



June 20, 2024

Division of Trading and Markets
Office of Market Supervision
Securities and Exchange Commission
100 F. Street, N.E.
Washington, D.C. 20549

**RE: MIAX Emerald, LLC ("EMERALD")
Amendment 2024-15 to Form 1 Application**

Dear Sir/Madam:

Enclosed for official filing pursuant to Rule 6a-2(b) is Amendment 2024-15 to the Form 1 Application of EMERALD, which includes the following:

Exhibits D, I, K, M & N – Annual filing pursuant to Rule 6a-2(b)

Please do not hesitate to contact me if you have any questions in connection with this matter.

Sincerely,

Barbara J. Comly

Barbara J. Comly
EVP, General Counsel & Corporate Secretary

Enclosure
cc: Marlene Olsen

Form 1 Page 1 Execution Page	UNITED STATES 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): 06/20/24	OFFICIAL USE ONLY
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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 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

1. State the name of the applicant: MIAX Emerald, LLC
2. Provide the applicant's primary street address (Do not use a P.O. Box): 7 Roszel Road, Suite 1A, Princeton, NJ 08540
3. Provide the applicant's mailing address (if different): 
4. Provide the applicant's business telephone and facsimile number: Telephone: 609-897-7300; Facsimile: 609-987-2210 24010765
5. Provide the name, title and telephone number of a contact employee: Barbara J. Comly, EVP, General Counsel & Corporate Secretary 609-897-7315
6. Provide the name and address of counsel for the applicant: Barbara J. Comly, EVP, General Counsel & Corporate Secretary MIAX Emerald, LLC 7 Roszel Road, Suite 1A Princeton, NJ 08540
7. Provide the date applicant's fiscal year ends: December 31
8. Indicate legal status of applicant: Corporation Sole Proprietorship 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): 01/30/18 (b) State/Country of formation: Delaware
- (c) Statute under which applicant was organized: Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.)

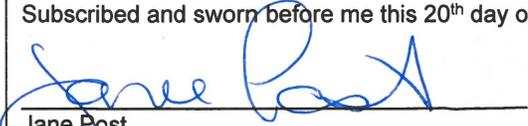
EXECUTION: The applicant consents that service of any civil action brought by, or notice of any proceeding before, the Securities and Exchange Commission in connection with the applicant's activities may be given by registered or certified mail or confirmed telegram to the applicant's contact employee 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 statements 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.

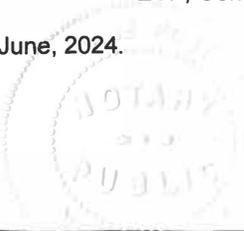
MIAX EMERALD, LLC

Date: June 20, 2024

By: 
Barbara J. Comly
EVP, General Counsel & Corporate Secretary

Subscribed and sworn before me this 20th day of June, 2024.


Jane Post
Notary Public of the State of New Jersey
My Commission Expires October 27, 2024



This page must always be completed in full with original, manual signature and notarization.
Affix notary stamp or seal where applicable.

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.

Response:

1. Unaudited unconsolidated financial statements of Miami International Holdings, Inc. as of December 31, 2023 are attached.
2. Audited unconsolidated financial statements of Miami International Securities Exchange, LLC as of December 31, 2023 are attached.
3. Audited unconsolidated financial statements of MIAX PEARL, LLC as of December 31, 2023 are attached.
4. Unaudited unconsolidated financial statements of MIAX Sapphire, LLC as of December 31, 2023 are attached.
5. Unaudited unconsolidated financial statements of Miami International Technologies, LLC as of December 31, 2023 are attached.
6. Unaudited unconsolidated financial statements of MIAX Futures, LLC as of December 31, 2023 are attached. (Current name: M 9 Holdings, LLC)
7. Unaudited unconsolidated financial statements of The Bermuda Stock Exchange as of December 31, 2023 are attached.
8. Unaudited unconsolidated financial statements of M 402 Holdings, LLC as of December 31, 2023 are attached. (Balance sheet provided; no profit & loss statement as no income or expenses as of December 31, 2023.)
9. Unaudited unconsolidated financial statements of Minneapolis Grain Exchange, LLC as of December 31, 2023 are attached.
10. Unaudited unconsolidated financial statements of Dorman Trading, LLC as of December 31, 2023 are attached.
11. Unaudited unconsolidated financial statements of M 7 Holdings, LLC as of December 31, 2023 are attached. (Balance sheet provided; no profit & loss statement as no income or expenses as of December 31, 2023.)

12. Unaudited unconsolidated financial statements of LedgerX LLC as of December 31, 2023 are attached. (Current name: LedgerX LLC d/b/a MIAX Derivatives Exchange)
13. Unaudited unconsolidated financial statements MIH East Holdings, Limited as of December 31, 2023.
14. Unaudited unconsolidated financial statements of ConvexityShares, LLC as of December 31, 2023 are attached.
15. MIAX Global, LLC, MIAX Products, LLC, and BSD Nominee Limited are not active and financial statements are not available for these companies.
16. The following companies were subsidiaries subsequent to December 31, 2023 and accordingly financial statements as of December 31, 2023 are not included: MGEX Real Estate Holdings, LLC and MIAX Futures Holdco, LLC.

MIAMI INTERNATIONAL HOLDINGS, INC.

Financial Statements (Unaudited)

As of and for the year ended December 31, 2023

MIAMI INTERNATIONAL HOLDINGS, INC.
Unconsolidated Statement of Financial Condition (Unaudited)
December 31, 2023 (dollars in thousands)

Assets	
Current assets:	
Cash and cash equivalents	\$ 929
Restricted cash	1,060
Other current assets	9,188
Total current assets	<u>11,177</u>
Due from subsidiaries (to Miami International Holdings, Inc.)	232,416
Investment in third parties	16,708
Investment in subsidiaries	73,641
Fixed assets, net	18,672
Internally developed software, net	27,415
Goodwill	46,818
Other intangible assets, net	114,713
Other assets	22,014
Total assets	<u>\$ 563,574</u>
Liabilities and stockholders' equity	
Current liabilities:	
Accounts payable and other liabilities	\$ 27,170
Accrued compensation payable	23,511
Current portion of long term debt	112,241
Total current liabilities	<u>162,922</u>
Deferred income taxes	5,390
Long term debt	6,184
Puttable common stock, net of current portion	79,186
Other non-current liabilities	13,714
Total liabilities	<u>267,396</u>
Stockholders' equity:	
Convertible preferred stock - par value \$0.001 (25,000,000 authorized, 1,493,718 issued and outstanding at December 31, 2023)	2
Common stock - voting and nonvoting, par value \$0.001 (600,000,000 authorized (400,000,000 voting, 200,000,000 nonvoting); 115,073,008 issued and outstanding non-puttable common stock at December 31, 2023 (107,529,228 voting, 7,543,780 nonvoting))	114
Additional paid-in capital	833,022
Accumulated deficit	(536,099)
Total Miami International Holdings, Inc. stockholders' equity	<u>297,039</u>
Non-controlling interest in consolidated subsidiaries	(861)
Total stockholders' equity	<u>296,178</u>
Total liabilities and stockholders' equity	<u>\$ 563,574</u>

MIAMI INTERNATIONAL HOLDINGS, INC.
Unconsolidated Statement of Income (Unaudited)
For the Year Ended December 31, 2023 (dollars in thousands)

Revenues:		
Market data fees	\$	6
Other revenue		17,557
Total revenues		<u>17,563</u>
Operating expenses:		
Compensation and benefits		19,435
Information technology and communication costs		4,811
Depreciation and amortization		18,626
Occupancy costs		1,467
Professional fees and outside services		17,797
Marketing and business development		2,782
Acquisition-related costs		2,723
General, administrative, and other		2,234
Total operating expense		<u>69,875</u>
Operating loss		(52,312)
Non-operating (expense) income:		
Change in fair value of warrants on puttable shares & puttable common stock		(26)
Loss on extinguishment of puttable common stock liability		(5,085)
Interest expense and amortization of debt issuance cost		(18,214)
Impairment of investment		(2,419)
Other expenses		(8)
Loss before income tax provision		<u>(78,064)</u>
Income tax benefit		<u>1,600</u>
Net loss		(76,464)
Net loss attributable to non-controlling interest		<u>(482)</u>
Net loss attributable to common stock holders	\$	<u><u>(75,982)</u></u>

MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC

Financial Statements

As of and for the year ended December 31, 2023

(with Independent Auditors' Report Thereon)

MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC

TABLE OF CONTENTS

	Page(s)
Independent Auditors' Report	1-2
Financial Statements:	
Statement of Financial Condition	3
Statement of Income and Changes in Member's Deficit	4
Statement of Cash Flows	5
Notes to Financial Statements	6 - 11



KPMG LLP
345 Park Avenue
New York, NY 10154-0102

Independent Auditors' Report

Board of Directors
Miami International Securities Exchange, LLC:

Opinion

We have audited the financial statements of Miami International Securities Exchange, LLC (the Company), which comprise the statement of financial condition as of December 31, 2023, and the related statements of income and changes in member's deficit, and cash flows for the year then ended, and the related notes to the financial statements.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023, and the results of its operations and its cash flows for the year then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Company and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.



In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

KPMG LLP

New York, New York
June 3, 2024

MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC
Statement of Financial Condition
December 31, 2023 (dollars in thousands)

Assets	
Current assets:	
Cash and cash equivalents	\$ 4,604
Accounts receivable	14,259
Marketing fee receivable	5,595
Other current assets	1,389
Total current assets	<u>25,847</u>
Notes receivable, net	14,663
Other assets	1,000
Total assets	<u>\$ 41,510</u>
Liabilities and Member's Deficit	
Current liabilities:	
Accounts payable and other liabilities	\$ 8,485
Marketing fees payable	5,627
Total current liabilities	<u>14,112</u>
Due to Miami International Holdings, Inc.	33,759
Deferred transaction revenue	43
Total liabilities	<u>47,914</u>
Commitments and contingencies (Note 6)	
Member's deficit:	
Accumulated losses	<u>(6,404)</u>
Total member's deficit	<u>(6,404)</u>
Total liabilities and member's deficit	<u>\$ 41,510</u>

See accompanying notes to financial statements.

MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC
Statement of Income and Changes in Member's Deficit
Year Ended December 31, 2023 (dollars in thousands)

Revenues:	
Transaction fees	\$ 163,729
Access fees	26,685
Market data fees	7,247
Other revenue	8
Total revenues	<u>197,669</u>
Cost of revenues:	
Liquidity payments	93,808
Brokerage and exchange fees	1,891
Section 31 fees	5,562
Total cost of revenues	<u>101,261</u>
Revenues less cost of revenues	<u>96,408</u>
Operating expenses:	
Compensation and benefits	14,473
Information technology and communication costs	7,072
Occupancy costs	708
Professional fees and outside services	6,595
Marketing and business development	600
General, administrative, and other	2,888
Total operating expenses	<u>32,336</u>
Operating income	64,072
Non-operating income:	
Interest income	623
Net profit	<u>\$ 64,695</u>
Member's deficit at beginning of year	\$ (71,099)
Net profit	64,695
Member's deficit at end of year	<u>\$ (6,404)</u>

See accompanying notes to financial statements.

MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC
Statement of Cash Flows
Year Ended December 31, 2023 (dollars in thousands)

Cash flow from operating activities:	
Net profit	\$ 64,695
Adjustments to reconcile net profit to net cash provided by operating activities:	
Provision for notes receivable credit losses	1,840
Changes in operating assets and liabilities:	
Accounts receivable	1,310
Marketing fees receivable	1,094
Notes receivable	(5,520)
Other current assets	463
Accounts payable and other liabilities	(2,655)
Marketing fees payable	(1,086)
Deferred transaction revenue	(6)
Net cash provided by operating activities	<u>60,135</u>
Cash flow from financing activities:	
Due to Miami International Holdings, Inc.	<u>(68,710)</u>
Net cash used in financing activities	<u>(68,710)</u>
Decrease in cash and cash equivalents	(8,575)
Cash and cash equivalents at beginning of year	<u>13,179</u>
Cash and cash equivalents at end of year	<u>\$ 4,604</u>

See accompanying notes to financial statements.

MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC

Notes to Financial Statements

As of and for the Year Ended December 31, 2023

1. NATURE OF OPERATIONS

Miami International Securities Exchange, LLC (“MIAX” or the “Company”) is a wholly owned subsidiary of Miami International Holdings, Inc. (the “Parent” or “MIH”) and provides a marketplace for the trading of options products for its exchange members.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying financial statements have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”). 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 and other affiliated subsidiaries of the Parent to the Company as disclosed. See Note 5 (“Related Party Transactions”) for more information on related party transactions.

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 at the date of the financial statements, and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company's operations are funded by its Parent through a centralized treasury function. Cash and cash equivalents include cash and amounts due from banks and interest-bearing bank balances. The Company places its cash and cash equivalents with financial institutions and at times, cash held in bank accounts may exceed the Federal Deposit Insurance Corporation insurance limit. The Company monitors its risk of loss associated with such balances and deems the risk of loss to be remote. The carrying values of the Company's cash and cash equivalents approximates fair value. The Company did not have any restricted cash as of December 31, 2023.

Accounts Receivable

Accounts receivable are concentrated with the Company's member firms and market data distributors and are primarily collected through the Options Clearing Corporation (“OCC”). Transaction fees are netted against the liquidity payments for each member firm and the balance owed from a member firm is recognized as accounts receivable, net if the amount is to be received and as accounts payable and other liabilities if the amount is owed to the member firm. Management evaluates the Company's accounts receivables periodically and determines an appropriate allowance for uncollectible accounts receivable using an aging schedule. The aging schedule applies loss rates based on historical loss information and as deemed necessary, is adjusted for the difference in the nature of the receivables that exist at the reporting date from the historical period. In circumstances where a specific member firm's inability to meet its financial obligations is probable, the Company records a provision for uncollectible accounts against the member firm's receivable. Due to the short-term nature of the accounts receivable, changes in future economic conditions are not expected to have a significant impact on the expected credit losses.

MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC

Notes to Financial Statements

As of and for the Year Ended December 31, 2023

Due to Miami International Holdings, Inc.

The majority of the Company's expenditures to date has been funded by the Parent. In certain instances, the Parent's other wholly owned subsidiaries may incur certain expenditure on behalf of the Company. Expenses incurred by the Company are settled on its behalf by the Parent or the Parent's other wholly-owned subsidiaries and allocated through intercompany charges and are net settled with the Parent resulting in payables due to Miami International Holdings, Inc. See Note 5 ("Related Party Transactions") for more information on related party transactions.

Management has determined that substantially all costs, other than direct financing and other financing related costs, for the build out of a marketplace for the trading of options and cash equities, are primarily attributable to the Company and its affiliates including MIAX Emerald, LLC ("Emerald") and MIAX PEARL, LLC ("PEARL"). The Company's allocated portion of cost is included in the accompanying statement of income and member's deficit. The Company considers changes in Due to Miami International Holdings, Inc., to be financing activity for purposes of the statement of cash flows.

Revenue Recognition

The Company generates revenues by assessing fees to its member firms for the services it renders, which include providing access to its exchanges, enabling transaction-based trading on its exchanges, and providing access to various market data. Revenue for the Company's services is recognized as control of the services are transferred to the customer. The amount recognized is the amount that reflects the consideration the Company expects to be entitled to in exchange for its services.

The Company determines the transaction price at the outset of the arrangement based on the contractual and payment terms associated with the transaction. The typical term for the Company's contracts with customers ranges from the time it takes to complete a single transaction to one month, depending on the service being provided. Customers are usually billed each month in arrears with standard payment terms, though the Company does occasionally bill customers in advance. Fees associated with each contract are fixed within the month in which the service is provided.

The Company assesses the services promised in the contracts with customers and identifies a performance obligation for each promise to transfer to the customer a service that is distinct—i.e., if such service is separately identifiable and if a customer can benefit from it on its own or with other resources that are readily available to the customer.

Transaction fees: Transaction fees represent fees the Company charges to its exchange member firms, as customers, for the performance obligation of executing a trade on the Company's exchange. These fees can be variable based on trade volume tiered discounts; however, as all tiered discounts are calculated monthly, the actual discount is recorded on a monthly basis in accordance with the Company's published fee schedules. Transaction fees are recorded as transactions occur on a trade-date basis.

Tiered discounts are offered to customers based on the amount of trades that are executed on the Company's exchange. As these are volume driven, they reduce the transaction price and are recorded net in transaction fees on the statement of income and changes in member's deficit. Liquidity payments paid for certain customer transactions are accounted for as consideration payable to a customer and are recorded separately as liquidity payments, which are classified within cost of revenue in the statement of income and changes in member's deficit.

Transaction fees also result in regulatory fees. Regulatory fees include the options regulatory fee ("ORF") and Section 31 fees. ORF is in place to fund the Company's regulatory oversight function of the exchange marketplace and is determined based on the number of customer contracts and cannot be used for non-regulatory purposes. Section 31 fees are transaction fees charged by the SEC to the exchanges. The Section 31 fees charged to customers are based on the fee set by the SEC per notional value of transactions executed on the Company's securities markets

MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC

Notes to Financial Statements

As of and for the Year Ended December 31, 2023

and are calculated and billed monthly. The Section 31 fee collected by the Company is ultimately payable to the SEC, and is therefore classified within cost of revenue in the statement of income and changes in member's deficit.

Access fees: Access fees include fees assessed for allowing customers, which include exchange member firms and non-member firms, to connect their networks to the Company's exchange or to an external exchange for a specified period of time. Fees for these services are assessed to customers for the opportunity to trade as member firms, or in the case of non-member firms to provide these services to member firms, and use other related functions of the exchange. Access fees are billed monthly in accordance with the published fee schedules and recognized during the period the service is provided which is generally one month.

Market data fees: Market data fees include making market data available to customers either through direct subscriptions or through the Company's participation in the Options Price Reporting Authority ("OPRA") tape plan. Market data revenue includes distributions from OPRA, which is distributed based upon each individual exchange's market share of U.S. volume, trades, and/or quotes. Market data revenue also includes market data revenue earned from the sale of proprietary market data directly to the customer on a subscription basis. Market data revenue is recognized in the period the data is provided.

Consideration payable to a customer: As discussed in the transaction fees section above, liquidity payments are accounted for as consideration payable to a customer and reduce revenue in the period in which the rebate is earned by the customer and the payment is provided.

Concentration of revenue: For the year ended December 31, 2023, three customers generated 47% of the Company's total revenue. No customer is contractually or otherwise obligated to continue to use the Company's services. The loss of, or a significant reduction of, participation by these customers may have a material adverse effect on the Company's business, financial position, results of operations and cash flows.

Income Taxes

The Company is a disregarded LLC for U.S. income tax. In December 2019, the FASB issued ASU 2019-12, Simplifying the Accounting for Income Taxes, which (a) clarified that an entity is not required to allocate consolidated income taxes to a legal entity that is not subject to tax for purposes of that legal entity's separate financial statements. Accordingly, no provision for income taxes is provided in the accompanying financial statements.

Recent Accounting Pronouncements

Recent Accounting Pronouncements - Recently adopted

In June 2016, the FASB issued ASU No. 2016-13 (amended by ASU 2019-10), Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, regarding the measurement of credit losses for certain financial instruments which replaces the incurred loss model with a current expected credit loss ("CECL") model. The CECL model is based on historical experience, adjusted for current conditions and reasonable and supportable forecasts. The Company adopted the new guidance as of January 1, 2023 using a modified-retrospective approach with no impact to the opening balance of retained earnings. Accounts receivable are balances with the Company's member firms and market data distributors and are primarily collected through the OCC. The Company's accounts receivable do not have significant credit risk as transaction fees are netted against liquidity payments for each member firm, mitigating the risk of collection. The financial instruments other than accounts receivable, net that are within the scope of the standard were not materially impacted by the standard.

MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC

Notes to Financial Statements

As of and for the Year Ended December 31, 2023

3. NOTES RECEIVABLE, NET

The notes receivable relate to the consolidated audit trail (“CAT”), which involves the creation of an audit trail to enhance regulators' ability to monitor trading activities in the U.S. markets through a phased implementation. The funding for the development of the CAT is ultimately expected to be provided by the Self-Regulatory Organizations (“SROs”), which include the Company, and by broker-dealers. However, the funding to date has been solely provided by the SROs in exchange for promissory notes.

On September 6, 2023, the SEC issued an order approving a revised CAT funding model calculated based on the share of transactions executed. The funding model consists of two categories: (i) CAT fees assessed to executing brokers to recover a portion of historical CAT costs previously paid by the SROs; and (ii) CAT fees assessed to executing brokers and SROs to fund prospective CAT costs. During the first week of January 2024, the SROs submitted fee filings with the SEC to implement the applicable transaction-based fee rates that are to be assessed to executing brokers to recover a portion of historical CAT costs incurred prior to 2022 and use the collected funds to repay a portion of the promissory notes to the SROs. Additional historical and prospective CAT fees are planned to be introduced at a later time through separate fee filings submitted by the SROs. Once the CAT fee filing related to ongoing prospective CAT costs becomes effective, SROs are no longer expected to issue promissory notes to fund CAT. On January 17, 2024, the SEC issued orders suspending each SRO's fee filing and instituting proceedings to determine whether to approve or disapprove the fees, as published in the Federal Register on February 13, 2024.

On October 17, 2023, certain parties filed a legal challenge in court against the SEC's order referenced above. This challenge or any other litigation related to the CAT funding model may significantly delay its implementation. As a result, SROs may continue to incur additional CAT costs and/or SROs may not be able to collect on the promissory notes related to the CAT funding. Until the historical CAT fees associated with the promissory notes are collected from executing brokers, and until CAT fees assessed to executing brokers and SROs to fund prospective CAT costs are implemented, the SROs, including the Company, may continue to incur additional significant costs.

The allowance for notes receivable associated with CAT is estimated based on anticipated collections. The following represents the changes in notes receivable and the allowance for notes receivable for the year ended December 31, 2023 (in thousands):

Notes receivable, gross		
Balance at January 1, 2023	\$	16,499
Additions		5,520
Balance at December 31, 2023		<u>22,019</u>
Allowance for notes receivable		
Balance at January 1, 2023		5,516
Additions		1,840
(Write-off) / recoveries		-
Balance at December 31, 2023		<u>7,356</u>
Notes receivable, net	\$	<u>14,663</u>

MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC

Notes to Financial Statements

As of and for the Year Ended December 31, 2023

4. ACCOUNTS PAYABLE AND OTHER LIABILITIES

The following table presents the components of accounts payable and other liabilities as at December 31, 2023 (in thousands):

Liquidity payments payable	\$	4,139
Section 31 fees payable		1,706
Accounts payable and other		2,040
Sales tax payable		600
Accounts payable and other liabilities	\$	<u>8,485</u>

5. RELATED PARTY TRANSACTIONS

The Company utilizes assets and incurs certain liabilities that are held at the Parent level. Substantially all expenses of the Company are settled by the Parent and are charged to the Company, at cost, through intercompany charges. 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 of the Parent for the year ended December 31, 2023 (in thousands):

Compensation and benefits	\$	14,473
Information technology and communication costs		7,072
Occupancy costs		708
Professional fees and outside services		4,289
Marketing and business development		600
General, administrative, and other		1,420
Total operating expenses	\$	<u>28,562</u>

6. COMMITMENTS AND CONTINGENCIES

Claims and Litigation

Nasdaq

On September 1, 2017, Nasdaq, Inc., filed an action against Miami International Holdings, Inc., Miami International Securities Exchange, LLC, MIA X PEARL, LLC and Miami International Technologies, LLC in the U.S. District Court for the District of New Jersey alleging patent infringement and trade secret misappropriation relating to Nasdaq's electronic trading technology and platforms. MIH subsequently filed six petitions before the Patent Trial and Appeal Board ("PTAB") at the United States Patent and Trademark Office ("USPTO") seeking a determination that the subject patent is invalid under the current law. The District Court proceeding was stayed in December 2018, pending resolution of the PTAB proceedings. All claims asserted by Nasdaq against MIH under the six patents at issue were invalidated by the PTAB in 2019 (the "PTAB Final Written Decisions"). On June 7, 2022, the USPTO Director denied a request by Nasdaq to review the PTAB Final Written Decisions.

On August 31, 2021, MIH filed an Answer and Counterclaims in the NJ District Court. MIH's Answer included denials of the allegations made by Nasdaq in the Complaint and Counterclaims including monopolization antitrust claims, patent misuse, sham litigation, and fraud on the USPTO by Nasdaq. MIH is seeking attorneys' fees and costs and such other relief as the Court may find to be just and proper. On June 21, 2022, Nasdaq waived its right to

MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC

Notes to Financial Statements

As of and for the Year Ended December 31, 2023

appeal the PTAB's Final Written Decisions and the stay in the District Court matter was lifted as all of the PTAB proceedings were concluded with each of the Nasdaq patent claims at issue invalidated. MIH filed an Amended Answer and Counterclaims on August 5, 2022. The Amended Counterclaims added claims of fraud on the patent office and Lanham Act violations. MIH filed a motion to dismiss Nasdaq's trade secret misappropriation claims on September 2, 2022. Nasdaq filed a motion to dismiss MIH's Counterclaims on September 19, 2022. On July 25, 2023, the Court denied MIH's motion to dismiss Nasdaq's trade secret claims and also denied Nasdaq's motion to dismiss MIH's counterclaims. The Court granted Nasdaq's motion to stay and bifurcate MIH's counterclaims. Accordingly, the trade secret case is currently proceeding and MIH's counterclaims are stayed until the conclusion of the trade secret case at which time the parties may proceed to litigate MIH's counterclaims against Nasdaq. The parties are engaged in discovery in connection with the trade secret case. MIH intends to continue defending its interest in this matter vigorously.

