT EXP 120522
RWGE=	REGALWOOD GLOBAL ENERGY LTD UNIT EXP000022
RWJ	OPPENHEIMER ETF TR S&P SMALLCAP 600
RWK	OPPENHEIMER ETF TR S&P MDCP 400 REV
RWL	OPPENHEIMER ETF TR S&P 500 REVENUE
RWLK	REWALK ROBOTICS LTD SHS
RWM	PROSHARES TR SHRT RUSSELL2000
RWO	SPDR INDEX SHS FDS DJ GLB RL ES ETF
RWR	SPDR SERIES TRUST DJ REIT ETF
RWT	REDWOOD TR INC COM
RWW	OPPENHEIMER ETF TR S&P FINICIAL REVE

RWX	SPDR INDEX SHS FDS DJ INTL RL ETF
RXD	PROSHARES TR ULTSHT HLTHCRE
RXI	ISHARES TR GLB CNS DISC ETF
RXII	RXI PHARMACEUTICALS CORP NEW COM PAR
RXIIW	RXI PHARMACEUTICALS CORP NEW WT EXP 121621
RXL	PROSHARES TR PSHS ULT HLTHCRE
RXN	REXNORD CORP NEW COM
RXN-A	REXNORD CORP NEW DEP SHS PFD A
RY	ROYAL BK CDA MONTREAL QUE COM
RYAAY	RYANAIR HLDGS PLC SPONSORED ADR NE
RYAM	RAYONIER ADVANCED MATLS INC COM
RYAM-A	RAYONIER ADVANCED MATLS INC PFD CV SER A
RYB	RYB ED INC ADR
RYE	INVESCO EXCHANGE TRADED FD TR S&P500 EQL ENR
RYF	INVESCO EXCHANGE TRADED FD TR S&P500 EQL FIN
RYH	INVESCO EXCHANGE TRADED FD TR S&P500 EQL HLT
RYI	RYERSON HLDG CORP COM
RYJ	INVESCO EXCHANGE TRADED FD TR RYMND JMS SB 1
RYN	RAYONIER INC COM
RYT	INVESCO EXCHANGE TRADED FD TR S&P500 EQL TEC
RY-T	ROYAL BK OF CDA BD CDS DEP 1/40 6.75% C
RYTM	RHYTHM PHARMACEUTICALS INC COM
RYU	INVESCO EXCHANGE TRADED FD TR S&P500 EQL UTL
RZA	REINSURANCE GROUP AMER INC SUB DEB 42
RZB	REINSURANCE GROUP AMER INC SB DB FX/FL56
RZG	INVESCO EXCHANGE TRADED FD TR S&P SML600 GWT
RZV	INVESCO EXCHANGE TRADED FD TR S&P SML600 VAL
S	SPRINT CORP COM SER 1
SA	SEABRIDGE GOLD INC COM
SAA	PROSHARES TR PSHS ULT SCAP600
SAB	SARATOGA INVT CORP NT 23
SABR	SABRE CORP COM
SACH	SACHEM CAP CORP COM
SAEX	SAEXPLORATION HLDGS INC COM NEW
SAFE	SAFETY INCOME & GROWTH INC COM
SAFM	SANDERSON FARMS INC COM
SAFT	SAFETY INS GROUP INC COM
SAGE	SAGE THERAPEUTICS INC COM
SAGG	DIREXION SHS ETF TR TL BD MKT BEAR



SAH	SONIC AUTOMOTIVE INC CL A
SAIA	SAIA INC COM
SAIC	SCIENCE APPLICATNS INTL CP NEW COM
SAIL	SAILPOINT TECHNLOGIES HLDGS INC COM
SAL	SALISBURY BANCORP INC COM
SALM	SALEM MEDIA GROUP INC CL A
SALT	SCORPIO BULKERS INC COM
SAM	BOSTON BEER INC CL A
SAMG	SILVERCREST ASSET MGMT GROUP I CL A
SAN	BANCO SANTANDER SA ADR
SAN-B	BANCO SANTANDER S A GTD PFD SECS 6
SAND	SANDSTORM GOLD LTD COM NEW
SANM	SANMINA CORPORATION COM
SANW	S&W SEED CO COM
SAP	SAP SE SPON ADR
SAR	SARATOGA INVT CORP COM NEW
SASR	SANDY SPRING BANCORP INC COM
SATS	ECHOSTAR CORP CL A
SAUC	DIVERSIFIED RSTRNT HLDGS INC COM
SAVE	SPIRIT AIRLS INC COM
SB	SAFE BULKERS INC COM
SBAC	SBA COMMUNICATIONS CORP NEW CL A
SBB	PROSHARES TR SHRT SMALLCAP60
SBBC	SCORPIO TANKERS INC 8.25% SR NT 19
SBBP	STRONGBRIDGE BIOPHARMA PLC SHS USD
SBBX	SB ONE BANCORP COM
SB-C	SAFE BULKERS INC RED PERP PFD C%
SBCF	SEACOAST BKG CORP FLA COM NEW
SB-D	SAFE BULKERS INC PERP PFD SER D
SBFG	SB FINL GROUP INC COM
SBFGP	SB FINL GROUP INC DEP SHS PFD 6.5%
SBGI	SINCLAIR BROADCAST GROUP INC CL A
SBGL	SIBANYE STILLWATER SPONSORED ADR
SBH	SALLY BEAUTY HLDGS INC COM
SBI	WESTERN ASSET INTM MUNI FD INC COM
SBIO	ALPS ETF TR MED BREAKTHGH
SBLK	STAR BULK CARRIERS CORP SHS PAR
SBLKZ	STAR BULK CARRIERS CORP 8.30% SR NT 22
SBM	PROSHARES TR SHT BASIC MAT

SBNA	SCORPIO TANKERS INC 6.75 SR NOTE20
SBNY	SIGNATURE BK NEW YORK N Y COM
SBNYW	SIGNATURE BK NEW YORK N Y WT PUR COM STK
SBOT	STELLAR BIOTECHNOLOGIES INC COM
SBOW	SILVERBOW RES INC COM
SBPH	SPRING BK PHARMACEUTICALS INC COM
SBR	SABINE ROYALTY TR UNIT BEN INT
SBRA	SABRA HEALTH CARE REIT INC COM
SBS	COMPANHIA DE SANEAMENTO BASICO SPONSORED ADR
SBSI	SOUTHSIDE BANCSHARES INC COM
SBT	STERLING BANCORP INC COM
SBUX	STARBUCKS CORP COM
SC	SANTANDER CONSUMER USA HDG INC COM
SCA	STELLUS CAP INVT CORP 5.75% NT 2022
SCAC	SABAN CAP ACQUISITION CORP COM CL A
SCACU	SABAN CAP ACQUISITION CORP UT 1COM 1WT EX
SCACW	SABAN CAP ACQUISITION CORP WT EXP 092121
SCAP	ADVISORSHARES TR CORNERSTONE SM
SCC	PROSHARES TR ULTSHT CONS SERV
SCCO	SOUTHERN COPPER CORP COM
SCD	LMP CAP & INCOME FD INC COM
SCE-B	SOUTHERN CALIF EDISON CO PFD 4.08%
SCE-C	SOUTHERN CALIF EDISON CO PFD 4.24%
SCE-D	SOUTHERN CALIF EDISON CO PFD 4.32%
SCE-E	SOUTHERN CALIF EDISON CO PFD 4.78%
SCE-G	SCE TR II TR PFD SECS 5.1%
SCE-H	SCE TR III FXD/FLT RT PFD
SCE-J	SCE TR IV PFD SER J
SCE-K	SCE TR V PFD SEC
SCE-L	SCE TRUST VI 5% TR PEF SEC
SCG	SCANA CORP NEW COM
SCHA	SCHWAB STRATEGIC TR US SML CAP ETF
SCHB	SCHWAB STRATEGIC TR US BRD MKT ETF
SCHC	SCHWAB STRATEGIC TR INTL SCEQT ETF
SCHD	SCHWAB STRATEGIC TR US DIVIDEND EQ
SCHE	SCHWAB STRATEGIC TR EMRG MKTEQ ETF
SCHF	SCHWAB STRATEGIC TR INTL EQTY ETF
SCHG	SCHWAB STRATEGIC TR US LCAP GR ETF
SCHH	SCHWAB STRATEGIC TR US REIT ETF

SCHK	SCHWAB STRATEGIC TR 1000 INDEX ETF
SCHL	SCHOLASTIC CORP COM
SCHM	SCHWAB STRATEGIC TR US MID-CAP ETF
SCHN	SCHNITZER STL INDS CL A
SCHO	SCHWAB STRATEGIC TR SHT TM US TRES
SCHP	SCHWAB STRATEGIC TR US TIPS ETF
SCHR	SCHWAB STRATEGIC TR INTRM TRM TRES
SCHV	SCHWAB STRATEGIC TR US LCAP VA ETF
SCHW	SCHWAB CHARLES CORP NEW COM
SCHW-C	SCHWAB CHARLES CORP NEW DEP SHS PFD C
SCHW-D	SCHWAB CHARLES CORP NEW DEP SHS 1/40 PFD
SCHX	SCHWAB STRATEGIC TR US LRG CAP ETF
SCHZ	SCHWAB STRATEGIC TR US AGGREGATE B
SCI	SERVICE CORP INTL COM
SCID	GLOBAL X FDS SCIEN BETA EUR
SCIF	VANECK VECTORS ETF TR INDIA SMALL CAP
SCIJ	GLOBAL X FDS SCIEN BETA JPN
SCIN	COLUMBIA ETF TR II INDIA SML CP ETF
SCIU	GLOBAL X FDS SCIEN BETA US
SCIX	GLOBAL X FDS BETA ASIA EXJP
SCJ	ISHARES INC MSCI JAPN SMCETF
SCKT	SOCKET MOBILE INC COM NEW
SCL	STEPAN CO COM
SCM	STELLUS CAP INVT CORP COM
SCO	PROSHARES TR II ULSHT BLOOMB OIL
SCON	SUPERCONDUCTOR TECHNOLOGIES COM PAR NEW
SCOR	COMSCORE INC COM
SCPH	SCPHARMACEUTICALS INC COM
SCS	STEELCASE INC CL A
SCSC	SCANSOURCE INC COM
SCTO	GLOBAL X FDS GBL X JPM ROTA
SCVL	SHOE CARNIVAL INC COM
SCWX	SECUREWORKS CORP CL A
SCX	STARRETT L S CO CL A
SCYX	SCYNEXIS INC COM
SCZ	ISHARES TR EAFE SML CP ETF
SD	SANDRIDGE ENERGY INC COM NEW
SDCI	USCF ETF TR SUMMERHAVEN K1
SDD	PROSHARES TR ULTSHT SMLCP600

SDEM	GLOBAL X FDS MSCI SUPR EM ETF
SDI	STANDARD DIVERSIFIED INC COM CL A
SDIV	GLOBAL X FDS GLB X SUPERDIV
SDLP	SEADRILL PARTNERS LLC COMUNIT REP LB
SDOG	ALPS ETF TR SECTR DIV DOGS
SDOW	PROSHARES TR ULTRAPRO DOW 30
SDP	PROSHARES TR ULSHRT UTILS NEW
SDPI	SUPERIOR DRILLING PRODS INC COM
SDR	SANDRIDGE MISSISSIPPIAN TR II SH BEN INT
SDRL	SEADRILL LIMITED SHS
SDS	PROSHARES TR ULTRASHRT S&P500
SDT	SANDRIDGE MISSISSIPPIAN TR I UNIT BEN INT
SDVY	FIRST TR EXCHANGE TRADED FD VI SMID RISNG ETF
SDY	SPDR SERIES TRUST S&P DIVID ETF
SDYL	UBS AG LONDON BRH ETRACS 2XLVS&P
SE	SEA LTD ADR
SEA	INVESCO EXCHNG TRADED FD TR II SHIPPING ETF
SEAC	SEACHANGE INTL INC COM
SEAS	SEAWORLD ENTMT INC COM
SEB	SEABOARD CORP COM
SECO	SECOO HLDG LTD ADR
SECT	Main Sector Rotation ETF
SEDG	SOLAREEDGE TECHNOLOGIES INC COM
SEE	SEALED AIR CORP NEW COM
SEED	ORIGIN AGRITECH LIMITED SHS
SEF	PROSHARES TR PSHS SHTFINL ETF
SEIC	SEI INVESTMENTS CO COM
SEII	SHARING ECONOMY INTL INC COM
SELB	SELECTA BIOSCIENCES INC COM
SELF	GLOBAL SELF STORAGE INC COM
SEM	SELECT MED HLDGS CORP COM
SEMG	SEMGROUP CORP CL A
SEND	SENDGRID INC COM
SENEA	SENECA FOODS CORP NEW CL A
SENEB	SENECA FOODS CORP NEW CL B
SENS	SENSEONICS HLDGS INC COM
SEP	SPECTRA ENERGY PARTNERS LP COM
SERV	SERVICEMASTER GLOBAL HLDGS INC COM
SES	SYNTHESIS ENERGY SYS INC COM NEW

SESN	SESEN BIO INC COM
SF	STIFEL FINL CORP COM
SF-A	STIFEL FINL CORP DSHS 1/40 PF A
SFB	STIFEL FINL CORP 5.20% SR NT 47
SFBC	SOUND FINL BANCORP INC COM
SFBS	SERVISFIRST BANCSHARES INC COM
SFE	SAFEGUARD SCIENTIFICS INC COM NEW
SFHY	WisdomTree Fundamental U.S. Short-Term High Yield Corporate Bond Fund
SFIG	WisdomTree Fundamental U.S. Short-Term Corporate Bond Fund
SFIX	STITCH FIX INC COM CL A
SFL	SHIP FINANCE INTERNATIONAL LTD SHS
SFLY	SHUTTERFLY INC COM
SFM	SPROUTS FMRS MKT INC COM
SFNC	SIMMONS 1ST NATL CORP CL A \$1 PAR
SFS	SMART & FINAL STORES INC COM
SFST	SOUTHERN FIRST BANCSHARES INC COM
SFUN	FANG HLDGS LTD ADR
SGA	SAGA COMMUNICATIONS INC CL A NEW
SGB	SOUTHWEST GA FINL CORP COM
SGBX	SG BLOCKS INC COM PAR
SGC	SUPERIOR GRP OF COMPANIES INC COM
SGDJ	ALPS ETF TR SPROTT JR GLD
SGDM	ALPS ETF TR SPROTT GL MINE
SGEN	SEATTLE GENETICS INC COM
SGGB	BARCLAYS BK PLC IPATH B SUGR SUB
SGH	SMART GLOBAL HLDGS INC SHS
SGLB	SIGMA LABS INC COM PAR
SGLBW	SIGMA LABS INC WT EXP 150222
SGMA	SIGMATRON INTL INC COM
SGMO	SANGAMO THERAPEUTICS INC COM
SGMS	SCIENTIFIC GAMES CORP COM
SGOC	SGOCO GROUP LTD SHS NEW
SGOL	ETFS GOLD TR SHS
SGRP	SPAR GROUP INC COM
SGRY	SURGERY PARTNERS INC COM
SGU	STAR GROUP L P UNIT LTD PARTNR
SGYP	SYNERGY PHARMACEUTICALS DEL COM NEW
SGZA	SELECTIVE INS GROUP INC SR NT 43
SH	PROSHARES TR SHORT S&P 500 NE

