



September 28, 2020

Via Federal Express

Ms. Jeanette Marshall
Securities and Exchange Commission
100 F Street, N.E.
Mail Stop 7010
Washington, DC 20549-0001

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

Dear Ms. Marshall:

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 exhibits¹:

- Exhibit F (updated to include the most recent, final versions of agreements circulated to Members and other Users of the Exchange)
- Exhibit M (updated to provide a list of firms currently approved as members or other users of the Exchange)

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

Sincerely,

A handwritten signature in cursive script that reads 'Kyle Murray'.

Kyle Murray
VP, Associate General Counsel
913-815-7121
Signature executed at 9:00am on 09/28/20

Enclosures

¹ See Attachment for a comprehensive list of updates to Exhibits F & M

Attachment

Summary of changes made to Exhibit F:

- Updates made to our Electronic Stock Option Execution Registration Form

Summary of changes made to Exhibit M:

Name Change:

- Lime Brokerage LLC changed names to Lightspeed Financial Services Group LLC

***Based upon relief from the Commission staff and difficulties arising from COVID-19, we are making this filing without notarization. This document has been signed electronically.**


| | | | |
|--|---|---|---|
| Form 1 Page 1 Execution Page | U.S. SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 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 | Date filed (MM/DD/YY) 09/28/20 | OFFICIAL USE ONLY |
| <p>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.</p> | | | |
| INTENTIONAL MISSTATEMENTS OR OMISSIONS OF FACTS MAY CONSTITUTE CRIMINAL VIOLATIONS | | | |
| <p style="text-align: center;"> <input type="checkbox"/> APPLICATION <input checked="" type="checkbox"/> AMENDMENT </p> | | | |
| <p>1. State the name of the applicant: <u>Cboe EDGX Exchange, Inc.</u></p> | | | |
| <p>2. Provide the applicant's primary street address (Do not use a P.O. Box): <u>400 South LaSalle Street</u> <u>Chicago, Illinois 60605</u></p> | | |  20012574 |
| <p>3. Provide the applicant's mailing address (if different): _____ _____</p> | | | |
| <p>4. Provide the business telephone and facsimile number: <u>(913) 815-7000</u> <u>(913) 815-7119</u> (Telephone) (Facsimile)</p> | | | |
| <p>5. Provide the name, title and telephone number of a contact employee: <u>Kyle Murray</u> <u>VP, Associate General Counsel, Cboe EDGX Exchange, Inc.</u> <u>(913) 815-7121</u> (Name) (Title) (Telephone Number)</p> | | | |
| <p>6. Provide the name and address of counsel for the applicant: <u>Pat Sexton</u> <u>400 S. LaSalle Street</u> <u>Chicago, IL 60605</u></p> | | | |
| <p>7. Provide the date that applicant's fiscal year ends: <u>December 31</u></p> | | | |
| <p>8. Indicate legal status of the applicant: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Partnership <input type="checkbox"/> Partnership <input type="checkbox"/> Limited Liability Company <input type="checkbox"/> Other (specify): _____</p> <p>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): <u>11/01/07</u> (b) State/Country of formation: <u>Delaware/United States of America</u> (c) Statute under which applicant was organized: <u>General Corporation Law of the State of Delaware</u></p> | | | |
| <p>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.</p> | | | |
| <p>Date: <u>09/28/20</u> <u>Cboe EDGX Exchange, Inc.</u> (MM/DD/YY) (Name of Applicant)</p> | | | |
| <p>By: <u>Kyle Murray</u> [signature executed at 9:00am on 09/28/20] <u>Kyle Murray, VP, Associate General Counsel</u> (Signature) (Printed Name and Title)</p> | | | |
| <p>Subscribed and sworn before me this <u>see header</u> day of <u>see header</u>, <u>see header</u> by <u>see header</u> (Month) (Year) (Notary Public)</p> | | | |
| <p>My Commission expires <u>see header</u> County of <u>see header</u> State of <u>see header</u></p> | | | |
| <p>This page must always be completed in full with original, manual signature and notarization. Affix notary stamp or seal where applicable.</p> | | | |

Exhibit F

Exhibit Request:

A complete set of all forms pertaining to:

1. Application for membership, participation or subscription to the entity,
2. Application for approval as a person associated with a member, participant or subscriber of the entity, and
3. Any other similar materials.

Response:

Attached please find the following documents which have recently been added or updated:

- Electronic Stock-Option Execution Registration Form – reformatted the table; added FOG, Libucki and SRT as destinations; added a notation that FOG, Libucki, Penserra and SRT are eligible for QCC only

The Exchange intends to use Form U-4, the Uniform Application for Securities Industry Registration or Transfer, for persons applying to be associated persons of a Member.