General

As a self-regulatory organization under the jurisdiction of the SEC, the Company is subject to routine reviews and inspections by the SEC. Management does not believe that the outcome of any of these reviews or inspections will have a material impact on the statement of financial conditions, the statement of income and changes in member's deficit or cash flows of the Company.

In the normal course of its business, the Company is exposed to asserted and unasserted claims. In the opinion of management, these matters will not have a material adverse effect on the Company's financial position, results of operations or cash flows.

7. SUBSEQUENT EVENTS

The Company has evaluated the possibility of subsequent events existing in the Company's financial statements through June 3, 2024, the date the financial statements were available to be issued. The Company has determined that there are no material events that would require disclosure in the Company's financial statements.

MIAX PEARL, LLC

Financial Statements

As of and for the year ended December 31, 2023

(with Independent Auditors' Report Thereon)

MIAX PEARL, LLC

TABLE OF CONTENTS

	Page(s)
Independent Auditors' Report	1-2
Financial Statements:	
Statement of Financial Condition	3
Statement of Operations and Changes in Member's Deficit	4
Statement of Cash Flows	5
Notes to Financial Statements	6 - 12



KPMG LLP
345 Park Avenue
New York, NY 10154-0102

Independent Auditors' Report

Board of Directors
MIAX Pearl, LLC:

Opinion

We have audited the financial statements of MIAX Pearl, LLC (the Company), which comprise the statement of financial condition as of December 31, 2023, and the related statements of operations and member's deficit, and cash flows for the year then ended, and the related notes to the financial statements.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023, and the results of its operations and its cash flows for the year then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Company and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.



In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

KPMG LLP

New York, New York
June 3, 2024

MIAX PEARL, LLC
Statement of Financial Condition
December 31, 2023 (dollars in thousands)

Assets	
Current assets:	
Cash and cash equivalents	\$ 9,771
Accounts receivable	25,825
Other current assets	134
Total current assets	35,730
Notes receivable, net	21,643
Other assets	1,086
Total assets	\$ 58,459
Liabilities and Member's Deficit	
Current liabilities:	
Accounts payable and other liabilities	\$ 22,894
Total current liabilities	22,894
Due to Miami International Holdings, Inc.	120,920
Deferred transaction revenue	83
Total liabilities	143,897
Commitments and contingencies (Note 6)	
Member's deficit:	
Accumulated losses	(85,438)
Total member's deficit	(85,438)
Total liabilities and member's deficit	\$ 58,459

See accompanying notes to financial statements.

MIAX PEARL, LLC
Statement of Operations and Changes in Member's Deficit
Year Ended December 31, 2023 (dollars in thousands)

Revenues:	
Transaction fees	\$ 498,118
Access fees	32,753
Market data fees	14,585
Other revenue	42
Total revenues	<u>545,498</u>
Cost of revenues:	
Liquidity payments	466,703
Brokerage and exchange fees	1,722
Section 31 fees	19,422
Equity rights programs	4,601
Total cost of revenues	<u>492,448</u>
Revenues less cost of revenues	53,050
Operating expenses:	
Compensation and benefits	24,641
Information technology and communication costs	16,981
Occupancy costs	1,498
Professional fees and outside services	9,668
General, administrative, and other	3,294
Total operating expenses	<u>56,082</u>
Operating loss	(3,032)
Non-operating income:	
Interest income	576
Net loss	<u>\$ (2,456)</u>
Member's deficit at beginning of year	\$ (82,982)
Net loss	(2,456)
Member's deficit at end of year	<u><u>\$ (85,438)</u></u>

See accompanying notes to financial statements.

MIAX PEARL, LLC
Statement of Cash Flows
Year Ended December 31, 2023 (dollars in thousands)

Cash flow from operating activities:		
Net loss	\$	(2,456)
Adjustments to reconcile net loss to net cash used in operating activities:		
Provision for notes receivable credit losses		3,971
Changes in operating assets and liabilities:		
Accounts receivable		(247)
Notes receivable		(11,913)
Other assets		257
Accounts payable and other liabilities		(4,148)
Deferred transaction revenue		11
Net cash used in operating activities		<u>(14,525)</u>
Cash flow from financing activities:		
Due to Miami International Holdings, Inc.		<u>(546)</u>
Net cash used in financing activities		<u>(546)</u>
Decrease in cash and cash equivalents		(15,071)
Cash and cash equivalents at beginning of year		<u>24,842</u>
Cash and cash equivalents at end of year	\$	<u>9,771</u>

See accompanying notes to financial statements.

MIAX PEARL, LLC

Notes to Financial Statements

As of and for the Year Ended December 31, 2023

1. NATURE OF OPERATIONS

MIAX PEARL, LLC (“PEARL” or the “Company”) is a wholly owned subsidiary of Miami International Holdings, Inc. (the “Parent” or “MIH”), and provides a marketplace for the trading of equity options and cash equities products for its exchange members.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying financial statements have been prepared in accordance with U.S generally accepted accounting principles (“GAAP”). 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 and other affiliated subsidiaries of the Parent to the Company as disclosed. See Note 5 (“Related Party Transactions”) for more information on related party transactions.

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 at the date of the financial statements, and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company's operations are funded by its Parent through a centralized treasury function. Cash and cash equivalents include cash and amounts due from banks and interest-bearing bank balances. The Company places its cash and cash equivalents with financial institutions and at times, cash held in bank accounts may exceed the Federal Deposit Insurance Corporation insurance limit. The Company monitors its risk of loss associated with such balances and deems the risk of loss to be remote. The carrying values of the Company’s cash and cash equivalents approximates fair value. The Company did not have any restricted cash as of December 31, 2023.

Accounts Receivable

Accounts receivable are concentrated with the Company’s member firms and market data distributors and are primarily collected through the Options Clearing Corporation (“OCC”) and the National Securities Clearing Corporation (“NSCC”). Transaction fees are netted against the liquidity payments for each member firm and the balance owed from a member firm is recognized as accounts receivable, net if the amount is to be received and as accounts payable and other liabilities if the amount is owed to the member firm. Management evaluates the Company’s accounts receivables periodically and determines an appropriate allowance for uncollectible accounts receivable using an aging schedule. The aging schedule applies loss rates based on historical loss information and as deemed necessary, is adjusted for the difference in the nature of the receivables that exist at the reporting date from the historical period. In circumstances where a specific member firm’s inability to meet its financial obligations is probable, the Company records a provision for uncollectible accounts against the member firm’s receivable. Due to the short-term nature of the accounts receivable, changes in future economic conditions are not expected to have a significant impact on the expected credit losses.

MIAX PEARL, LLC

Notes to Financial Statements

As of and for the Year Ended December 31, 2023

Due to Miami International Holdings, Inc.

The majority of all of the Company's expenditures to date have been funded by the Parent. In certain instances the Parent's other wholly owned subsidiaries may incur certain expenditure on behalf of the Company. Expenses incurred by the Company are settled on its behalf by the Parent or the Parent's other wholly owned subsidiaries and allocated through intercompany charges and are net settled with the Parent resulting in payables due to Miami International Holdings, Inc. See Note 5 ("Related Party Transactions") for more information on related party transactions.

Management has determined that substantially all costs, other than direct financing and other financing related costs, for the build out of a marketplace for the trading of options and cash equities, are primarily attributable to the Company and its affiliates including Miami International Securities Exchange, LLC ("MIAX") and MIAX Emerald, LLC ("Emerald"). The Company's allocated portion of costs are included in the accompanying statement of operations and changes in member's deficit. The Company considers changes in Due to Miami International Holdings Inc., to be financing activity for purposes of the statement of cash flows.

Revenue Recognition

The Company generates revenues by assessing fees to its member firms for the services it renders, which include providing access to its exchanges, enabling transaction-based trading on its exchanges, and providing access to various market data. Revenue for the Company's services are recognized as control of the services are transferred to the customer. The amount recognized is the amount that reflects the consideration the Company expects to be entitled to in exchange for its services.

The Company determines the transaction price at the outset of the arrangement based on the contractual and payment terms associated with the transaction. The typical term for the Company's contracts with customers ranges from the time it takes to complete a single transaction to one month, depending on the service being provided. Customers are usually billed each month in arrears with standard payment terms, though the Company does occasionally bill customers in advance. Fees associated with each contract are fixed within the month in which the service is provided.

The Company assesses the services promised in the contracts with customers and identifies a performance obligation for each promise to transfer to the customer a service that is distinct—i.e., if such service is separately identifiable and if a customer can benefit from it on its own or with other resources that are readily available to the customer.

Transaction fees: Transaction fees represent fees the Company charges to its exchange member firms, as customers, for the performance obligation of executing a trade on the Company's exchange. These fees can be variable based on trade volume tiered discounts; however, as all tiered discounts are calculated monthly, the actual discount is recorded on a monthly basis in accordance with the Company's published fee schedules. Transaction fees are recorded as transactions occur on a trade-date basis.

In the event that a customer prepays for transaction fees, revenue is recognized as transactions occur. Tiered discounts are offered to customers based on the amount of trades that are executed on the Company's exchange. As these are volume driven, they reduce the transaction price and are recorded net in transaction fees on the statement of operations and changes in member's deficit. Liquidity payments paid for certain customer transactions are accounted for as consideration payable to a customer and are recorded separately as liquidity payments, which are classified within cost of revenue in the statement of operations and changes in member's deficit.

Transaction fees also result in regulatory fees. Regulatory fees include the options regulatory fee ("ORF") and Section 31 fees. ORF is in place to fund the Company's regulatory oversight function of the exchange marketplace and is determined based on the number of customer contracts and cannot be used for non-regulatory purposes. Section 31 fees are transaction fees charged by the SEC to the exchanges. The Section 31 fees charged to customers are based on the fee set by the SEC per notional value of transactions executed on the Company's securities markets and are calculated and billed monthly. The Section 31 fee collected by the Company is ultimately payable to the

MIAX PEARL, LLC

Notes to Financial Statements

As of and for the Year Ended December 31, 2023

SEC, and is therefore classified within cost of revenues in the accompanying statement of operations and changes in member's deficit.

Access fees: Access fees include allowing the customer to connect its network to one of the Company's exchanges for a specified period of time. Fees for these services are assessed to exchange members for the opportunity to trade and use other related functions of the exchanges. Access fees are billed monthly in accordance with the published fee schedule and recognized during the period the service is provided which is generally one month.

Market data fees: Market data fees include making market data available to customers either through direct subscriptions or through the Company's participation in the U.S. Tape Plans, including the Options Price Reporting Authority ("OPRA"), the Unlisted Trading Privileges Plan ("UTP") and the Consolidated Tape Association Plan ("CTA"). Market data revenue includes distributions from the U.S. Tape Plans, which is distributed based upon each individual exchange's market share of U.S. volume, trades, and/or quotes. Market data revenue also includes market data revenue earned from the sale of proprietary market data directly to the customer on a subscription basis. Market data revenue is recognized in the period the data is provided.

Consideration payable to a customer: As discussed in the Transaction-based services section above, liquidity payments are accounted for as consideration payable to a customer and reduce revenue in the period in which the rebate is earned by the customer and the rebate is provided. Additionally, the Parent has issued warrants to certain customers as part of its Equity Rights Programs detailed in Note 7. Under these programs, the Company records the fair value of the number of warrants that vest in a period as a cost of revenues. Customers vest in the warrants as and when they transact certain volumes of trades on the Company's equity exchange which is considered a sales incentive offering that rewards customers solely in return for executing increased trading volumes with the Company.

Concentration of revenue: For the year ended December 31, 2023, three customers generated 40% of the Company's total revenue. No customer is contractually or otherwise obligated to continue to use the Company's services. The loss of, or a significant reduction of, participation by these customers may have a material adverse effect on the Company's business, financial position, results of operations and cash flows.

Deferred revenue: As of December 31, 2023, the Company had fully amortized deferred revenue representing prepaid transaction and non-transaction fees related to the collection of prepaid fees from customers participating in the Equity Rights Program V program detailed in Note 7. Deferred revenue is amortized to income over the applicable future periods as fees are earned.

Income Taxes

The Company is a disregarded LLC for U.S. income tax. In December 2019, the FASB issued ASU 2019-12, Simplifying the Accounting for Income Taxes, which (a) clarified that an entity is not required to allocate consolidated income taxes to a legal entity that is not subject to tax for purposes of that legal entity's separate financial statements. Accordingly, no provision for income taxes is provided in the accompanying financial statements.

Recent Accounting Pronouncements

Recent Accounting Pronouncements - Recently adopted

In June 2016, the FASB issued ASU No. 2016-13 (amended by ASU 2019-10), Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, regarding the measurement of credit losses for certain financial instruments which replaces the incurred loss model with a current expected credit loss ("CECL") model. The CECL model is based on historical experience, adjusted for current conditions and reasonable and supportable forecasts. The Company adopted the new guidance as of January 1, 2023 using a modified-retrospective approach with no impact to the opening balance of retained earnings. Accounts receivables are balances with the Company's member firms and market data distributors and are primarily collected through the

MIAX PEARL, LLC
Notes to Financial Statements
As of and for the Year Ended December 31, 2023

OCC and NSCC. The Company's accounts receivable do not have significant credit risk as transaction fees are netted against liquidity payments for each member firm, mitigating the risk of collection. The financial instruments other than accounts receivable, net that are within the scope of the standard were not materially impacted by the standard.

3. NOTES RECEIVABLE, NET

The notes receivable relate to the consolidated audit trail (“CAT”), which involves the creation of an audit trail to enhance regulators' ability to monitor trading activities in the U.S. markets through a phased implementation. The funding for the development of the CAT is ultimately expected to be provided by the Self-Regulated Organizations (“SROs”), which include the Company, and by broker-dealers. However, the funding to date has been solely provided by the SROs in exchange for promissory notes.

On September 6, 2023, the SEC issued an order approving a revised CAT funding model calculated based on the share of transactions executed. The funding model consists of two categories: (i) CAT fees assessed to executing brokers to recover a portion of historical CAT costs previously paid by the SROs; and (ii) CAT fees assessed to executing brokers and SROs to fund prospective CAT costs. During the first week of January 2024, the SROs submitted fee filings with the SEC to implement the applicable transaction-based fee rates that are to be assessed to executing brokers to recover a portion of historical CAT costs incurred prior to 2022 and use the collected funds to repay a portion of the promissory notes to the SROs. Additional historical and prospective CAT fees are planned to be introduced at a later time through separate fee filings submitted by the SROs. Once the CAT fee related to ongoing prospective CAT costs becomes effective, SROs are no longer expected to issue promissory notes to fund CAT. On January 17, 2024, the SEC issued orders suspending each SRO’s fee filing and instituting proceedings to determine whether to approve or disapprove the fees, as published in the Federal Register on February 13, 2024.

On October 17, 2023, certain parties filed a legal challenge in court against the SEC’s order above. This challenge or any other litigation related to the CAT funding model may significantly delay its implementation. As a result, SROs may continue to incur additional CAT costs and/or it may result in SROs not being able to collect on the promissory notes related to the CAT funding. Until the historical CAT fees associated with the promissory notes are collected from executing brokers, and until CAT fees assessed to executing brokers and SROs to fund prospective CAT costs are implemented, the SROs, including the Company may continue to incur additional significant costs.

The allowance for notes receivable associated with CAT is estimated based on anticipated collections. The following represents the changes in notes receivable and the allowance for notes receivable for the year ended December 31, 2023 (in thousands):

Notes receivable, gross		
Balance at January 1, 2023	\$	20,569
Additions		11,913
Balance at December 31, 2023		<u>32,482</u>
Allowance for notes receivable		
Balance at January 1, 2023		6,868
Additions		3,971
(Write-off) / recoveries		-
Balance at December 31, 2023		<u>10,839</u>
Notes receivable, net	\$	<u><u>21,643</u></u>

MIAX PEARL, LLC
Notes to Financial Statements
As of and for the Year Ended December 31, 2023

4. ACCOUNTS PAYABLE AND OTHER LIABILITIES

The following table presents the components of accounts payable and other liabilities as at December 31, 2023 (in thousands):

Liquidity payments payable	\$	12,190
Section 31 fees payable		6,478
Accounts payable and others		4,226
Accounts payable and other liabilities	\$	<u>22,894</u>

5. RELATED PARTY TRANSACTIONS

The Company utilizes assets and incurs certain liabilities that are held at the Parent level. Substantially all expenses of the Company are settled by the Parent and are charged to the Company, at cost, through intercompany charges. 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 of the Parent for the year ended December 31, 2023 (in thousands):

Compensation and benefits	\$	24,641
Information technology and communication costs		16,981
Occupancy costs		1,498
Professional fees and outside services		4,904
General, administrative, and other		2,209
Total operating expenses	\$	<u>50,233</u>

6. COMMITMENTS AND CONTINGENCIES

Claims and Litigation

Nasdaq

On September 1, 2017, Nasdaq, Inc., filed an action against Miami International Holdings, Inc., Miami International Securities Exchange, LLC, MIAX PEARL, LLC and Miami International Technologies, LLC in the U.S. District Court for the District of New Jersey alleging patent infringement and trade secret misappropriation relating to Nasdaq's electronic trading technology and platforms. MIH subsequently filed six petitions before the Patent Trial and Appeal Board ("PTAB") at the United States Patent and Trademark Office ("USPTO") seeking a determination that the subject patent is invalid under the current law. The District Court proceeding was stayed in December 2018, pending resolution of the PTAB proceedings. All claims asserted by Nasdaq against MIH under the six patents at issue were invalidated by the PTAB in 2019 (the "PTAB Final Written Decisions"). On June 7, 2022, the USPTO Director denied a request by Nasdaq to review the PTAB Final Written Decisions.

On August 31, 2021, MIH filed an Answer and Counterclaims in the NJ District Court. MIH's Answer included denials of the allegations made by Nasdaq in the Complaint and Counterclaims including monopolization antitrust claims, patent misuse, sham litigation, and fraud on the USPTO by Nasdaq. MIH is seeking attorneys' fees and costs and such other relief as the Court may find to be just and proper. On June 21, 2022, Nasdaq waived its right to appeal the PTAB's Final Written Decisions and the stay in the District Court matter was lifted as all of the PTAB proceedings were concluded with each of the Nasdaq patent claims at issue invalidated. MIH filed an Amended Answer and Counterclaims on August 5, 2022. The Amended Counterclaims added claims of fraud on the patent

MIAX PEARL, LLC

Notes to Financial Statements

As of and for the Year Ended December 31, 2023

office and Lanham Act violations. MIH filed a motion to dismiss Nasdaq's trade secret misappropriation claims on September 2, 2022. Nasdaq filed a motion to dismiss MIH's Counterclaims on September 19, 2022. On July 25, 2023, the Court denied MIH's motion to dismiss Nasdaq's trade secret claims and also denied Nasdaq's motion to dismiss MIH's counterclaims. The Court granted Nasdaq's motion to stay and bifurcate MIH's counterclaims. Accordingly, the trade secret case is currently proceeding and MIH's counterclaims are stayed until the conclusion of the trade secret case at which time the parties may proceed to litigate MIH's counterclaims against Nasdaq. The parties are engaged in discovery in connection with the trade secret case. MIH intends to continue defending its interest in this matter vigorously.

General

As a self-regulatory organization under the jurisdiction of the SEC, the Company is subject to routine reviews and inspections by the SEC. Management does not believe that the outcome of any of these reviews or inspections will have a material impact on the statement of financial conditions, the statement of operations and changes in member's deficit or cash flows of the Company.

In the normal course of its business, the Company is exposed to asserted and unasserted claims. In the opinion of management, these matters will not have a material adverse effect on the Company's financial position, results of operations or cash flows.

7. EQUITY

PEARL is a single member limited liability company and has issued 100 membership units constituting 100% membership interest in the Company to MIH who is the Company's sole member. PEARL has not made any distributions for the period from February 11, 2016 (inception) through December 31, 2023.

Equity Rights Offering V ("ERP V")

MIH launched its first Equity Rights Program ("ERP") in September 2013 and subsequently introduced four additional ERPs between February 2015 and September 2020. Each ERP included a certain number of units allowing the Company's customers to obtain common stock warrants in return for a prepaid fee, which is applied to future purchases by the customer of the Company's services. The customer vests in the common stock warrants in tranches over designated time periods based on certain performance criteria, which generally require the customer to execute qualifying trades on the the Parent's exchanges in an amount equal to a specified fixed percentage of the average daily volume of trades on the applicable exchange.

On September 11, 2020, the Parent closed a fifth equity rights offering with nine firms for 22 L-Units providing for the issuance of warrants to purchase a total of 9,507,586 shares of common stock, representing 432,163 shares per L-Unit. The L-Warrants vest over a 42 month period provided that the participant meets the specific performance criteria, which require the participants to trade an agreed-upon number of equities contracts, subject to certain exceptions, on the Company's equity exchange on a daily basis over seven six-month measurement periods. In the event of an initial public offering of MIH common stock under the Securities Act of 1933, as amended, where the offering price, net of underwriting discounts and commissions, exceeds \$250,000,000 (a "Qualified Public Offering"), merger or other liquidating event, it will result in the immediate vesting of all unvested ERP V warrants that remain eligible to vest with the L-Unit participant. The warrants expire on the earliest to occur of (i) September 11, 2027, (ii) the two year anniversary of a Qualified Public Offering, or (iii) a merger or sale of the Parent. Upon closing, MIH collected \$22 million of prepaid fees from participating member firms. The Company amortized the entire prepaid fee in the prior periods. There is no remaining unamortized balance as of December 31, 2023.

The shares of common stock and warrants issued under ERP V are classified as equity instruments on the Parent's consolidated balance sheets. The ERP Awards are determined to be consideration payable to a customer and recorded as cost of revenue on the Company's statement of operations and changes in member's deficit, based on the grant date fair value of the awards.

MIAX PEARL, LLC
Notes to Financial Statements
As of and for the Year Ended December 31, 2023

8. SUBSEQUENT EVENTS

The Company has evaluated the possibility of subsequent events existing in the Company's financial statements through June 3, 2024, the date the financial statements were available to be issued. The Company has determined that there are no material events that would require disclosure in the Company's financial statements.

MIAX SAPPHIRE, LLC

Financial Statements (Unaudited)

As of and for the year ended December 31, 2023

MIAX Sapphire, LLC
Statement of Financial Condition (Unaudited)
December 31, 2023 (dollars in thousands)

Assets

Current assets:

Other current assets	\$	250
Total current assets		<u>250</u>

Total assets	\$	<u><u>250</u></u>
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Liabilities and member's deficit

Due to Miami International Holdings, Inc.	\$	13,892
Total liabilities		<u>13,892</u>

Member's deficit:

Accumulated deficit		<u>(13,642)</u>
Total member's deficit		<u>(13,642)</u>

Total liabilities and member's deficit	\$	<u><u>250</u></u>
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MIAX Sapphire, LLC
Statement of Income (Unaudited)
For the Year Ended December 31, 2023 (dollars in thousands)

Revenues	\$	-
Total revenues		<u>-</u>
Operating expenses:		
Compensation and benefits		10,584
Information technology and communication costs		1,480
Occupancy costs		618
Professional fees and outside services		238
General, administrative, and other		<u>722</u>
Total operating expense		<u>13,642</u>
Operating loss		(13,642)
Net loss	\$	<u><u>(13,642)</u></u>

MIAMI INTERNATIONAL TECHNOLOGIES, LLC

Financial Statements (Unaudited)

As of and for the year ended December 31, 2023

Miami International Technologies, LLC
Statement of Financial Condition (Unaudited)
December 31, 2023 (dollars in thousands)

Assets

Current assets:

Cash and cash equivalents	\$	12
Accounts receivable		<u>57</u>
Total current assets		<u>69</u>
Total assets	\$	<u><u>69</u></u>

Liabilities and member's deficit

Due to Miami International Holdings, Inc.	\$	<u>19,865</u>
Total liabilities		19,865
Member's deficit:		
Accumulated deficit		<u>(19,796)</u>
Total member's deficit		<u>(19,796)</u>
Total liabilities and member's deficit	\$	<u><u>69</u></u>

Miami International Technologies, LLC
Statement of Income (Unaudited)
For the Year Ended December 31, 2023 (dollars in thousands)

Revenues:	
Other revenue	\$ 845
Total revenues	<u>845</u>
Operating expenses:	
Compensation and benefits	1,960
Information technology and communication costs	324
Occupancy costs	35
Professional fees and outside services	547
General, administrative, and other	<u>43</u>
Total operating expenses	<u>2,909</u>
Operating loss	(2,064)
Non-operating income:	
Other income	<u>2</u>
Net loss	<u>\$ (2,062)</u>

MIAX FUTURES, LLC

Financial Statements (Unaudited)

As of and for the year ended December 31, 2023

MIAX Futures, LLC
Statement of Financial Condition (Unaudited)
December 31, 2023 (dollars in thousands)

		Assets	
Other assets		\$	1,000
Total assets		\$	<u>1,000</u>
		Liabilities and member's deficit	
Due to Miami International Holdings, Inc.		\$	<u>48,327</u>
Total liabilities			48,327
Member's deficit:			
Accumulated deficit			<u>(47,327)</u>
Total member's deficit			<u>(47,327)</u>
Total liabilities and member's deficit		\$	<u>1,000</u>

MIAX Futures, LLC
Statement of Income (Unaudited)
For the Year Ended December 31, 2023 (dollars in thousands)

Revenues:		
Other revenue	\$	671
Total revenues		<u>671</u>
Cost of revenues		
Liquidity payments		<u>568</u>
Total cost of revenues		<u>568</u>
Revenues less cost of revenues		103
Operating expenses:		
Compensation and benefits		8,315
Information technology and communication costs		162
Occupancy costs		174
Professional fees and outside services		1,087
Marketing and business development		1,863
General, administrative, and other		<u>777</u>
Total operating expenses		<u>12,378</u>
Operating loss		(12,275)
Net loss	\$	<u><u>(12,275)</u></u>

THE BERMUDA STOCK EXCHANGE

Financial Statements (Unaudited)