SHAG	WisdomTree Barclays Yield Enhanced U.S. Short-Term Aggregate Bond Fund
SHAK	SHAKE SHACK INC CL A
SHBI	SHORE BANCSHARES INC COM
SHE	SPDR SER TR SSGA GNDER ETF
SHEN	SHENANDOAH TELECOMMUNICATIONS COM
SHG	SHINHAN FINANCIAL GROUP CO LTD SPN ADR RESTRD
SHI	SINOPEC SHANGHAI PETROCHEMICAL SPON ADR H
SHIP	SEANERGY MARITIME HLDGS CORP SHS NEW
SHIPW	SEANERGY MARITIME HLDGS CORP WT CL A 111021
SHLD	SEARS HLDGS CORP COM
SHLDW	SEARS HLDGS CORP WT EXP 121519
SHLM	SCHULMAN A INC COM
SHLO	SHILOH INDS INC COM
SHLX	SHELL MIDSTREAM PARTNERS L P UNIT LTD INT
SHM	SPDR SER TR NUVEEN BLMBRG SR
SHNY	DIREXION SHS ETF TR DAILY SLR BULL
SHO	SUNSTONE HOTEL INVS INC NEW COM
SHO-E	SUNSTONE HOTEL INVS INC NEW RED PFD SER E
SHO-F	SUNSTONE HOTEL INVS INC NEW PFD SER F
SHOO	MADDEN STEVEN LTD COM
SHOP	SHOPIFY INC CL A
SHOS	SEARS HOMETOWN & OUTLET STORES COM
SHPG	SHIRE PLC SPONSORED ADR
SHSP	SHARPSRING INC COM
SHV	ISHARES TR SHORT TREAS BD
SHW	SHERWIN WILLIAMS CO COM
SHY	ISHARES TR 1 3 YR TREAS BD
SHYD	VANECK VECTORS ETF TR SHORT HIGH YIELD
SHYG	ISHARES TR 0-5YR HI YL CP
SHYL	DBX ETF TR XTRACKERS SHRT
SID	COMPANHIA SIDERURGICA NACIONAL SPONSORED ADR
SIEB	SIEBERT FINL CORP COM
SIEN	SIENTRA INC COM
SIF	SIFCO INDS INC COM
SIFI	SI FINL GROUP INC MD COM
SIFY	SIFY TECHNOLOGIES LIMITED SPONSORED ADR
SIG	SIGNET JEWELERS LIMITED SHS
SIGA	SIGA TECHNOLOGIES INC COM
SIGI	SELECTIVE INS GROUP INC COM

SIGM	SIGMA DESIGNS INC COM
SIJ	PROSHARES TR ULTRASHORT INDL
SIL	GLOBAL X FDS GLOBAL X SILVER
SILC	SILICOM LTD ORD
SILJ	ETF MANAGERS TR PRIME JUNIR SLVR
SIM	GRUPO SIMEC S A B DE C V ADR
SIMO	SILICON MOTION TECHNOLOGY CORP SPONSORED ADR
SINA	SINA CORP ORD
SINO	SINO GLOBAL SHIPPING AMER LTD COM
SIR	SELECT INCOME REIT COM SH BEN INT
SIRI	SIRIUS XM HLDGS INC COM
SITE	SITEONE LANDSCAPE SUPPLY INC COM
SITO	SITO MOBILE LTD COM NEW
SIVB	SVB FINL GROUP COM
SIVR	ETFS SILVER TR SILVER SHS
SIX	SIX FLAGS ENTMT CORP NEW COM
SIZ	FQF TR AGFIQ US MK SIZE
SIZE	ISHARES TR USA SIZE FACTOR
SJB	PROSHARES TR SHRT HGH YIELD
SJI	SOUTH JERSEY INDS INC COM
SJIU	SOUTH JERSEY INDS INC CORP UNITS
SJM	SMUCKER J M CO COM NEW
SJNK	SPDR SER TR BLOOMBERG SRT TR
SJR	SHAW COMMUNICATIONS INC CL B CONV
SJT	SAN JUAN BASIN RTY TR UNIT BEN INT
SJW	SJW GROUP COM
SKF	PROSHARES TR ULTSHT FINLS NEW
SKIS	PEAK RESORTS INC COM
SKM	SK TELECOM LTD SPONSORED ADR
SKOR	FLEXSHARES TR CR SCD US BD
SKT	TANGER FACTORY OUTLET CTRS INC COM
SKX	SKECHERS U S A INC CL A
SKY	SKYLINE CHAMPION CORPORATION COM
SKYS	SKY SOLAR HLDGS LTD SPONSORED ADR
SKYW	SKYWEST INC COM
SKYY	FIRST TR EXCHANGE TRADED FD II CLOUD COMPUTING
SLAB	SILICON LABORATORIES INC COM
SLB	SCHLUMBERGER LTD COM
SLCA	U S SILICA HLDGS INC COM

SLCT	SELECT BANCORP INC NEW COM
SLD	SUTHERLAND ASSET MGMT CORP MD COM
SLDA	SUTHERLAND ASSET MGMT CORP MD 7% CN SR NT 2023
SLDB	SOLID BIOSCIENCES INC COM
SLDD	SUTHERLAND ASSET MGMT CORP MD 6.5% SR NT 21
SLF	SUN LIFE FINL INC COM
SLG	SL GREEN RLTY CORP COM
SLG-I	SL GREEN RLTY CORP PFD SER I
SLGL	SOL GEL TECHNOLOGIES SHS
SLGN	SILGAN HOLDINGS INC COM
SLIM	JANUS DETROIT STR TR OBESITY ETF
SLM	SLM CORP COM
SLMBP	SLM CORP PFD SER B
SLNO	SOLENO THERAPEUTICS INC COM NEW
SLNOW	SOLENO THERAPEUTICS INC WT A EXP 111219
SLP	SIMULATIONS PLUS INC COM
SLQD	ISHARES TR 0-5YR INVT GR CP
SLRC	SOLAR CAP LTD COM
SLS	SELLAS LIFE SCIENCES GROUP INC COM
SLT	Salt truBeta High Exposure ETF
SLTB	SCORPIO BULKERS INC 7.5% SR NT 19
SLV	ISHARES SILVER TRUST ISHARES
SLVO	CREDIT SUISSE NASSAU BRH X LINK SILVER SH
SLVP	iShares MSCI Global Silver Miners ETF
SLX	VANECK VECTORS ETF TR STEEL ETF
SLY	SPDR SERIES TRUST S&P 600 SML CAP
SLYG	SPDR SERIES TRUST S&P 600 SMCP GRW
SLYV	SPDR SERIES TRUST S&P 600 SMCP VAL
SM	SM ENERGY CO COM
SMAR	SMARTSHEET INC COM CL A
SMB	VANECK VECTORS ETF TR AMT FREE SHORT M
SMBC	SOUTHERN MO BANCORP INC COM
SMBK	SMARTFINANCIAL INC COM NEW
SMCI	SUPER MICRO COMPUTER INC COM
SMCP	ETF SER SOLUTIONS ALPHAMARK SM
SMDD	PROSHARES TR ULTPRO SHT MDCP
SMDV	ProShares Russell 2000 Dividend Growers ETF
SMED	SHARPS COMPLIANCE CORP COM
SMEZ	SPDR INDEX SHS FDS EUR STOXX SMCP



SMFG	SUMITOMO MITSUI FINL GROUP INC SPONSORED ADR
SMG	SCOTTS MIRACLE GRO CO CL A
SMH	VANECK VECTORS ETF TR SEMICONDUCTOR ET
SMHD	UBS AG LONDON BRH ETRACS MNT ETN
SMHI	SEACOR MARINE HLDGS INC COM
SMI	SEMICONDUCTOR MFG INTL CORP SPONSORED ADR
SMIN	iShares MSCI India Small-Cap ETF
SMIT	SCHMITT INDS INC ORE COM NEW
SMLF	ISHARES TR MULTIFACTOR USA
SMLL	DIREXION SHS ETF TR SML CP BULL 2X
SMLP	SUMMIT MIDSTREAM PARTNERS LP COM UNIT LTD
SMLV	SPDR SER TR SSGA US SMAL ETF
SMM	SALIENT MIDSTREAM & MLP FD SH BEN INT
SMMD	iShares Russell 2500 ETF
SMMF	SUMMIT FINANCIAL GROUP INC COM
SMMT	SUMMIT THERAPEUTICS PLC SPONS ADS
SMMU	PIMCO ETF TR SHTRM MUN BD ACT
SMMV	iShares Edge MSCI Min Vol USA Small-Cap ETF
SMN	PROSHARES TR BASIC MAT NEW
SMP	STANDARD MTR PRODS INC COM
SMPL	SIMPLY GOOD FOODS CO COM
SMPLW	SIMPLY GOOD FOODS CO WT EXP 070722
SMRT	STEIN MART INC COM
SMSI	SMITH MICRO SOFTWARE INC COM NEW
SMTA	SPIRIT MTA REIT COM SHS BEN IN
SMTC	SEMTECH CORP COM
SMTS	SIERRA METALS INC COM
SMTX	SMTC CORP COM NEW
SN	SANCHEZ ENERGY CORP COM
SNA	SNAP ON INC COM
SNAP	SNAP INC CL A
SNBR	SLEEP NUMBER CORP COM
SND	SMART SAND INC COM
SNDE	SUNDANCE ENERGY AUSTRALIA LTD SPONSORED ADR
SNDR	SCHNEIDER NATIONAL INC CL B
SNDX	SYNDAX PHARMACEUTICALS INC COM
SNE	SONY CORP SPONSORED ADR
SNES	SENESTECH INC COM
SNFCA	SECURITY NATL FINL CORP CL A NEW

SNGX	SOLIGENIX INC COM
SNGXW	SOLIGENIX INC WT EXP 111421
SNH	SENIOR HSG PPTYS TR SH BEN INT
SNHNI	SENIOR HSG PPTYS TR NT 42
SNHNL	SENIOR HSG PPTYS TR SR NT 46
SNHY	SUN HYDRAULICS CORP COM
SNLN	HIGHLAND FDS I HI LD IBOXX SRLN
SNMP	SANCHEZ MIDSTREAM PARTNERS LP COM UNITS REP B
SNMX	SENOAMYX INC COM
SNN	SMITH & NEPHEW PLC SPDN ADR NEW
SNNA	SIENNA BIOPHARMACEUTICALS INC COM
SNOA	SONOMA PHARMACEUTICALS INC COM
SNOAW	SONOMA PHARMACEUTICALS INC WT EXP 012120
SNP	CHINA PETE & CHEM CORP SPON ADR H SHS
SNPS	SYNOPSYS INC COM
SNR	NEW SR INVT GROUP INC COM
SNSR	GLOBAL X FDS INTERNET OF THNG
SNSS	SUNESIS PHARMACEUTICALS INC COM PAR
SNV	SYNOVUS FINL CORP COM NEW
SNV-C	SYNOVUS FINL CORP PRP PFD SER C FX
SNX	SYNNEX CORP COM
SNY	SANOFI SPONSORED ADR
SO	SOUTHERN CO COM
SOCL	GLOBAL X FDS SOCIAL MED ETF
SODA	SODASTREAM INTERNATIONAL LTD USD SHS
SOFO	SONIC FDRY INC COM NEW
SOGO	SOGOU INC ADR REPSTG A
SOHO	SOTHERLY HOTELS INC COM
SOHOB	SOTHERLY HOTELS INC PFD SER B
SOHOK	SOTHERLY HOTELS LP 7.25% SR NT 21
SOHOO	SOTHERLY HOTELS INC 7.875% PFD SER C
SOHU	SOHU COM LTD SPONSORED ADS
SOI	SOLARIS OILFIELD INFRSTR INC COM CL A
SOIL	GLOBAL X FDS GLB X FERTIL
SOJA	SOUTHERN CO JR SUB NT 2015A
SOJB	SOUTHERN CO JR SUB NT 76
SOJC	SOUTHERN CO JR 2017B NT 77
SOL	RENESOLA LTD SPONSORED ADS
SON	SONOCO PRODS CO COM

SONA	SOUTHERN NATL BANCORP OF VA IN COM
SONC	SONIC CORP COM
SOR	SOURCE CAP INC COM
SORL	SORL AUTO PTS INC COM
SOVB	Cambria Sovereign Bond ETF
SOV-C	SANTANDER HLDGS USA INC DEP 1/1000 PFD C
SOXL	DIREXION SHS ETF TR DLY SCOND 3XBU
SOXS	DIREXION SHS ETF TR DLY SEMICNDTR 3X
SOXX	ISHARES TR PHLX SEMICND ETF
SOYB	TEUCRIUM COMMODITY TR SOYBEAN FD
SP	SP PLUS CORP COM
SPA	SPARTON CORP COM
SPAB	SPDR SERIES TRUST PORTFOLIO AGRGTE
SPAR	SPARTAN MTRS INC COM
SPB	SPECTRUM BRANDS HLDGS INC COM
SPCB	SUPERCOM LTD NEW SHS NEW
SPDN	DIREXION SHS ETF TR DLY S&P500 BR 1X
SPDV	ETF SER SOLUTIONS AAM S&P 500
SPDW	SPDR INDEX SHS FDS PORTFOLIO DEVLDP
SPE	SPECIAL OPPORTUNITIES FD INC COM
SPE-B	SPECIAL OPPORTUNITIES FD INC PFD CONV SE B
SPEM	SPDR INDEX SHS FDS PORTFOLIO EMG MK
SPEX	SPHERIX INC COM PAR NEW
SPFF	GLOBAL X FDS GLBX SUPRINC ETF
SPG	SIMON PPTY GROUP INC NEW COM
SPGI	S&P GLOBAL INC COM
SPG-J	SIMON PPTY GROUP INC NEW PFD J 8.375%
SPH	SUBURBAN PROPANE PARTNERS L P UNIT LTD PARTN
SPHB	INVESCO EXCHNG TRADED FD TR II S&P 500 HB ETF
SPHD	INVESCO EXCHNG TRADED FD TR II S&P500 HDL VOL
SPHQ	INVESCO EXCHANGE TRADED FD TR S&P500 QUALITY
SPHS	SOPHIRIS BIO INC COM NEW
SPI	SPI ENERGY CO LTD SHS
SPIB	SPDR SERIES TRUST PORTFOLIO INTRMD
SPKE	SPARK ENERGY INC CL A COM
SPKEP	SPARK ENERGY INC PFD SER A
SPLB	SPDR SERIES TRUST PORTFOLIO LN COR
SPLG	SPDR SERIES TRUST PORTFOLIO LR ETF
SPLK	SPLUNK INC COM