Electronic Stock-Option Execution Registration Form

To be completed by any Trading Permit Holder ("TPH") of Cboe Exchange, Inc. ("Cboe Options") or Member of the Cboe EDGX Exchange, Inc. Options Market ("EDGX Options") routing complex orders with a stock component for electronic processing via Complex Order Auctions (COA), Complex Automated Improvement Mechanism (AIM), Complex Qualified Contingent Cross (QCC) or the Complex Order Book (COB).

An executed version of this Document can be delivered to Membership Services via email to MembershipServices@cboe.com.

MPID / DTCC Clearing Number: _____ / _____

Market: Cboe Options EDGX Options **Instructions:** Add Remove

Destination: Cowen FOG (QCC only) Libucki (QCC only) Penserra (QCC only) SRT (QCC only)

MPID / DTCC Clearing Number: _____ / _____

Market: Cboe Options EDGX Options **Instructions:** Add Remove

Destination: Cowen FOG (QCC only) Libucki (QCC only) Penserra (QCC only) SRT (QCC only)

MPID / DTCC Clearing Number: _____ / _____

Market: Cboe Options EDGX Options **Instructions:** Add Remove

Destination: Cowen FOG (QCC only) Libucki (QCC only) Penserra (QCC only) SRT (QCC only)

MPID / DTCC Clearing Number: _____ / _____

Market: Cboe Options EDGX Options **Instructions:** Add Remove

Destination: Cowen FOG (QCC only) Libucki (QCC only) Penserra (QCC only) SRT (QCC only)

MPID / DTCC Clearing Number: _____ / _____

Market: Cboe Options EDGX Options **Instructions:** Add Remove

Destination: Cowen FOG (QCC only) Libucki (QCC only) Penserra (QCC only) SRT (QCC only)

TPH / Member Name

CRD #

Signature of Authorized Officer, Partner, Managing Member or
Sole Proprietor

Date

Printed Name

Title

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 |
|--|-------------------|-------------------|--------------------|--------------------|---------------------|-------------------|-----------------------|--|-----------------|---|
| 78 North Investments ApS | 8/24/2020 | 8/24/2020 | 8/24/2020 | 8/24/2020 | NA | NA | Sponsored Participant | Vimmelskaftet 43 3rd Floor Copenhagen Denmark 1161 | 45 88707858 | Proprietary Trading |
| 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 |
| All Rise Trading LLC | NA | NA | NA | NA | 8/14/2018 | NA | Member TPH | 141 W. Jackson Blvd., Suite 300A, Chicago, IL 60604 | 312-483-2147 | Floor Broker |
| Alpha Direct 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 |
| 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 |
| Alpha Trading, LP | 2/22/2019 | 2/22/2019 | 2/22/2019 | 2/22/2019 | NA | NA | Sponsored Participant | 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. | 8/14/2019 | 9/10/2019 | 9/10/2019 | 8/14/2019 | 12/1/2017 | 6/5/2019 | Member TPH | Strawinskylaan 3095 Amsterdam, 1077ZX Netherlands | 31-020-708-7000 | Proprietary Trading |
| 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 dba Cowen Electronic | 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 |
| Axos Financial 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 |
| 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 |
| Belvedere Trading LLC | 11/1/2011 | 3/1/2012 | 11/29/2011 | 10/16/2018 | 1/3/2005 | 4/4/2011 | Member TPH | 10 S Riverside Plaza Suite 2100 Chicago, IL 60606 | 312-893-3750 | Market Maker, Proprietary Trading |
| 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 |
| Bluefin Capital Management, 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 |
| 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 | 8/27/2019 | 8/27/2019 | 8/27/2019 | 2/1/2017 | NA | Member TPH | 300 N LaSalle Street Suite 2060 Chicago, IL 60654 | 708-967-6843 | Market Maker |
| Boerboel Capital LLC | 1/30/2019 | 1/30/2019 | 1/30/2019 | 1/30/2019 | NA | NA | Sponsored Participant | 300 N LaSalle Street Suite 2060 Chicago, IL 60654 | 708-967-6843 | Market Maker |
| Boerboel Trading LP | 10/15/2018 | 10/15/2018 | 10/15/2018 | 10/15/2018 | NA | NA | Sponsored Participant | Maples Corporate Services PO Box 309, Ugland House Cayman Islands KY1-1104 | ##### | Proprietary Trading |
| BofA Securities, Inc. | 9/19/2018 | 9/19/2018 | 9/19/2018 | 9/19/2018 | 5/13/2019 | 5/13/2019 | Member TPH | One Bryant Park New York, NY 10036 | 201-671-5685 | Clearing Services, Firm Proprietary Trading, Public Customer Business |
| 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 | 1/24/2019 | NA | NA | NA | 10/1/2007 | NA | Member TPH | 141 W Jackson Boulevard Suite 2200A Chicago, IL 60604 | 312-477-8400 | Market Maker/Proprietary |
| Casey Securities LLC | NA | NA | NA | NA | 8/3/2020 | NA | Member TPH | One Montgomery Street Floor San Francisco, CA 94104 | 415-954-5590 | Electronic Execution, Transact Business with the Public |
| Cboe Trading, Inc. | 10/23/2008 | 9/1/2010 | 5/14/2010 | 5/14/2010 | 7/26/2019 | 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 | NA | NA | Member TPH | 211 Main Street San Francisco, CA 94105 | 415-636-7000 | Clearing, Transact Business with the Public |
| Chimera Securities, LLC | 11/17/2017 | 11/27/2017 | 11/27/2017 | 11/17/2017 | NA | NA | Sponsored Participant | 27 Union Square West 4th Floor New York, NY 10003 | 646-597-6145 | 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 |