As of and for the year ended December 31, 2023

The Bermuda Stock Exchange
Statement of Financial Condition (Unaudited)
December 31, 2023 (dollars in thousands)

Assets	
Current assets:	
Cash and cash equivalents	\$ 1,372
Accounts receivable	439
Prepaid and other current assets	152
Total current assets	<u>1,963</u>
Fixed assets, net	2,892
Other assets	175
Total assets	<u>\$ 5,030</u>
Liabilities and member's equity	
Current liabilities:	
Accounts payable and other liabilities	\$ 463
Deferred transaction revenue	746
Total current liabilities	<u>1,209</u>
Due to Miami International Holdings, Inc.	1,351
Total liabilities	<u>2,560</u>
Equity:	
Share capital and contributed surplus	6,481
Deficit	(4,011)
Total equity	<u>2,470</u>
Total liabilities and equity	<u>\$ 5,030</u>

The Bermuda Stock Exchange
Statement of Income (Unaudited)
For the Year Ended December 31, 2023 (dollars in thousands)

Revenues:		
Transaction fees	\$	233
Access fees		180
Market data fees		427
Other revenue		2,404
Total revenues		<u>3,244</u>
Operating expenses:		
Compensation and benefits		1,735
Information technology and communication costs		303
Depreciation and amortization		465
Occupancy costs		509
Professional fees and outside services		591
Marketing and business development		257
General, administrative, and other		272
Total operating expense		<u>4,132</u>
Operating loss		(888)
Net loss	\$	<u><u>(888)</u></u>

M 402 HOLDINGS, LLC

Financial Statements (Unaudited)

As of and for the year ended December 31, 2023

M 402 Holdings, LLC
Statement of Financial Condition (Unaudited)
December 31, 2023 (dollars in thousands)

	Assets	
Investment in subsidiaries		\$ 121,320
Total assets		<u>\$ 121,320</u>
	Liabilities and member's equity	
Member's equity:		
Contribution from parent		\$ 121,320
Total member's equity		<u>121,320</u>
Total liabilities and member's equity		<u>\$ 121,320</u>

There is no income statement activity during the year ended December 31, 2023. Hence the Statement of Income is not presented

MINNEAPOLIS GRAIN EXCHANGE, LLC

Financial Statements (Unaudited)

As of and for the year ended December 31, 2023

Minneapolis Grain Exchange, LLC
Statement of Financial Condition (Unaudited)
December 31, 2023 (dollars in thousands)

Assets

Current assets:

Cash and cash equivalents	\$	19,693
Accounts receivable		484
Restricted cash		6,000
Clearing house performance bonds and guarantee funds		67,847
Other current assets		<u>320</u>
Total current assets		<u>94,344</u>

Fixed assets, net		12,545
Investment in third parties		1,580
Other assets		<u>143</u>
Total assets	\$	<u>108,612</u>

Liabilities and member's equity

Current liabilities:

Accounts payable and other liabilities	\$	3,144
Clearing house performance bonds and guarantee funds		<u>67,847</u>
Total current liabilities		70,991

Deferred transaction revenue		1,606
Due to Miami International Holdings, Inc.		<u>599</u>
Total liabilities		73,196

Member's equity:

Total member's equity		<u>35,416</u>
Total liabilities and member's equity	\$	<u>108,612</u>

Minneapolis Grain Exchange, LLC
Statement of Income (Unaudited)
For the Year Ended December 31, 2023 (dollars in thousands)

Revenues:	
Transaction fees	\$ 7,893
Market data fees	2,970
Other revenue	<u>7,925</u>
Total revenues	<u>18,788</u>
Cost of revenues:	
Liquidity payments	647
Brokerage, clearing, and exchange fees	670
Other	<u>1,113</u>
Total cost of revenues	<u>2,430</u>
Revenues less cost of revenues	16,358
Operating expenses:	
Compensation and benefits	6,759
Information technology and communication costs	650
Depreciation and amortization	1,780
Occupancy costs	2,141
Professional fees and outside services	422
Marketing and business development	52
Impairment of fixed assets	5,830
General, administrative, and other	<u>1,224</u>
Total operating expense	<u>18,858</u>
Operating loss	(2,500)
Non-operating income:	
Interest income	<u>243</u>
Net loss	<u>\$ (2,257)</u>

DORMAN TRADING, LLC

Financial Statements (Unaudited)

As of and for the year ended December 31, 2023

Dorman Trading, LLC
Statement of Financial Condition (Unaudited)
December 31, 2023 (dollars in thousands)

Assets

Current assets:

Cash and cash equivalents	\$	3,943
Cash and securities segregated under federal and other regulations		15,191
Accounts receivable		103
Receivables from broker-dealers, futures commission merchants, and clearing organizations		128,897
Other current assets		<u>9,571</u>
Total current assets		157,705

Other assets

		<u>3,326</u>
Total assets	\$	<u>161,031</u>

Liabilities and member's equity

Current liabilities:

Accounts payable and other liabilities	\$	4,414
Accrued compensation payable		1,018
Payables to customers		130,139
Payables to clearing organizations		<u>749</u>
Total current liabilities		136,320

Deferred income taxes

2,188

Due to Miami International Holdings, Inc.

799

Other non-current liabilities

463

Total liabilities

139,770

Member's equity:

Total member's equity 21,261

Total liabilities and member's equity \$ 161,031

Dorman Trading, LLC
Statement of Income (Unaudited)
For the Year Ended December 31, 2023 (dollars in thousands)

Revenues:		
Transaction fees	\$	58,370
Access fees		832
Market data fees		724
Other revenue		<u>6,239</u>
Total revenues		<u>66,165</u>
Cost of revenues:		
Liquidity payments		5,482
Brokerage, clearing, and exchange fees		49,478
Other		<u>2,506</u>
Total cost of revenues		<u>57,466</u>
Revenues less cost of revenues		8,699
Operating expenses:		
Compensation and benefits		5,492
Information technology and communication costs		942
Occupancy costs		444
Professional fees and outside services		715
General, administrative, and other		<u>350</u>
Total operating expense		<u>7,943</u>
Operating income		756
Non-operating income:		
Other income		<u>2,396</u>
Income before income tax provision		3,152
Income tax expense		<u>(903)</u>
Net profit	\$	<u>2,249</u>

M 7 HOLDINGS, LLC

Financial Statements (Unaudited)

As of and for the year ended December 31, 2023

M 7 HOLDINGS, LLC
Statement of Financial Condition (Unaudited)
For the Year Ended December 31, 2023 (dollars in thousands)

	Assets	
Investment in subsidiaries		\$ 35,100
Total assets		<u>\$ 35,100</u>
	Liabilities and member's equity	
Member's equity:		
Contribution from parent		\$ 35,100
Total member's equity		<u>35,100</u>
Total liabilities and member's equity		<u>\$ 35,100</u>

There is no income statement activity during the year ended December 31, 2023. Hence the Statement of Income is not presented

LEDGERX LLC

Financial Statements (Unaudited)

As of and for the post-acquisition period ended December 31, 2023

LedgerX LLC
Statement of Financial Condition (Unaudited)
December 31, 2023 (dollars in thousands)

Assets

Current assets:

Cash and cash equivalents	\$	16,159
Accounts receivable		74
Restricted cash		363
Participant margin deposits		26,384
Safeguarded customer digital assets		71,464
Prepaid and other current assets		<u>1,876</u>
Total current assets		116,320

Other assets

		<u>112</u>
Total assets	\$	<u><u>116,432</u></u>

Liabilities and member's equity

Current liabilities:

Accounts payable and other liabilities	\$	2,124
Accrued compensation payable		1,733
Deferred transaction revenue		325
Participant margin deposits		26,384
Liability for safeguarded customer digital assets		<u>71,464</u>
Total current liabilities		102,030

Due to Miami International Holdings, Inc.

		<u>5,089</u>
Total liabilities		107,119

Member's equity:

Total member's equity		<u>9,313</u>
Total liabilities and member's equity	\$	<u><u>116,432</u></u>

LedgerX LLC
Statement of Income (Unaudited)
For the period May 19, 2023 to December 31, 2023 (dollars in thousands)

Revenues:		
Transaction fees		\$ 497
Total revenues		<u>497</u>
Operating expenses:		
Compensation and benefits		6,058
Information technology and communication costs		1,074
Occupancy costs		57
Professional fees and outside services		2,881
General, administrative, and other		<u>1,220</u>
Total operating expense		<u>11,290</u>
Operating loss		(10,793)
Non-operating income:		
Interest income		270
Other income		<u>239</u>
Net loss		<u>\$ (10,284)</u>

MIH EAST HOLDINGS, LIMITED

Financial Statements (Unaudited)

As of December 31, 2023 and for the period from March 20, 2023 to December 31, 2023

MIH East Holdings, Limited
Statement of Financial Condition (Unaudited)
December 31, 2023 (dollars in thousands)

	Assets	
Current assets:		
Cash		\$ 497
Total current assets		<u>497</u>
Investment in third parties		<u>17,302</u>
Total assets		<u>\$ 17,799</u>
	Liabilities and member's equity	
Due to Miami International Holdings, Inc.		\$ 15,879
Total liabilities		15,879
Member's equity:		
Retained earnings		<u>1,920</u>
Total member's equity		<u>1,920</u>
Total liabilities and member's equity		<u>\$ 17,799</u>

MIH East Holdings, Limited
Statement of Income (Unaudited)
For the Period from March 20, 2023 to December 31, 2023 (dollars in thousands)

Revenues	\$	-
Operating expenses		-
Operating profit		-
Non-operating income:		
Interest income		9
Dividend income		477
Unrealized gain on investment		1,434
Net profit	\$	1,920

COVEXITYSHARES, LLC

Financial Statements (Unaudited)

As of and for the year ended December 31, 2023

CONVEXITYSHARES, LLC
Statement of Financial Condition (Unaudited)
December 31, 2023 (dollars in thousands)

Assets

Current assets:

Cash and cash equivalents	\$	22
Prepaid and other current assets		21
Total current assets		<u>43</u>

Total assets	\$	<u><u>43</u></u>
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Liabilities and member's deficit

Current liabilities:

Accounts payable and other liabilities	\$	144
Total current liabilities		<u>144</u>

Due to Miami International Holdings, Inc.		<u>1,125</u>
Total liabilities		1,269

Member's deficit:

Member's contribution		551
Accumulated losses		<u>(1,777)</u>
Total member's deficit		<u>(1,226)</u>

Total liabilities and member's deficit	\$	<u><u>43</u></u>
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CONVEXITYSHARES, LLC
Statement of Income (Unaudited)
For the Year Ended December 31, 2023

Revenues	\$	9
Total revenues		<u>9</u>
Cost of revenues		<u>-</u>
Total cost of revenues		<u>-</u>
Revenues less cost of revenues		9
Operating expenses:		
Information technology and communication costs		18
Professional fees and outside services		950
General, administrative, and other		<u>43</u>
Total operating expenses		<u>1,011</u>
Operating loss		(1,002)
Non-operating income:		
Other income		<u>3</u>
Net loss	\$	<u><u>(999)</u></u>

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.

Response:

Audited unconsolidated financial statements for MIAX Emerald, LLC as of December 31, 2023 are attached. MIAX Emerald, LLC has no consolidated subsidiaries.

MIAX EMERALD, LLC

Financial Statements

As of and for the year ended December 31, 2023

(with Independent Auditors' Report Thereon)

MIAX EMERALD, LLC

TABLE OF CONTENTS

	Page(s)
Independent Auditors' Report	1-2
Financial Statements:	
Statement of Financial Condition	3
Statement of Income and Changes in Member's Equity	4
Statement of Cash Flows	5
Notes to Financial Statements	6 - 11



KPMG LLP
345 Park Avenue
New York, NY 10154-0102

Independent Auditors' Report

Board of Directors
MIAX Emerald, LLC:

Opinion

We have audited the financial statements of MIAX Emerald, LLC (the Company), which comprise the statement of financial condition as of December 31, 2023, and the related statements of income and changes in member's equity, and cash flows for the year then ended, and the related notes to the financial statements.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023, and the results of its operations and its cash flows for the year then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Company and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.



- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

KPMG LLP

New York, New York
June 3, 2024

MIAX EMERALD, LLC
Statement of Financial Condition
December 31, 2023 (dollars in thousands)

Assets	
Current assets:	
Cash and cash equivalents	\$ 2,292
Accounts receivable	11,343
Other current assets	42
Total current assets	<u>13,677</u>
Notes receivable, net	9,950
Due from Miami International Holdings, Inc.	28,154
Other assets	1,000
Total assets	<u>\$ 52,781</u>
Liabilities And Member's Equity	
Current liabilities:	
Accounts payable and other liabilities	<u>\$ 7,895</u>
Total current liabilities	7,895
Deferred transaction revenue	93
Total liabilities	<u>7,988</u>
Commitments and contingencies (Note 6)	
Member's equity:	
Retained earnings	<u>44,793</u>
Total member's equity	<u>44,793</u>
Total liabilities and member's equity	<u>\$ 52,781</u>

See accompanying notes to financial statements.

MIAX EMERALD, LLC
Statement of Income and Changes in Member's Equity
Year Ended December 31, 2023 (dollars in thousands)

Revenues:	
Transaction fees	\$ 178,302
Access fees	27,819
Market data fees	4,161
Other revenue	8
Total revenues	<u>210,290</u>
Cost of revenues:	
Liquidity payments	151,009
Brokerage and exchange fees	1,240
Section 31 fees	2,786
Total cost of revenues	<u>155,035</u>
Revenues less cost of revenues	<u>55,255</u>
Operating expenses:	
Compensation and benefits	11,233
Information technology and communication costs	6,326
Occupancy costs	635
Professional fees and outside services	4,700
General, administrative, and other	1,655
Total operating expenses	<u>24,549</u>
Operating income	<u>30,706</u>
Non-operating income:	
Interest income	277
Net profit	<u>\$ 30,983</u>
Member's equity at beginning of year	\$ 13,810
Net profit	<u>30,983</u>
Member's equity at end of year	<u><u>\$ 44,793</u></u>

See accompanying notes to financial statements.

MIAX EMERALD, LLC
Statement of Cash Flows
Year Ended December 31, 2023 (dollars in thousands)

Cash flow from operating activities:	
Net profit	\$ 30,983
Adjustments to reconcile net profit to net cash provided by operating activities:	
Provision for notes receivable credit losses	924
Changes in operating assets and liabilities:	
Accounts receivable	144
Notes receivable	(2,773)
Other assets	82
Accounts payable and other liabilities	116
Deferred transaction revenue	42
Net cash provided by operating activities	<u>29,518</u>
Cash flow from financing activities:	
Due to/from Miami International Holdings, Inc.	<u>(37,796)</u>
Net cash used in financing activities	<u>(37,796)</u>
Decrease in cash and cash equivalents	(8,278)
Cash and cash equivalents at beginning of year	<u>10,570</u>
Cash and cash equivalents at end of year	<u>\$ 2,292</u>

See accompanying notes to financial statements.

MIAX EMERALD, LLC
Notes to Financial Statements
As of and for the Year Ended December 31, 2023

1. NATURE OF OPERATIONS

MIAX Emerald, LLC (“Emerald” or the “Company”), a wholly owned subsidiary of Miami International Holdings, Inc. (the “Parent” or “MIH”), provides a marketplace for the trading of equity options products for its exchange members.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying financial statements have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”). 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 and other affiliated subsidiaries of the Parent to the Company as disclosed. See Note 5 (“Related Party Transactions”) for more information on related party transactions.

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 at the date of the financial statements, and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company's operations are funded by its Parent through a centralized treasury function. Cash and cash equivalents include cash and amounts due from banks and interest-bearing bank balances. The Company places its cash and cash equivalents with financial institutions and at times, cash held in bank accounts may exceed the Federal Deposit Insurance Corporation insurance limit. The Company monitors its risk of loss associated with such balances and deems the risk of loss to be remote. The carrying values of the Company's cash and cash equivalents approximates fair value. The Company did not have any restricted cash as of December 31, 2023.

Accounts Receivable

Accounts receivable are concentrated with the Company's member firms and market data distributors and are primarily collected through the Options Clearing Corporation (“OCC”). Transaction fees are netted against the liquidity payments for each member firm and the balance owed from a member firm is recognized as accounts receivable, net if the amount is to be received and as accounts payable and other liabilities if the amount is owed to the member firm. Management evaluates the Company's accounts receivables periodically and determines an appropriate allowance for uncollectible accounts receivable using an aging schedule. The aging schedule applies loss rates based on historical loss information and as deemed necessary, is adjusted for the difference in the nature of the receivables that exist at the reporting date from the historical period. In circumstances where a specific member firm's inability to meet its financial obligations is probable, the Company records a provision for uncollectible accounts against the member firm's receivable. Due to the short-term nature of the accounts receivable, changes in future economic conditions are not expected to have a significant impact on the expected credit losses.

MIAX EMERALD, LLC
Notes to Financial Statements
As of and for the Year Ended December 31, 2023

Due from/to Miami International Holdings, Inc.

The Parent or the Parent's other wholly owned subsidiaries may incur certain expenditure on behalf of the Company or receive cash from the Company generated from its operations. Expenses incurred and cash provided by the Company are settled on its behalf by the Parent or the Parent's other wholly owned subsidiaries and allocated through intercompany charges and are net settled with the Parent resulting in either due to or due from Miami International Holdings, Inc. on the statement of financial condition. See Note 5 ("Related Party Transactions") for more information on related party transactions.

Management has determined that substantially all costs, other than direct financing and other financing related costs, for the build out of a marketplace for the trading of options and cash equities, are primarily attributable to the Company and its affiliates including Miami International Securities Exchange, LLC ("MIAX") and MIAX PEARL, LLC ("PEARL"). The Company's allocated portion of cost are included in the accompanying statement of income and changes in member's equity. The Company considers changes in Due from/to Miami International Holdings, Inc. to be financing activity for purposes of the statement of cash flows.

Revenue Recognition

The Company generates revenues by assessing fees to its member firms for the services it renders, which include providing access to the exchange, enabling transaction-based trading on the exchange, and providing access to various market data. Revenue for the Company's services are recognized as control of the services are transferred to the customer. The amount recognized is the amount that reflects the consideration the Company expects to be entitled to in exchange for its services.

The Company determines the transaction price at the outset of the arrangement based on the contractual and payment terms associated with the transaction. The typical term for the Company's contracts with customers ranges from the time it takes to complete a single transaction to one month, depending on the service being provided. Customers are usually billed each month in arrears with standard payment terms, though the Company does occasionally bill customers in advance. Fees associated with each contract are fixed within the month in which the service is provided.

The Company assesses the services promised in the contracts with customers and identifies a performance obligation for each promise to transfer to the customer a service that is distinct—i.e., if such service is separately identifiable and if a customer can benefit from it on its own or with other resources that are readily available to the customer.

Transaction fees: Transaction fees represent fees the Company charges to its exchange member firms, as customers, for the performance obligation of executing a trade on the Company's exchange. These fees can be variable based on trade volume tiered discounts; however, as all tiered discounts are calculated monthly, the actual discount is recorded on a monthly basis in accordance with the Company's published fee schedules. Transaction fees are recorded as transactions occur on a trade-date basis.

Tiered discounts are offered to customers based on the amount of trades that are executed on the Company's exchange. As these are volume driven, they reduce the transaction price and are recorded net in transaction fees on the statement of income and changes in member's equity. Liquidity payments paid for certain customer transactions are accounted for as consideration payable to a customer and are recorded separately as liquidity payments, which are classified within cost of revenue in the statement of income and changes in member's equity.

Transaction fees also result in regulatory fees. Regulatory fees include the options regulatory fee ("ORF") and Section 31 fees. ORF is in place to fund the Company's regulatory oversight function of the exchange marketplace and is determined based on the number of customer contracts and cannot be used for non-regulatory purposes. Section 31 fees are transaction fees charged by the SEC to the exchanges. The Section 31 fees charged to customers are based on the fee set by the SEC per notional value of transactions executed on the Company's securities markets and are calculated and billed monthly. The Section 31 fee collected by the Company is ultimately payable to the

MIAX EMERALD, LLC

Notes to Financial Statements

As of and for the Year Ended December 31, 2023

SEC, and is therefore classified within cost of revenue in the accompanying statement of income and changes in member's equity.

Access fees: Access fees include allowing the customer to connect its network to the Company's exchange for a specified period of time. Fees for these services are assessed to exchange members for the opportunity to trade and use other related functions of the exchange. Access fees are billed monthly in accordance with the published fee schedule and recognized during the period the service is provided which is generally one month.

Market data fees: Market data fees include making market data available to customers either through direct subscriptions or through the Company's participation in the Options Price Reporting Authority's ("OPRA") tape plan. Market data revenue includes distributions from OPRA, which is distributed based upon each individual exchange's market share of U.S. volume, trades, and/or quotes. Market data revenue also includes market data revenue earned from the sale of proprietary market data directly to the customer on a subscription basis. Market data revenue is recognized in the period the data is provided.

Consideration payable to a customer: As discussed in the Transaction-based services section above, liquidity payments are accounted for as consideration payable to a customer and reduce revenue in the period in which the rebate is earned by the customer and the rebate is provided.

Concentration of revenue: For the year ended December 31, 2023, three customers generated 63% of the Company's total revenue. No customer is contractually or otherwise obligated to continue to use the Company's services. The loss of, or a significant reduction of, participation by these customers may have a material adverse effect on the Company's business, financial position, results of operations and cash flows.

Income Taxes

The Company is a disregarded LLC for U.S. income tax. In December 2019, the FASB issued ASU 2019-12, Simplifying the Accounting for Income Taxes, which (a) clarified that an entity is not required to allocate consolidated income taxes to a legal entity that is not subject to tax for purposes of that legal entity's separate financial statements. Accordingly, no provision for income taxes is provided in the accompanying financial statements.

Recent Accounting Pronouncements

Recent Accounting Pronouncements - Recently adopted

In June 2016, the FASB issued ASU No. 2016-13 (amended by ASU 2019-10), Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, regarding the measurement of credit losses for certain financial instruments which replaces the incurred loss model with a current expected credit loss ("CECL") model. The CECL model is based on historical experience, adjusted for current conditions and reasonable and supportable forecasts. The Company adopted the new guidance as of January 1, 2023 using a modified-retrospective approach with no impact to the opening balance of retained earnings. Accounts receivables are balances with the Company's member firms and market data distributors and are primarily collected through the OCC. The Company's accounts receivable do not have significant credit risk as transaction fees are netted against liquidity payments for each member firm, mitigating the risk of collection. The financial instruments other than accounts receivable, net that are within the scope of the standard were not materially impacted by the standard.

MIAX EMERALD, LLC
Notes to Financial Statements
As of and for the Year Ended December 31, 2023

3. NOTES RECEIVABLE, NET

The notes receivable relate to the consolidated audit trail (“CAT”), which involves the creation of an audit trail to enhance regulators' ability to monitor trading activities in the U.S. markets through a phased implementation. The funding for the development of the CAT is ultimately expected to be provided by the Self-Regulated Organizations (“SROs”), which include the Company, and by broker-dealers. However, the funding to date has been solely provided by the SROs in exchange for promissory notes.

On September 6, 2023, the SEC issued an order approving a revised CAT funding model calculated based on the share of transactions executed. The funding model consists of two categories: (i) CAT fees assessed to executing brokers to recover a portion of historical CAT costs previously paid by the SROs; and (ii) CAT fees assessed to executing brokers and SROs to fund prospective CAT costs. During the first week of January 2024, the SROs submitted fee filings with the SEC to implement the applicable transaction-based fee rates that are to be assessed to executing brokers to recover a portion of historical CAT costs incurred prior to 2022 and use the collected funds to repay a portion of the promissory notes to the SROs. Additional historical and prospective CAT fees are planned to be introduced at a later time through separate fee filings submitted by the SROs. Once the CAT fee related to ongoing prospective CAT costs becomes effective, SROs are no longer expected to issue promissory notes to fund CAT. On January 17, 2024, the SEC issued orders suspending each SRO’s fee filing and instituting proceedings to determine whether to approve or disapprove the fees, as published in the Federal Register on February 13, 2024.

On October 17, 2023, certain parties filed a legal challenge in court against the SEC’s order above. This challenge or any other litigation related to the CAT funding model may significantly delay its implementation. As a result, SROs may continue to incur additional CAT costs and/or it may result in SROs not being able to collect on the promissory notes related to the CAT funding. Until the historical CAT fees associated with the promissory notes are collected from executing brokers, and until CAT fees assessed to executing brokers and SROs to fund prospective CAT costs are implemented, the SROs, including the Company may continue to incur additional significant costs.

The allowance for notes receivable associated with CAT is estimated based on anticipated collections. The following represents the changes in notes receivable and allowance for notes receivable for the year ended December 31, 2023 (in thousands):

Notes receivable, gross		
Balance at January 1, 2023	\$	12,158
Additions		2,773
Balance at December 31, 2023		<u>14,931</u>
Allowance for notes receivable		
Balance at January 1, 2023		4,057
Additions		924
(Write-off) / recoveries		
Balance at December 31, 2023		<u>4,981</u>
Notes receivable, net	\$	<u><u>9,950</u></u>

MIAX EMERALD, LLC
Notes to Financial Statements
As of and for the Year Ended December 31, 2023

4. ACCOUNTS PAYABLE AND OTHER LIABILITIES

The following table presents the components of accounts payable and other liabilities as at December 31, 2023 (in thousands):

Liquidity payments payable	\$	6,050
Section 31 fees payable		895
Accounts payable and other		950
Accounts payable and other liabilities	\$	<u>7,895</u>

5. RELATED PARTY TRANSACTIONS

The Company utilizes assets and incurs certain liabilities that are held at the Parent level. Substantially all expenses of the Company are settled by the Parent and are charged to the Company, at cost, through intercompany charges. 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 of the Parent for the year ended December 31, 2023 (in thousands):

Compensation and benefits	\$	11,233
Information technology and communication costs		6,326
Occupancy costs		635
Professional fees and outside services		3,354
General, administrative, and other		952
Total operating expenses	\$	<u>22,500</u>

6. COMMITMENTS AND CONTINGENCIES

Nasdaq

On September 1, 2017, Nasdaq, Inc., filed an action against Miami International Holdings, Inc., Miami International Securities Exchange, LLC, MIAX PEARL, LLC and Miami International Technologies, LLC in the U.S. District Court for the District of New Jersey alleging patent infringement and trade secret misappropriation relating to Nasdaq's electronic trading technology and platforms. MIH subsequently filed six petitions before the Patent Trial and Appeal Board ("PTAB") at the United States Patent and Trademark Office ("USPTO") seeking a determination that the subject patent is invalid under the current law. The District Court proceeding was stayed in December 2018, pending resolution of the PTAB proceedings. All claims asserted by Nasdaq against MIH under the six patents at issue were invalidated by the PTAB in 2019 (the "PTAB Final Written Decisions"). On June 7, 2022, the USPTO Director denied a request by Nasdaq to review the PTAB Final Written Decisions.