SPLP	STEEL PARTNERS HLDGS L P LTD PRTRSHIP U
SPLP-A	STEEL PARTNERS HLDGS L P PFD SER A
SPLV	INVESCO EXCHNG TRADED FD TR II S&P500 LOW VOL
SPLX	UBS AG LONDON BRH ETRACS 2XLEV
SPMD	SPDR SERIES TRUST PORTFOLIO MD ETF
SPMO	INVESCO EXCHNG TRADED FD TR II S&P 500 MOMNTM
SPMV	Invesco S&P 500 Minimum Variance ETF
SPN	SUPERIOR ENERGY SVCS INC COM
SPNE	SEASPINE HLDGS CORP COM
SPNS	SAPIENS INTL CORP N V SHS NEW
SPOK	SPOK HLDGS INC COM
SPOT	SPOTIFY TECHNOLOGY S A SHS
SPPI	SPECTRUM PHARMACEUTICALS INC COM
SPPP	SPROTT PHYSICAL PLAT PALLAD TS UNIT
SPR	SPIRIT AEROSYSTEMS HLDGS INC COM CL A
SPRO	SPERO THERAPEUTICS INC COM
SPRT	SUPPORT COM INC COM NEW
SPSB	SPDR SERIES TRUST PORTFOLIO SHORT
SPSC	SPS COMM INC COM
SPSM	SPDR SER TR PORTFOLIO SM ETF
SPTL	SPDR SERIES TRUST PORTFOLIO LN TSR
SPTM	SPDR SERIES TRUST PORTFOLIO TL STK
SPTN	SPARTANNASH CO COM
SPTS	SPDR SER TR PORTFOLIO SH TSR
SPUN	VANECK VECTORS ETF TR SPINOFF
SPUU	DIREXION SHS ETF TR DLY S&P500 2XS
SPVM	Invesco S&P 500 Value With Momentum ETF
SPVU	INVESCO EXCHNG TRADED FD TR II S&P 500 ENHNCD
SPWH	SPORTSMANS WHSE HLDGS INC COM
SPWR	SUNPOWER CORP COM
SPXB	PROSHARES TR S&P 500 BD ETF
SPXC	SPX CORP COM
SPXE	PROSHARES TR SP500 EX ENRGY
SPXL	DIREXION SHS ETF TR DRX S&P500BULL
SPXN	PROSHARES TR SP500 EX FINLS
SPXS	DIREXION SHS ETF TR DLY S&P500 BR 3X
SPXT	PROSHARES TR SP500 EX TECH
SPXU	PROSHARES TR ULTRAPRO SHORT S
SPXV	PROSHARES TR SP500 EX HLTH

SPXX	NUVEEN S&P 500 DYN OVERWRITE COM
SPY	SPDR S&P 500 ETF TR TR UNIT
SPYB	SPDR SER TR S&P 500 BUYBCK
SPYD	SPDR SER TR PRTFLO S&P500 HI
SPYG	SPDR SERIES TRUST PRTFLO S&P500 GW
SPYV	SPDR SERIES TRUST PRTFLO S&P500 VL
SPYX	SPDR SER TR SPDR S&P 500 ETF
SQ	SQUARE INC CL A
SQBG	SEQUENTIAL BRNDS GROUP INC NEW COM
SQLV	LEGG MASON ETF INVESTMENT TR SML CAP QULITY
SQM	SOCIEDAD QUIMICA MINERA DE CHI SPON ADR SER B
SQNS	SEQUANS COMMUNICATIONS S A SPONSORED ADS
SQQQ	PROSHARES TR ULTRAPRO SHORT Q
SR	SPIRE INC COM
SRAX	SOCIAL REALITY INC COM CL A NEW
SRC	SPIRIT RLTY CAP INC NEW COM
SRC-A	SPIRIT RLTY CAP INC NEW 6% PFD SER A
SRCE	1ST SOURCE CORP COM
SRCI	SRC ENERGY INC COM
SRCL	STERICYCLE INC COM
SRCLP	STERICYCLE INC DEP PFD A 1/10
SRDX	SURMODICS INC COM
SRE	SEMPRA ENERGY COM
SRE-A	SEMPRA ENERGY 6% PFD CONV A
SRET	GLOBAL X FDS REIT ETF
SREV	SERVICESTRONG INTL INC COM
SRF	CUSHING ENERGY INCOME COM SH BEN INT
SRG	SERITAGE GROWTH PPTYS CL A
SRG-A	SERITAGE GROWTH PPTYS 7% CUM PFD SR A
SRI	STONERIDGE INC COM
SRLN	SSGA ACTIVE ETF TR BLKSTN GSOSRLN
SRLP	SPRAGUE RES LP COM UNIT REP LTD
SRNE	SORRENTO THERAPEUTICS INC COM NEW
SRPT	SAREPTA THERAPEUTICS INC COM
SRRA	SIERRA ONCOLOGY INC COM
SRRK	SCHOLAR ROCK HLDG CORP COM
SRS	PROSHARES TR ULTSHT REAL EST
SRT	STARTEK INC COM
SRTS	SENSUS HEALTHCARE INC COM

SRTSW	SENSUS HEALTHCARE INC WT EXP 060819
SRTY	PROSHARES TR ULTPRO SHT 2017
SRV	THE CUSHING MLP INFACR TOTAL COM NEW
SRVR	PACER FDS TR BNCHMRK INFRA
SSB	SOUTH ST CORP COM
SSBI	SUMMIT ST BK SANTA ROSA CALIF COM
SSC	SEVEN STARS CLOUD GROUP INC COM
SSD	SIMPSON MANUFACTURING CO INC COM
SSFN	STEWARDSHIP FINL CORP COM
SSG	PROSHARES TR ULSHRT SEMIC NEW
SSI	STAGE STORES INC COM NEW
SSKN	STRATA SKIN SCIENCES INC COM NEW
SSL	SASOL LTD SPONSORED ADR
SSLJ	SSLJ COM LIMITED SHS CL A
SSNC	SS&C TECHNOLOGIES HLDGS INC COM
SSNT	SILVERSUN TECHNOLOGIES INC COM NEW
SSO	PROSHARES TR PSHS ULT S&P 500
SSP	SCRIPPS E W CO OHIO CL A NEW
SSRM	SSR MNG INC COM
SSTI	SHOTSPOTTER INC COM
SSTK	SHUTTERSTOCK INC COM
SSW	SEASPAN CORP SHS
SSWA	SEASPAN CORP 7.125% NT DUE 27
SSW-D	SEASPAN CORP PERP PFD-D
SSW-E	SEASPAN CORP CUM RD PRP PFD E
SSW-G	SEASPAN CORP PERP PFD SER G
SSW-H	SEASPAN CORP PFD CM RE SE H
SSWN	SEASPAN CORP NT 6.375%19
SSY	SUNLINK HEALTH SYSTEMS INC COM
SSYS	STRATASYS LTD SHS
ST	SENSATA TECHNOLOGIES HLDNG PLC SHS
STAA	STAAR SURGICAL CO COM PAR \$0.01
STAF	STAFFING 360 SOLUTIONS INC COM PAR
STAG	STAG INDL INC COM
STAG-C	STAG INDL INC RED PFD SER C
STAR	ISTAR INC COM
STAR-D	ISTAR INC PFD SER D
STAR-G	ISTAR INC PFD G 7.65%
STAR-I	ISTAR INC PFD SER I

STAY	EXTENDED STAY AMER INC SHS 1 COM 1 CL B
STBA	S & T BANCORP INC COM
STBZ	STATE BK FINL CORP COM
STC	STEWART INFORMATION SVCS CORP COM
STCN	STEEL CONNECT INC COM
STDY	STEADYMED LTD SHS
STE	STERIS PLC SHS USD
STFC	STATE AUTO FINL CORP COM
STG	SUNLANDS ONLINE ED GROUP ADS
STI	SUNTRUST BKS INC COM
STI+A	SUNTRUST BKS INC WT EXP 123118
STI+B	SUNTRUST BKS INC WT EXP 111418
STI-A	SUNTRUST BKS INC PFD 1/4000 A
STIP	ISHARES TR 0-5 YR TIPS ETF
STK	COLUMBIA SELIGM PREM TECH GRW COM
STKL	SUNOPTA INC COM
STKS	THE ONE GROUP HOSPITALITY INC COM
STL	STERLING BANCORP DEL COM
STL-A	STERLING BANCORP DEL 6.50% CUM PFD A
STLD	STEEL DYNAMICS INC COM
STLR	STELLAR ACQUISITION III INC COM
STLRU	STELLAR ACQUISITION III INC UT EXP 032222
STLRW	STELLAR ACQUISITION III INC WT EXP 032222
STM	STMICROELECTRONICS N V NY REGISTRY
STML	STEMLINE THERAPEUTICS INC COM
STMP	STAMPS COM INC COM NEW
STN	STANTEC INC COM
STND	STANDARD AVB FINL CORP COM
STNG	SCORPIO TANKERS INC SHS
STNL	SENTINEL ENERGY SVCS INC COM CL A
STNLU	SENTINEL ENERGY SVCS INC UNIT EXP 110222
STNLW	SENTINEL ENERGY SVCS INC WT EXP 021122
STON	STONEMOR PARTNERS L P COM UNITS INT
STOR	STORE CAP CORP COM
STOT	SPDR DoubleLine Short Duration Total Return Tactical ETF
STPP	BARCLAYS BK PLC US TRES STEEP
STPZ	PIMCO ETF TR 1-5 US TIP IDX
STRA	STRAYER ED INC COM
STRL	STERLING CONSTRUCTION CO INC COM

STRM	STREAMLINE HEALTH SOLUTIONS COM
STRS	STRATUS PPTYS INC COM NEW
STRT	STRATTEC SEC CORP COM
STT	STATE STR CORP COM
STT-C	STATE STR CORP DEP SHS REPSTG 1
STT-D	STATE STR CORP DEP SHS 1/4000 D
STT-E	STATE STR CORP SHS REPSTG PFD S
STT-G	STATE STR CORP DEP SHS PFD G
STWD	STARWOOD PPTY TR INC COM
STX	SEAGATE TECHNOLOGY PLC SHS
STXB	SPIRIT OF TEX BANCSHARES INC COM
STZ	CONSTELLATION BRANDS INC CL A
STZ.B	CONSTELLATION BRANDS INC CL B
SU	SUNCOR ENERGY INC NEW COM
SUB	ISHARES TR SHRT NAT MUN ETF
SUI	SUN CMNTYS INC COM
SUM	SUMMIT MATLS INC CL A
SUMR	SUMMER INFANT INC COM
SUN	SUNOCO LP COM U REP LP
SUNS	SOLAR SR CAP LTD COM
SUNW	SUNWORKS INC COM
SUP	SUPERIOR INDS INTL INC COM
SUPN	SUPERNUS PHARMACEUTICALS INC COM
SUPV	GRUPO SUPERVIELLE S A SPONSORED ADR
SURF	SURFACE ONCOLOGY INC COM
SUSA	ISHARES TR MSCI USA ESG SLC
SUSB	ISHARES TR ESG 1 5 YR USD
SUSC	ISHARES TR ESG USD CORPT
SVA	SINOVAC BIOTECH LTD SHS
SVBI	SEVERN BANCORP ANNAPOLIS MD COM
SVM	SILVERCORP METALS INC COM
SVRA	SAVARA INC COM
SVT	SERVOTRONICS INC COM
SVU	SUPERVALU INC COM NEW
SVVC	FIRSTHAND TECH VALUE FD INC COM
SVXY	PROSHARES TR II SHT VIX ST TRM
SWCH	SWITCH INC CL A
SWIN	ALPS ETF TR ALPS DORESEY
SWIR	SIERRA WIRELESS INC COM



SWJ	STANLEY BLACK & DECKER INC JR SUB DEB 52
SWK	STANLEY BLACK & DECKER INC COM
SWKS	SKYWORKS SOLUTIONS INC COM
SWM	SCHWEITZER-MAUDUIT INTL INC COM
SWN	SOUTHWESTERN ENERGY CO COM
SWP	STANLEY BLACK & DECKER INC CORP UNIT 2017
SWX	SOUTHWEST GAS HOLDINGS INC COM
SWZ	SWISS HELVETIA FD INC COM
SXC	SUNCOKE ENERGY INC COM
SXCP	SUNCOKE ENERGY PARTNERS L P COMUNIT REP LT
SXE	SOUTHCROSS ENERGY PARTNERS L P COM UNIT LTDPT
SXI	STANDEX INTL CORP COM
SXT	SENSIENT TECHNOLOGIES CORP COM
SYBT	STOCK YDS BANCORP INC COM
SYBX	SYNLOGIC INC COM
SYE	SSGA ACTIVE ETF TR MFS SYS COR EQ
SYF	SYNCHRONY FINL COM
SYG	SSGA ACTIVE ETF TR MFS SYS GWT EQ
SYK	STRYKER CORP COM
SYKE	SYKES ENTERPRISES INC COM
SYLD	CAMBRIA ETF TR SHSHLD YIELD ETF
SYMC	SYMANTEC CORP COM
SYN	SYNTHETIC BIOLOGICS INC COM
SYNA	SYNAPTICS INC COM
SYNC	SYNACOR INC COM
SYNH	SYNEOS HEALTH INC CL A
SYNL	SYNALLOY CP DEL COM
SYNT	SYNTEL INC COM
SYPR	SYPRIS SOLUTIONS INC COM
SYRS	SYROS PHARMACEUTICALS INC COM
SYV	SSGA ACTIVE ETF TR MFS SYS VAL EQ
SYX	SYSTEMAX INC COM
SYZ	SYSCO CORP COM
SZC	CUSHING RENAISSANCE FD COM
SZK	PROSHARES TR PSHS CONSUMR GD
SZO	DEUTSCHE BK AG LONDON BRH DB CRUD OIL SHR
T	AT&T INC COM
TA	TRAVELCENTERS AMER LLC COM
TAC	TRANSALTA CORP COM