| 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 |
|---|-------------------|-------------------|--------------------|--------------------|---------------------|-------------------|-----------------------|---|--------------|---|
| 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 |
| 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 | 212-723-2960 | Market Maker |
| Citigroup Global Markets Inc. | 9/24/2008 | 12/15/2010 | 5/25/2010 | 5/27/2010 | 5/2/2011 | 6/3/2019 | 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 |
| Clear Street Markets, LLC | 7/16/2012 | 7/16/2012 | 8/20/2012 | 8/20/2012 | 6/6/2012 | 3/22/2019 | Member TPH | 55 Broadway Suite 2102 New York, NY 10006 | 646-738-4066 | Market Maker, Proprietary Trading |
| Clear Street, LLC | 3/18/2019 | 8/14/2019 | 8/14/2019 | 8/14/2019 | NA | NA | Member TPH | 55 Broadway Suite 2102 New York, NY 10006 | 646-738-4068 | Public Customer Business, Clearing, Proprietary Trading |
| Clearpool Execution Services, LLC | 5/15/2014 | 5/15/2014 | 6/16/2014 | 6/16/2014 | NA | NA | Member TPH | 17 State Street 38h Floor New York, NY 10004 | 212-531-8500 | Public Customer Business |
| 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 |
| 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 | 12/13/2019 | 12/13/2019 | 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 |
| 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 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 | NA | NA | Member TPH | 60 Wall Street New York, NY 10005 | 212-250-2500 | Clearing, Proprietary Trading, Transact Business with the Public, Brokerage |
| DRW Commodities LLC | 8/6/2020 | 8/6/2020 | 8/6/2020 | 8/6/2020 | NA | NA | Sponsored Participant | 540 W Madison Street Suite 2500 Chicago, IL 60661 | 312-542-1000 | Proprietary Trading |
| DRW Execution Services, LLC | 11/19/2019 | 11/19/2019 | 11/19/2019 | 11/19/2019 | NA | NA | Member TPH | 540 W Madison Street Suite 2500 Chicago, IL 60661 | 312-542-1090 | Proprietary Trading |
| 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 |
| DRW Singapore Ltd. | 11/19/2018 | NA | NA | 11/19/2018 | NA | NA | Sponsored Participant | 8 Marina View Asia Square Tower 1 #32-05 Singapore 018960 | 312-542-1005 | Proprietary Trading |
| Dynamic Technology Lab Pte. Ltd. | 11/5/2018 | 11/5/2018 | 11/5/2018 | 11/5/2018 | NA | NA | Sponsored Participant | 07-00, 178 Clemenceau Avenue Singapore 239926 | 656-610-4693 | Proprietary Trading |
| E D & F Man Capital Markets Inc. | NA | NA | NA | NA | 3/1/2019 | 6/7/2019 | Member TPH | 140 E. 45th Street 10th Floor New York, NY 10017 | 212-618-2800 | Clearing, Public Customer Business |
| 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 |
| Electronic Transaction Clearing, Inc. | 10/23/2008 | 9/1/2010 | 5/25/2010 | 5/27/2010 | NA | NA | Member TPH | 660 S Figueroa Street Los Angeles, CA 90017 | 949-533-1885 | 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 | 114 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 | NA | NA | Member TPH | 114 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 |
| Gair Loch Enterprises Ltd. | 2/22/2019 | 2/22/2019 | 4/8/2019 | 4/8/2019 | NA | NA | Sponsored Participant | 540 W. Madison Suite 2500 Chicago, IL 60661 | 312-542-1193 | Proprietary Trading |
| Gair Loch Enterprises Ltd. | 12/2/2019 | 12/2/2019 | 12/2/2019 | 12/2/2019 | NA | NA | Sponsored Participant | 540 W. Madison Suite 2500 Chicago, IL 60661 | 312-542-1193 | Proprietary Trading |
| 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 |
| 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 |