On August 31, 2021, MIH filed an Answer and Counterclaims in the NJ District Court. MIH's Answer included denials of the allegations made by Nasdaq in the Complaint and Counterclaims including monopolization antitrust claims, patent misuse, sham litigation, and fraud on the USPTO by Nasdaq. MIH is seeking attorneys' fees and costs and such other relief as the Court may find to be just and proper. On June 21, 2022, Nasdaq waived its right to appeal the PTAB's Final Written Decisions and the stay in the District Court matter was lifted as all of the PTAB proceedings were concluded with each of the Nasdaq patent claims at issue invalidated. MIH filed an Amended Answer and Counterclaims on August 5, 2022. The Amended Counterclaims added claims of fraud on the patent office and Lanham Act violations. MIH filed a motion to dismiss Nasdaq's trade secret misappropriation claims on September 2, 2022. Nasdaq filed a motion to dismiss MIH's Counterclaims on September 19, 2022. On July 25, 2023, the Court denied MIH's motion to dismiss Nasdaq's trade secret claims and also denied Nasdaq's motion to

MIAX EMERALD, LLC
Notes to Financial Statements
As of and for the Year Ended December 31, 2023

dismiss MIH's counterclaims. The Court granted Nasdaq's motion to stay and bifurcate MIH's counterclaims. Accordingly, the trade secret case is currently proceeding and MIH's counterclaims are stayed until the conclusion of the trade secret case at which time the parties may proceed to litigate MIH's counterclaims against Nasdaq. The parties are engaged in discovery in connection with the trade secret case. MIH intends to continue defending its interest in this matter vigorously.

General

As a self-regulatory organization under the jurisdiction of the SEC, the Company is subject to routine reviews and inspections by the SEC. Management does not believe that the outcome of any of these reviews or inspections will have a material impact on the statement of financial conditions, the statement of income and changes in member's equity or cash flows of the Company.

In the normal course of its business, the Company is exposed to asserted and unasserted claims. In the opinion of management, these matters will not have a material adverse effect on the Company's financial position, results of operations or cash flows.

7. SUBSEQUENT EVENTS

The Company has evaluated the possibility of subsequent events existing in the Company's financial statements through June 3, 2024, the date the financial statements were available to be issued. The Company has determined that there are no material events that would require disclosure in the Company's financial statements.

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:

Miami International Holdings, Inc. owns 100% of MIAX Emerald, LLC. Miami International Holdings, Inc. exercises "control" over the Exchange, as that term is defined in the Form 1 instructions. MIAX Emerald, LLC became a wholly-owned subsidiary of Miami International Holdings, Inc. on January 30, 2018.

EXHIBIT M

Exhibit Request:

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

1. **Name;**
2. **Date of election to membership or acceptance as a member, subscriber or other user;**
3. **Principal business address and telephone number;**
4. **If member, 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, 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 participants, subscribers, or other users in each; and**
6. **The class of membership, participation or subscription or other access.**

Response:

Attached is a list of the members of the Exchange as of June 3, 2024, including the information set forth in items 1-6 above.

ABN AMRO CLEARING USA LLC

175 West Jackson Blvd., Ste. 2050
 Chicago IL 60604
 Tele #: (312) 604-8000

Approval Date: 3/1/2019
Membership Activities:
 Clearance
 International Tele #

SEC #: 8-34354
 CRD #: 14020

APEX CLEARING CORPORATION

One Dallas Center
 350 N. St. Paul, Suite 1300
 Dallas TX 75201
 Tele #: (214) 765-1100

Approval Date: 3/1/2019
Membership Activities:
 Clearance
 International Tele #

SEC #: 8-23522
 CRD #: 13071

BARCLAYS CAPITAL INC.

745 Seventh Avenue
 New York NY 10019
 Tele #: (212) 526-7000

Approval Date: 3/1/2019
Membership Activities:
 Order Entry & Clearance
 International Tele #

SEC #: 8-41342
 CRD #: 19714

BELVEDERE TRADING LLC

10 S. Riverside Plaza, Suite 2100
 Chicago IL 60606
 Tele #: (312) 893-3750

Approval Date: 9/15/2022
Membership Activities:
 Primary Lead, Lead & Registered Market Maker
 International Tele #

SEC #: 8-66612
 CRD #: 132605

BOFA SECURITIES, INC.

One Bryant Park
 New York NY 10036
 Tele #: (646) 743-2734

Approval Date: 3/1/2019
Membership Activities:
 Order Entry & Clearance
 International Tele #

SEC #: 8-69787
 CRD #: 283942

CITADEL SECURITIES LLC

200 South Biscayne Blvd., 33rd Floor
 Miami FL 33131
 Tele #: (312) 395-2100

Approval Date: 3/1/2019
Membership Activities:
 Primary Lead/Lead/Reg. Mkt Maker/Order Entry/Clearance
 International Tele #

SEC #: 8-53574
 CRD #: 116797

CITIGROUP GLOBAL MARKETS INC.

Tower Building
 388 Greenwich Street
 New York NY 10013
 Tele #: (212) 816-6000

Approval Date: 5/1/2019
Membership Activities:
 Order Entry & Clearance
 International Tele #

SEC #: 8-8177
 CRD #: 7059

CLEAR STREET LLC

55 Broadway
 New York NY 10006
 Tele #: (646) 738-4066

Approval Date: 4/1/2024
Membership Activities:
 Clearance
 International Tele #

SEC #: 8-69972
 CRD #: 288933

CREDIT SUISSE SECURITIES (USA) LLC

11 Madison Avenue - 24th Floor
 New York NY 10010
 Tele #: (212) 325-2000

Approval Date: 3/1/2019
Membership Activities:
 Order Entry & Clearance
 International Tele #

SEC #: 8-00422
 CRD #: 816

DASH FINANCIAL TECHNOLOGIES LLC

200 S. Wacker Drive, Ste. 2450

Chicago IL 60606

Tele #: (312) 986-2006

Approval Date: 3/1/2019

SEC #: 8-52503

Membership Activities:

CRD #: 104031

Order Entry & Clearance

International Tele #

GLOBAL EXECUTION BROKERS, LP

401 City Avenue, Ste. 200

Bala Cynwyd PA 19004

Tele #: (610) 617-2600

Approval Date: 3/1/2019

SEC #: 8-65878

Membership Activities:

CRD #: 126407

Order Entry

International Tele #

GOLDMAN SACHS & CO. LLC

200 West Street

New York NY 10282

Tele #: (212) 902-1000

Approval Date: 3/1/2019

SEC #: 8-129

Membership Activities:

CRD #: 361

Order Entry & Clearance

International Tele #

GROUP ONE TRADING LP

425 S. Financial Place - Ste. 3400

Chicago IL 60605

Tele #: (312) 347-8864

Approval Date: 3/1/2019

SEC #: 8-47762

Membership Activities:

CRD #: 37484

Order Entry

International Tele #

GTS SECURITIES LLC

545 Madison Avenue, 15th Fl.

New York NY 10022

Tele #: (212) 715-2830

Approval Date: 3/22/2022

SEC #: 8-68126

Membership Activities:

CRD #: 149224

Order Entry

International Tele #

HRT FINANCIAL LP

175 Greenwich Street - 76th Floor

3 World Trade Center

New York NY 10007

Tele #: (212) 293-1444

Approval Date: 3/1/2019

SEC #: 8-68430

Membership Activities:

CRD #: 152144

Registered Market Maker

International Tele #

IMC-CHICAGO, LLC D/B/A IMC FINANCIAL MARKETS

233 South Wacker Drive, Ste. 4300

Chicago IL 60606

Tele #: (312) 244-3300

Approval Date: 3/1/2019

SEC #: 8-52600

Membership Activities:

CRD #: 104143

Primary Lead, Lead & Registered Market Maker

International Tele #

INSTINET, LLC

Worldwide Plaza

309 West 49th Street

New York NY 10019

Tele #: (212) 310-9500

Approval Date: 3/1/2019

SEC #: 8-23669

Membership Activities:

CRD #: 7897

Order Entry & Clearance

International Tele #

INTERACTIVE BROKERS LLC

One Pickwick Plaza - 2nd Floor

Greenwich CT 06830

Tele #: (203) 618-5710

Approval Date: 3/1/2019

SEC #: 8-47257

Membership Activities:

CRD #: 36418

Order Entry & Clearance

International Tele #

J.P. MORGAN SECURITIES LLC

383 Madison Avenue
 New York NY 10179
 Tele #: (212) 272-2000

Approval Date: 3/1/2019
Membership Activities:
 Order Entry & Clearance
 International Tele #

SEC #: 8-35008
 CRD #: 79

JANE STREET CAPITAL, LLC

250 Vesey Street - 5th Floor
 New York NY 10281
 Tele #: (646) 759-6000

Approval Date: 3/8/2019
Membership Activities:
 Order Entry
 International Tele #

SEC #: 8-52275
 CRD #: 103782

JANE STREET OPTIONS, LLC

250 Vesey Street - 5th Floor
 New York NY 10281
 Tele #: (646) 759-6000

Approval Date: 3/8/2019
Membership Activities:
 Registered Market Maker & Order Entry
 International Tele #

SEC #: 8-66813
 CRD #: 134159

JEFFERIES LLC

520 Madison Avenue - 11th Floor
 New York NY 10022
 Tele #: (212) 284-2300

Approval Date: 3/1/2019
Membership Activities:
 Order Entry & Clearance
 International Tele #

SEC #: 8-15074
 CRD #: 2347

JUMP TRADING, LLC

600 West Chicago Avenue, Ste. 600
 Chicago IL 60654
 Tele #: (312) 205-8900

Approval Date: 12/9/2019
Membership Activities:
 Registered Market Maker
 International Tele #

SEC #: 8-52989
 CRD #: 106124

MATRIX EXECUTIONS, LLC

135 S. LaSalle Street, Ste. 3900
 Chicago IL 60603
 Tele #: (312) 334-8000

Approval Date: 3/1/2019
Membership Activities:
 Order Entry
 International Tele #

SEC #: 8-48255
 CRD #: 38455

MORGAN STANLEY & CO. LLC

1585 Broadway
 New York NY 10036
 Tele #: (212) 761-4000

Approval Date: 3/1/2019
Membership Activities:
 All Market Maker & Electronic Exchange Options Memberships
 International Tele #

SEC #: 8-15869
 CRD #: 8209

OLD MISSION CAPITAL, LLC

1 N. Dearborn Street - 8th Floor
 Chicago IL 60602
 Tele #: (312) 260-3052

Approval Date: 6/3/2024
Membership Activities:
 Market Maker
 International Tele #

SEC #: 8-67867
 CRD #: 146991

OPTIVER US LLC

130 E. Randolph Street, Ste. 800
 Chicago IL 60601
 Tele #: (312) 821-9500

Approval Date: 3/1/2019
Membership Activities:
 Primary Lead, Lead & Registered Market Maker
 International Tele #

SEC #: 8-66083
 CRD #: 128030

PERSHING LLC

One Pershing Plaza - 10th Fl.

Jersey City NJ 07399

Tele #: (201) 413-2000

Approval Date: 3/1/2019

SEC #: 8-17574

Membership Activities:

CRD #: 7560

Order Entry & Clearance

International Tele #

RQD* CLEARING, LLC

425 South Financial Place - Suite 910B

Chicago IL 60605

Tele #: (312) 692-5000

Approval Date: 3/1/2019

SEC #: 8-66826

Membership Activities:

CRD #: 134284

Order Entry & Clearance

International Tele #

SIMPLEX TRADING, LLC

230 So. LaSalle St., Ste. 4-100

Chicago IL 60604

Tele #: (312) 360-2440

Approval Date: 3/1/2019

SEC #: 8-68556

Membership Activities:

CRD #: 153585

Order Entry

International Tele #

SUSQUEHANNA INVESTMENT GROUP

401 City Avenue, Ste. 220

Bala Cynwyd PA 19004

Tele #: (610) 617-2600

Approval Date: 3/1/2019

SEC #: 8-37520

Membership Activities:

CRD #: 33875

Lead & Registered Market Maker

International Tele #

SUSQUEHANNA SECURITIES, LLC

401 City Avenue, Ste. 220

Bala Cynwyd PA 19004

Tele #: (610) 617-2600

Approval Date: 3/1/2019

SEC #: 8-47034

Membership Activities:

CRD #: 35874

Primary Lead, Lead & Registered Market Maker

International Tele #

TWO SIGMA SECURITIES, LLC

100 Avenue of the Americas - 2nd Fl.

New York NY 10013

Tele #: (212) 625-5700

Approval Date: 3/1/2019

SEC #: 8-68090

Membership Activities:

CRD #: 148960

Primary Lead, Lead & Registered Market Maker

International Tele #

UBS SECURITIES LLC

1285 Avenue of the Americas

New York NY 10019

Tele #: (203) 719-3000

Approval Date: 3/1/2019

SEC #: 8-22651

Membership Activities:

CRD #: 7654

Order Entry & Clearance

International Tele #

WELLS FARGO SECURITIES, LLC

550 South Tryon Street - 6th Floor

D1086-060

Charlotte NC 28202

Tele #: (704) 410-1913

Approval Date: 3/6/2019

SEC #: 8-65876

Membership Activities:

CRD #: 126292

Order Entry & Clearance

International Tele #

WOLVERINE EXECUTION SERVICES, LLC

175 W. Jackson Blvd., Ste. 200

Chicago IL 60604

Tele #: (312) 884-4000

Approval Date: 3/1/2019

SEC #: 8-65336

Membership Activities:

CRD #: 120719

Order Entry & Clearance

International Tele #

WOLVERINE TRADING, LLC

175 W. Jackson Blvd., Ste. 200

Chicago IL 60604

Tele #: (312) 884-4000

Approval Date: 3/1/2019

Membership Activities:

Primary Lead, Lead & Registered Market Maker

International Tele #

SEC #: 8-47484

CRD #: 36848

Total BD Firms 37

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:

1. Attached is a list of the securities listed on the exchange as of May 31, 2024, indicating for each the name of the issuer and a description of the security.
2. None.
3. None.
4. None.