TACO	DEL TACO RESTAURANTS INC COM
TACOW	DEL TACO RESTAURANTS INC WT EXP 063020
TACT	TRANSACT TECHNOLOGIES INC COM
TAGS	TEUCRIUM COMMODITY TR AGRICULTURE FD
TAHO	TAHOE RES INC COM
TAIL	Cambria Tail Risk ETF
TAIT	TAITRON COMPONENTS INC CL A
TAL	TAL ED GROUP SPONSORED ADS
TALO	TALOS ENERGY INC COM
TALO+	TALOS ENERGY INC WT EXP 010121
TAN	INVESCO EXCHNG TRADED FD TR II SOLAR ETF
TANH	TANTECH HLDGS LTD COM
TANNI	TRAVELCENTERS AMER LLC SR NT 8.25%2028
TANNL	TRAVELCENTERS AMER LLC SR NT
TANNZ	TRAVELCENTERS AMER LLC 8% SR NT 2030
TAO	INVESCO EXCHNG TRADED FD TR II CHINA REALESTE
TAOP	TAOPING INC COM
TAP	MOLSON COORS BREWING CO CL B
TAP.A	MOLSON COORS BREWING CO CL A
TAPR	BARCLAYS BK PLC INV USTREA ETN
TARO	TARO PHARMACEUTICAL INDS LTD SHS
TAST	CARROLS RESTAURANT GROUP INC COM
TAT	TRANSATLANTIC PETROLEUM LTD SHS NEW
TATT	TAT TECHNOLOGIES LTD ORD NEW
TAX	LIBERTY TAX INC CL A
TAYD	TAYLOR DEVICES INC COM
TBB	AT&T INC 5.35% GLB NTS 66
TBBK	BANCORP INC DEL COM
TBF	PROSHARES TR SHRT 20+YR TRE
TBI	TRUEBLUE INC COM
TBK	TRIUMPH BANCORP INC COM
TBLU	Tortoise Global Water ESG Fund
TBNK	TERRITORIAL BANCORP INC COM
TBPH	THERAVANCE BIOPHARMA INC COM
TBRGU	THUNDER BRIDGE ACQUISITION LTD UNIT EXP 010125
TBT	PROSHARES TR PSHS ULTSH 20YRS
TBX	PROSHARES TR SHT 7-10 YR TR
TCAP	TRIANGLE CAP CORP COM
TCBI	TEXAS CAPITAL BANCSHARES INC COM

TCBIL	TEXAS CAP BANCSHARES INC SUB NT 6.50%42
TCBIP	TEXAS CAP BANCSHARES INC PFD PERP SR-A
TCBIW	TEXAS CAPITAL BANCSHARES INC WT EXP 011619
TCBK	TRICO BANCSHARES COM
TCCA	TRIANGLE CAP CORP SR NT 22
TCCB	TRIANGLE CAP CORP NT 22
TCCO	TECHNICAL COMMUNICATIONS CORP COM
TCF	TCF FINL CORP COM
TCF+	TCF FINL CORP WT EXP 111418
TCFC	COMMUNITY FINL CORP MD COM
TCF-D	TCF FINL CORP NON CUM 1/1000 C
TCGP	CARLYLE GROUP L P 5.875% PFD UNT A
TCHF	iShares Edge MSCI Multifactor Technology ETF
TCI	TRANSCONTINENTAL RLTY INVS COM NEW
TCMD	TACTILE SYS TECHNOLOGY INC COM
TCO	TAUBMAN CTRS INC COM
TCO-J	TAUBMAN CTRS INC PFD-J
TCO-K	TAUBMAN CTRS INC PFD SER K
TCON	TRACON PHARMACEUTICALS INC COM
TCP	TC PIPELINES LP UT COM LTD PRT
TCPC	TCP CAP CORP COM
TCRD	THL CR INC COM
TCRX	THL CR INC SR NT 111521
TCRZ	THL CR INC 6.75 NTS 2022
TCS	CONTAINER STORE GROUP INC COM
TCTL	Premise Capital Frontier Advantage Diversified Tactical ETF
TCX	TUCOWS INC COM NEW
TD	TORONTO DOMINION BK ONT COM NEW
TDA	TELEPHONE & DATA SYS INC SR NT 61
TDAC	TRIDENT ACQUISITIONS CORP COM
TDACU	TRIDENT ACQUISITIONS CORP UNIT EXP 050923
TDACW	TRIDENT ACQUISITIONS CORP WT EXP 050923
TDC	TERADATA CORP DEL COM
TDE	TELEPHONE & DATA SYS INC SR NT 2059
TDF	TEMPLETON DRAGON FD INC COM
TDG	TRANSDIGM GROUP INC COM
TDI	TELEPHONE & DATA SYS INC SR NT 2045
TDIV	FIRST TR EXCHANGE TRADED FD VI NASD TECH DIV
TDJ	TELEPHONE & DATA SYS INC PFD

TDOC	TELADOC INC COM
TDS	TELEPHONE & DATA SYS INC COM NEW
TDTF	FLEXSHARES TR IBOXX 5YR TRGT
TDTT	FLEXSHARES TR IBOXX 3R TARGET
TDW	TIDEWATER INC NEW COM
TDW+A	TIDEWATER INC NEW WT A EXP 073123
TDW+B	TIDEWATER INC NEW WT B EXP 073123
TDY	TELEDYNE TECHNOLOGIES INC COM
TEAM	ATLASSIAN CORP PLC CL A
TECD	TECH DATA CORP COM
TECH	BIO TECHNE CORP COM
TECK	TECK RESOURCES LTD CL B
TECL	DIREXION SHS ETF TR DLY TECH BULL 3X
TECS	DIREXION SHS ETF TR DAILY TECHNOLOGY
TEDU	TARENA INTL INC ADR
TEF	TELEFONICA S A SPONSORED ADR
TEGP	TALLGRASS ENERGY GP LP SHS CL A
TEI	TEMPLETON EMERG MKTS INCOME FD COM
TEL	TE CONNECTIVITY LTD REG SHS
TELL	TELLURIAN INC NEW COM
TEN	TENNECO INC COM
TENX	TENAX THERAPEUTICS INC COM NEW
TEO	TELECOM ARGENTINA S A SPON ADR REP B
TEP	TALLGRASS ENERGY PARTNERS LP COM UNIT
TER	TERADYNE INC COM
TERM	FIRST TR EXCHNG TRADED FD VIII EQTCOMPAS TACT
TERP	TERRAFORM PWR INC COM CL A
TESS	TESSCO TECHNOLOGIES INC COM
TETF	EXCHANGE TRADED CONCEPTS TR ETF IND EX FIN
TEUM	PARETEUM CORP COM NEW
TEVA	TEVA PHARMACEUTICAL INDS LTD SPONSORED ADR
TEX	TEREX CORP NEW COM
TFI	SPDR SER TR NUVEEN BRC MUNIC
TFLO	ISHARES TR TRS FLT RT BD
TFSL	TFS FINL CORP COM
TFX	TELEFLEX INC COM
TG	TREDEGAR CORP COM
TGA	TRANSGLOBE ENERGY CORP COM
TGB	TASEKO MINES LTD COM

TGC	TENGASCO INC COM PAR
TGEN	TECOGEN INC NEW COM NEW
TGH	TEXTAINER GROUP HOLDINGS LTD SHS
TGI	TRIUMPH GROUP INC NEW COM
TGLS	TECNOGLASS INC SHS
TGNA	TEGNA INC COM
TGP	TEEKAY LNG PARTNERS L P PRTNRSP UNITS
TGP-A	TEEKAY LNG PARTNERS L P PFD UNIT SER A
TGP-B	TEEKAY LNG PARTNERS L P 8.50% PFD UNIT B
TGS	TRANSPORTADORA DE GAS SUR SPON ADR B
TGT	TARGET CORP COM
TGTX	TG THERAPEUTICS INC COM
THC	TENET HEALTHCARE CORP COM NEW
THD	ISHARES INC MSCI THAILND ETF
THFF	FIRST FINL CORP IND COM
THG	HANOVER INS GROUP INC COM
THGA	HANOVER INS GROUP INC SUB DB 6.35%53
THM	INTERNATIONAL TOWER HILL MINES COM
THO	THOR INDS INC COM
THQ	TEKLA HEALTHCARE OPPORTUNIT FD SHS
THR	THERMON GROUP HLDGS INC COM
THRM	GENTHERM INC COM
THS	TREEHOUSE FOODS INC COM
THST	TRUETT-HURST INC CL A
THW	TEKLA WORLD HEALTHCARE FD BEN INT SHS
TI	TELECOM ITALIA S P A NEW SPON ADR ORD
TI.A	TELECOM ITALIA S P A NEW SPON ADR SVGS
TIBR	TIBERIUS ACQUISITION CORP COM
TIBRU	TIBERIUS ACQUISITION CORP UNIT EXP 022821
TIBRW	TIBERIUS ACQUISITION CORP WT EXP 022821
TIER	TIER REIT INC COM NEW
TIF	TIFFANY & CO NEW COM
TIG	TIGENIX SPONSORED ADS
TIK	TEL INSTR ELECTRS CORP COM NEW
TILE	INTERFACE INC COM
TILT	FLEXSHARES TR MORNSTAR USMKT
TIP	ISHARES TR TIPS BD ETF
TIPT	TIPTREE INC COM
TIPX	SPDR SER TR BLOMBERG 1 10 YR

TIPZ	PIMCO ETF TR BROAD US TIPS
TIS	ORCHIDS PAPER PRODS CO DEL COM
TISA	TOP IMAGE SYSTEMS LTD ORD
TISI	TEAM INC COM
TITN	TITAN MACHY INC COM
TIVO	TIVO CORP COM
TJX	TJX COS INC NEW COM
TK	TEEKAY CORPORATION COM
TKAT	TAKUNG ART CO LTD COM NEW
TKC	TURKCELL ILETISIM HIZMETLERI SPON ADR NEW
TKR	TIMKEN CO COM
TLDH	FLEXSHARES TR CUR HDG DM IDX
TLEH	FLEXSHARES TR CUR HDG EM IDX
TLF	TANDY LEATHER FACTORY INC COM
TLGT	TELIGENT INC NEW COM
TLH	ISHARES TR 10-20 YR TRS ETF
TLI	WESTERN ASSET CORPORATE LN FD COM
TLK	P T TELEKOMUNIKASI INDONESIA SPONSORED ADR
TLND	TALEND S A ADS
TLP	TRANSMONTAIGNE PARTNERS L P COM UNIT L P
TLRA	TELARIA INC COM
TLRD	TAILORED BRANDS INC COM
TLT	ISHARES TR 20 YR TR BD ETF
TLTD	FLEXSHARES TR M STAR DEV MKT
TLTE	FLEXSHARES TR MSTAR EMKT FAC
TLYS	TILLYS INC CL A
TM	TOYOTA MOTOR CORP SP ADR REP2COM
TMCX	TRINITY MERGER CORP COM CL A
TMCXU	TRINITY MERGER CORP UNIT EXP 051125
TMCXW	TRINITY MERGER CORP WT EXP 051125
TMF	DIREXION SHS ETF TR 20YR TRES BULL
TMFC	Motley Fool 100 Index ETF
TMHC	TAYLOR MORRISON HOME CORP CL A
TMK	TORCHMARK CORP COM
TMK-C	TORCHMARK CORP JR SUB DEB 56
TMO	THERMO FISHER SCIENTIFIC INC COM
TMP	TOMPKINS FINANCIAL CORPORATION COM
TMQ	TRILOGY METALS INC NEW COM
TMSR	TMSR HLDG CO LTD COM

TMST	TIMKENSTEEL CORP COM
TMUS	T MOBILE US INC COM
TMV	DIREXION SHS ETF TR 20YR TRES BEAR
TNA	DIREXION SHS ETF TR DLY SMCAP BULL3X
TNAV	TELENAV INC COM
TNC	TENNANT CO COM
TNDM	TANDEM DIABETES CARE INC COM NEW
TNET	TRINET GROUP INC COM
TNK	TEEKAY TANKERS LTD CL A
TNP	TSAKOS ENERGY NAVIGATION LTD SHS
TNP-B	TSAKOS ENERGY NAVIGATION LTD RED PRP PFD B %
TNP-C	TSAKOS ENERGY NAVIGATION LTD RED PFD SER C
TNP-D	TSAKOS ENERGY NAVIGATION LTD PERP PFD SER D
TNP-E	TSAKOS ENERGY NAVIGATION LTD PERP PFD SER E
TNTR	TINTRI INC COM
TNXP	TONIX PHARMACEUTICALS HLDG COR COM
TOCA	TOCAGEN INC COM
TOK	ISHARES TR MSCI KOKUSAI ETF
TOL	TOLL BROTHERS INC COM
TOLZ	PROSHARES TR DJ BRKFLD GLB
TOO	TEEKAY OFFSHORE PARTNERS L P PARTNERSHIP UN
TOO-A	TEEKAY OFFSHORE PARTNERS L P CUM PFD-A7.25%
TOO-B	TEEKAY OFFSHORE PARTNERS L P PFD UNIT SER B
TOO-E	TEEKAY OFFSHORE PARTNERS L P 8.87% PFD UNIT E
TOPS	TOP SHIPS INC COM
TORC	RESTORBIO INC COM
TOT	TOTAL S A SPONSORED ADR
TOTL	SSGA ACTIVE ETF TR SPDR TR TACTIC
TOUR	TUNIU CORP SPONSORED ADS CL
TOWN	TOWNEBANK PORTSMOUTH VA COM
TOWR	TOWER INTL INC COM
TPB	TURNING PT BRANDS INC COM
TPC	TUTOR PERINI CORP COM
TPGE	TPG PACE ENERGY HLDGS CORP CL A
TPGE+	TPG PACE ENERGY HLDGS CORP WT EXP 2022
TPGE=	TPG PACE ENERGY HLDGS CORP UNIT EXP 000022
TPGH	TPG PACE HLDGS CORP CL A
TPGH+	TPG PACE HLDGS CORP WT EXP 062722
TPGH=	TPG PACE HLDGS CORP UNIT EXP