| 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 |
|--|-------------------|-------------------|--------------------|--------------------|---------------------|-------------------|-----------------------|--|--------------|---|
| Group One Trading, LP | 6/2/2015 | NA | NA | 9/29/2015 | 11/23/1994 | 9/11/2020 | Member TPH | 425 S Financial Place Suite 3400 Chicago, IL 60605 | 312-347-8864 | Market Maker, Proprietary Trading |
| GTS Securities LLC | 12/17/2013 | 5/1/2012 | 6/2/2014 | 6/2/2014 | 11/29/2019 | 2/25/2020 | 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 | Themistoki 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 |
| HAP Trading LLC | 1/8/2020 | 1/8/2020 | 1/8/2020 | 1/8/2020 | NA | NA | Sponsored Participant | 395 Hudson Street Suite 701 New York, NY 10014 | 212-380-5100 | Proprietary Trading |
| Headlands Technologies LLC | 10/15/2018 | 10/15/2018 | 10/15/2018 | 10/15/2018 | NA | NA | Sponsored Participant | 155 N. Wacker Drive, Suite 1900 Chicago, IL 60606 | 312-601-8649 | Proprietary Trading |
| Hehmeyer, 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 |
| 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 |
| 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-Chicago LLC dba 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 |
| IMC-Chicago LLC dba IMC Financial Markets | 11/5/2018 | 11/5/2018 | 11/5/2018 | 11/5/2018 | NA | NA | Sponsored Participant | 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 |
| 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 | 1/2/2019 | Member TPH | 250 Vesey Street 5th Floor New York, NY 10281 | 646-759-6000 | Market Maker, Proprietary Trading |
| Jane Street Execution Services LLC | 1/24/2019 | 1/24/2019 | 1/24/2019 | 1/24/2019 | NA | NA | Member TPH | 250 Vesey Street 6th Floor New York, NY 10281 | 646-759-6381 | Proprietary Trading |
| Jane Street Options, LLC | 4/15/2016 | NA | NA | 11/9/2018 | 5/2/2005 | 1/2/2019 | Member TPH | 250 Vesey Street 5th Floor New York, NY 10281 | 646-759-6000 | 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 | NA | Member TPH | 600 W Chicago Avenue Suite 825 Chicago, IL 60654 | 312-205-8900 | Market Maker, Proprietary Trading |
| 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 | 212-887-7777 | 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 |
| 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 |
| LEK Securities Corporation | 8/18/2008 | 10/1/2010 | 5/26/2010 | 5/27/2010 | 1/9/2001 | 9/24/2010 | Member TPH | 1 Liberty Plaza 165 Broadway, 52nd Floor New York, NY 10006 | 212-509-2300 | Clearing, Transact Business with the Public |
| Lightspeed Financial Services Group LLC | 8/18/2008 | 10/1/2010 | 5/26/2010 | 5/27/2010 | NA | NA | Member TPH | 1001 Avenue of the Americas 16th Floor New York, NY 10018 | 212-824-5000 | Transact Business with the Public |
| Liquidnet, Inc. | 9/1/2009 | NA | 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 Matsonford 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 |

| 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 |
|--|-------------------|-------------------|--------------------|--------------------|---------------------|-------------------|-----------------------|--|--------------|---|
| MEMX Execution Services LLC | 8/21/2020 | 8/21/2020 | 8/21/2020 | 8/21/2020 | NA | NA | Member TPH | 111 Town Square Place Suite 520 Jersey City, NJ 07310 | 551-370-1006 | Affiliate routing Broker-Dealer |
| 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 NY1-100-06-01 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 | NA | 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 |
| 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 |
| 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 |
| Old Mission Markets LLC | NA | NA | 12/13/2019 | NA | NA | NA | Member TPH | 314 W Superior Suite 200 Chicago, IL 60654 | 312-260-3044 | Public Customer Business |
| Olivetree Financial, LLC | NA | NA | 9/1/2016 | NA | NA | NA | Member TPH | 420 Lexington Avenue Suite 800 New York, NY 10170 | 646-930-6600 | 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 |
| 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 |
| 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 Sandler & 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 |
| 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 |
| Pundion LLC | 10/15/2018 | 10/15/2018 | 10/15/2018 | 10/15/2018 | NA | NA | Sponsored Participant | 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 |
| Quantlab Brokerage, LLC | 12/9/2019 | 12/9/2019 | 12/9/2019 | 12/9/2019 | NA | NA | Member TPH | 3 Greenway Plaza Suite 200 Houston, TX 77046 | 713-333-3704 | Public Customer Business |
| 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 |
| Radix Trading LLC | 11/5/2018 | 11/5/2018 | 11/5/2018 | 11/5/2018 | NA | NA | Sponsored Participant | 353 N Clark Street Suite 3200 Chicago, IL 60654 | 773-377-8080 | Research Firm |
| 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 Professional, LLC | 8/18/2008 | 10/1/2010 | 5/25/2010 | 5/27/2010 | 1/2/2008 | NA | 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 |