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
AGILENT TECHNOLOGIES INC.	A	Equity
ALCOA Corporation	AA	Equity
AADI BIOSCIENCE, INC.	AADI	Equity
AMERICAN AIRLINES GROUP INC.	AAL	Equity
Aarons Holdings Company, Inc.	AAN	Equity
APPLIED OPTOELECTRONICS, INC.	AAOI	Equity
AAON INC	AAON	Equity
ADVANCE AUTO PARTS INC.	AAP	Equity
APPLE INC.	AAPL	Equity
Direxion Daily AAPL Bull 2X Shares	AAPU	ETF
American Assets Trust, Inc.	AAT	Equity
iShares MSCI All Country Asia ex Japan ETF	AAXJ	ETF
AllianceBernstein Holding L.P.	AB	Equity
AMERICAN BATTERY TECHNOLOGY CO.	ABAT	Equity
ABBVIE INC.	ABBV	Equity
Ameris Bancorp	ABCB	Equity
ABCELLERA BIOLOGICS, INC.	ABCL	Equity
ABEONA THERAPEUTICS INC.	ABEO	Equity
AMBEV S.A.	ABEV	Equity
ASBURY AUTOMOTIVE GROUP INCCOM	ABG	Equity
ARCA BIOPHARMA, INC.	ABIO	Equity
ABM INDUSTRIES INCORPORATED	ABM	Equity
Airbnb, Inc.	ABNB	Equity
ACUMEN PHARMACEUTICALS, INC.	ABOS	Equity
Arbor Realty Trust, Inc.	ABR	Equity
ABSCI CORPORATION	ABSI	Equity
ABBOTT LABORATORIES	ABT	Equity
Abits Group Inc	ABTS	Equity
Arbutus Biopharma Corporation	ABUS	Equity
ARCOSA INC	ACA	Equity
ACADIA PHARMACEUTICALS INC.	ACAD	Equity
Aurora Cannabis Inc.	ACB	Equity
ACCOLADE INC	ACCD	Equity
ACCO Brands Corp	ACCO	Equity
ProFrac Holding Corporation	ACDC	Equity
ACCEL ENTERTAINMENT, INC.	ACEL	Equity
ADICET BIO INC	ACET	Equity
ARCH CAPITAL GROUP Ltd	ACGL	Equity
Acadia Healthcare Co Inc	ACHC	Equity
Archer Aviation Inc.	ACHR	Equity
ACHIEVE LIFE SCIENCES, INC.	ACHV	Equity
ALBERTSONS COMPANIES, INC.	ACI	Equity
American Coastal Insurance Corporation	ACIC	Equity
AC IMMUNE SA	ACIU	Equity
ACI Worldwide, Inc.	ACIW	Equity
Axcelis Technologies Inc.	ACLS	Equity
ARCELLX, INC.	ACLX	Equity
Aecom Technology Corporation	ACM	Equity
ACM Research, Inc.	ACMR	Equity
ACCENTURE PLC	ACN	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
ACRES Commercial Realty Corp.	ACR	Equity
Ares Commercial Real Estate Corporation	ACRE	Equity
Aclaris Therapeutics, Inc.	ACRS	Equity
ACACIA RESEARCH CORPORATION	ACTG	Equity
ACV AUCTIONS INC	ACVA	Equity
iShares MSCI ACWI Index Fund	ACWI	ETF
iShares MSCI ACWI ex US ETF	ACWX	ETF
ACURX PHARMACEUTICALS LLC	ACXP	Equity
Adaptimmune Therapeutics PLC	ADAP	Equity
ADOBE SYSTEMS INC.	ADBE	Equity
Agree Realty Corporation	ADC	Equity
ADC THERAPEUTICS SA	ADCT	Equity
Adeia Inc.	ADEA	Equity
ANALOG DEVICES INC	ADI	Equity
ARCHER DANIELS MIDLAND COMPANY	ADM	Equity
ADMA Biologics Inc	ADMA	Equity
Adient plc	ADNT	Equity
AUTOMATIC DATA PROCESSING INC	ADP	Equity
Adaptive Biotechnologies Corp	ADPT	Equity
AUTODESK, INC.	ADSK	Equity
ADT Inc.	ADT	Equity
ADTRAN, INC.	ADTN	Equity
Addus HomeCare Corporation	ADUS	Equity
Advantage Solutions Inc.	ADV	Equity
Adverum Biotechnologies, Inc.	ADVVM	Equity
AMEREN CORPORATION	AEE	Equity
AEGON N.V.	AEG	Equity
AEHR TEST SYSTEMS	AEHR	Equity
Advanced Energy Industries, Inc.	AEIS	Equity
AGNICO-EAGLE MINES LTD.	AEM	Equity
AMERICAN EAGLE OUTFITTERS, INC.	AEO	Equity
AMERICAN ELECTRIC POWER COMPANY, INC.	AEP	Equity
AerCap Holdings NV	AER	Equity
AES CORP.	AES	Equity
ATLAS ENERGY SOLUTIONS INC	AESI	Equity
Aeva Technologies, Inc.	AEVA	Equity
AFC GAMMA INC	AFCG	Equity
AMERICAN FINANCIAL GROUP	AFG	Equity
AFLAC INC.	AFL	Equity
Affimed N.V.	AFMD	Equity
AFFIRM HOLDINGS, INC.	AFRM	Equity
CSOP FTSE China A50 ETF	AFTY	ETF
First Majestic Silver Corp	AG	Equity
AGCO CORPORATION	AGCO	Equity
Agentus Inc.	AGEN	Equity
iShares Core U.S. Aggregate Bond ETF	AGG	ETF
ALAMOS GOLD INC	AGI	Equity
Agios Pharmaceuticals Inc	AGIO	Equity
AGILON HEALTH INC	AGL	Equity
Federal Agricultural Mortgage Corp. (CI C)	AGM	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
AGNC Investment Corp.	AGNC	Equity
ASSURED GUARANTY LTD.	AGO	Equity
PROSHARES ULTRA SILVER	AGQ	ETF
Avangrid Inc	AGR	Equity
AdecoAgro S.A.	AGRO	Equity
PLAYAGS INC	AGS	Equity
Argan Inc	AGX	Equity
AGILYSYS INC	AGYS	Equity
ADAPTHEALTH CORP.	AHCO	Equity
Armada Hoffer Properties, Inc.	AHH	Equity
Ashford Hospitality Trust, Inc.	AHT	Equity
C3.ai, Inc.	AI	Equity
AMERICAN INTERNATIONAL GROUP, INC.	AIG	Equity
ARTERIS, INC.	AIP	Equity
GLOBAL X ARTIFICIAL INTELLIGENCE & TECHNOLOGY ETF	AIQ	ETF
AAR Corp.	AIR	Equity
APARTMENT INCOME REIT CORP	AIRC	Equity
Airgain Inc	AIRG	Equity
AIRSCULPT TECHNOLOGIES, INC.	AIRS	Equity
Apartment Investment and Management Company	AIV	Equity
Assurant Inc.	AIZ	Equity
ARTHUR J. GALLAGHER & CO.	AJG	Equity
AKAMAI TECHNOLOGIES, INC.	AKAM	Equity
Akebia Therapeutics, Inc.	AKBA	Equity
Akili, Inc.	AKLI	Equity
AKERO THERAPEUTICS, INC.	AKRO	Equity
AKOUSTIS TECHNOLOGIES, INC	AKTS	Equity
Air Lease Corp	AL	Equity
Astera Labs, Inc.	ALAB	Equity
Albemarle Corporation	ALB	Equity
ALCON INC	ALC	Equity
ALDEYRA THERAPEUTICS, INC.	ALDX	Equity
ALECTOR INC.	ALEC	Equity
Alamo Group, Inc.	ALG	Equity
ALLEGRO MICROSYSTEMS, INC.	ALGM	Equity
ALIGN TECHNOLOGY INC.	ALGN	Equity
Allegiant Travel Company	ALGT	Equity
ALIGNMENT HEALTHCARE INC	ALHC	Equity
Alight, Inc.	ALIT	Equity
ALASKA AIR GROUP INC	ALK	Equity
ALKERMES PLC	ALKS	Equity
ALKAMI TECHNOLOGY INC	ALKT	Equity
THE ALLSTATE CORPORATION	ALL	Equity
ALLEGION PLC	ALLE	Equity
ALLEGRO NV	ALLG	Equity
Allakos Inc	ALLK	Equity
Allogene Therapeutics, Inc.	ALLO	Equity
Allot Communications Ltd	ALLT	Equity
ALLY FINANCIAL INC.	ALLY	Equity
ALNYLAM PHARMACEUTICALS INC	ALNY	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
ALPINE 4 HOLDINGS, INC.	ALPP	Equity
Alarm.Com Holdings, Inc.	ALRM	Equity
Allison Transmission Holdings, Inc.	ALSN	Equity
Altimune, Inc.	ALT	Equity
ALTA EQUIPMENT GROUP INC	ALTG	Equity
Alto Ingredients, Inc.	ALTO	Equity
Altair Engineering Inc	ALTR	Equity
ALLURION TECHNOLOGIES INC	ALUR	Equity
Autoliv, Inc	ALV	Equity
ALLOVIR INC	ALVR	Equity
ALX ONCOLOGY HOLDINGS INC	ALXO	Equity
Antero Midstream Partners LP	AM	Equity
APPLIED MATERIALS, INC.	AMAT	Equity
AMBARELLA, INC.	AMBA	Equity
AMBAC FINANCIAL GROUP, INC.	AMBC	Equity
Ardagh Metal Packaging S.A.	AMBP	Equity
AMC ENTERTAINMENT HOLDINGS, INC.	AMC	Equity
AMCOR PLC	AMCR	Equity
AMC Networks Inc.	AMCX	Equity
ADVANCED MICRO DEVICES, INC.	AMD	Equity
AMETEK, INC.	AME	Equity
AMEDISYS INC	AMED	Equity
AFFILIATED MANAGERS GROUP INC	AMG	Equity
AMGEN INC.	AMGN	Equity
American Homes 4 Rent	AMH	Equity
ASSETMARK FINANCIAL HOLDINGS, INC.	AMK	Equity
AMKOR TECHNOLOGY, INC.	AMKR	Equity
Alerian MLP ETF	AMLP	ETF
AMYLYX PHARMACEUTICALS, INC.	AMLX	Equity
AMN Healthcare Services, Inc.	AMN	Equity
AMERIPRISE FINANCIAL INC	AMP	Equity
Amphastar Pharmaceuticals, Inc.	AMPH	Equity
AMPLITUDE INC	AMPL	Equity
Altus Power, Inc.	AMPS	Equity
AMPRIUS TECHNOLOGIES INC	AMPX	Equity
Amplify Energy Corporation	AMPY	Equity
Alpha Metallurgical Resources, Inc.	AMR	Equity
Ameresco, Inc.	AMRC	Equity
A-MARK PRECIOUS METALS, INC.	AMRK	Equity
AMARIN CORPORATION PLC	AMRN	Equity
Amneal Pharmaceuticals, Inc.	AMRX	Equity
AMERICAN SUPERCONDUCTOR CORP	AMSC	Equity
American Software Inc	AMSWA	Equity
AMERICAN TOWER CL A	AMT	Equity
AEMETIS, INC.	AMTX	Equity
American Woodmark Corp.	AMWD	Equity
AMERICAN WELL CORP	AMWL	Equity
America Movil S.A.B. de C.V.	AMX	Equity
InfraCap MLP ETF	AMZA	ETF
AMAZON.COM INC.	AMZN	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Direxion Daily AMZN Bull 2X Shares	AMZU	ETF
AUTONATION, INC	AN	Equity
AnaptysBio, Inc.	ANAB	Equity
The Andersons, Inc.	ANDE	Equity
Arista Networks Inc	ANET	Equity
ABERCROMBIE & FITCH COMPANY	ANF	Equity
Angie's List, Inc.	ANGI	Equity
AngioDynamcis, Inc.	ANGO	Equity
ANIKA THERAPEUTICS INC.	ANIK	Equity
ANI Pharmaceuticals, Inc.	ANIP	Equity
ANIXA BIOSCIENCES, INC.	ANIX	Equity
ANNEXON, INC.	ANNX	Equity
ANSYS, Inc.	ANSS	Equity
ANNOVIS BIO INC	ANVS	Equity
SPHERE 3D CORP.	ANY	Equity
Aon plc	AON	Equity
Artivion, Inc.	AORT	Equity
A.O. Smith Corporation	AOS	Equity
Alpha & Omega Semiconductor, Ltd.	AOSL	Equity
AMERICAN OUTDOOR BRANDS, INC.	AOUT	Equity
APACHE CORPORATION	APA	Equity
Artisan Partners Asset Management, Inc.	APAM	Equity
AIR PRODUCTS AND CHEMICALS,INC	APD	Equity
American Public Education, Inc.	APEI	Equity
API GROUP CORPORATION	APG	Equity
Amphenol Corporation	APH	Equity
AGORA, INC.	API	Equity
APPLIED DIGITAL CORPORATION	APLD	Equity
Apple Hospitality REIT, Inc.	APLE	Equity
Apellis Pharmaceuticals Inc	APLS	Equity
APPLIED THERAPEUTICS, INC.	APLT	Equity
Apollo Global Management LLC	APO	Equity
Apogee Enterprises, Inc.	APOG	Equity
APPLOVIN CORP	APP	Equity
Appfolio Inc	APPF	Equity
Appian Corporation	APPN	Equity
Digital Turbine, Inc.	APPS	Equity
ALPHA PRO TECH LTD.	APT	Equity
Aptiv PLC	APTV	Equity
Apyx Medical Corporation	APYX	Equity
Aqua Metals, Inc.	AQMS	Equity
ALGONQUIN POWER & UTILITIES CORP	AQN	Equity
AQUESTIVE THERAPEUTICS, INC.	AQST	Equity
ANTERO RESOURCES CORPORATION	AR	Equity
Accuray Incorporated	ARAY	Equity
ARBE ROBOTICS LTD	ARBE	Equity
ARGO BLOCKCHAIN PLC	ARBK	Equity
ARC Document Solutions, Inc.	ARC	Equity
ARCBEST CORPORATION	ARCB	Equity
Ares Capital Corporation	ARCC	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Arch Coal, Inc.	ARCH	Equity
ARCOS DORADOS HOLDINGS INC. CLA	ARCO	Equity
Arcturus Therapeutics Holdings Inc.	ARCT	Equity
Ardelyx, Inc.	ARDX	Equity
Alexandria Real Estate Equities, Inc.	ARE	Equity
AMERICAN RESOURCES CORP	AREC	Equity
ARENA GROUP HOLDINGS, INC.	AREN	Equity
Ares Management, L.P.	ARES	Equity
argenx SE	ARGX	Equity
ARHAUS, INC.	ARHS	Equity
Apollo Commercial Real Estate Finance, Inc.	ARI	Equity
ARK FINTECH INNOVATION	ARKF	ETF
ARK GENOMIC REVOLUTION ETF	ARKG	ETF
ARK Innovation ETF	ARKK	ETF
ARKO CORP	ARKO	Equity
ARK AUTONOMOUS TECH & ROBOTICS	ARKQ	ETF
ARK Next Generation Internet ETF	ARKW	ETF
ARK SPACE EXPLORATION & INNOVATION ETF	ARKX	ETF
Arlo Technologies, Inc.	ARLO	Equity
ALLIANCE RESOURCE PARTNERS	ARLP	Equity
ARM Holdings	ARM	Equity
Aramark	ARMK	Equity
Archrock, Inc.	AROC	Equity
Arq, Inc.	ARQ	Equity
ARQIT QUANTUM INC.	ARQQ	Equity
ARCUTIS BIOTHERAPEUTICS INC	ARQT	Equity
ARMOUR Residential REIT, Inc.	ARR	Equity
ARRY TECHNOLOGIES, INC.	ARRY	Equity
Arvinas,inc	ARVN	Equity
ARROW ELECTRONICS INC.	ARW	Equity
ARROWHEAD RESEARCH CORP.	ARWR	Equity
AMER SPORTS INC	AS	Equity
ASA Gold and Precious Metals Limited	ASA	Equity
Asana, Inc.	ASAN	Equity
ASSOCIATED BANC CORP	ASB	Equity
Ardmore Shipping Corporation	ASC	Equity
ASGN Inc.	ASGN	Equity
ASHLAND INC	ASH	Equity
Deutsche X-Trackers Harvest CSI 300 China A Shares ETF	ASHR	ETF
Deutsche X-trackers Harvest CSI 500 China A-Shares Small Cap ETF	ASHS	ETF
AdvanSix Inc.	ASIX	Equity
AERSALE CORPORATION	ASLE	Equity
ASLAN PHARMACEUTICALS LTD. ADR	ASLN	Equity
ASML HOLDING NV	ASML	Equity
Ascendis Pharma A/S	ASND	Equity
ACADEMY SPORTS & OUTDOOR INC	ASO	Equity
ASPEN AEROGELS, INC.	ASPN	Equity
Assertio Therapeutics, Inc.	ASRT	Equity
ASTEC INDUSTRIES, INC	ASTE	Equity
Astrana Health Inc.	ASTH	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
ALGOMA STEEL GROUP INC.	ASTL	Equity
Astra Space, Inc	ASTR	Equity
AST SpaceMobile, Inc.	ASTS	Equity
Asure Software, Inc.	ASUR	Equity
ASE TECHNOLOGY HOLDING CO., LTD.	ASX	Equity
Asensus Surgical, Inc.	ASXC	Equity
Amtech Systems, Inc.	ASYS	Equity
ATAI LIFE SCIENCES N.V.	ATAI	Equity
ALPHATEC HOLDINGS INC	ATEC	Equity
A10 Networks, Inc.	ATEN	Equity
Anterix Inc	ATEX	Equity
Adtalem Global Education Inc.	ATGE	Equity
ATHIRA PHARMA, INC.	ATHA	Equity
Autohome Inc (ADR)	ATHM	Equity
Allegheny Technologies, Inc.	ATI	Equity
Atkore International Group, Inc	ATKR	Equity
ATLAS LITHIUM CORP	ATLX	Equity
ATMUS FILTRATION TECHNOLOGIE	ATMU	Equity
Actinium Pharmaceuticals, Inc.	ATNM	Equity
Atmos Energy Corp	ATO	Equity
ATOMERA INCORPORATED	ATOM	Equity
Atossa Therapeutics, Inc.	ATOS	Equity
AptarGroup, Inc.	ATR	Equity
Atara Biotherapeutics, Inc.	ATRA	Equity
AtriCure Inc	ATRC	Equity
ASTRONICS CORPORATION	ATRO	Equity
Air Transport Services Group Inc.	ATSG	Equity
Altice USA, Inc.	ATUS	Equity
Astria Therapeutics, Inc.	ATXS	Equity
ANGLOGOLD ASHANTI LTD.	AU	Equity
AUDICODES LTD.	AUDC	Equity
AUGMEDIX INC	AUGX	Equity
Aurinia Pharmaceuticals Inc.	AUPH	Equity
Aurora Innovation, Inc.	AUR	Equity
AUTOLUS THERAPEUTICS PLC	AUTL	Equity
AVEANNA HEALTHCARE HOLDINGS	AVAH	Equity
Aerovironment Inc	AVAV	Equity
AVALONBAY COMMUNITIES INC	AVB	Equity
American Vanguard Corp.	AVD	Equity
Avadel Pharmaceuticals plc	AVDL	Equity
AVANTIS INTERNATIONAL SMALL CAP VALUE ETF	AVDV	ETF
AVIDXCHANGE HOLDINGS INC	AVDX	Equity
Broadcom Inc.	AVGO	Equity
ATE PHARMACEUTICAL INC.	AVIR	Equity
Avanos Medical, Inc.	AVNS	Equity
Avient Corporation	AVNT	Equity
AVIAT NETWORKS INC	AVNW	Equity
AvePoint, Inc	AVPT	Equity
AVROBIO INC	AVRO	Equity
AVNET INC	AVT	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Avantor, Inc.	AVTR	Equity
Anavex Life Sciences Corp.	AVXL	Equity
AVERY DENNISON CORP.	AVY	Equity
ETFMG TRAVEL TECH ETF	AWAY	ETF
Armstrong World Industries, Inc.	AWI	Equity
American Water Works Co., Inc.	AWK	Equity
Aware Inc	AWRE	Equity
Axos Financial, Inc.	AX	Equity
ACCELERATE DIAGNOSTICS, INC.	AXDX	Equity
AxoGen, Inc.	AXGN	Equity
AMERICAN AXLE & MFG. HLDNGS	AXL	Equity
Axonics Modulation Technologies Inc	AXNX	Equity
Axon Enterprise, Inc	AXON	Equity
AMERICAN EXPRESS COMPANY	AXP	Equity
AXIS CAPITAL HOLDINGS LIMITED	AXS	Equity
Axsome Therapeutics, Inc.	AXSM	Equity
Axalta Coating Systems Ltd.	AXTA	Equity
AXT, Inc.	AXTI	Equity
Atlantica Yield plc	AY	Equity
Acuity Brands, Inc.	AYI	Equity
AZEK COMPANY INC	AZEK	Equity
ASTRAZENECA	AZN	Equity
AUTOZONE, INC.	AZO	Equity
Aspen Technology, Inc.	AZPN	Equity
Azenta, Inc	AZTA	Equity
Azul S.A.	AZUL	Equity
AZZ Incorporated	AZZ	Equity
THE BOEING COMPANY	BA	Equity
ALIBABA GROUP HOLDING LTD	BABA	Equity
BANK OF AMERICA CORPORATION	BAC	Equity
Booz Allen Hamilton Holding Corporation	BAH	Equity
Ball Corporation	BALL	Equity
Bally's Corporation	BALY	Equity
Brookfield Asset Management Inc	BAM	Equity
Banc of California, Inc.	BANC	Equity
BANDWIDTH, INC	BAND	Equity
Credicorp Ltd.	BAP	Equity
The Original BARK Company	BARK	Equity
COUCHBASE, INC.	BASE	Equity
Atlanta Braves Holdings, Inc. Series A	BATRA	Equity
Liberty Media Corporation (Series C) Liberty Brave	BATRK	Equity
BAXTER INTERNATIONAL INC.	BAX	Equity
Blackberry Limited	BB	Equity
BigBear.ai Holdings, Inc.	BBAI	Equity
BBVA Banco Frances S.A	BBAR	Equity
BANCO BRADESCO S.A.	BBD	Equity
Barings BDC, Inc.	BBDC	Equity
Market Vectors Biotech ETF	BBH	ETF
BridgeBio Pharma Inc	BBIO	Equity
Barrett Business Services Inc.	BBSI	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
BANCO BILBAO VIZCAYA	BBVA	Equity
Build-A-Bear Workshop, Inc	BBW	Equity
Bath & Body Works, Inc.	BBWI	Equity
BEST BUY COMPANY, INC.	BBY	Equity
BRUNSWICK CORP	BC	Equity
BIOATLA, INC.	BCAB	Equity
Boise Cascade Company	BCC	Equity
BCE INC	BCE	Equity
Brainstorm Cell Therapeutics Inc.	BCLI	Equity
THE BRINK'S COMPANY	BCO	Equity
Brightcove Inc	BCOV	Equity
Balchem Corporation	BCPC	Equity
BIOCRYST PHARMACEUTICAS INC	BCRX	Equity
BARCLAYS PLC	BCS	Equity
BAIN CAPITAL SPECIALTY FINANCE, INC.	BCSF	Equity
BRIACELL THERAPEUTICS CORP	BCTX	Equity
BICYCLE THERAPEUTICS PLC	BCYC	Equity
Belden Inc.	BDC	Equity
Brandywine Realty Trust	BDN	Equity
BREAKWAVE DRY BULK SHIPPING ETF	BDRY	ETF
Black Diamond Therapeutics, Inc.	BDTX	Equity
BECTON, DICKINSON AND CO	BDX	Equity
Bloom Energy Corporation	BE	Equity
BEAM THERAPEUTICS, INC.	BEAM	Equity
BEACON ROOFING SUPPLY, INC	BECN	Equity
BEAM GLOBAL	BEEM	Equity
E Holdings Inc	BEKE	Equity
Bel Fuse Inc. Class B	BELFB	Equity
FRANKLIN RESOURCES INC.	BEN	Equity
BROOKFIELD RENEWABLE PARTNERS LP	BEP	Equity
BROOKFIELD RENEWABLE CORPORATION	BEPC	Equity
Berry Plastics Group Inc.	BERY	Equity
BEST Inc.	BEST	Equity
Roundhill Sports Betting & iGaming ETF	BETZ	Equity
Bright Horizons Family Solutions Inc	BFAM	Equity
Brown Forman Corporation Cl. B (150 shrs)	BFB	Equity
Bread Financial Holdings, Inc.	BFH	Equity
BURGERFI INTERNATIONAL, INC.	BFI	Equity
Butterfly Network, Inc.	BFLY	Equity
BUNGE LIMITED	BG	Equity
BGC Group, Inc.	BGC	Equity
Big 5 Sporting Goods Corp.	BGFV	Equity
BeiGene, Ltd.	BGNE	Equity
B&G Foods Inc.	BGS	Equity
BRIGHT GREEN CORPORATION	BGXX	Equity
Bausch Health Companies Inc.	BHC	Equity
Brighthouse Financial, Inc.	BHF	Equity
Benson Hill, Inc.	BHIL	Equity
Berkshire Hills Bancorp Inc	BHLB	Equity
BHP BILLITON LIMITED	BHP	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Braemar Hotels & Resorts Inc.	BHR	Equity
BIOHAVEN LTD	BHVN	Equity
PROSHARES ULTRA NASDAQ BIOTECHNOLOGY	BIB	ETF
BAIDU, INC.	BIDU	Equity
BIG LOTS INC.	BIG	Equity
BigCommerce Holdings, Inc.	BIGC	Equity
BIOGEN IDEC INC.	BIIB	Equity
SPDR Bloomberg Barclays 1-3 Month T-Bill ETF	BIL	ETF
Bilibili Inc.	BILI	Equity
Bill.com Holdings Inc	BILL	Equity
Bio-Rad Laboratories, Inc.	BIO	Equity
Biora Therapeutics, Inc.	BIOR	Equity
BIOCERES CROP SOLUTIONS CORP.	BIOX	Equity
Brookfield Infrastructure Partners L.P.	BIP	Equity
BROOKFIELD INFRASTRUCTURE CORPORATION	BIPC	Equity
ALLBIRDS, INC.	BIRD	Equity
Birkenstock Holding Limited	BIRK	Equity
PROSHARES ULTRASHORT NASDAQ BIOTECH	BIS	ETF
BITFARMS LTD.	BITF	Equity
PROSHARES SHORT BITCOIN STRATEGY ETF	BITI	ETF
ProShares Bitcoin Strategy ETF	BITO	ETF
BITWISE CRYPTO INDUSTRY INNOVATORS ETF	BITQ	ETF
2X BITCOIN STRATEGY ETF	BITX	ETF
BIOVIE INC CL A NEW	BIVI	Equity
VanEck BDC Income ETF	BIZD	ETF
BJ's Warehouse Holdings, Inc.	BJ	Equity
BJ S RESTAURANTS INC	BJRI	Equity
THE BANK OF NEW YORK MELLON CORPORATION	BK	Equity
Brookdale Senior Living Inc	BKD	Equity
The Buckle, Inc.	BKE	Equity
iShares MSCI BRIC ETF	BKF	Equity
BLACK HILLS CORPORATION	BKH	Equity
PowerShares Senior Loan (ETF)	BKLN	ETF
Booking Holdings Inc.	BKNG	Equity
Baker Hughes Company	BKR	Equity
BlackSky Technology Inc	BKSY	Equity
BankUnited, Inc.	BKU	Equity
BlackLine Inc	BL	Equity
BLUEBIRD CORP	BLBD	Equity
Siren Nasdaq NexGen Economy ETF	BLCN	ETF
BAUSCH & LOMB CORP	BLCO	Equity
TopBuild Corp.	BLD	Equity
Blade Air Mobility, Inc.	BLDE	Equity
BALLARD POWER SYSTEMS INC	BLDP	Equity
Builders FirstSource Inc.	BLDR	Equity
BioLife Solutions, Inc	BLFS	Equity
BLACKROCK INC	BLK	Equity
Blackbaud Inc.	BLKB	Equity
Bloomin Brands Inc.	BLMN	Equity
BLEND LABS, INC	BLND	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Blink Charing Co	BLNK	Equity
Amplify Transformational Data Sharing ETF	BLOK	ETF
BIOLINE RX LTD	BLRX	Equity
bluebird bio Inc	BLUE	Equity
BACKBLAZE, INC.	BLZE	Equity
Banco Macro S.A.	BMA	Equity
Bumble Inc.	BMBL	Equity
Biomea Fusion, Inc.	BMEA	Equity
Bank of Montreal	BMO	Equity
Biomerica Inc	BMRA	Equity
BIOMARIN PHARMACEUTICAL INC.	BMRN	Equity
BM TECHNOLOGIES, INC.	BMTX	Equity
BRISTOL-MYERS SQUIBB COMPANY	BMY	Equity
BROOKFIELD CORPORATION	BN	Equity
Vanguard Total Bond Market ETF	BND	ETF
KRANESHARES QUADRATIC DEFLATION ETF	BNDD	ETF
Barnes & Noble Education, Inc.	BNED	Equity
BIONANO GENOMICS, INC.	BNGO	Equity
Broadstone Net Lease, Inc.	BNL	Equity
United States Brent Oil ETF	BNO	ETF
Bank of Nova Scotia	BNS	Equity
BioNTech SE	BNTX	Equity
BOSTON OMAHA CORP	BOC	Equity
Bank of Hawaii Corp.	BOH	Equity
PROSHARES ULTRA DJ-UBS NATURAL GAS	BOIL	ETF
PROSHARES ULTRA DJ-UBS NATURAL GAS	BOIL1	ETF
Bok Financial Corporation	BOKF	Equity
DMC Global Inc.	BOOM	Equity
Boot Barn Holdings, Inc.	BOOT	Equity
BORR DRILLING LIMITED	BORR	Equity
Global X Robotics & Artifcl Intlgnc ETF	BOTZ	ETF
BOWLERO CORP.	BOWL	Equity
Box, Inc.	BOX	Equity
BP PLC	BP	Equity
Blueprint Medicines Corporation	BPMC	Equity
Popular Inc. (10 shrs)	BPOP	Equity
BP PRUDHOE BAY ROYALTY TRUST	BPT	Equity
Broadridge Financial Solutions, Inc.	BR	Equity
BRAGG GAMING GROUP INC.	BRAG	Equity
BellRing Brands Inc	BRBR	Equity
BRC Inc.	BRCC	Equity
BRIDGE INVESTMENT GROUP HOLDINGS, INC.	BRDG	Equity
Market Vectors Brazil Small Cap ETF	BRF	ETF
BRF - Brasil Foods SA	BRFS	Equity
BERKSHIRE HATHAWAY INC.	BRKB	Equity
Brookline Bancorp, Inc.	BRKL	Equity
Bruker Corporation	BRKR	Equity
BRILLIANT EARTH GROUP, INC.	BRLT	Equity
BROWN & BROWN, INC	BRO	Equity
DUTCH BROS INC.	BROS	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
BrightSpire Capital, Inc.	BRSP	Equity
BRT APARTMENTS CORP	BRT	Equity
Brixmor Property Group Inc	BRX	Equity
Berry Corporation	BRY	Equity
BRAZE, INC.	BRZE	Equity
Direxion Daily Brazil Bull 3X ETF	BRZU	ETF
Banco Santander Brasil SA	BSBR	Equity
Bassett Furniture Industries Inc	BSET	Equity
BioSig Technologies, Inc.	BSGM	Equity
BRIGHTSPHERE INVESTMENT GROUP INC	BSIG	Equity
Black Stone Minerals L.P.	BSM	Equity
BOSTON SCIENTIFIC CORPORATION	BSX	Equity
BENTLEY SYSTEMS INCORPORATED	BSY	Equity
BioXcel Therapeutics Inc.	BTAI	Equity
BIT DIGITAL, INC.	BTBT	Equity
BIT Mining Limited	BTCM	Equity
BIOTRICITY, INC.	BTCY	Equity
BITDEER TECHNOLOGIES GROUP CLASS A	BTDR	Equity
BAYTEX ENERGY CORP.	BTE	Equity
VALKYRIE BITCOIN STRATEGY ETF	BTF	ETF
B2Gold Corp.	BTG	Equity
British American Tobacco PLC	BTI	Equity
Peabody Energy Corporation	BTU	Equity
Anheuser-Busch InBev	BUD	Equity
GLOBAL X CYBER SECURITY	BUG	ETF
BURFORD CAP LTD	BUR	Equity
Burlington Stores Inc	BURL	Equity
VANECK VECTORS SOCIAL SENTIMENT ETF	BUZZ	ETF
COMPANIA DE MINAS BUENAVENTURA S.A.-ADR	BVN	Equity
Bioventus Inc.	BVS	Equity
Babcock & Wilcox Enterprises, Inc.	BW	Equity
BORGWARNER INC.	BWA	Equity
BROADWIND, INC.	BWEN	Equity
Baldwin Insurance Group, Inc.	BWIN	Equity
BWX Technologies, Inc.	BWXT	Equity
THE BLACKSTONE GROUP LP	BX	Equity
BlueLinx Holdings Inc	BXC	Equity
Blackstone Mortgage Trust, Inc.	BXMT	Equity
BOSTON PROPERTIES INC	BXP	Equity
BLACKSTONE SECURED LENDING FUND	BXSL	Equity
BOYD GAMING CORP.	BYD	Equity
Beyond Meat, Inc.	BYND	Equity
Beyond, Inc.	BYON	Equity
BYRNA TECHNOLOGIES INC.	BYRN	Equity
BEYONDSRING INC.	BYSI	Equity
KANZHUN LTD.	BZ	Equity
BUZZFEED, INC	BZFD	Equity
BEAZER HOMES USA INC.	BZH	Equity
ProShares UltraShort MSCI Brazil Capped	BZQ	ETF
Baozun Inc.	BZUN	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
CITIGROUP, INC.	C	Equity
CORPORACION AMERICA AIRPORTS S.A.	CAAP	Equity
China Automotive Systems Inc	CAAS	Equity
CABALETTA BIO, INC.	CABA	Equity
Credit Acceptance Corp.	CACC	Equity
CACI INTERNATIONAL, INC.	CACI	Equity
CAE Inc	CAE	Equity
ConAgra Brands, Inc.	CAG	Equity
CARDINAL HEALTH INC	CAH	Equity
THE CHEESECAKE FACTORY	CAKE	Equity
Caleres, Inc.	CAL	Equity
PACER US SMALL CAP CASH COWS 100 ETF	CALF	ETF
Cal-Maine Foods, Inc.	CALM	Equity
CALLIDITAS THERAPEUTICS AB	CALT	Equity
Calix, Inc.	CALX	Equity
Camtek Ltd.	CAMT	Equity
CANAAN INC. SPONSORED ADR	CAN	Equity
Teucrium Sugar	CANE	ETF
CROSSAMERICA PARTNERS LP	CAPL	Equity
Capricor Therapeutics, Inc.	CAPR	Equity
Avis Budget Group Inc	CAR	Equity
Cara Therapeutics Inc.	CARA	Equity
CarGurus, Inc.	CARG	Equity
Carrier Global Corporation	CARR	Equity
Cars.com Inc.	CARS	Equity
Instacart (Maplebear Inc.)	CART	Equity
Meta Financial Group, Inc.	CASH	Equity
Casey's General Stores, Inc.	CASY	Equity
CATERPILLAR INC.	CAT	Equity
CAVA GROUP INC	CAVA	Equity
Chubb Limited	CB	Equity
COLONY BANKCORP, INC.	CBAN	Equity
CBAK ENERGY TECHNOLOGY, INC.	CBAT	Equity
CBL & ASSOCIATES PROPERTIES, INC.	CBL	Equity
CBOE HOLDINGS, INC.	CBOE	Equity
CBRE Group, Inc.	CBRE	Equity
Cracker Barrel Old Country Store	CBRL	Equity
CABOT CORPORATION	CBT	Equity
The Chemours Company	CC	Equity
C4 THERAPEUTICS, INC.	CCCC	Equity
CCC Intelligent Solutions Holdings Inc.	CCCS	Equity
Coca-Cola European Partners plc	CCEP	Equity
CROWN CASTLE INTER.	CCI	Equity
CAMECO CORPORATION	CCJ	Equity
CROWN HOLDINGS INC.	CCK	Equity
CARNIVAL CORPORATION	CCL	Equity
Clear Channel Outdoor HLD Inc CL. A	CCO	Equity
Cogent Communications Holdings, Inc.	CCOI	Equity
Cross Country Healthcare, Inc.	CCRN	Equity
Century Communities, Inc.	CCS	Equity