TPH	TRI POINTE GROUP INC COM
TPHS	TRINITY PL HLDGS INC COM
TPIC	TPI COMPOSITES INC COM
TPIV	TAPIMMUNE INC COM PAR
TPL	TEXAS PAC LD TR SUB CTF PROP I T
TPOR	DIREXION SHS ETF TR DAILY TRANS 3X
TPR	TAPESTRY INC COM
TPRE	THIRD PT REINS LTD COM
TPVG	TRIPLEPOINT VENTURE GROWTH BDC COM
TPVY	TRIPLEPOINT VENTURE GROWTH BDC 5.75% NT 22
TPX	TEMPUR SEALY INTL INC COM
TPYP	MANAGED PORTFOLIO SER TORTOISE NRAM PI
TPZ	TORTOISE PWR & ENERGY INFRASTR COM
TQQQ	PROSHARES TR ULTRAPRO QQQ
TR	TOOTSIE ROLL INDS INC COM
TRC	TEJON RANCH CO COM
TRCB	TWO RIV BANCORP COM
TRCH	TORCHLIGHT ENERGY RES INC COM
TRCO	TRIBUNE MEDIA CO CL A
TREC	TRECORA RES COM
TREE	LENDINGTREE INC NEW COM
TREX	TREX CO INC COM
TRGP	TARGA RES CORP COM
TRHC	TABULA RASA HEALTHCARE INC COM
TRI	THOMSON REUTERS CORP COM
TRIB	TRINITY BIOTECH PLC SPON ADR NEW
TRIL	TRILLIUM THERAPEUTICS INC COM NEW
TRIP	TRIPADVISOR INC COM
TRK	SPEEDWAY MOTORSPORTS INC COM
TRMB	TRIMBLE INC COM
TRMD	TORM PLC SHS CL A
TRMK	TRUSTMARK CORP COM
TRMT	TREMONT MTG TR COM
TRN	TRINITY INDS INC COM
TRNC	TRONC INC COM
TRNO	TERRENO RLTY CORP COM
TRNS	TRANSCAT INC COM
TROV	TROVAGENE INC COM PAR
TROW	PRICE T ROWE GROUP INC COM



TROX	TRONOX LTD SHS CL A
TRP	TRANSCANADA CORP COM
TRPX	THERAPIX BIOSCIENCES LTD SPONSORED ADS NE
TRQ	TURQUOISE HILL RES LTD COM
TRS	TRIMAS CORP COM NEW
TRST	TRUSTCO BK CORP N Y COM
TRT	TRIO TECH INTL COM NEW
TRTN	TRITON INTL LTD CL A
TRTX	TPG RE FIN TR INC COM
TRU	TRANSUNION COM
TRUE	TRUECAR INC COM
TRUP	TRUPANION INC COM
TRV	TRAVELERS COMPANIES INC COM
TRVG	TRIVAGO N V SPON ADS A SHS
TRVN	TREVENA INC COM
TRX	TANZANIAN ROYALTY EXPL CORP COM
TRXC	TRANSETERIX INC COM NEW
TS	TENARIS S A SPONSORED ADR
TSBK	TIMBERLAND BANCORP INC COM
TSC	TRISTATE CAP HLDGS INC COM
TSCAP	TRISTATE CAP HLDGS INC DEP SHS 1/40 INT
TSCO	TRACTOR SUPPLY CO COM
TSE	TRINSEO S A SHS
TSEM	TOWER SEMICONDUCTOR LTD SHS NEW
TSG	STARS GROUP INC COM
TSI	TCW STRATEGIC INCOME FUND INC COM
TSLA	TESLA INC COM
TSLF	THL CR SR LN FD COM
TSLX	TPG SPECIALTY LENDING INC COM
TSM	TAIWAN SEMICONDUCTOR MFG LTD SPONSORED ADR
TSN	TYSON FOODS INC CL A
TSQ	TOWNSQUARE MEDIA INC CL A
TSRI	TSR INC COM NEW
TSRO	TESARO INC COM
TSS	TOTAL SYS SVCS INC COM
TST	THESTREET INC COM
TSU	TIM PARTICIPACOES S A SPONSORED ADR
TTAC	TrimTabs All Cap U.S. Free-Cash-Flow ETF
TTAI	TrimTabs All Cap International Free-Cash-Flow ETF

TTC	TORO CO COM
TTD	THE TRADE DESK INC COM CL A
TTEC	TTEC HLDGS INC COM
TTEK	TETRA TECH INC NEW COM
TTFS	ADVISORSHARES TR WILSHIRE BUYBACK
TTGT	TECHTARGET INC COM
TTI	TETRA TECHNOLOGIES INC DEL COM
TTM	TATA MTRS LTD SPONSORED ADR
TTMI	TTM TECHNOLOGIES INC COM
TTNP	TITAN PHARMACEUTICALS INC DEL COM NEW
TTOO	T2 BIOSYSTEMS INC COM
TTP	TORTOISE PIPELINE & ENERGY FD COM
TTPH	TETRAPHASE PHARMACEUTICALS INC COM
TTS	TILE SHOP HLDGS INC COM
TTT	PROSHARES TR ULSH 20YRTRE NEW
TTWO	TAKE-TWO INTERACTIVE SOFTWARE COM
TU	TELUS CORP COM
TUES	TUESDAY MORNING CORP COM NEW
TUP	TUPPERWARE BRANDS CORP COM
TUR	ISHARES INC MSCI TURKEY ETF
TURN	180 DEGREE CAP CORP COM
TUSA	FIRST TR EXCHANGE TRADED FD ETF
TUSK	MAMMOTH ENERGY SVCS INC COM
TUZ	PIMCO ETF TR 1-3YR USTREIDX
TV	GRUPO TELEVISA SA SPON ADR REP ORD
TVC	TENNESSEE VALLEY AUTH PARRS D 2028
TVE	TENNESSEE VALLEY AUTH PARRS A 2029
TVIX	CREDIT SUISSE NASSAU BRH VELOCITY SHS DAI
TVIZ	CREDIT SUISSE NASSAU BRH VELOCITY SHS MED
TVPT	TRAVELPORT WORLDWIDE LTD SHS
TVTY	TIVITY HEALTH INC COM
TWI	TITAN INTL INC ILL COM
TWIN	TWIN DISC INC COM
TWLO	TWILIO INC CL A
TWLVU	TWELVE SEAS INVESTMENT COMPANY UNIT EXP 062123
TWM	PROSHARES TR ULTSHT RUSS2000
TWMC	TRANS WORLD ENTMT CORP COM
TWN	TAIWAN FD INC COM
TWNK	HOSTESS BRANDS INC CL A

TWNKW	HOSTESS BRANDS INC WT EXP 110421
TWO	TWO HBRS INVT CORP COM NEW
TWO-A	TWO HBRS INVT CORP PFD SER A
TWO-B	TWO HBRS INVT CORP 7.625% PFD B FXD
TWO-C	TWO HBRS INVT CORP 7.25% CUM PFD C
TWOU	2U INC COM
TWTR	TWITTER INC COM
TX	TERNIUM SA SPON ADR
TXMD	THERAPEUTICSMD INC COM
TXN	TEXAS INSTRS INC COM
TXRH	TEXAS ROADHOUSE INC COM
TXT	TEXTRON INC COM
TY	TRI CONTL CORP COM
TY-	TRI CONTL CORP PFD \$2.50
TYBS	DIREXION SHS ETF TR 20YR TRES BEAR
TYD	DIREXION SHS ETF TR 7 10YR TRES BULL
TYG	TORTOISE ENERGY INFRA CORP COM
TYHT	SHINECO INC COM NEW
TYL	TYLER TECHNOLOGIES INC COM
TYME	TYME TECHNOLOGIES INC COM
TYNS	DIREXION SHS ETF TR 7-10YR TR BEAR
TYO	DIREXION SHS ETF TR 7 10YR TRES BEAR
TYPE	MONOTYPE IMAGING HOLDINGS INC COM
TZA	DIREXION SHS ETF TR DAILY SM CAP BEA
TZOO	TRAVELZOO COM NEW
UA	UNDER ARMOUR INC CL C
UAA	UNDER ARMOUR INC CL A
UAE	ISHARES TR MSCI UAE ETF
UAG	UBS AG JERSEY BRH CMCI AGRI ETN
UAL	UNITED CONTL HLDGS INC COM
UAMY	UNITED STATES ANTIMONY CORP COM
UAN	CVR PARTNERS LP COM
UAUD	CITIGROUP GLOBAL MKT HLDGS INC VELCTYSHS USDAUD
UAVS	AGEAGLE AERIAL SYS INC NEW COM
UBA	URSTADT BIDDLE PPTYS INC CL A
UBC	UBS AG JERSEY BRH LIVESTK ETN 38
UBCP	UNITED BANCORP INC OHIO COM
UBFO	UNITED SECURITY BANCSHARES CA COM
UBG	UBS AG JERSEY BRH CMCI GOLD ETN

UBIO	PROSHARES TR ULTPRO NASBIO NW
UBM	UBS AG JERSEY BRH CMCI INDL ETN
UBN	UBS AG JERSEY BRH CMCI ENRGY ETN
UBNK	UNITED FINL BANCORP INC NEW COM
UBNT	UBIQUITI NETWORKS INC COM
UBOH	UNITED BANCSHARES INC OHIO COM
UBOT	DIREXION SHS ETF TR DLY ROB AI 3X
UBP	URSTADT BIDDLE PPTYS INC COM
UBP-G	URSTADT BIDDLE PPTYS INC PFD-G CV 6.75%
UBP-H	URSTADT BIDDLE PPTYS INC 6.25% CUM PFD H
UBR	PROSHARES TR ULTRA MSCI BRAZI
UBRT	CREDIT SUISSE AG NASSAU BRH AXELATRDR 3X LNG
UBS	UBS GROUP AG SHS
UBSH	UNION BANKSHARES CORP NEW COM
UBSI	UNITED BANKSHARES INC WEST VA COM
UBT	PROSHARES TR ULTRA 20YR TRE
UBX	UNITY BIOTECHNOLOGY INC COM
UCBA	UNITED CMNTY BANCORP IND COM
UCBI	UNITED CMNTY BKS BLAIRSVLE GA COM
UCC	PROSHARES TR PSHS CONSMR SVCS
UCFC	UNITED CMNTY FINL CORP OHIO COM
UCHF	CITIGROUP GLOBAL MKT HLDGS INC VELCTYSHS USDCHF
UCI	UBS AG JERSEY BRH CMCI ETN 38
UCIB	UBS AG LONDON BRH ETRACS UBS BLOOM
UCO	PROSHARES TR II ULTA BLMBG 2017
UCON	FIRST TR EXCHNG TRADED FD VIII TCW UNCONSTRAI
UCTT	ULTRA CLEAN HLDGS INC COM
UDBI	LEGG MASON ETF INVESTMENT TR US DIV COR ETF
UDN	INVESCO DB US DLR INDEX TR BEARISH FD
UDOW	PROSHARES TR ULTRPRO DOW30
UDR	UDR INC COM
UE	URBAN EDGE PPTYS COM
UEC	URANIUM ENERGY CORP COM
UEIC	UNIVERSAL ELECTRS INC COM
UEPS	NET 1 UEPS TECHNOLOGIES INC COM NEW
UEUR	CITIGROUP GLOBAL MKT HLDGS INC VELCTYSHS USDEUR
UEVM	USAA ETF TR MSCI EMRG MKTS
UFAB	UNIQUE FABRICATING INC COM
UFCS	UNITED FIRE GROUP INC COM

UFI	UNIFI INC COM NEW
UFPI	UNIVERSAL FST PRODS INC COM
UFPT	UFP TECHNOLOGIES INC COM
UFS	DOMTAR CORP COM NEW
UG	UNITED GUARDIAN INC COM
UGA	UNITED STS GASOLINE FD LP UNITS
UGAZ	CREDIT SUISSE AG NASSAU BRH VLCTYSHS 3X S&P
UGBP	CITIGROUP GLOBAL MKT HLDGS INC VELCTYSHS USDGBP
UGE	PROSHARES TR PSHS CONSMRGOODS
UGI	UGI CORP NEW COM
UGL	PROSHARES TR II ULTRA GOLD
UGLD	CREDIT SUISSE NASSAU BRH 3X LONG GOLD
UGP	ULTRAPAR PARTICIPACOES S A SP ADR REP COM
UHAL	AMERCO COM
UHN	UNITED STS DIESEL HEATING OIL UNIT
UHS	UNIVERSAL HLTH SVCS INC CL B
UHT	UNIVERSAL HEALTH RLTY INCM TR SH BEN INT
UIHC	UNITED INS HLDGS CORP COM
UIS	UNISYS CORP COM NEW
UITB	USAA ETF TR CORE INTRMDITE
UIVM	USAA ETF TR MSCI INTL VLU
UJB	PROSHARES TR ULTRA HIGH YLD
UJPY	CITIGROUP GLOBAL MKT HLDGS INC VELCTYSHS USDJPY
UL	UNILEVER PLC SPON ADR NEW
ULBI	ULTRALIFE CORP COM
ULBR	CITIGROUP GBL MKTS HLDGS INC VELOCITYSHS LONG
ULE	PROSHARES TR II PSH ULTRA EURO
ULH	UNIVERSAL LOGISTICS HLDGS INC COM
ULST	SSGA ACTIVE ETF TR ULT SHT TRM BD
ULTA	ULTA BEAUTY INC COM
ULTI	ULTIMATE SOFTWARE GROUP INC COM
ULVM	USAA ETF TR MSCI USA VL MT
UMBF	UMB FINL CORP COM
UMC	UNITED MICROELECTRONICS CORP SPON ADR NEW
UMDD	PROSHARES TR ULTRA MDCAP400
UMH	UMH PPTYS INC COM
UMH-B	UMH PPTYS INC PFD RED SER B
UMH-C	UMH PPTYS INC 6.75% CUM PFD C
UMH-D	UMH PPTYS INC 6.375% CUM PFD D