| 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 |
|---|-------------------|-------------------|--------------------|--------------------|---------------------|-------------------|-----------------------|---|--------------|---|
| 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 |
| Score Priority Corp | 8/18/2020 | 8/18/2020 | 8/18/2020 | 8/18/2020 | NA | NA | Member TPH | 1 Penn Plaza, 16th Floor New York, NY 10119 | 310-947-9044 | Public Customer Business |
| 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 |
| Sea Otter Securities Group LLC | 10/9/2018 | 10/9/2018 | NA | 10/9/2018 | NA | NA | Sponsored Participant | 107 Grand Street 7th Floor New York, NY 10013 | 646-762-9972 | Proprietary Trading |
| 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 |
| 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 |
| Southern Trust Securities Inc. | 2/19/2020 | 2/19/2020 | 2/19/2020 | 2/19/2020 | NA | NA | Member TPH | 2307 Douglas Road, Suite 301 Miami, FL 33145 | 631-804-0396 | Public Customer Business |
| Squarepoint Ops LLC | 6/12/2020 | 6/12/2020 | 6/12/2020 | 6/12/2020 | NA | NA | Sponsored Participant | 250 W 55th Street 32nd Floor New York, NY 10019 | 646-868-1508 | Proprietary Trading |
| SRT Securities LLC | NA | 5/18/2020 | 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 |
| 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 |
| Sumo Captial, 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 |
| 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, LLC | 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 |
| SVB Leerink 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 |
| 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 Encintas, 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 |
| 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 |
| 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 | 646-472-1792 | 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 |
| 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 | 7/18/2018 | Member TPH | 100 Avenue of the Americas 19th Floor New York, NY 10013 | 212-625-5700 | Market Maker, Broker |
| 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 07086 | 201-352-3000 | Clearing, Transact Business with the Public |

| 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 |
|------------------------------------|-------------------|-------------------|--------------------|--------------------|---------------------|-------------------|-----------------------|---|--------------|---|
| 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 |
| Ultraviolet Securities LLC | 6/17/2019 | 6/17/2019 | 6/17/2019 | 6/17/2019 | NA | NA | Sponsored Participant | 151 Bodman Place Suite 301 Red Bank, NJ 07701 | 732-450-7462 | Proprietary Trading |
| Ultraviolet Securities LLC | 10/24/2019 | 10/24/2019 | 10/24/2019 | 10/24/2019 | NA | NA | Sponsored Participant | 151 Bodman Place Suite 301 Red Bank, NJ 07701 | 732-450-7462 | Proprietary Trading |
| 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 |
| Velocity 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 |
| Velox Clearing LLC | 9/5/2019 | 9/5/2019 | 9/5/2019 | 9/5/2019 | NA | NA | Member TPH | 2400 E. Katella Ave Suite 725 Anaheim, CA 92806 | 949-352-4694 | Clearing Services |
| Verition Fund Management LLC | 10/21/2019 | 10/21/2019 | 10/21/2019 | 10/21/2019 | NA | NA | Sponsored Participant | 1 American Lane Greenwich, CT 06831 | 203-742-7711 | 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 | 561-620-0306 | 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 |
| 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 |
| 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 |
| 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 | 312-244-4712 | Market Maker, Proprietary Trading |
| XR Securities LLC | 10/10/2019 | 10/10/2019 | 10/10/2019 | 10/10/2019 | NA | NA | Sponsored Participant | 550 W Jackson Boulevard Suite 1000 Chicago, IL 60661 | 312-244-4712 | Market Maker, Proprietary Trading |
| XTX Markets LLC | 8/18/2020 | 8/18/2020 | 8/18/2020 | 8/18/2020 | NA | NA | Sponsored Participant | 10 Hudson Yards 40th Floor New York, NY 10001 | 212-660-9930 | Proprietary Trading |