MIAX Emerald Options as of 5/31/24		
Company Name	Symbol	Inst Type
COEUR d' ALENE MINES CORP	CDE	Equity
Cardlytics Inc	CDLX	Equity
Avid Bioservices, Inc.	CDMO	Equity
CareDx, Inc	CDNA	Equity
CADENCE DESIGN SYSTEMS, I	CDNS	Equity
COPT Defense Properties	CDP	Equity
CADRE HOLDINGS INC	CDRE	Equity
CDW CORPORATION	CDW	Equity
ChromaDex Corporation	CDXC	Equity
Codexis Inc.	CDXS	Equity
Cadiz Inc.	CDZI	Equity
CELANESE CORPORATION	CE	Equity
CECO Environmental Corporation	CECO	Equity
CONSTELLATION ENERGY CORPORATION	CEG	Equity
CAMBER ENERGY, INC.	CEI	Equity
CONSOL Energy Inc	CEIX	Equity
Celsius Holdings, Inc.	CELH	Equity
Celularity Inc.	CELU	Equity
CENTURY ALUMINUM COMPANY	CENX	Equity
CEREVEL THERAPEUTICS HOLDINGS, INC	CERE	Equity
CERUS CORPORATION	CERS	Equity
CERTARA, INC.	CERT	Equity
Ceva Inc	CEVA	Equity
CF INDUSTRIES HOLDINGS, INC.	CF	Equity
Capitol Federal Financial	CFFN	Equity
Citizens Financial Group, Inc.	CFG	Equity
CONFLUENT, INC.	CFLT	Equity
CULLEN/FROST BANKERS INC.	CFR	Equity
The Carlyle Group LP	CG	Equity
CHINA GREEN AGRICULTURE, INC.	CGA	Equity
CENTERRA GOLD INC.	CGAU	Equity
Carlyle Secured Lending, Inc.	CGBD	Equity
Canopy Growth Corporation	CGC	Equity
CULLINAN ONCOLOGY, INC.	CGEM	Equity
Compugen Ltd.	CGEN	Equity
COGNYTE SOFTWARE LTD	CGNT	Equity
COGNEX CORPORATION	CGNX	Equity
TIDAL TRUST II ROUNDHILL GENERATIVE AI & TECH ETF	CHAT	ETF
Direxion Dly CSI 300 Chn A Shr Br 2X ETF	CHAU	ETF
CHURCH & DWIGHT CO.	CHD	Equity
Churchill Downs, Inc.	CHDN	Equity
Chemed Corporation	CHE	Equity
Chefs' Warehouse Inc/The	CHEF	Equity
CHEGG, INC	CHGG	Equity
Choice Hotels International Inc.	CHH	Equity
Global X MSCI China Consumer Discretionary ETF	CHIQ	Equity
CHESAPEAKE ENERGY CORPORATION	CHK	Equity
CHECK POINT SOFTWARE TECHNOLOGIES LTD.	CHKP	Equity
CHERRY HILL MORTGAGE INVESTMENT CORP.	CHMI	Equity
ChargePoint Holdings, Inc.	CHPT	Equity

MIAX Emerald Options as of 5/31/24		
Company Name	Symbol	Inst Type
Chord Energy Corporation	CHRD	Equity
Coherus BioSciences, Inc.	CHRS	Equity
CH ROBINSON WORLDWIDE INC.	CHRW	Equity
Charter Communications Inc. Cl A	CHTR	Equity
CHUY'S HOLDINGS, INC.	CHUY	Equity
Chewy, Inc.	CHWY	Equity
ChampionX Corporation	CHX	Equity
CIGNA CORPORATION	CI	Equity
Citizens Inc.	CIA	Equity
First Trust NASDAQ Cybersecurity ETF	CIBR	ETF
CIENA CORPORATION	CIEN	Equity
Cipher Mining Inc.	CIFR	Equity
Companhia Energetica de Minas Gerais - CEMIG (125)	CIG	Equity
COLLIERS INTERNATIONAL GROUP INC.	CIGI	Equity
CHIMERA INVESTMENT CORPORATION	CIM	Equity
Cincinnati Financial Corp.	CINF	Equity
City Office REIT, Inc.	CIO	Equity
Civista BancShares Inc	CIVB	Equity
Civitas Resources, Inc	CIVI	Equity
CHECKPOINT THERAPEUTICS, INC.	CKPT	Equity
COLGATE-PALMOLIVE COMPANY	CL	Equity
Clarus Corporation	CLAR	Equity
Core Laboratories N.V.	CLB	Equity
Cellebrite DI Ltd.	CLBT	Equity
Chatham Lodging Trust	CLDT	Equity
Celldex Therapeutics, Inc.	CLDX	Equity
CLIFFS NATURAL RESOURCES INC.	CLF	Equity
Clearfield, Inc.	CLFD	Equity
CLEAN HARBORS INC	CLH	Equity
ClearSign Combustion Corporation	CLIR	Equity
Collectis S.A.	CLLS	Equity
Calumet Specialty Products Partners, L.P.	CLMT	Equity
CLEAN ENERGY FUELS CORPORATION	CLNE	Equity
CLENE INC	CLNN	Equity
Global X Cloud Computing ETF Global X Cloud Computing ETF	CLOU	ETF
Clover Health Investments, Corporation	CLOV	Equity
CLIPPER REALTY, INC.	CLPR	Equity
CLEARPOINT NEURO INC	CLPT	Equity
CELLECTAR BIOSCIENCES, INC.	CLRB	Equity
Celestica, Inc.	CLS	Equity
Clearside Biomedical, Inc.	CLSD	Equity
CleanSpark, Inc.	CLSK	Equity
Clarivate Plc	CLVT	Equity
Clearwater Paper Corporation	CLW	Equity
COLOROX CO	CLX	Equity
Canadian Imperial Bank of Commerce	CM	Equity
COMERICA, INC.	CMA	Equity
CAMBIUM NETWORKS CORPORATION	CMBM	Equity
COMMERCIAL METALS COMPANY	CMC	Equity
Cheetah Mobile Inc.	CMCM	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
COMCAST CORPORATION	CMCSA	Equity
CME GROUP INC.	CME	Equity
CHIPOTLE MEXICAN GRILL, INC.	CMG	Equity
CUMMINS INC.	CMI	Equity
CUMULUS MEDIA, INC.	CMLS	Equity
Compass Minerals International, Inc.	CMP	Equity
COMPOSECURE, INC. CLASS A	CMPO	Equity
CIMPRESS N.V.	CMPR	Equity
COMPASS PATHWAYS PLC	CMPS	Equity
Costamare Inc.	CMRE	Equity
CHIMERIX, INC.	CMRX	Equity
CMS ENERGY CORPORATION	CMS	Equity
CLAROS MORTGAGE TRUST, INC.	CMTG	Equity
COMTECH TELECOMMUNICATION	CMTL	Equity
CNA FINANCIAL CORPORATION	CNA	Equity
CENTENE CORP	CNC	Equity
Conduent Incorporated	CNDT	Equity
CNH Industrial N.V.	CNH	Equity
CANADIAN NATIONAL RAILWAY	CNI	Equity
Cinemark Holdings, Inc.	CNK	Equity
CORE & MAIN INC	CNM	Equity
CONMED CORP.	CNMD	Equity
Cannae Holdings, Inc.	CNNE	Equity
CNO Financial Group, Inc.	CNO	Equity
CENTERPOINT ENERGY, INC.	CNP	Equity
CANADIAN NATURAL RESOURCES LIMITED	CNQ	Equity
Consolidated Communications Holdings, Inc.	CNSL	Equity
Century Casinos, Inc.	CNTY	Equity
CNX Resources Corporation	CNX	Equity
CONCENTRIX CORPORATION	CNXC	Equity
iShare MSCI China A ETF	CNYA	ETF
VITA COCO COMPANY, INC.	COCO	Equity
Compass Diversified Holdings LLC	CODI	Equity
Co-Diagnostics, Inc.	CODX	Equity
CAPITAL ONE FINANCIAL CORPORATION	COF	Equity
COGENT BIOSCIENCES, INC.	COGT	Equity
Coherent Corporation	COHR	Equity
Cohu, Inc.	COHU	Equity
Coinbase Global, Inc.	COIN	Equity
Columbia Banking System, Inc.	COLB	Equity
Americold Realty Trust	COLD	Equity
Collegium Pharmaceutical, Inc.	COLL	Equity
COLUMBIA SPORTWEAR CO.	COLM	Equity
COMMSCOPE HOLDING CO, INC.	COMM	Equity
COMPASS INC	COMP	Equity
GraniteShares ETF Trust GraniteShares 2x Long COIN	CONL	ETF
Conn's, Inc.	CONN	Equity
YIELDMAX COIN OPTION INCOME STRATEGY ETF	CONY	ETF
Cooper Companies, Inc.	COO	Equity
TRAEGER, INC.	COOK	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Mr. Cooper Group Inc.	COOP	Equity
CONOCOPHILLIPS	COP	Equity
GLOBAL X COPPER MINERS ETF	COPX	ETF
Cencora, Inc.	COR	Equity
TEUCRIUM COMMODITY TRUST CORN FUND SHARES ETF	CORN	ETF
Corcept Therapeutics Incorporated	CORT	Equity
CORE SCIENTIFIC, INC	CORZ	Equity
COSMOS HOLDINGS INC.	COSM	Equity
COSTCO WHOLESALE CORPORATION	COST	Equity
COTY INC.	COTY	Equity
COURSERA, INC.	COUR	Equity
Canadian Pacific Railway Limited	CP	Equity
Copa Holdings SA	CPA	Equity
Corpay, Inc.	CPAY	Equity
CAMPBELL SOUP CO	CPB	Equity
UNITED STATES COPPER INDEX FUND	CPER	ETF
Capital Product Partners LP	CPLP	Equity
COUPANG INC	CPNG	Equity
Capri Holdings Limited	CPRI	Equity
COPART INC	CPRT	Equity
CATALYST PHARMACEUTICAL PARTNES INC.	CPRX	Equity
Cooper-Standard Holdings Inc.	CPS	Equity
CPS TECHNOLOGIES CORPORATION	CPSH	Equity
Consumer Portfolio Services, Inc.	CPSS	Equity
Camden Property Trust	CPT	Equity
Cheniere Energy Ptnrs L.P.	CQP	Equity
Crane Co.	CR	Equity
COREBRIDGE FINANCIAL INC	CRBG	Equity
CARIBOU BIOSCIENCES, INC.	CRBU	Equity
CALIFORNIA RESOURCES CORP	CRC	Equity
CRICUT, INC.	CRCT	Equity
Cardiff Oncology, Inc.	CRDF	Equity
CARDIOL THERAPEUTICS INC.	CRDL	Equity
CREDO TECHNOLOGY GROUP HOLDING LTD.	CRDO	Equity
Cresud Sociedad Anonima Comercial, Inmobiliaria, Financiera y Agropecuaria	CRESY	Equity
CRESCENT ENERGY COMPANY	CRGY	Equity
CRH plc	CRH	Equity
CARTER'S , INC.	CRI	Equity
COMSTOCK RESOURCES INC.	CRK	Equity
Charles River Laboratories International, Inc.	CRL	Equity
SALESFORCE.COM, INC	CRM	Equity
CorMedix Inc.	CRMD	Equity
Cerence Inc.	CRNC	Equity
Ceragon Networks Ltd.	CRNT	Equity
CRINETICS PHARMACEUTICALS INC	CRNX	Equity
Cronos Group Inc.	CRON	Equity
CROCS, INC.	CROX	Equity
CARPENTER TECHNOLOGY CORP.	CRS	Equity
CRISPR Therapeutics AG	CRSP	Equity
CORSAIR GAMING, INC.	CRSR	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
CRITEO SA	CRTO	Equity
CIRRUS LOGIC INC.	CRUS	Equity
Corvus Pharmaceuticals, Inc.	CRVS	Equity
CrowdStrike Holdings, Inc.	CRWD	Equity
CHAMPIONS ONCOLOGY, INC.	CSBR	Equity
CISCO SYSTEMS, INC.	CSCO	Equity
LoopNet, Inc. (Merger)	CSGP	Equity
CSG Systems International Inc.	CSGS	Equity
Canadian Solar Inc	CSIQ	Equity
Carlisle Companies Incorporated	CSL	Equity
Centerspace	CSR	Equity
CHICKEN SOUP FOR THE SOUL	CSSE	Equity
CAESARSTONE SDOT-YAM LTD.	CSTE	Equity
CASTLE BIOSCIENCES, INC.	CSTL	Equity
CONSTELLIUM N.V	CSTM	Equity
Carriage Services, Inc.	CSV	Equity
Capital Southwest Corp	CSWC	Equity
CSX CORPORATION	CSX	Equity
CINTAS CORP.	CTAS	Equity
CYTEK BIOSCIENCES, INC.	CTKB	Equity
Cantaloupe, Inc.	CTLP	Equity
Catalent, Inc.	CTLT	Equity
CytomX Therapeutics, Inc.	CTMX	Equity
Custom Truck One Source, Inc.	CTOS	Equity
Coterra Energy Inc.	CTRA	Equity
CASTOR MARITIME, INC.	CTRM	Equity
Citi Trends, Inc.	CTRN	Equity
CTS Corporation	CTS	Equity
COGNIZANT TECHNOLOGY SOLUTIONS CORPORATION	CTSH	Equity
CYTOSORBENTS CORPORATION	CTSO	Equity
Corteva, Inc.	CTVA	Equity
CITIUS PHARMACEUTICALS INC	CTXR	Equity
CubeSmart	CUBE	Equity
Customers Bancorp, Inc Common Stock	CUBI	Equity
CUE BIOPHARMA INC	CUE	Equity
Carnival Corporation & Plc	CUK	Equity
Culp, Inc.	CULP	Equity
Direxion Daily Healthcare Bull 3X ETF	CURE	ETF
CURIOSITYSTREAM INC	CURI	Equity
TORRID HOLDINGS INC.	CURV	Equity
CUTERA INC	CUTR	Equity
Cousins Properties Inc.	CUZ	Equity
CUREVAC N.V.	CVAC	Equity
CVB Financial Corp.	CVBF	Equity
Cenovus Energy Inc.	CVE	Equity
CIVEO CORPORATION	CVEO	Equity
Commercial Vehicle Group, Inc.	CVGI	Equity
CALAVO GROWERS INC.	CVGW	Equity
CVR Energy, Inc.	CVI	Equity
Covenant Logistics Group, Inc.	CVLG	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Commvault Systems Inc	CVLT	Equity
CEL-SCI Corporation	CVM	Equity
Carvana Co.	CVNA	Equity
CVRX, INC.	CVRX	Equity
CVS CAREMARK CORPORATION	CVS	Equity
CHEVRON CORPORATION	CVX	Equity
CLEARWATER ANALYTICS HOLDINGS	CWAN	Equity
SPDR Barclays Convertible Secs ETF	CWB	ETF
Consolidated Water Co. Ltd	CWCO	Equity
Direxion Shares ETF Trust - Direxion Daily CSI China Internet Index Bull 2X Shares	CWEB	ETF
Clearway Energy, Inc.	CWEN	Equity
Clearway Energy, Inc. Class A	CWENA	Equity
Camping World Holdings, Inc.	CWH	Equity
Cushman Wakefield Plc	CWK	Equity
Casella Waste Systems Inc.	CWST	Equity
CEMEX, S.A.B. DE C.V.	CX	Equity
CREXENDO, INC.	CXDO	Equity
SPRINKLR, INC.	CXM	Equity
Crane NXT, Co.	CXT	Equity
CORRECTIONS CORPORATION OF AMERICA	CXW	Equity
CYBERARK SOFTWARE, LTD.	CYBR	Equity
China Yuchai International Limited	CYD	Equity
COMMUNITY HEALTH SYSTEMS, INC.	CYH	Equity
CryoPort, Inc	CYRX	Equity
CYTOKINETICS, INCORPORATED	CYTK	Equity
Caesars Entertainment Corporation	CZR	Equity
DOMINION RESOURCES	D	Equity
DANAOS CORPORATION	DAC	Equity
DADA NEXUS LTD.	DADA	Equity
DAKTRONICS INC.	DAKT	Equity
DELTA AIR LINES INC.	DAL	Equity
Dana Holding Corporation	DAN	Equity
YOUDAO INC	DAO	Equity
VanEck Digital Transformation ETF	DAPP	ETF
Darling International, Inc.	DAR	Equity
DoorDash, Inc.	DASH	Equity
ENDAVAL PLC	DAVA	Equity
DAY ONE BIOPHARMACEUTICALS, INC.	DAWN	Equity
Dayforce, Inc.	DAY	Equity
DEUTSCHE BANK AG	DB	Equity
POWERSHARES DB AGRICULTURE	DBA	ETF
PowerShares DB Base Metals ETF	DBB	ETF
PoweShares DB Commodity Index Tracking Fund	DBC	ETF
Designer Brands Inc. (DBI	Equity
PowerShares DB Oil Fund	DBO	ETF
DigitalBridge Group, Inc.	DBRG	Equity
DBV Technologies S.A.	DBVT	Equity
Dropbox, Inc.	DBX	Equity
DOCGO INC	DCGO	Equity
Donaldson Company, Inc.	DCI	Equity