UMPQ	UMPQUA HLDGS CORP COM
UMRX	UNUM THERAPEUTICS INC COM
UN	UNILEVER N V N Y SHS NEW
UNAM	UNICO AMERN CORP COM
UNB	UNION BANKSHARES INC COM
UNF	UNIFIRST CORP MASS COM
UNFI	UNITED NAT FOODS INC COM
UNG	UNITED STATES NATL GAS FUND LP UNIT PAR
UNH	UNITEDHEALTH GROUP INC COM
UNIT	UNITI GROUP INC COM
UNL	UNITED STS 12 MONTH NAT GAS FD UNIT BEN INT
UNM	UNUM GROUP COM
UNMA	UNUM GROUP 6.250% JR NT58
UNP	UNION PAC CORP COM
UNT	UNIT CORP COM
UNTY	UNITY BANCORP INC COM
UNVR	UNIVAR INC COM
UONE	URBAN ONE INC CL A
UONEK	URBAN ONE INC CL D NON VTG
UPL	ULTRA PETROLEUM CORP COM NEW
UPLD	UPLAND SOFTWARE INC COM
UPRO	PROSHARES TR ULTRPRO S&P500
UPS	UNITED PARCEL SERVICE INC CL B
UPV	PROSHARES TR ULT FTSE EUROPE
UPW	PROSHARES TR PSHS ULTRA UTIL
UQM	UQM TECHNOLOGIES INC COM
URA	GLOBAL X FDS GLOBAL X URANIUM
URBN	URBAN OUTFITTERS INC COM
URE	PROSHARES TR ULT R/EST NEW
URG	UR ENERGY INC COM
URGN	UROGEN PHARMA LTD COM
URI	UNITED RENTALS INC COM
URR	MORGAN STANLEY LNG EURO ETN20
URTH	ISHARES INC MSCI WORLD ETF
URTY	PROSHARES TR ULTR RUSSL2000
USA	LIBERTY ALL STAR EQUITY FD SH BEN INT
USAC	USA COMPRESSION PARTNERS LP COMUNIT LTDPAR
USAG	UNITED STS COMMODITY IDX FDTR COM UTS US AGR
USAI	ETF SER SOLUTIONS AMERN ENERGY

USAK	USA TRUCK INC COM
USAP	UNIVERSAL STAINLESS & ALLOY COM
USAS	AMERICAS SILVER CORP COM NEW
USAT	USA TECHNOLOGIES INC COM NO PAR
USATP	USA TECHNOLOGIES INC CONV PFD SER A
USAU	U S GOLD CORP COM PAR NEW
USB	US BANCORP DEL COM NEW
USB-A	US BANCORP DEL PERP PFD SER A
USB-H	US BANCORP DEL PFD B 1/1000DP
USB-M	US BANCORP DEL DEP SHS PFD F
USB-O	US BANCORP DEL PFD 1/1000 PRP H
USCI	UNITED STS COMMODITY INDEX FD COMM IDX FND
USCR	U S CONCRETE INC COM NEW
USD	PROSHARES TR PSHS ULT SEMICDT
USDP	USD PARTNERS LP COM UT REP LTD
USDU	WISDOMTREE TR BLMBG US BULL
USDY	Horizons Cadence Hedged US Dividend Yield ETF
USEG	U S ENERGY CORP WYO COM NEW
USEQ	Invesco Russell 1000 Enhanced Equal Weight ETF
USFD	US FOODS HLDG CORP COM
USFR	WISDOMTREE TR BLMBRG FL TRFD
USG	U S G CORP COM NEW
USHY	iShares Broad USD High Yield Corporate Bond ETF
USL	UNITED STS 12 MONTH OIL FD LP UNIT BEN INT
USLB	INVESCO EXCHNG TRADED FD TR II RUSEL 1000 LOW
USLM	UNITED STATES LIME & MINERALS COM
USLV	CREDIT SUISSE AG NASSAU BRH VELOCITY SHS EXC
USM	UNITED STATES CELLULAR CORP COM
USMC	PRINCIPAL EXCHANGE TRADED FDS US MEGA CAP
USMF	WisdomTree U.S. Multifactor Fund
USMV	iShares Edge MSCI Min Vol USA ETF
USNA	USANA HEALTH SCIENCES INC COM
USO	UNITED STATES OIL FUND LP UNITS
USOD	USCF FDS TR US 3X SHRT OIL
USOI	CREDIT SUISSE AG NASSAU BRH XLINK CRD ETN37
USOU	USCF FDS TR US 3X OIL FD
USPH	U S PHYSICAL THERAPY INC COM
USRT	ISHARES TR CRE U S REIT ETF
UST	PROSHARES TR ULTR 7-10 TREA

USTB	USAA ETF TR CORE SHRT BD
USV	UBS AG JERSEY BRH CMCI SILVR ETN
USVM	USAA ETF TR MSCI USA SMALL
USX	US XPRESS ENTERPRISES INC COM CL A
UTES	ETFIS SER TR I REAVES UTILS ETF
UTF	COHEN & STEERS INFRASTRUCTURE COM
UTG	REAVES UTIL INCOME FD COM SH BEN INT
UTHR	UNITED THERAPEUTICS CORP DEL COM
UTI	UNIVERSAL TECHNICAL INST INC COM
UTL	UNITIL CORP COM
UTLF	iShares Edge MSCI Multifactor Utilities ETF
UTMD	UTAH MED PRODS INC COM
UTSI	UTSTARCOM HOLDINGS CORP SHS NEW
UTSL	DIREXION SHS ETF TR DLY UTLTIES 3X
UTX	UNITED TECHNOLOGIES CORP COM
UUP	INVESCO DB US DLR INDEX TR BULLISH FD
UUU	UNIVERSAL SEC INSTRS INC COM NEW
UUUU	ENERGY FUELS INC COM NEW
UUUU+	ENERGY FUELS INC WT EXP 092021
UVE	UNIVERSAL INS HLDGS INC COM
UVSP	UNIVEST CORP PA COM
UVV	UNIVERSAL CORP VA COM
UVXY	PROSHARES TR II ULTRA VIX SHORT
UWM	PROSHARES TR PSHS ULTRUSS2000
UWN	NEVADA GOLD & CASINOS INC COM NEW
UWT	CITIGROUP GLOBAL MKTS HLDGS IN VELOCITYSHARE 3X
UXI	PROSHARES TR PSHS ULTRA INDL
UYG	PROSHARES TR ULTRA FNCLS NEW
UYM	PROSHARES TR PSHS ULT BASMATL
UZA	UNITED STATES CELLULAR CORP CALL SR NT 60
UZB	UNITED STATES CELLULAR CORP SR NT 120163
UZC	UNITED STATES CELLULAR CORP SR NT 64
V	VISA INC COM CL A
VAC	MARRIOTT VACATIONS WRDLWDE CP COM
VALE	VALE S A ADR
VALQ	AMERICAN CENTY ETF TR STOXX US QUALT
VALU	VALUE LINE INC COM
VALX	ETF SER SOLUTIONS VAL MKT LEG ET
VAM	VIVALDI OPPORTUNITIES FD COM



VAMO	Cambria Value and Momentum ETF
VAR	VARIAN MED SYS INC COM
VAW	VANGUARD WORLD FDS MATERIALS ETF
VB	VANGUARD INDEX FDS SMALL CP ETF
VBF	INVESCO BD FD COM
VBFC	VILLAGE BK & TR FINANCIAL CORP COM NEW
VBIV	VBI VACCINES INC COM NEW
VBK	VANGUARD INDEX FDS SML CP GRW ETF
VBLT	VASCULAR BIOGENICS LTD COM
VBND	ETF SER SOLUTIONS VIDENT CORE US
VBR	VANGUARD INDEX FDS SM CP VAL ETF
VBTX	VERITEX HLDGS INC COM
VC	VISTEON CORP COM NEW
VCEL	VERICEL CORP COM
VCF	DELAWARE INV CO MUN INC FD INC COM
VCIT	VANGUARD SCOTTSDALE FDS INT-TERM CORP
VCLT	VANGUARD SCOTTSDALE FDS LG-TERM COR BD
VCO	VINA CONCHA Y TORO S A SPONSORED ADR
VCR	VANGUARD WORLD FDS CONSUM DIS ETF
VCRA	VOCERA COMMUNICATIONS INC COM
VCSH	VANGUARD SCOTTSDALE FDS SHRT TRM CORP BD
VCTR	VICTORY CAP HLDGS INC COM CL A
VCV	INVESCO CALIF VALUE MUN INC TR COM
VCYT	VERACYTE INC COM
VDC	VANGUARD WORLD FDS CONSUM STP ETF
VDE	VANGUARD WORLD FDS ENERGY ETF
VEA	VANGUARD TAX MANAGED INTL FD FTSE DEV MKT ETF
VEAC	VANTAGE ENERGY ACQUISITION COM CL A
VEACU	VANTAGE ENERGY ACQUISITION UNIT EX 041224
VEACW	VANTAGE ENERGY ACQUISITION WT EXP 041224
VEC	VECTRUS INC COM
VECO	VEECO INSTRS INC DEL COM
VEDL	VEDANTA LTD SPONSORED ADR
VEEV	VEEVA SYS INC CL A COM
VEGA	ADVISORSHARES TR STAR GLOB BUYW
VEGI	ISHARES INC GLB AGRIC PR ETF
VEON	VEON LTD SPONSORED ADR
VER	VEREIT INC COM
VER-F	VEREIT INC PFD SER F

VERI	VERITONE INC COM
VERU	VERU INC COM
VESH	VIRTUS ETF TR II VIRTUS ENHCD SRT
VET	VERMILION ENERGY INC COM
VETS	PACER FDS TR MILTRY TIMS ETF
VEU	VANGUARD INTL EQUITY INDEX FD ALLWRLD EX US
VFC	V F CORP COM
VFH	VANGUARD WORLD FDS FINANCIALS ETF
VFL	DELAWARE INVT NAT MUNI INC FD SH BEN INT
VFLQ	Vanguard U.S. Liquidity Factor ETF
VFMF	Vanguard U.S. Multifactor ETF
VFMO	Vanguard U.S. Momentum Factor ETF
VFMV	Vanguard U.S. Minimum Volatility ETF
VFQY	Vanguard U.S. Quality Factor ETF
VFVA	Vanguard U.S. Value Factor ETF
VG	VONAGE HLDGS CORP COM
VGFO	ETFIS SER TR I VIRTUS WMC GBL
VGI	VIRTUS GLOBAL MULTI-SEC INC FD COM
VGIT	VANGUARD SCOTTSDALE FDS INTER TERM TREAS
VGK	VANGUARD INTL EQUITY INDEX FD FTSE EUROPE ETF
VGLT	VANGUARD SCOTTSDALE FDS LONG TERM TREAS
VGM	INVESCO TR INVT GRADE MUNS COM
VGR	VECTOR GROUP LTD COM
VGSH	VANGUARD SCOTTSDALE FDS SHORT TERM TREAS
VGT	VANGUARD WORLD FDS INF TECH ETF
VGZ	VISTA GOLD CORP COM NEW
VHC	VIRNETX HLDG CORP COM
VHI	VALHI INC NEW COM
VHT	VANGUARD WORLD FDS HEALTH CAR ETF
VIA	VIACOM INC NEW CL A
VIAB	VIACOM INC NEW CL B
VIAV	VIAVI SOLUTIONS INC COM
VICI	VICI PPTYS INC COM
VICL	VICAL INC COM NEW
VICR	VICOR CORP COM
VIDI	ETF SER SOLUTIONS VIDENT INTL EQ
VIG	VANGUARD GROUP DIV APP ETF
VIGI	VANGUARD WHITEHALL FDS INC INTL DVD ETF
VII	VICON INDS INC COM

VIIX	CREDIT SUISSE NASSAU BRH VELOCITY SHS SHO
VIIZ	CREDIT SUISSE NASSAU BRH ETN TERM SHEET
VIOG	VANGUARD ADMIRAL FDS INC SMLCP 600 GRTH
VIOO	VANGUARD ADMIRAL FDS INC SMLLCP 600 IDX
VIOV	VANGUARD ADMIRAL FDS INC SMLCP 600 VAL
VIPS	VIPSHOP HLDGS LTD SPONSORED ADR
VIRC	VIRCO MFG CO COM
VIRT	VIRTU FINL INC CL A
VIS	VANGUARD WORLD FDS INDUSTRIAL ETF
VISI	VOLT INFORMATION SCIENCES INC COM
VIV	TELEFONICA BRASIL SA SPONSORED ADR
VIVE	VIVEVE MED INC COM NEW
VIVO	MERIDIAN BIOSCIENCE INC COM
VIXM	PROSHARES TR II VIX MDTRM FUTR N
VIXY	PROSHARES TR II VIX SH TRM FUTRS
VJET	VOXELJET AG ADS
VKI	INVESCO ADVANTAGE MUNICIPAL IN SH BEN INT
VKQ	INVESCO MUN TR COM
VKTX	VIKING THERAPEUTICS INC COM
VKTXW	VIKING THERAPEUTICS INC WT EXP 041321
VLGEA	VILLAGE SUPER MKT INC CL A NEW
VLO	VALERO ENERGY CORP NEW COM
VLP	VALERO ENERGY PARTNERS LP COM UNT REP LP
VLRS	CONTROLADORA VUELA CIA DE AVIA SPON ADR RP 10
VLRX	VALERITAS HLDGS INC COM NEW
VLT	INVESCO HIGH INCOME TR II COM
VLU	SPDR SERIES TRUST SPDR S&P1500VL
VLUE	iShares Edge MSCI USA Value Factor ETF
VLY	VALLEY NATL BANCORP COM
VLY+	VALLEY NATL BANCORP WT EXP 111418
VLY-A	VALLEY NATL BANCORP PERP PFD SER A
VLY-B	VALLEY NATL BANCORP 5.50% PFD SER B
VMAX	REX VolMAXX Long VIX Futures Strategy ETF
VMBS	VANGUARD SCOTTSDALE FDS MORTG-BACK SEC
VMC	VULCAN MATLS CO COM
VMI	VALMONT INDS INC COM
VMIN	REX VolMAXX Short VIX Futures Strategy ETF
VMM	DELAWARE INV MN MUN INC FD II COM
VMO	INVESCO MUN OPPORTUNITY TR COM