MIAX Emerald Options as of 5/31/24		
Company Name	Symbol	Inst Type
Dime Community Bancshares, Inc.	DCOM	Equity
Deciphera Pharmaceuticals, Inc.	DCPH	Equity
DELCATH SYSTEM INC	DCTH	Equity
DuPont de Nemours, Inc.	DD	Equity
3D SYSTEMS CORPORATION	DDD	Equity
ProShares Ultra Dow30	DDM	ETF
Datadog Inc	DDOG	Equity
DEERE & COMPANY	DE	Equity
Easterly Government Properties, Inc.	DEA	Equity
DECKERS OUTDOOR CORPORATION	DECK	Equity
Douglas Emmett Inc	DEI	Equity
Dell Technologies, Inc.	DELL	Equity
WisdomTree Emerging Markets Eq Inc ETF	DEM	ETF
Denny's Corp.	DENN	Equity
DIAGEO PLC	DEO	Equity
Despegar.com, Corp.	DESP	Equity
WisdomTree Europe SmallCap Dividend Fund	DFE	ETF
Direxion Daily Aerospace & Defense Bull 3X Shares Direxion Daily Aerospace	DFEN	ETF
DREAM FINDERS HOMES, INC.	DFH	Equity
Donnelley Financial Solutions, Inc.	DFIN	Equity
DRAGONFLY ENERGY HOLDINGS CORP	DFLI	Equity
DISCOVER FINANCIAL SERVICES	DFS	Equity
DOLLAR GENERAL CORPORATION	DG	Equity
Digi International Inc	DGII	Equity
iShares Core Dividend Growth ETF	DGRO	Equity
WisdomTree Emerging Markets SmallCap Dividend Fund	DGS	ETF
QUEST DIAGNOSTICS INC	DGX	Equity
DEFINITIVE HEALTHCARE CORP.	DH	Equity
Diversified Healthcare Trust (DHC	Equity
DR HORTON INC.	DHI	Equity
DANAHER CORPORATION	DHR	Equity
DHT Holdings, Inc.	DHT	Equity
DHI Group, Inc.	DHX	Equity
SPDR DOW JONES INDUSTRIAL AVERAGE	DIA	ETF
1STDIBS.COM, INC.	DIBS	Equity
ProShares Ultra Oil & Gas	DIG	ETF
DineEquity, Inc	DIN	Equity
HF Sinclair Corporation	DINO	Equity
Diodes Incorporated	DIOD	Equity
THE WALT DISNEY COMPANY	DIS	Equity
AMPLIFY CWP ENHANCED DIVIDEND INCOME ETF	DIVO	ETF
iPath DJ-UBS Commodity Indx Tot Ret ETN	DJP	ETF
Trump Media & Technology Group Corp.	DJT	Equity
Delek US Holdings, Inc.	DK	Equity
Delek Logistics Partners LP	DKL	Equity
DraftKings Inc.	DKNG	Equity
DICK'S SPORTING GOODS INC.	DKS	Equity
DOLBY LABORATORIES, INC.	DLB	Equity
DLH HOLDINGS CORP.	DLHC	Equity
Dynagas LNG Partners LP	DLNG	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
DLOCAL, LTD	DLO	Equity
DOLPHIN ENTERTAINMENT INC	DLPN	Equity
Digital Realty Trust Inc	DLR	Equity
Duluth Holdings Inc.	DLTH	Equity
DOLLAR TREE, INC.	DLTR	Equity
DELUXE CORPORATION	DLX	Equity
Desktop Metal, Inc.	DM	Equity
DIAMEDICA THERAPEUTICS INC.	DMAC	Equity
Dorchester Minerals LP	DMLP	Equity
Digimarc Corporation	DMRC	Equity
DERMTECH, INC.	DMTK	Equity
Ginkgo Bioworks Holdings, Inc. (DNA	Equity
Dun & Bradstreet Holdings, Inc.	DNB	Equity
Denali Therapeutics Inc	DNLI	Equity
DANIMER SCIENTIFIC INC	DNMR	Equity
Denison Mines Corp.	DNN	Equity
NOW, INC.	DNOW	Equity
KRISPY KREME, INC	DNUT	Equity
DIAMOND OFFSHORE DRILLING INC	DO	Equity
Physicians Realty Trust	DOC	Equity
DIGITALOCEAN HOLDINGS, INC.	DOCN	Equity
DOXIMITY, INC	DOCS	Equity
Docusign Inc.	DOCU	Equity
ProShares Short Dow30	DOG	ETF
DOLE PLS	DOLE	Equity
Domo, Inc.	DOMO	Equity
BRP, INC.	DOOO	Equity
DOUGLAS ELLIMAN INC.	DOUG	Equity
DOVER CORPORATION	DOV	Equity
Dow Inc.	DOW	Equity
AMDOCS LTD	DOX	Equity
DRAGANFLY INC	DPRO	Equity
Direxion Shares ETF Trust - Direxion Daily Regional Banks Bull 3X Shares	DPST	ETF
DOMINO'S PIZZA INC	DPZ	Equity
Daqo New Energy Corp	DQ	Equity
DRDGOLD Ltd.	DRD	Equity
DARDEN RESTAURANTS, INC.	DRI	Equity
DARIOHEALTH CORP	DRIO	Equity
Direxion Dly S&P Oil&Gs Ex&Prd Br 3X ETF	DRIP	ETF
GLOBAL X AUTONOMOUS & ELECTRIC VEHICLES ETF	DRIV	ETF
Direxion Daily Real Estate Bull 3x ETF	DRN	ETF
DRIL-QUIP INC	DRQ	Equity
DURECT Corporation	DRRX	Equity
Leonardo DRS, Inc.	DRS	Equity
Direxion Daily Real Estate Bear 3x ETF	DRV	ETF
DRIVEN BRANDS HOLDINGS INC	DRVN	Equity
DESIGN THERAPEUTICS, INC.	DSGN	Equity
DESCARTES SYSTEM GROUP INC	DSGX	Equity
DoubleLine Income Solutions Fund	DSL	Equity
VIANI TECHNOLOGY, INC.	DSP	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
DIANA SHIPPING INC	DSX	Equity
Dynatrace Inc	DT	Equity
SOLO BRANDS, INC.	DTC	Equity
DTE Energy Company	DTE	Equity
DT Midstream, Inc.	DTM	Equity
ProShares UltraShort Oil & Gas	DUG	ETF
DUKE ENERGY CORPORATION	DUK	Equity
DUOLINGO, INC.	DUOL	Equity
Direxion Daily Gold Miners Bear 3X Shares	DUST	ETF
DOUBLEVERIFY HOLDINGS INC	DV	Equity
DaVita HealthCare Partners Inc.	DVA	Equity
DYNAVAX TECHNOLOGIES CORPORATION	DVAX	Equity
DEVON ENERGY CORPORATION	DVN	Equity
ISHARES DJ SELECT DIVIDEND	DVY	ETF
Dynex Capital, Inc.	DX	Equity
DXC Technology Company	DXC	Equity
DexCom, Inc.	DXCM	Equity
ProShares UltraShort Dow30 (25 Shares)	DXD	ETF
WISDOMTREE JAPAN HEDGED EQUITY FUND	DXJ	ETF
DESTINATION XL GROUP, INC.	DXLG	Equity
DXP Enterprises, Inc.	DXPE	Equity
Dixie Group Inc.	DXYN	Equity
DYCOM INDUSTRIES INC.	DY	Equity
DYADIC INTERNATIONAL, INC.	DYAI	Equity
DYNE THERAPEUTICS INC	DYN	Equity
DZS INC.	DZSI	Equity
ENI SpA	E	Equity
ELECTRONIC ARTS INC.	EA	Equity
GrafTech International Ltd.	EAF	Equity
BRINKER INT'L, INC.	EAT	Equity
Eventbrite, Inc.	EB	Equity
EBAY INC.	EBAY	Equity
EASTERN BANKSHARES, INC.	EBC	Equity
Emergent Biosolutions, Inc.	EBS	Equity
Ecopetrol SA	EC	Equity
iShares MSCI Chile ETF	ECH	ETF
ECOLAB INC.	ECL	Equity
iShares MSCI China Small-Cap ETF	ECNS	ETF
Encore Capital Group Inc	ECPG	Equity
Ecovyst Inc.	ECVT	Equity
CON EDISON	ED	Equity
EDAP TMS S.A.	EDAP	Equity
Direxion Daily Emerging Markets Bull 3X Shares (20	EDC	ETF
Editas Medicine, Inc.	EDIT	Equity
ENDEAVOR GROUP HOLDINGS, INC.	EDR	Equity
NEW ORIENTAL EDUCATION & TECHNOLOGY GROUP	EDU	Equity
VANGUARD EXTENDED DURATION TREASURY ETF	EDV	ETF
Direxion Daily Emerging Markets Bear 3X Share	EDZ	ETF
EXCELERATE ENERGY, INC.	EE	Equity
EURONET WORLDWIDE, INC.	EEFT	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
ISHARES MSCI EMERGING MARKETS INDEX	EEM	ETF
iShares MSCI Emerging Markets Min Vol Factor ETF	EEMV	ETF
PROSHARES ETHER STRATEGY ETF	EETH	ETF
ProShares UltraShort MSCI Emerging Mkts	EEV	ETF
ISHARES MSCI EAFE INDEX	EFA	ETF
iShares Edge MSCI Min Vol EAFE	EFAV	ETF
Ellington Financial LLC	EFC	Equity
Enterprise Financial Services Corp	EFSC	Equity
EQUIFAX INC.	EFX	Equity
Everest Group, Ltd.	EG	Equity
Egain Communications Corp.	EGAN	Equity
Eagle Bancorp Inc	EGBN	Equity
8x8 Inc	EGHT	Equity
ELDORADO GOLD CORPORATION	EGO	Equity
Eagle Pharmaceuticals Inc.	EGRX	Equity
VAALCO ENERGY INC	EGY	Equity
EHANG HOLDINGS LTD. SPONSORED ADR	EH	Equity
Enhabit, Inc.	EHAB	Equity
Encompass Health Corporation	EHC	Equity
eHealth, Inc.	EHTH	Equity
EDISON INTERNATIONAL	EIX	Equity
EKSO BIONICS HOLDINGS, INC.	EKSO	Equity
The Estée Lauder Companies Inc.	EL	Equity
Elanco Animal Health Incorporated	ELAN	Equity
ELEDON PHARMACEUTICALS, INC.	ELDN	Equity
e.l.f. Beauty, Inc.	ELF	Equity
Elme Communities	ELME	Equity
Equity Lifestyle Properties, Inc.	ELS	Equity
Elevance Health, Inc	ELV	Equity
iShares J.P. Morgan USD Emerging Markets Bond ETF	EMB	ETF
EMBECTA CORP.	EMBC	Equity
EMCOR GROUP INC	EME	Equity
VanEck Vectors J.P. Morgan EM Local Currency Bond ETF	EMLC	ETF
EASTMAN CHEMICAL COMPANY	EMN	Equity
EMERSON ELECTRIC COMPANY	EMR	Equity
EMX ROYALTY CORP	EMX	Equity
Enbridge Inc	ENB	Equity
ENFUSION, INC.	ENFN	Equity
EnLink Midstream, LLC	ENLC	Equity
ENLIVEX THERAPEUTICS LTD.	ENLV	Equity
Enovis Corporation	ENOV	Equity
Enphase Energy Inc.	ENPH	Equity
Energizer Holdings, Inc.	ENR	Equity
Energys	ENS	Equity
Ensign Group, Inc.	ENSG	Equity
ENSERVCO CORPORATION	ENSV	Equity
Enanta Pharmaceuticals, Inc.	ENTA	Equity
Entegris, Inc.	ENTG	Equity
ENTERA BIO LTD.	ENTX	Equity
Investnet, Inc.	ENV	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Enova International, Inc.	ENVA	Equity
Enovix Corporation	ENVX	Equity
ENZO BIOCHEM INC.	ENZ	Equity
EOG RESOURCES, INC.	EOG	Equity
Evolus, Inc.	EOLS	Equity
Eos Energy Enterprises, Inc.	EOSE	Equity
Actuant Corporation	EPAC	Equity
EPAM Systems, Inc.	EPAM	Equity
Edgewell Personal Care Company	EPC	Equity
ENTERPRISE PRODUCTS PARTNERS L.P.	EPD	Equity
WisdomTree India Earning Fund	EPI	ETF
ESSA PHARMA INC	EPIX	Equity
Evolution Petroleum Corporation	EPM	Equity
iShares MSCI Pacific ex Japan ETF	EPP	Equity
EPR Properties	EPR	Equity
Essential Properties Realty Trust Inc	EPRT	Equity
EPSILON ENERGY LTD.	EPSN	Equity
ProShares UltraShort FTSE Europe	EPV	ETF
EQUITY COMMONWEALTH	EQC	Equity
AXA Equitable Holdings, Inc.	EQH	Equity
EQUINIX, INC.	EQIX	Equity
Equinor ASA	EQNR	Equity
EQUITY RESIDENTIAL	EQR	Equity
EQT Corporation	EQT	Equity
Equinox Gold Corp.	EQX	Equity
ERASCA, INC.	ERAS	Equity
Enerplus Corporation	ERF	Equity
Ericsson	ERIC	Equity
Erie Indemnity Company Cl A	ERIE	Equity
Energy Recovery Inc.	ERII	Equity
Embraer S.A.	ERJ	Equity
ERO COPPER CORP.	ERO	Equity
DIREXION DAILY ENERGY BULL 3X SHARES	ERX	ETF
Direxionshares Daily Energy Bear 3X Shares	ERY	ETF
Eversource Energy	ES	Equity
Escalade, Incorporated	ESCA	Equity
Element Solutions Inc.	ESI	Equity
ELBIT SYSTEMS LTD.	ESLT	Equity
Essent Group Ltd.	ESNT	Equity
Esperion Therapeutics, Inc.	ESPR	Equity
Empire State Realty Trust, Inc.	ESRT	Equity
Essex Property Trust Inc.	ESS	Equity
ESTABLISHMENT LABS HOLDINGS, INC.	ESTA	Equity
Elastic N.V.	ESTC	Equity
Energy Transfer LP	ET	Equity
Ethan Allen Interiors Inc.	ETD	Equity
EATON CORPORATION PLC	ETN	Equity
89BIO INC	ETNB	Equity
ETON PHARMACEUTICALS, INC	ETON	Equity
ENTERGY CORPORATION	ETR	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Equitrans Midstream Corp	ETRN	Equity
Etsy,Inc.	ETSY	Equity
E2open Parent Holdings, Inc.	ETWO	Equity
ENCORE ENERGY CORP.	EU	Equity
iShares MSCI Europe Financials ETF	EUFN	ETF
PROSHARES ULTRASHORT EURO	EUO	ETF
Euronav NV	EURN	Equity
Enviva Partners, LP	EVA	Equity
Everbridge, Inc.	EVBG	Equity
Entravision Communications Corporation	EVC	Equity
EverQuote Inc	EVER	Equity
Eve Holding, Inc	EVEX	Equity
EVOGENE LTD	EVGN	Equity
EVgo Inc.	EVGO	Equity
Evolent Health, Inc.	EVH	Equity
Evolv Technologies Holdings, Inc.	EVLV	Equity
Evercore Partners Inc.	EVR	Equity
Evergy, Inc.	EVRG	Equity
Everi Holdings Inc.	EVRI	Equity
EVERTEC, Inc.	EVTC	Equity
Vertical Aerospace Ltd.	EVTL	Equity
EDWARDS LIFESCIENCES CORP.	EW	Equity
ISHARES MSCI AUSTRALIA INDEX	EWA	ETF
EAST WEST BANCORP INC	EWBC	Equity
iShares Canada Index ETF	EWCA	ETF
EUROPEAN WAX CENTER, INC.	EWCAZ	Equity
iShares MSCI Germany Index Fund ETF	EWG	ETF
ISHARES MSCI HONG KONG INDEX	EWH	ETF
iShares MSCI Italy Index Fund	EWI	ETF
ISHARES MSCI JAPAN INDEX	EWJ	ETF
ISHARES MSCI MALAYSIA INDEX ETF	EWM	ETF
iShares MSCI Spain Capped	EWP	ETF
iShares MSCI France	EWQ	ETF
iShares MSCI Singapore	EWS	ETF
ISHARES TAIWAN INDEX ETF	EWT	ETF
EDGEWISE THERAPEUTICS, INC.	EWTX	Equity
iShares MSCI United Kingdom Index ETF	EWU	ETF
ISHARES MSCI MEXICO CAPPED ETF	EWV	ETF
ISHARES MSCI SOUTH KOREA CAPPED INDEX	EWY	ETF
ISHARES MSCI BRAZIL CAPPED INDEX	EWZ	ETF
EXSCIENTIA PLC SPONSORED ADR	EXAI	Equity
Exact Sciences Corp.	EXAS	Equity
EXELON CORPORATION	EXC	Equity
EXELIXIS, INC.	EXEL	Equity
EXPENSIFY, INC.	EXFY	Equity
Endeavour Silver Corp.	EXK	Equity
ExlService Holdings, Inc.	EXLS	Equity
EAGLE MATERIALS INC.	EXP	Equity
EXPEDITORS INTERNATIONAL	EXPD	Equity
EXPEDIA INC.	EXPE	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
eXp World Holdings, Inc.	EXPI	Equity
Extra Space Storage Inc.	EXR	Equity
EXTREME NETWORKS, INC.	EXTR	Equity
National Vision Holdings, Inc.	EYE	Equity
EYENOVIA, INC.	EYEN	Equity
EyePoint Pharmaceuticals, Inc.	EYPT	Equity
iShares MSCI South Africa Index	EZA	ETF
EZCORP, INC	EZPW	Equity
iShares MSCI Eurozone	EZU	ETF
FORD MOTOR COMPANY	F	Equity
First American Financial Corporation	FAF	Equity
ISHARES FALLEN ANGELS USD BOND ETF	FALN	ETF
FIRST TRUST GLOBAL WIND ENERGY ETF	FAN	ETF
DIAMONDBACK ENERGY, INC.	FANG	Equity
FARMER BROS. CO.	FARM	Equity
FARO TECHNOLOGIES	FARO	Equity
DIREXION DAILY FINANCIAL BULL 3X SHARES	FAS	ETF
FASTENAL COMPANY	FAST	Equity
Fate Therapeutics, Inc.	FATE	Equity
DIREXION DAILY FINANCIAL BEAR 3X SHARES	FAZ	ETF
Fortune Brands Innovations, Inc.	FBIN	Equity
FB Financial Corporation	FBK	Equity
First Bancorp	FBNC	Equity
First BanCorp	FBP	Equity
FORTE BIOSCIENCES INC.	FBRX	Equity
Franklin Covey Co.	FC	Equity
FUELCELL ENERGY, INC.	FCEL	Equity
First Commonwealth Financial Corp	FCF	Equity
FirstCash Holdings, Inc.	FCFS	Equity
First Trust ISE-Revere Natural Gas ETF	FCG	ETF
FTI CONSULTING, INC.	FCN	Equity
FOCUS UNIVERSAL INC	FCUV	Equity
FREEMPORT-MCMORAN COPPER & GOLD INC.	FCX	Equity
4D MOLECULAR THERAPEUTICS, INC.	FDMT	Equity
First Trust Dow Jones Internet ETF	FDN	ETF
Fresh Del Monte Produce Inc.	FDP	Equity
FACTSET RESEARCH SYSTEMS	FDS	Equity
Fidus Investment Corporation	FDUS	Equity
FEDEX CORPORATION	FDX	Equity
FIRSTENERGY CORP.	FE	Equity
Fennec Pharmaceuticals Inc.	FENC	Equity
PHOENIX NEW MEDIA LIMITED	FENG	Equity
Fidelity MSCI Energy Index ETF	FENY	ETF
FERGUSON PLC	FERG	Equity
SPDR EURO STOXX 50 ETF	FEZ	ETF
FutureFuel Corp	FF	Equity
First Financial Bancorp.	FFBC	Equity
Faraday Future Intelligent Electric Inc.	FFIE	Equity
F5 NETWORKS, INC.	FFIV	Equity
FIRST FOUNDATION, INC.	FFWM	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
FibroGen, Inc.	FGEN	Equity
Fundamental Global Inc.	FGF	Equity
Federated Hermes, Inc.	FHI	Equity
FIRST HORIZON NATIONAL CORPORATION	FHN	Equity
FOGHORN THERAPEUTICS, INC.	FHTX	Equity
Fiserv, Inc	FI	Equity
First Interstate Bancsystem Inc	FIBK	Equity
FAIR ISAAC CORPORATION	FICO	Equity
FIGS, INC.	FIGS	Equity
FinVolution Group	FINV	Equity
GLOBAL X FINTECH ETF	FINX	ETF
FTAI INFRASTRUCTURE INC.	FIP	Equity
Fidelity National Information Services, Inc.	FIS	Equity
FIFTH THIRD BANCORP	FITB	Equity
Five Below Inc	FIVE	Equity
DEFIANCE NEXT GEN CONNECTIVITY ETF	FIVG	Equity
Five9, Inc.	FIVN	Equity
Comfort Systems USA Inc.	FIX	Equity
National Beverage Corp	FIZZ	Equity
FRANKLIN WIRELESS CORP.	FKWL	Equity
FOOT LOCKER, INC.	FL	Equity
Flex Ltd.	FLEX	Equity
Fulgent Genetics, Inc.	FLGT	Equity
FULL HOUSE RESORTS, INC.	FLL	Equity
FLUENCE ENERGY, INC.	FLNC	Equity
FLEX LNG LTD	FLNG	Equity
FLOWERS FOODS, INC.	FLO	Equity
FLUOR CORPORATION	FLR	Equity
Flowserve Corp.	FLS	Equity
FLUX POWER HOLDINGS, INC	FLUX	Equity
1-800-Flowers.com Inc.	FLWS	Equity
FLYWIRE CORPORATION	FLYW	Equity
iShares MSCI Frontier 100 ETF	FM	ETF
Fidelity MSCI Materials Index ETF	FMAT	ETF
FMC CORPORATION	FMC	Equity
Farmers National Banc Corp.	FMNB	Equity
Fresenius Medical Care AG & Co KGaA	FMS	Equity
Fomento Economico Mexicano, S.A.B. de C.V.	FMX	Equity
Fabrinet	FN	Equity
PARAGON 28, INC.	FNA	Equity
F N B Corp. PA	FNB	Equity
Floor & Decor Holdings, Inc.	FND	Equity
FIDELITY NATIONAL FINANCIAL	FNF	Equity
FINGERMOTION INC	FNGR	Equity
MicroSectors FANG+ ETN	FNGS	ETF
Funko, Inc.	FNKO	Equity
Franco-Nevada Corporation	FNV	Equity
Finance of America Companies Inc.	FOA	Equity
Amicus Therapeutics, Inc.	FOLD	Equity
Forestar Group Inc.	FOR	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
FormFactor Inc.	FORM	Equity
FOSSIL, INC.	FOSL	Equity
Shift4 Payments, Inc.	FOUR	Equity
FOX CORPCL B COM	FOX	Equity
(New) Fox Corporation Class A	FOXA	Equity
Fox Factory Holding Corp.	FOXF	Equity
First Trust Preferred Securities and Income ETF	FPE	ETF
Farmland Partners Inc.	FPI	Equity
First Industrial Realty Trust	FR	Equity
Whole Earth Brands, Inc.	FREE	Equity
FREYR Battery	FREY	Equity
FORGE GLOBAL HOLDINGS, INC.	FRGE	Equity
FREEDOM HOLDING CORP.	FRHC	Equity
FRONTLINE LIMITED	FRO	Equity
JFROG LTD.	FROG	Equity
Freshpet, Inc.	FRPT	Equity
FRESHWORKS INC	FRSH	Equity
FORESIGHT AUTONOMOUS HOLDINGS LTD	FRSX	Equity
Federal Realty Investment Trust	FRT	Equity
FS KKR Capital Corp.	FSK	Equity
FIRST SOLAR, INC.	FSLR	Equity
Fastly, Inc.	FSLY	Equity
Fortuna Silver Mines Inc.	FSM	Equity
Franklin Street Properties Corporation	FSP	Equity
FEDERAL SIGNAL CORP	FSS	Equity
LB Foster Co.	FSTR	Equity
Fortress Transportation and Infrastructure Investors LLC	FTAI	Equity
FTC SOLAR, INC.	FTCI	Equity
frontdoor, inc.	FTDR	Equity
Fuel Tech inc.	FTEK	Equity
FUTURE FINTECH GROUP INC.	FTFT	Equity
FATHOM HOLDINGS INC.	FTHM	Equity
FMC TECHNOLOGIES, INC.	FTI	Equity
Flotek Industries Inc	FTK	Equity
FORTINET INC.	FTNT	Equity
FORTREA HOLDINGS INC.	FTRE	Equity
Fortis Inc.	FTS	Equity
Fortive Corporation	FTV	Equity
FUBOTV INC.	FUBO	Equity
FULLER (H.B.) CO	FUL	Equity
FULCRUM THERAPEUTICS, INC.	FULC	Equity
Fulton Financial Corporation	FULT	Equity
CEDAR FAIR, L.P.	FUN	Equity
FUSION PHARMACEUTICALS INC	FUSN	Equity
Futu Holdings Limited	FUTU	Equity
Fiverr International Ltd.	FVRR	Equity
Liberty Media Corporation Series C Liberty Formula One	FWONK	Equity
Forward Air Corporation	FWRD	Equity
FIRST WATCH RESTAURANT GROUP	FWRG	Equity
CurrencyShares Australian Dollar Trust	FXA	ETF