VMOT	Alpha Architect Value Momentum Trend ETF
VMW	VMWARE INC CL A COM
VNCE	VINCE HLDG CORP COM NEW
VNDA	VANDA PHARMACEUTICALS INC COM
VNE#	VEONEER INCORPORATED COM
VNET	21VIANET GROUP INC SPONSORED ADR
VNLA	JANUS DETROIT STR TR HENDRSN SHRT ETF
VNM	VANECK VECTORS ETF TR VIETNAM ETF
VNO	VORNADO RLTY TR SH BEN INT
VNO-K	VORNADO RLTY TR PFD SER K
VNO-L	VORNADO RLTY TR PFD SER L 5.40%
VNOM	VIPER ENERGY PARTNERS LP COM UNT RP INT
VNO-M	VORNADO RLTY TR 5.25% CUM PFD M
VNQ	VANGUARD INDEX FDS REAL ESTATE ETF
VNQI	VANGUARD INTL EQUITY INDEX FD GLB EX US ETF
VNRX	VOLITIONRX LTD COM
VNTR	VENATOR MATLS PLC SHS
VO	VANGUARD INDEX FDS MID CAP ETF
VOC	VOC ENERGY TR TR UNIT
VOD	VODAFONE GROUP PLC NEW SPONSORED ADR
VOE	VANGUARD INDEX FDS MCAP VL IDXVIP
VONE	VANGUARD SCOTTSDALE FDS VNG RUS1000IDX
VONG	VANGUARD SCOTTSDALE FDS VNG RUS1000GRW
VONV	VANGUARD SCOTTSDALE FDS VNG RUS1000VAL
VOO	VANGUARD INDEX FDS S&P 500 ETF SHS
VOOG	VANGUARD ADMIRAL FDS INC 500 GRTH IDX F
VOOV	VANGUARD ADMIRAL FDS INC 500 VAL IDX FD
VOT	VANGUARD INDEX FDS MCAP GR IDXVIP
VOX	VANGUARD WORLD FDS COMM SRVC ETF
VOXX	VOXX INTL CORP CL A
VOYA	VOYA FINL INC COM
VPG	VISHAY PRECISION GROUP INC COM
VPL	VANGUARD INTL EQUITY INDEX FD FTSE PACIFIC ETF
VPU	VANGUARD WORLD FDS UTILITIES ETF
VPV	INVESCO PA VALUE MUN INCOME TR COM
VQT	BARCLAYS BK PLC S&P 500 VEQTOR
VR	VALIDUS HOLDINGS LTD COM SHS
VRA	VERA BRADLEY INC COM
VR-A	VALIDUS HOLDINGS LTD DEP SHS PFD A

VRAY	VIEWRAY INC COM
VR-B	VALIDUS HOLDINGS LTD DEP 1/1000 B 5.8
VRCA	VERRICA PHARMACEUTICALS INC COM
VREX	VAREX IMAGING CORP COM
VRIG	INVESCO ACTIVELY MANAGD ETF TR VAR RATE INVT
VRML	VERMILLION INC COM NEW
VRNA	VERONA PHARMA PLC SPONSORED ADS
VRNS	VARONIS SYS INC COM
VRNT	VERINT SYS INC COM
VRP	INVESCO EXCHNG TRADED FD TR II VAR RATE PFD
VRS	VERSO CORP CL A
VRSK	VERISK ANALYTICS INC COM
VRSN	VERISIGN INC COM
VRTS	VIRTUS INVT PARTNERS INC COM
VRTSP	VIRTUS INVT PARTNERS INC PFD CV SER D
VRTU	VIRTUSA CORP COM
VRTV	VERITIV CORP COM
VRTX	VERTEX PHARMACEUTICALS INC COM
VRX	VALEANT PHARMACEUTICALS INTL I COM
VSAR	VERSARTIS INC COM
VSAT	VIASAT INC COM
VSDA	VICTORY PORTFOLIOS II VICSHS DV AC ETF
VSEC	VSE CORP COM
VSH	VISHAY INTERTECHNOLOGY INC COM
VSJ	VITAMIN SHOPPE INC COM
VSL	ETF SER SOLUTIONS VOLSHARES LARG
VSLR	VIVINT SOLAR INC COM
VSM	VERSUM MATLS INC COM
VSMV	VICTORY PORTFOLIOS II VICTORYSHS US
VSS	VANGUARD INTL EQUITY INDEX FD FTSE SMCAP ETF
VST	VISTRA ENERGY CORP COM
VST+A	VISTRA ENERGY CORP WT EXP 020224
VSTM	VERASTEM INC COM
VSTO	VISTA OUTDOOR INC COM
VT	VANGUARD INTL EQUITY INDEX FD TT WRLD ST ETF
VTA	INVESCO DYNAMIC CR OPP FD COM
VTC	VANGUARD SCOTTSDALE FDS TOTAL CORP BND
VTEB	VANGUARD MUN BD FD INC TAX EXEMPT BD
VTGN	VISTAGEN THERAPEUTICS INC COM NEW

VTHR	VANGUARD SCOTTSDALE FDS VNG RUS3000IDX
VTI	VANGUARD INDEX FDS TOTAL STK MKT
VTIP	VANGUARD MALVERN FDS STRM INFPROIDX
VTIQ	VECTOIQ ACQUISITION CORP COM
VTIQU	VECTOIQ ACQUISITION CORP UNIT EX 051123
VTIQW	VECTOIQ ACQUISITION CORP WT EXP 051623
VTL	VITAL THERAPIES INC COM
VTN	INVESCO TR INVT GRADE NY MUNS COM
VTNR	VERTEX ENERGY INC COM
VTR	VENTAS INC COM
VTRB	VENTAS RLTY LTD PARTNERSHIP GTD SR NT 43
VTSI	VIRTRA INC COM PAR
VTV	VANGUARD INDEX FDS VALUE ETF
VTVT	VTV THERAPEUTICS INC CL A
VTWG	VANGUARD SCOTTSDALE FDS VNG RUS2000GRW
VTWO	VANGUARD SCOTTSDALE FDS VNG RUS2000IDX
VTWV	VANGUARD SCOTTSDALE FDS VNG RUS2000VAL
VUG	VANGUARD INDEX FDS GROWTH ETF
VUSE	ETF SER SOLUTIONS VIDENTCORE EQ FD
VUZI	VUZIX CORP COM NEW
VV	VANGUARD INDEX FDS LARGE CAP ETF
VVC	VECTREN CORP COM
VVI	VIAD CORP COM NEW
VVPR	VIVOPOWER INTERNATIONAL PLC SHS
VVR	INVESCO SR INCOME TR COM
VVUS	VIVUS INC COM
VVV	VALVOLINE INC COM
VWO	VANGUARD INTL EQUITY INDEX FD FTSE EMR MKT ETF
VWOB	VANGUARD WHITEHALL FDS INC EMERG MKT BD ETF
VXF	VANGUARD INDEX FDS EXTEND MKT ETF
VXRT	VAXART INC COM NEW
VXUS	VANGUARD STAR FD VG TL INTL STK F
VXX	BARCLAYS BK PLC IPATH S&P500 VIX
VXXB	iPath Series B S&P 500 VIX Short-Term Futures ETN
VXZ	BARCLAYS BK PLC IPATH S&P MT ETN
VXZB	iPath Series B S&P 500 VIX Mid-Term Futures ETN
VYGR	VOYAGER THERAPEUTICS INC COM
VYM	VANGUARD WHITEHALL FDS INC HIGH DIV YLD
VYMI	VANGUARD WHITEHALL FDS INC INTL HIGH ETF

VZ	VERIZON COMMUNICATIONS INC COM
VZA	VERIZON COMMUNICATIONS INC SR NT 5.9%54
W	WAYFAIR INC CL A
WAAS	AQUAVENTURE HLDGS LTD SHS
WAB	WABTEC CORP COM
WABC	WESTAMERICA BANCORPORATION COM
WAFD	WASHINGTON FED INC COM
WAFDW	WASHINGTON FED INC WT EXP 111418
WAGE	WAGEWORKS INC COM
WAIR	WESCO AIRCRAFT HLDGS INC COM
WAL	WESTERN ALLIANCE BANCORP COM
WALA	WESTERN ALLIANCE BANCORP SUB DEBENTURS 56
WASH	WASHINGTON TR BANCORP COM
WAT	WATERS CORP COM
WATT	ENERGOUS CORP COM
WB	WEIBO CORP SPONSORED ADR
WBA	WALGREENS BOOTS ALLIANCE INC COM
WBAI	500 COM LTD SPON ADR REP A
WBAL	WISDOMTREE TR BALANCED INCOME
WBC	WABCO HLDGS INC COM
WBIA	ABSOLUTE SHS TR WBI BBR RNG 2000
WBIB	ABSOLUTE SHS TR WBI BBR VAL 2000
WBIC	ABSOLUTE SHS TR WBI BBR YLD 2000
WBID	ABSOLUTE SHS TR WBI BBR QTY 2000
WBIE	ABSOLUTE SHS TR WBI BBR RNG 1000
WBIF	ABSOLUTE SHS TR WBI BBR VAL 1000
WBIG	ABSOLUTE SHS TR WBI BBR YLD 1000
WBIH	ABSOLUTE SHS TR WBI BBR GBL HIGH
WBII	ABSOLUTE SHS TR WBI BBR GBL INME
WBIL	ABSOLUTE SHS TR WBI BBR QTY 1000
WBIR	ABSOLUTE SHS TR WBI BBR GBL ROTN
WBIY	ABSOLUTE SHS TR WBI PWR FCTR ETF
WBK	WESTPAC BKG CORP SPONSORED ADR
WBS	WEBSTER FINL CORP CONN COM
WBS-F	WEBSTER FINL CORP CONN DEP SHS RP PFD F
WBT	WELBILT INC COM
WCC	WESCO INTL INC COM
WCFB	WCF BANCORP INC COM
WCG	WELLCARE HEALTH PLANS INC COM

WCHN	WISDOMTREE TR ICBCCS S&P CHINA
WCN	WASTE CONNECTIONS INC COM
WD	WALKER & DUNLOP INC COM
WDAY	WORKDAY INC CL A
WDC	WESTERN DIGITAL CORP COM
WDFC	WD-40 CO COM
WDIV	SPDR INDEX SHS FDS S&P GLBDIV ETF
WDR	WADDELL & REED FINL INC CL A
WDRW	DIREXION SHS ETF TR DLY RGNAL BKS 3X
WEA	WESTERN ASSET PREMIER BD FD SHS BEN INT
WEAR	The WEAR ETF
WEAT	TEUCRIUM COMMODITY TR WHEAT FD
WEB	WEB COM GROUP INC COM
WEBK	WELLESLEY BANCORP INC COM
WEC	WEC ENERGY GROUP INC COM
WELL	WELLTOWER INC COM
WELL-I	WELLTOWER INC 6.50% PFD PREPET
WEN	WENDYS CO COM
WERN	WERNER ENTERPRISES INC COM
WES	WESTERN GAS PARTNERS LP COM UNIT LP IN
WETF	WISDOMTREE INVTS INC COM
WEX	WEX INC COM
WEYS	WEYCO GROUP INC COM
WF	WOORI BK ADR
WFC	WELLS FARGO CO NEW COM
WFC+	WELLS FARGO CO NEW WT EXP 102818
WFC-J	WELLS FARGO CO NEW DEP SHS SER J
WFC-L	WELLS FARGO CO NEW PERP PFD CNV A
WFC-N	WELLS FARGO CO NEW DEP SHS REPSTG 1
WFC-O	WELLS FARGO CO NEW DEP1/1000PF CL A
WFC-P	WELLS FARGO CO NEW DEP1/1000PF CL A
WFC-Q	WELLS FARGO CO NEW DEP SHS 1/1000 A
WFC-R	WELLS FARGO CO NEW DEP 1/1000 PFD A
WFC-T	WELLS FARGO CO NEW DEP SHS 1/1000 T
WFC-V	WELLS FARGO & CO NEW DEP PFD V 1/1000
WFC-W	WELLS FARGO & CO NEW PFD SER W CL A
WFC-X	WELLS FARGO & CO NEW PFD SER X CL A
WFC-Y	WELLS FARGO & CO NEW NON CUM PFD Y
WFE-A	WELLS FARGO REAL ESTATE INVT C PFD CUM SER A



WFHY	WisdomTree Fundamental U.S. High Yield Corporate Bond Fund
WFIG	WisdomTree Fundamental U.S. Corporate Bond Fund
WFT	WEATHERFORD INTL PLC ORD SHS
WGL	WGL HLDGS INC COM
WGO	WINNEBAGO INDS INC COM
WGP	WESTERN GAS EQUITY PARTNERS LP COMUNT LTD PT
WH	WYNDHAM HOTELS & RESORTS INC COM
WHD	CACTUS INC CL A
WHF	WHITEHORSE FIN INC COM
WHFBL	WHITEHORSE FIN INC SR NT
WHG	WESTWOOD HLDGS GROUP INC COM
WHLM	WILHELMINA INTL INC COM NEW
WHLR	WHEELER REAL ESTATE INVT TR COM NEW
WHLRD	WHEELER REAL ESTATE INVT TR PFD CNV SER D
WHLRP	WHEELER REAL ESTATE INVT TR CV PFD SER B
WHLRW	WHEELER REAL ESTATE INVT TR WT EXP 042919
WHR	WHIRLPOOL CORP COM
WIA	WESTERN ASST INFLTN LKD INM FD COM SH BEN INT
WIFI	BOINGO WIRELESS INC COM
WIL	BARCLAYS BK PLC LKD PERF BCLY
WILC	G WILLI FOOD INTL LTD ORD
WIN	WINDSTREAM HLDGS INC COM PAR
WINA	WINMARK CORP COM
WING	WINGSTOP INC COM
WINS	WINS FIN HLDGS INC ORD SHS
WIP	SPDR SERIES TRUST FTSE INT GVT ETF
WIRE	ENCORE WIRE CORP COM
WIT	WIPRO LTD SPON ADR 1 SH
WIW	WESTERN AST INFL LKD OPP & INM COM
WIX	WIX COM LTD SHS
WK	WORKIVA INC COM CL A
WKHS	WORKHORSE GROUP INC COM NEW
WLDN	WILLDAN GROUP INC COM
WLDR	Affinity World Leaders Equity ETF
WLFC	WILLIS LEASE FINANCE CORP COM
WLH	LYON WILLIAM HOMES CL A NEW
WLK	WESTLAKE CHEM CORP COM
WLKP	WESTLAKE CHEM PARTNERS LP COM UNIT RP LP
WLL	WHITING PETE CORP NEW COM NEW

WLTW	WILLIS TOWERS WATSON PUB LTD SHS
WM	WASTE MGMT INC DEL COM
WMB	WILLIAMS COS INC DEL COM
WMC	WESTERN ASSET MTG CAP CORP COM
WMCR	INVESCO EXCHANGE TRADED FD TR WILSHR MICR CP
WMGI	WRIGHT MED GROUP N V ORD SHS 0.03 PAR
WMGIZ	WRIGHT MED GROUP N V RT
WMIH	WMIH CORP COM
WMK	WEIS MKTS INC COM
WMLP	WESTMORELAND RESOURCE PARTNERS COM UNIT RP LP
WMS	ADVANCED DRAIN SYS INC DEL COM
WMT	WALMART INC COM
WMW	DEUTSCHE BK AG LONDON ELE MORN TTL22
WNC	WABASH NATL CORP COM
WNEB	WESTERN NEW ENG BANCORP INC COM
WNS	WNS HOLDINGS LTD SPON ADR
WOOD	ISHARES TR GL TIMB FORE ETF
WOR	WORTHINGTON INDS INC COM
WOW	WIDOPENWEST INC COM
WP	WORLDPAY INC CL A
WPC	W P CAREY INC COM
WPG	WASHINGTON PRIME GROUP NEW COM
WPG-H	WASHINGTON PRIME GROUP NEW REDEEMABLE PFD H
WPG-I	WASHINGTON PRIME GROUP NEW REDEEMABLE PFD I
WPM	WHEATON PRECIOUS METALS CORP COM
WPP	WPP PLC NEW ADR
WPRT	WESTPORT FUEL SYSTEMS INC COM NEW
WPS	ISHARES TR INTL DEVPPTY ETF
WPX	WPX ENERGY INC COM
WPXP	WPX ENERGY INC PFD SER A CV
WPZ	WILLIAMS PARTNERS L P NEW COM UNIT LTD PAR
WRB	W R BERKLEY CORPORATION COM
WRB-B	W R BERKLEY CORPORATION SUB DEB 53
WRB-C	W R BERKLEY CORPORATION 5.9% SUB DB 56
WRB-D	W R BERKLEY CORPORATION SUB DEB 56
WRB-E	W R BERKLEY CORPORATION 5.70% SB DB 2058
WRD	WILDHORSE RESOURCE DEV CORP COM
WRE	WASHINGTON REAL ESTATE INVT TR SH BEN INT
WREI	INVESCO EXCHANGE TRADED FD TR WILSHIRE REIT

WRI	WEINGARTEN RLTY INVS SH BEN INT
WRK	WESTROCK CO COM
WRLD	WORLD ACCEP CORP DEL COM
WRLS	PENSARE ACQUISITION CORP COM
WRLSR	PENSARE ACQUISITION CORP RT
WRLSU	PENSARE ACQUISITION CORP UNIT EXP 072722
WRLSW	PENSARE ACQUISITION CORP WT EXP 072722
WRN	WESTERN COPPER & GOLD CORP COM
WSBC	WESBANCO INC COM
WSBF	WATERSTONE FINL INC MD COM
WSC	WILLSCOT CORP COM
WSCI	WSI INDS INC COM
WSCWW	WILLSCOT CORP WT EXP 091020
WSFS	WSFS FINL CORP COM
WSM	WILLIAMS SONOMA INC COM
WSO	WATSCO INC COM
WSO.B	WATSCO INC CL B CONV
WSR	WHITESTONE REIT COM
WST	WEST PHARMACEUTICAL SVSC INC COM
WSTG	WAYSIDE TECHNOLOGY GROUP INC COM
WSTL	WESTELL TECHNOLOGIES INC CL A NEW
WTBA	WEST BANCORPORATION INC CAP STK
WTFC	WINTRUST FINL CORP COM
WTFCM	WINTRUST FINL CORP PFD-D FIX/FLT
WTFCW	WINTRUST FINL CORP WT EXP 121918
WTI	W & T OFFSHORE INC COM
WTID	UBS AG LONDON BRH NT LKD 46
WTIU	UBS AG LONDON BRH NT LKD 46
WTM	WHITE MTNS INS GROUP LTD COM
WTMF	WISDOMTREE TR FUTRE STRAT FD
WTR	AQUA AMERICA INC COM
WTS	WATTS WATER TECHNOLOGIES INC CL A
WTT	WIRELESS TELECOM GROUP INC COM
WTTR	SELECT ENERGY SVCS INC CL A COM
WTW	WEIGHT WATCHERS INTL INC NEW COM
WU	WESTERN UN CO COM
WUBA	58 COM INC SPON ADR REP A
WVE	WAVE LIFE SCIENCES LTD SHS
WVFC	WVS FINL CORP COM

WVVI	WILLAMETTE VY VINEYARD INC COM
WVVIP	WILLAMETTE VY VINEYARD INC RED PFD SER A
WWD	WOODWARD INC COM
WWE	WORLD WRESTLING ENTMT INC CL A
WWR	WESTWATER RES INC COM
WWW	WOLVERINE WORLD WIDE INC COM
WY	WEYERHAEUSER CO COM
WYDE	ProShares CDS Short North American HY Credit ETF
WYND	WYNDHAM DESTINATIONS INC COM
WYNN	WYNN RESORTS LTD COM
WYY	WIDEPOINT CORP COM
X	UNITED STATES STL CORP NEW COM
XAN	EXANTAS CAP CORP COM NEW
XAN-C	EXANTAS CAP CORP 8.625% CUM PFD C
XAR	SPDR SERIES TRUST AEROSPACE DEF
XBI	SPDR SERIES TRUST S&P BIOTECH
XBIO	XENETIC BIOSCIENCES INC COM NEW
XBIT	XBIOTECH INC COM
XCEM	COLUMBIA ETF TR II EM CORE EX ETF
XCRA	XCERRA CORP COM
XDIV	METAURUS EQUITY COMPONENT TR US EQT EX 2027
XEC	CIMAREX ENERGY CO COM
XEL	XCEL ENERGY INC COM
XELA	EXELA TECHNOLOGIES INC COM
XELB	XCEL BRANDS INC COM NEW
XENE	XENON PHARMACEUTICALS INC COM
XENT	INTERSECT ENT INC COM
XERS	XERIS PHARMACEUTICALS INC COM
XES	SPDR SERIES TRUST OILGAS EQUIP
XFLT	XAI OCTAGON FLOATNG RATE ALTER COM
XGTI	XG TECHNOLOGY INC COM PAR
XGTIW	XG TECHNOLOGY INC WT EXP 071918
XHB	SPDR SERIES TRUST S&P HOMEBUILD
XHE	SPDR SERIES TRUST HLTH CR EQUIP
XHR	XENIA HOTELS & RESORTS INC COM
XHS	SPDR SERIES TRUST HLTH CARE SVCS
XIN	XINYUAN REAL ESTATE CO LTD SPONS ADR
XINA	SPDR INDEX SHS FDS MSCI CHINA ETF
XITK	SPDR SERIES TRUST FACTST INV ETF

XIVH	UBS AG LONDON BRH VELOCITYSHS SHRT
XKFS	SPDR SER TR KENSHO FUTURE
XKII	SPDR SER TR KENSHO INTELGN
XKST	SPDR SER TR KENSHO SMART
XL	XL GROUP LTD COM
XLB	SELECT SECTOR SPDR TR SBI MATERIALS
XLC	SELECT SECTOR SPDR TR COMMUNICATION
XLE	SELECT SECTOR SPDR TR ENERGY
XLF	SELECT SECTOR SPDR TR SBI INT-FINL
XLG	INVESCO EXCHANGE TRADED FD TR S&P 500 TOP 50
XLI	SELECT SECTOR SPDR TR SBI INT-INDS
XLK	SELECT SECTOR SPDR TR TECHNOLOGY
XLNX	XILINX INC COM
XLP	SELECT SECTOR SPDR TR SBI CONS STPLS
XLRE	SELECT SECTOR SPDR TR RL EST SEL SEC
XLRN	ACCELERON PHARMA INC COM
XLU	SELECT SECTOR SPDR TR SBI INT-UTILS
XLV	SELECT SECTOR SPDR TR SBI HEALTHCARE
XLY	SELECT SECTOR SPDR TR SBI CONS DISCR
XME	SPDR SERIES TRUST S&P METALS MNG
XMLV	INVESCO EXCHNG TRADED FD TR II S&P MIDCP LOW
XMPT	VANECK VECTORS ETF TR CEF MUN INCOME E
XXM	WISDOMTREE TR GBL MXC EQT FD
XNCR	XENCOR INC COM
XNET	XUNLEI LTD SPONSORED ADR
XNTK	SPDR SERIES TRUST NYSE TECH ETF
XOG	EXTRACTION OIL AND GAS INC COM
XOM	EXXON MOBIL CORP COM
XOMA	XOMA CORP DEL COM NEW
XON	INTREXON CORP COM
XONE	EXONE CO COM
XOP	SPDR SERIES TRUST S&P OILGAS EXP
XOXO	XO GROUP INC COM
XPER	XPERI CORP COM
XPH	SPDR SERIES TRUST S&P PHARMAC
XPL	SOLITARIO ZINC CORP COM
XPLR	XPLORE TECHNOLOGIES CORP COM PAR \$0.001
XPO	XPO LOGISTICS INC COM
XPP	PROSHARES TR ULT FTSE CHIN 50

XRAY	DENTSPLY SIRONA INC COM
XRF	CHINA RAPID FIN LTD SPONSORED ADR
XRLV	INVESCO EXCHNG TRADED FD TR II S&P 500 EX RAT
XRM	XERIUM TECHNOLOGIES INC COM NEW
XRT	SPDR SERIES TRUST S&P RETAIL ETF
XRX	XEROX CORP COM NEW
XSD	SPDR SERIES TRUST S&P SEMICNDCTR
XSHD	Invesco S&P SmallCap High Dividend Low Volatility ETF
XSHQ	Invesco S&P SmallCap Quality ETF
XSLV	INVESCO EXCHNG TRADED FD TR II S&P SMLCP LOW
XSOE	WISDOMTREE TR EM EX ST-OWNED
XSPA	XPRESSPA GROUP INC COM
XSPL	XSPAND PRODUCTS LAB INC COM
XSW	SPDR SERIES TRUST COMP SOFTWARE
XT	ISHARES TR EXPONENTIAL TECH
XTH	SPDR SER TR S&P TECH HARDWRE
XTL	SPDR SERIES TRUST S&P TELECOM
XTLB	XTL BIOPHARMACEUTICALS LTD SPONSORED ADR NE
XTN	SPDR SERIES TRUST S&P TRANSN ETF
XTNT	XTANT MED HLDGS INC COM NEW
XUSA	QuantX Dynamic Beta US Equity ETF
XVZ	BARCLAYS BK PLC IPATH DYNM VIX
XWEB	SPDR SER TR S&P INTERNET ETF
XXII	22ND CENTY GROUP INC COM
XYL	XYLEM INC COM
Y	ALLEGHANY CORP DEL COM
YANG	DIREXION SHS ETF TR DAILY FTSE CHINA
YAO	INVESCO EXCHNG TRADED FD TR II CHINA ALL CAP
YCL	PROSHARES TR II ULTRA YEN NEW
YCS	PROSHARES TR II ULTRASHORT YEN N
YDIV	FIRST TR EXCHANGE TRADED FD VI INCOME INDEX FD
YECO	YULONG ECO MATLS LTD SHS
YELP	YELP INC CL A
YESR	AMPLIFY ETF TR YLDSHS SENIOR
YEXT	YEXT INC COM
YGE	YINGLI GREEN ENERGY HLDG CO LT ADR NEW
YGYI	YOUNGEVITY INTL INC COM NEW
YIN	YINTECH INVT HLDGS LTD SPONSORED ADR
YINN	DIREXION SHS ETF TR DL FTSE BLL 3X

YLCO	GLOBAL X FDS X YIELDCO IX ETF
YLD	PRINCIPAL EXCHANGE TRADED FDS PRIN EDGE ACTV
YLDE	LEGG MASON ETF INVNT TR CLEARBRIDGE DI
YMLI	VANECK VECTORS ETF TR HIGH INCOME INFR
YMLP	VANECK VECTORS ETF TR HIGH INCOME MLP
YNDX	YANDEX N V SHS CLASS A
YOGA	YOGAWORKS INC COM
YORW	YORK WTR CO COM
YPF	YPF SOCIEDAD ANONIMA SPON ADR CL D
YRCW	YRC WORLDWIDE INC COM PAR \$.01
YRD	YIRENDAI LTD SPONSORED ADR
YRIV	YANGTZE RIV PORT AND LGSTC LTD COM
YTEN	YIELD10 BIOSCIENCE INC COM NEW
YTRA	YATRA ONLINE INC ORD SHS
YUM	YUM BRANDS INC COM
YUMA	YUMA ENERGY INC NEW COM
YUMC	YUM CHINA HLDGS INC COM
YXI	PROSHARES TR SHT FTSE CHIN 50
YY	YY INC ADS REPCOM CLA
YYY	EXCHANGE TRADED CONCEPTS TR YLD SHS HGH INC
Z	ZILLOW GROUP INC CL C CAP STK
ZAGG	ZAGG INC COM
ZAYO	ZAYO GROUP HLDGS INC COM
ZB-A	ZIONS BANCORPORATION PFD 1/40 SER A
ZB-G	ZIONS BANCORPORATION DEP 1/40TH PFD
ZBH	ZIMMER BIOMET HLDGS INC COM
ZB-H	ZIONS BANCORPORATION PFD 1/40 PRP H
ZBIO	PROSHARES TR ULTRAPRO SHORT N
ZBK	ZIONS BANCORPORATION SUB NT FX/FLT 28
ZBRA	ZEBRA TECHNOLOGIES CORP CL A
ZDGE	ZEDGE INC CL B
ZEAL	ZEALAND PHARMA A S SPONSORED ADR
ZEN	ZENDESK INC COM
ZEUS	OLYMPIC STEEL INC COM
ZF	VIRTUS TOTAL RETURN FUND INC COM
ZFGN	ZAFGEN INC COM
ZG	ZILLOW GROUP INC CL A
ZGNX	ZOGENIX INC COM NEW
ZION	ZIONS BANCORPORATION COM

ZIONW	ZIONS BANCORPORATION WT EXP 052220
ZIONZ	ZIONS BANCORPORATION WT EXP 111418
ZIOP	ZIOPHARM ONCOLOGY INC COM
ZIV	CREDIT SUISSE NASSAU BRH INVRS VIX MDTERM
ZIXI	ZIX CORP COM
ZKIN	ZK INTL GROUP CO LTD SHS
ZLAB	ZAI LAB LTD ADR
ZMLP	DIREXION SHS ETF TR ZACKS MLP HG INC
ZN	ZION OIL & GAS INC COM
ZNGA	ZYNGA INC CL A
ZNH	CHINA SOUTHN AIRLS LTD SPON ADR CL H
ZNWAA	ZION OIL & GAS INC WT EXP 013120
ZOES	ZOES KITCHEN INC COM
ZOM	ZOMEDICA PHARMACEUTICALS CORP COM
ZROZ	PIMCO ETF TR 25YR+ ZERO U S
ZS	ZSCALER INC COM
ZSAN	ZOSANO PHARMA CORP COM NEW
ZSL	PROSHARES TR II PSHS ULSSLVR NEW
ZTO	ZTO EXPRESS CAYMAN INC SPONSORED ADR
ZTR	VIRTUS GLOBAL DIVID INCOME FD COM
ZTS	ZOETIS INC CL A
ZUMZ	ZUMIEZ INC COM
ZUO	ZUORA INC COM CL A
ZYME	ZYMEWORKS INC COM
ZYNE	ZYNERBA PHARMACEUTICALS INC COM