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
CurrencyShares British Pound Sterling Trust	FXB	ETF
CurrencyShares Canadian Dollar Trust	FXC	ETF
CURRENCYSHARES EURO TRUST	FXE	ETF
CurrencyShares Swiss Franc ETF	FXF	ETF
First Trust Health Care AlphaDEX ETF	FXH	ETF
ISHARES FTSE CHINA 25 INDEX FUND	FXI	ETF
ProShares UltraShort FTSE China 50	FXP	ETF
CURRENCYSHARES JAPANESE YEN TRUST	FXY	ETF
FRONTIER COMMUNICATIONS PARENT, INC	FYBR	Equity
GENPACT LIMITED	G	Equity
Gaia, Inc.	GAIA	Equity
Gladstone Investment Corporation	GAIN	Equity
GALECTIN THERAPEUTICS, INC.	GALT	Equity
GAMBLING.COM GROUP LTD	GAMB	Equity
WEDBUSH ETFMG VIDEO GAME TECH ETF	GAMR	ETF
GAN Limited	GAN	Equity
GAIN THERAPEUTICS, INC.	GANX	Equity
StealthGas Inc	GASS	Equity
GATOS SILVER, INC.	GATO	Equity
GATX Corporation	GATX	Equity
Galiano Gold Inc.	GAU	Equity
Golub Capital BDC, Inc.	GBDC	Equity
GENERATION BIO CO.	GBIO	Equity
Global Business Travel Group, Inc	GBTG	Equity
THE GREENBRIER COMPANIES, INC.	GBX	Equity
Gannett Co., Inc.	GCI	Equity
Genesco Inc.	GCO	Equity
GIGACLOUD TECHNOLOGY, INC. CLASS A	GCT	Equity
GENERAL DYNAMICS CORPORATION	GD	Equity
GoDaddy Inc.	GDDY	Equity
Golden Entertainment, Inc.	GDEN	Equity
Green Dot Corporation	GDOT	Equity
GOODRX HOLDINGS INC	GDRX	Equity
GDS Holdings Limited	GDS	Equity
MARKET VECTORS GOLD MINERS ETF	GDX	ETF
VANECK VECTORS JUNIOR GOLD MINERS ETF	GDXJ	ETF
GRID DYNAMICS HOLDINGS, INC.	GDYN	Equity
GE Aerospace	GE	Equity
Greif, Inc.	GEF	Equity
GE HEALTHCARE TECHNOLOGIES INC.	GEHC	Equity
Genesis Energy L.P.	GEL	Equity
Gen Digital Inc.	GEN	Equity
Genius Sports Limited	GENI	Equity
GEO Group Inc (The)	GEO	Equity
GEOSPACE TECHNOLOGIES CORPORATION	GEOS	Equity
GERON CORPORATION	GERN	Equity
GUESS? INC.	GES	Equity
Getty Images Holdings, Inc.	GETY	Equity
GE VERNOVA INC.	GEV	Equity
GEVO, INC.	GEVO	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Griffon Corporation	GFF	Equity
GOLD FIELDS LTD.	GFI	Equity
GFL Environmental Inc.	GFL	Equity
GLOBALFOUNDRIES INC.	GFS	Equity
GRUPO FINANCIERO GALICIA S.A.	GGAL	Equity
GERDAU S.A. (ADR)	GGB	Equity
GRACO, INC.	GGG	Equity
Guardant Health, Inc.	GH	Equity
CGI Group Inc.	GIB	Equity
G-III Apparel Group Ltd	GIII	Equity
Gildan Activewear Inc	GIL	Equity
GILEAD SCIENCES INC.	GILD	Equity
Gilat Satellite Networks Ltd.	GILT	Equity
GENERAL MILLS, INC.	GIS	Equity
Glaukos Corporation	GKOS	Equity
Globe Life Inc.	GL	Equity
Gladstone Capital Corporation	GLAD	Equity
GLOBAL ONLINE LTD	GLBE	Equity
GLOBUS MARITIME LIMITED	GLBS	Equity
SPDR GOLD TRUST	GLD	ETF
Great Lakes Dredge & Dock	GLDD	Equity
ProShares UltraShort Gold	GLL	ETF
Golar LNG Ltd	GLNG	Equity
Globant S.A.	GLOB	Equity
Global Partners LP	GLP	Equity
Galapagos NV	GLPG	Equity
Gaming and Leisure Properties Inc	GLPI	Equity
Greenlight Capital Re, Ltd.	GLRE	Equity
Glatfelter Corporation	GLT	Equity
GALECTO, INC.	GLTO	Equity
MONTE ROSA THERAPEUTICS, INC.	GLUE	Equity
CORNING INC.	GLW	Equity
GlycoMimetics, Inc.	GLYC	Equity
GENERAL MOTORS COMPANY	GM	Equity
Genmab A/S	GMAB	Equity
GAMESTOP CORPORATION	GME	Equity
GLOBUS MEDICAL, INC.	GMED	Equity
Global Medical REIT Inc.	GMRE	Equity
GMS Inc.	GMS	Equity
Genie Energy Ltd.	GNE	Equity
GENCO SHIPPING & TRADING LTD	GNK	Equity
Global Net Lease, Inc.	GNL	Equity
Generac Holdings Inc	GNRC	Equity
Genasys Inc.	GNSS	Equity
GENTEX CORP.	GNTX	Equity
GENWORTH FINANCIAL INC.	GNW	Equity
Grocery Outlet Holding Corp	GO	Equity
Canoo Inc.	GOEV	Equity
Golden Ocean Group Limited	GOGL	Equity
GOGO, INC.	GOGO	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Barrick Gold Corporation	GOLD	Equity
Acushnet Holdings Corp.	GOLF	Equity
Gladstone Commercial Corporation	GOOD	Equity
Alphabet Inc. Class C	GOOG	Equity
Alphabet Inc. Class A	GOOGL	Equity
Canada Goose Holdings Inc.	GOOS	Equity
Gold Resource Corporation	GORO	Equity
Gossamer Bio Inc	GOSS	Equity
GSX Techedu Inc.	GOTU	Equity
GREENPOWER MOTOR COMPANY INC.	GP	Equity
GENUINE PARTS	GPC	Equity
STRUCTURE THERAPEUTIC INC	GPCR	Equity
GROUP 1 AUTOMOTIVE INC.	GPI	Equity
Graphic Packaging Holding Company	GPK	Equity
Granite Point Mortgage Trust Inc.	GPMT	Equity
GLOBAL PAYMENTS INC.	GPN	Equity
Green Plains Renewable Energy, Inc.	GPRE	Equity
Geopark Ltd	GPRK	Equity
GOPRO, INC.	GPRO	Equity
GAP INC.	GPS	Equity
Grab Holdings Limited	GRAB	Equity
Green Brick Partners, Inc.	GRBK	Equity
Global X MSCI Greece ETF	GREK	ETF
Grifols SA	GRFS	Equity
GARMIN LTD.	GRMN	Equity
GRINDR INC COM	GRND	Equity
GROVE COLLABORATIVE HOLDINGS, INC.	GROV	Equity
U.S. Global Investors, Inc.	GROW	Equity
GOLD ROYALTY CORP.	GROY	Equity
GROUPON, INC.	GRPN	Equity
GRITSTONE ONCOLOGY INC	GRTS	Equity
GALERA THERAPEUTICS, INC.	GRTX	Equity
GrowGeneration Corp.	GRWG	Equity
THE GOLDMAN SACHS GROUP, INC.	GS	Equity
Globalstar, Inc	GSAT	Equity
GOLDMAN SACHS BDC, INC	GSBD	Equity
iShares S&P GSCI Commodity Indexed Trust	GSG	ETF
Goosehead Insurance, Inc	GSHD	Equity
GSI TECHNOLOGY	GSIT	Equity
GLAXOSMITHKLINE PLC	GSK	Equity
GLOBAL SHIP LEASE, INC.	GSL	Equity
Globe Specialty Metals Inc	GSM	Equity
GOODYEAR TIRE & RUBBER COMPANY	GT	Equity
Gran Tierra Energy Inc.	GTE	Equity
Gates Industrial Corporation plc	GTES	Equity
G1 Therapeutics, Inc.	GTHX	Equity
Good Times Restaurants Inc.	GTIM	Equity
GITLAB INC	GTLB	Equity
Chart Industries Inc	GTLS	Equity
Gray Television, Inc.	GTN	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Garrett Motion Inc.	GTX	Equity
Getty Realty Corp.	GTY	Equity
Direxion Dly S&P Oil&Gs Ex&Prd BI 3X ETF	GUSH	ETF
Granite Construction Incorporated	GVA	Equity
ESS Tech, Inc.	GWH	Equity
Guidewire Software, Inc.	GWRE	Equity
GRAINGER, W.W. INC.	GWV	Equity
Global X MSCI Colombia ETF	GXG	ETF
GXO LOGISTICS INC	GXO	Equity
Hyatt Hotels Corporation	H	Equity
Hawaiian Holdings, Inc.	HA	Equity
PureFunds ISE Cyber Security ETF	HACK	ETF
Haemonetics Corporation	HAE	Equity
THE HAIN CELESTIAL GROUP, INC.	HAIN	Equity
HALLIBURTON COMPANY	HAL	Equity
Halozyme Therapeutics Inc.	HALO	Equity
HASBRO INC.	HAS	Equity
Hannon Armstrong Sustainable Infrastructure Capital, Inc.	HASI	Equity
HAYWARD HOLDINGS INC	HAYW	Equity
HUNTINGTON BANCSHARES INCORPORATED	HBAN	Equity
Hanesbrands Inc.	HBI	Equity
Harvard Bioscience, Inc.	HBIO	Equity
HudBay Minerals, Inc.	HBM	Equity
Horizon Bancorp, Inc.	HBNC	Equity
HCA HOLDINGS, INC.	HCA	Equity
Health Catalyst, Inc.	HCAT	Equity
Warrior Met Coal, Inc.	HCC	Equity
HUTCHMED (China) Limited	HCM	Equity
HASHICORP, INC.	HCP	Equity
Healthcare Services Group, Inc.	HCSG	Equity
THE HOME DEPOT, INC.	HD	Equity
HDFC BANK LTD	HDB	Equity
AdvisorShares Ranger Equity Bear ETF	HDGE	ETF
DEFIANCE NEXT GEN H2 ETF	HDRO	ETF
Hudson Technologies, Inc.	HDSN	Equity
iShares High Dividend Equity Fund	HDV	ETF
Hawaiian Electric Industries Inc.	HE	Equity
Turtle Beach Corporation	HEAR	Equity
WisdomTree Europe Hedged Equity Fund	HEDJ	ETF
H&E Equipment Services, Inc.	HEES	Equity
HEICO Corporation	HEI	Equity
HELEN OF TROY LTD	HELE	Equity
GLOBAL X VIDEO GAMES & ESPORTS ETF	HERO	ETF
HESS CORPORATION	HES	Equity
Hess Midstream LP	HESM	Equity
HF FOODS GROUP, INC.	HFFG	Equity
HAGERTY INC	HGTY	Equity
Hilton Grand Vacations Inc.	HGV	Equity
Howard Hughes Holdings Inc.	HHH	Equity
Hillenbrand Inc	HI	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Hibbett Sports Inc	HIBB	Equity
DIREXION DAILY S&P 500 HIGH BETA BEAR 3X SHARES	HIBS	ETF
THE HARTFORD FINANCIAL SERVICES GROUP, INC.	HIG	Equity
Huntington Ingalls Industries, Inc.	HII	Equity
Hims & Hers Health, Inc.	HIMS	Equity
Himax Technologies, Inc.	HIMX	Equity
Hippo Holdings Inc.	HIPO	Equity
HIGH TIDE, INC.	HITI	Equity
HIVE BLOCKCHAIN TECHNOLOGIES LTD.	HIVE	Equity
HIGHWOODS PROPERTIES, INC.	HIW	Equity
DIREXION HYDROGEN ETF	HJEN	ETF
HECLA MINING COMPANY	HL	Equity
HERBALIFE LTD.	HLF	Equity
Harmonic Inc	HLIT	Equity
HOLLEY INC.	HLLY	Equity
Hillman Solutions Corporation	HLMN	Equity
HALEON PLC	HLN	Equity
HILTON WORLDWIDE HOLDINGS INC.	HLT	Equity
CUE HEALTH INC	HLTH	Equity
HELIX ENERGY SOLUTIONS GROUP INC	HLX	Equity
HONDA MOTOR COMPANY LTD	HMC	Equity
HomeStreet Inc	HMST	Equity
HARMONY GOLD MINING COMPANY LIMITED	HMY	Equity
HALLADOR ENERGY CO	HNRG	Equity
THE HONEST COMPANY, INC	HNST	Equity
HARLEY-DAVIDSON, INC.	HOG	Equity
Hollysys Automation Technologies Ltd.	HOLI	Equity
HOLOGIC, INC.	HOLX	Equity
Home Bancshares, Inc.	HOMB	Equity
HONEYWELL INTERNATIONAL INC.	HON	Equity
HARBORONE BANCORP INC	HONE	Equity
Robinhood Markets, Inc.	HOOD	Equity
HOOKIPA PHARMA, INC.	HOOK	Equity
Anywhere Real Estate Inc.	HOUS	Equity
WEREWOLF THERAPEUTICS, INC.	HOWL	Equity
HELMERICH & PAYNE INC	HP	Equity
Hewlett Packard Enterprise Company	HPE	Equity
HIGHPEAK ENERGY INC	HPK	Equity
Hudson Pacific Properties Inc.	HPP	Equity
HP Inc.	HPQ	Equity
HealthEquity, Inc.	HQY	Equity
Healthcare Realty Trust Incorporated	HR	Equity
H&R BLOCK, INC.	HRB	Equity
Herc Holdings Inc.	HRI	Equity
HORMEL FOODS CORPORATION	HRL	Equity
HARMONY BIOSCIENCES HOLDINGS IN	HRMY	Equity
Harrow Health Inc	HROW	Equity
HIRERIGHT HOLDINGS CORP	HRT	Equity
Heritage Insurance Holdings, Inc.	HRTG	Equity
Heron Therapeutics, Inc.	HRTX	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Horizon Technology Finance Corp	HRZN	Equity
HESAI GROUP	HSAI	Equity
HSBC HOLDINGS PLC	HSBC	Equity
Henry Schein, Inc.	HSIC	Equity
Heidrick & Struggles International Inc.	HSII	Equity
Host Hotels & Resorts	HST	Equity
HealthStream Inc	HSTM	Equity
HERSHEY CO THE	HSY	Equity
Hercules Capital, Inc.	HTGC	Equity
Hilltop Holdings Inc.	HTH	Equity
China Lodging Group, Limited	HTHT	Equity
HEARTLAND EXPRESS, INC.	HTLD	Equity
FUSION FUEL GREEN PLC	HTOO	Equity
Hertz Global Holdings, Inc.	HTZ	Equity
Hubbell Incorporated	HUBB	Equity
Hub Group, Inc.	HUBG	Equity
HubSpot, Inc.	HUBS	Equity
HUMANA INC.	HUM	Equity
Humacyte, Inc.	HUMA	Equity
HUNTSMAN CORPORATION	HUN	Equity
Huron Consulting Group, Inc.	HURN	Equity
HOUSTON AMERICAN ENERGY CORPORATION	HUSA	Equity
HUT 8 MINING CORP	HUT	Equity
HUYA Inc.	HUYA	Equity
Haverty Furniture Companies, Inc	HVT	Equity
Hancock Whitney Corporation	HWC	Equity
Howmet Aerospace Inc	HWM	Equity
HEXCEL CORPORATION	HXL	Equity
Market Vectors High Yield Municipal Index ETF	HYD	ETF
HYDROFARM HOLDINGS GROUP, INC	HYFM	Equity
ISHARES IBOX \$ HIGH YIELD CORPORATE BOND	HYG	ETF
Hyllion Holdings Corporation	HYLN	Equity
SPDR Nuveen Bloomberg High Yield Municipal Bond ETF	HYMB	ETF
HYCROFT MINING HOLDING	HYMC	Equity
HYPERFINE INC	HYPR	Equity
Hyzon Motors Inc.	HYZN	Equity
MARINEMAX , INC.	HZO	Equity
IAC/InterActiveCorp	IAC	Equity
IAMGOLD CORPORATION	IAG	Equity
iShares U.S. Broker-Dealers & Sec. Exchanges ETF	IAI	ETF
Integra LifeSciences Holdings Corporation	IART	Equity
INTEGRAL AD SCIENCE HOLDING CORP	IAS	Equity
iShares US Regional Banks	IAT	ETF
iShares Gold Trust	IAU	ETF
ISHARES NASDAQ BIOTECHNOLOGY	IBB	ETF
Independent Bank Corp/MI	IBCP	Equity
Interactive Brokers Group Inc	IBKR	Equity
INTERNATIONAL BUSINESS MACHINES CORPORATION	IBM	Equity
ICICI BANK LIMITED	IBN	Equity
Installed Building Products, Inc.	IBP	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
ImmunityBio, Inc.	IBRX	Equity
iCAD Inc.	ICAD	Equity
Intercontinental Exchange Inc	ICE	Equity
ISHARES COHEN & STEERS REALTY MAJORS INDEX FUND	ICF	ETF
Ichor Holdings, Ltd.	ICHR	Equity
ICL GROUP LTD.ICL GROUP LTD.	ICL	Equity
iShares Global Clean Energy ETF	ICLN	ETF
ICON Public Limited Company	ICLR	Equity
ICU MEDICAL, INC.	ICUI	Equity
IDACORP, INC.	IDA	Equity
INTERDIGITAL, INC.	IDCC	Equity
Ideanomics, Inc.	IDEX	Equity
iShares U.S. Digital Infrastructure and Real Estate ETF	IDGT	ETF
Intellicheck, Inc.	IDN	Equity
IDAHO STRATEGIC RESOURCES INC	IDR	Equity
ISHARES SELF-DRIVING EV AND TECH ETF	IDRV	ETF
IDT Corporation	IDT	Equity
iShares International Select Dividend ETF	IDV	ETF
IDEXX Laboratories, Inc.	IDXX	Equity
IDEAYA BIOSCIENCES, INC.	IDYA	Equity
IVANHOE ELECTRIC INC.	IE	Equity
iShares 7 -10 Year Treasury Bond ETF	IEF	ETF
iShares Core MSCI EAFE ETF	IEFA	ETF
iShares 3-7 Year Treasury Bond ETF	IEI	ETF
iShares Core MSCI Emerging Markets	IEMG	ETF
iShares U.S. Oil&Gas Explor&Prodtn	IEO	ETF
ICAHN ENTERPRISES, L.P.	IEP	Equity
IES HOLDINGS, INC.	IESC	Equity
iShares Europe	IEV	ETF
IDEX Corporation	IEX	Equity
iShares U.S. Oil Equipment&Services	IEZ	ETF
International Flavors & Fragrances Inc.	IFF	Equity
InflaRx N.V.	IFRX	Equity
IGC Pharma, Inc.	IGC	Equity
iSharesTrustiShares 5-10 Yr Inv Grade Corp BondETF	IGIB	ETF
iShares Expanded Tech Sector ETF	IGM	ETF
IGM Biosciences, Inc	IGMS	Equity
International Game Technology Plc	IGT	Equity
Tech-Software Sector ETF	IGV	ETF
iShares U.S. Medical Devices ETF	IHI	ETF
iHeartMedia Inc	IHRT	Equity
IHS HOLDING LTD.	IHS	Equity
INSTEEL INDUSTRIES INC	IIIN	Equity
I3 VERTICALS INC	IIIV	Equity
Innovative Industrial Properties, Inc.	IIPR	Equity
iShares Core S&P Mid-Cap ETF	IJH	ETF
iShares Core S&P Small-Cap ETF	IJR	ETF
iShares S&P Small-Cap 600 Value	IJS	ETF
iShares Latin America 40	ILF	ETF
ILLUMINA INC.	ILMN	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
INDUSTRIAL LOGISTICS PROPERTIES TRUST	ILPT	Equity
I-MAB	IMAB	Equity
IMAX CORPORATION	IMAX	Equity
IMMUNOCORE HOLDINGS PLC	IMCR	Equity
Ingles Markets, Incorporated	IMKTA	Equity
IMMUTEP LTD	IMMP	Equity
IMMERSSION CORP	IMMR	Equity
IMMUNOME, INC	IMNM	Equity
IMPERIAL OIL LTD.	IMO	Equity
IMMATICS N.V.	IMTX	Equity
Immunic, Inc	IMUX	Equity
IMMUNOVANT INC	IMVT	Equity
INTERNATIONAL MONEY EXPRESS, INC.	IMXI	Equity
INCYTE GENOMICS INC	INCY	Equity
iShares MSCI India	INDA	ETF
indie Semiconductor, Inc	INDI	Equity
Direxion Daily India Bull 3x ETF	INDL	ETF
INFORMATICA, INC.	INFA	Equity
HORIZON KINETICS INFLATION BENEFICIARIES ETF	INFL	ETF
Infinera Corporation	INFN	Equity
INFOSYS LTD.	INFY	Equity
ING GROEP N.V.	ING	Equity
Inogen, Inc.	INGN	Equity
Ingredion Incorporated	INGR	Equity
IMMUNE BIO INC	INMB	Equity
InMode Ltd.	INMD	Equity
Summit Hotel Properties, Inc.	INN	Equity
INNOVAGE HOLDING CORP	INNV	Equity
INOVIO PHARMACEUTICALS, INC.	INO	Equity
Innodata Inc	INOD	Equity
INSPIRED ENTERTAINMENT, INC.	INSE	Equity
Inseego Corporation	INSG	Equity
Insmid, Inc.	INSM	Equity
Inspire Medical Systems Inc	INSP	Equity
INSTRUCTURE HOLDINGS, INC.	INST	Equity
International Seaways, Inc	INSW	Equity
Intapp, Inc.	INTA	Equity
INTEL CORPORATION	INTC	Equity
INTER & CO., INC.	INTR	Equity
INTEST CORPORATION	INTT	Equity
INTUIT CORP	INTU	Equity
Innoviva, Inc.	INVA	Equity
Identiv Inc.	INVE	Equity
Invitation Homes Inc.	INVH	Equity
Innoviz Technologies Ltd.	INVZ	Equity
INOZYME PHARMA, INC.	INZY	Equity
IonQ, Inc	IONQ	Equity
Ionis Pharmaceuticals, Inc.	IONS	Equity
SAMSARA, INC.	IOT	Equity
lovance Biotherapeutics, Inc.	IOVA	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
INTERNATIONAL PAPER COMPANY	IP	Equity
IMMUNOPRECISE ANTIBODIES LTD.	IPA	Equity
THE INTERPUBLIC GROUP OF COMPANIES, INC.	IPG	Equity
IPG Photonics Corp	IPGP	Equity
Intrepid Potash, Inc.	IPI	Equity
Renaissance IPO ETF	IPO	ETF
CENTURY THERAPEUTICS, INC.	IPSC	Equity
iQIYI, Inc.	IQ	Equity
IQVIA Holdings Inc.	IQV	Equity
INGERSOLL-RAND PLC	IR	Equity
iShares Robo and Artificial Intel Multisector ETF	IRBO	ETF
iRobot Corporation	IRBT	Equity
Iridium Communications Inc.	IRDM	Equity
Iris Energy Limited	IREN	Equity
IRIDEX CORPORATION	IRIX	Equity
IRON MOUNTAIN INC. (elec div)	IRM	Equity
DISC MEDICINE, INC.	IRON	Equity
Independence Realty Trust, Inc.	IRT	Equity
iRhythm Technologies, Inc	IRTC	Equity
Ironwood Pharmaceuticals Inc	IRWD	Equity
ISPIRE TECHNOLOGY, INC.	ISPR	Equity
INTUITIVE SURGICAL, INC.	ISRG	Equity
Gartner, Inc.	IT	Equity
iShares US Aerospace and Defense ETF	ITA	ETF
ISHARES U.S. HOME CONSTRUCTION ETF	ITB	ETF
Intra-Cellular Therapies, Inc.	ITCI	Equity
Integer Holdings Corporation	ITGR	Equity
Iteris, Inc.	ITI	Equity
VanEck Intermediate Muni ETF	ITM	ETF
iTeos Therapeutics, Inc.	ITOS	Equity
iShares Core S&P Total U.S. Stock Market ETF	ITOT	ETF
IT Tech Packaging, Inc.	ITP	Equity
ITRON, INC.	ITRI	Equity
ITT Inc.	ITT	Equity
ITAU UNIBANCO HOLDING S.A.	ITUB	Equity
ILLINOIS TOOL WORKS INC.	ITW	Equity
Intevac Inc.	IVAC	Equity
iShares S&P 500 Value Index Fund	IVE	ETF
QUADRATIC INTEREST RATE VOL. AND INFLATION ETF	IVOL	ETF
INVESCO MORTGAGE CAPITAL INCCOM	IVR	Equity
iShares Core S&P 500 ETF	IVV	ETF
Invivyd, Inc.	IVVD	Equity
iShares S&P 500 Growth ETF	IVW	ETF
Invesco Ltd	IVZ	Equity
iShares Russell 1000	IWB	ETF
ISHARES RUSSELL MICROCAP INDEX	IWC	ETF
ISHARES RUSSELL 1000 VALUE ETF	IWD	ETF
iShares Russell 1000 Growth ETF	IWF	ETF
ISHARES RUSSELL 2000 INDEX	IWM	ETF
ISHRS RUSSELL 2000 VALUE ETF	IWN	ETF

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
ISHRS RUSSELL 2000 GROWTH INDX	IWO	ETF
iShares Russell Midcap Growth Index Fund ETF	IWP	ETF
ISHARES RUSSELL MIDCAP INDEX FUND	IWR	ETF
ISHARES RUSSELL MIDCAP VALUE INDEX FUND	IWS	ETF
ISHARES RUSSELL 3000 INDX	IWV	ETF
ISHARES DJ US ENERGY SECTOR ETF	IYE	ETF
ISHARES DOW JONES U.S. BASIC MATERIALS SECT	IYM	ETF
ISHARES DOW JONES US REAL ESTATE	IYR	ETF
ISHARES DOW JONES TRANSPORTATION AVERAGE	IYT	ETF
iShares US Technology	IYW	ETF
iShares US Telecommunications	IYZ	ETF
IZEA WORLDWIDE, INC.	IZEA	Equity
Jacobs Engineering Group Inc.	J	Equity
JACK IN THE BOX, INC	JACK	Equity
JAKKS PACIFIC, INC.	JAKK	Equity
Jamf Holding Corp	JAMF	Equity
JANUX THERAPEUTICS, INC.	JANX	Equity
Jazz Pharmaceuticals Plc	JAZZ	Equity
JBG SMITH Properties	JBGS	Equity
JB HUNT TRANSPORT SERVICES INC.	JBHT	Equity
Janus International Group, Inc.	JBI	Equity
JABIL CIRCUIT INC.	JBL	Equity
JETBLUE AIRWAYS CORPORATI	JBLU	Equity
John Bean Technologies Corporation	JBT	Equity
Johnson Controls International plc	JCI	Equity
JD.COM, INC.	JD	Equity
DIREXION DAILY JR GLD MNRS BEAR 3X ETF	JDST	ETF
Jefferies Financial Group Inc.	JEF	Equity
JELD-WEN Holding, Inc	JELD	Equity
JPMORGAN EQUITY PREMIUM INCOME ETF	JEPI	ETF
J.P. MORGAN NASDAQ EQUITY PREMIUM INCOME ETF	JEPQ	ETF
US Global Jets ETF	JETS	ETF
JIAYIN GROUP INC.	JFIN	Equity
Janus Henderson Group Plc	JHG	Equity
Jack Henry & Associates Inc.	JKHY	Equity
Jinkosolar Holding Company Limited	JKS	Equity
Jones Lang LaSalle Incorporated	JLL	Equity
Jumia Technologies AG	JMIA	Equity
JOHNSON & JOHNSON	JNJ	Equity
SPDR BARCLAYS HIGH YIELD BOND	JNK	ETF
JUNIPER NETWORKS, INC.	JNPR	Equity
DIREXION DAILY JR GLD MNRS BULL 3X ETF	JNUG	ETF
Joby Aviation, Inc.	JOBY	Equity
ST. JOE CORPORATION	JOE	Equity
JPMORGAN CHASE & COMPANY	JPM	Equity
JAMES RIVER GROUP HOLDINGS LTD	JRVR	Equity
NORDSTROM INC.	JWN	Equity
JACKSON FINANCIAL INCORPORATION	JXN	Equity
JOINT CORP	JYNT	Equity
Kellanova	K	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Kaiser Aluminum Corporation	KALU	Equity
KALVISTA PHARMACEUTICALS INC	KALV	Equity
KAR AUCTION SERVICES, INC.	KAR	Equity
KB Financial Group, Inc.	KB	Equity
KraneShares Boserá MSCI China A ETF	KBA	ETF
SPDR S&P BANK ETF	KBE	ETF
KB HOME	KBH	Equity
KBR, Inc.	KBR	Equity
PowerShares KBW Bank ETF	KBWB	ETF
Kingsoft Cloud Holdings Limited	KC	Equity
KYNDRYL HOLDINGS INCORPORATION	KD	Equity
Keurig Dr. Pepper Inc.	KDP	Equity
Kelly Services Inc	KELYA	Equity
KOREA ELECTRIC POWER CORP.	KEP	Equity
KIRBY CORPORATION	KEX	Equity
KEYCORP	KEY	Equity
Keysight Technologies Inc.	KEYS	Equity
Kforce Inc	KFRC	Equity
KORN/FERRY INTERNATIONAL	KFY	Equity
KINROSS GOLD CORPORATION	KGC	Equity
KODIAK GAS SERVICES INC	KGS	Equity
The Kraft Heinz Company	KHC	Equity
ORTHOPEDIATRICS CORP	KIDS	Equity
SPDR S&P Insurance ETF	KIE	ETF
KIMCO REALTY CORP.	KIM	Equity
Nextdoor Holdings, Inc.	KIND	Equity
Kirkland's Inc.	KIRK	Equity
KKR & Co. LP	KKR	Equity
KLA-TENCOR CORPORATION	KLAC	Equity
WK KELLOGG CO	KLG	Equity
KULICKE AND SOFFA IND INC	KLIC	Equity
KALTURA, INC.	KLTR	Equity
KLX ENERGY SERVICES HOLDINGS, INC.	KLXE	Equity
KIMBERLY-CLARK CORPORATION	KMB	Equity
KAMADA LTD	KMDA	Equity
KINDER MORGAN, INC.	KMI	Equity
Kennametal Inc.	KMT	Equity
CARMAX INC.	KMX	Equity
KNOWLES CORPORATION	KN	Equity
Kandi Technologies Corporation	KNDI	Equity
KNIFE RIVER CORP	KNF	Equity
KNOT Offshore Partners LP	KNOP	Equity
Kiniksa Pharmaceuticals, Ltd	KNSA	Equity
Kinsale Capital Group Inc	KNSL	Equity
KINETIK HOLDINGS INC.	KNTK	Equity
Knight-Swift Transportation Holdings Inc.	KNX	Equity
THE COCA-COLA COMPANY	KO	Equity
Kodiak Sciences Inc	KOD	Equity
Eastman Kodak Company	KODK	Equity
Coca-Cola Femsa SAB de CV	KOF	Equity

MIAX Emerald Options as of 5/31/24		
Company Name	Symbol	Inst Type
ProShares UltraShort Bloomberg Natrl Gas	KOLD	ETF
Koppers Holdings, Inc.	KOP	Equity
Kopin Corporation	KOPN	Equity
Kosmos Energy Ltd	KOS	Equity
KARYOPHARM THERAPEUTICS, INC.	KPTI	Equity
THE KROGER COMPANY	KR	Equity
KraneShares Global Carbon Strategy ETF	KRBN	ETF
Kilroy Realty Corp.	KRC	Equity
SPDR S&P REGIONAL BANKING ETF	KRE	ETF
KKR REAL ESTATE FINANCE TRUST INC.	KREF	Equity
Kite Realty Group Trust	KRG	Equity
Sundial Growers Inc	KRMD	Equity
Kornit Digital Ltd.	KRNT	Equity
Kearny Financial Corp.	KRNY	Equity
Kronos Worldwide, Inc.	KRO	Equity
KRONOS BIO INC	KRON	Equity
KEROS THERAPEUTICS, INC.	KROS	Equity
KIMBELL ROYALTY PARTNERS LP	KRP	Equity
KRYSTAL BIOTECH, INC.	KRYS	Equity
Joint Stock Company Kaspi.kz	KSPI	Equity
KOHL'S CORPORATION	KSS	Equity
KT Corp.	KT	Equity
Kontoor Brands, Inc.	KTB	Equity
Key Tronic Corporation	KTCC	Equity
Kratos Defense & Security Solutions, Inc.	KTOS	Equity
KULR TECHNOLOGY GROUP INC	KULR	Equity
Kura Oncology, Inc	KURA	Equity
KENVUE INC.	KVUE	Equity
Klaviyo, Inc.	KVYO	Equity
Kennedy-Wilson Holdings Inc.	KW	Equity
KraneShares CSI China Internet ETF	KWEB	ETF
KAIXIN AUTO HOLDINGS	KXIN	Equity
KYMERA THERAPEUTICS INC	KYMR	Equity
Kayne Anderson MLP Investment Company	KYN	Equity
KAZIA THERAPEUTICS LTD	KZIA	Equity
KEZAR LIFE SCIENCES INC	KZR	Equity
LOEWS CORPORATION	L	Equity
LITHIUM AMERICAS ARGENTINA CORP.	LAAC	Equity
Standard BioTools Inc	LAB	Equity
Direxion Daily S&P Biotech Bear 3X ETF	LABD	ETF
Direxion Daily S&P Biotech Bull 3X ETF	LABU	ETF
Lithium Americas Corp	LAC	Equity
Lithia Motors Inc	LAD	Equity
Ladder Capital Corp	LADR	Equity
Lakeland Industries, Inc.	LAKE	Equity
LAMAR ADVERTISING COMPANY	LAMR	Equity
Gladstone Land Corporation	LAND	Equity
nLIGHT, Inc	LASR	Equity
Laureate Education, Inc.	LAUR	Equity
CS DISCO, INC	LAW	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
LAZARD LTD.	LAZ	Equity
Luminar Technologies Inc	LAZR	Equity
Liberty Broadband Corporation	LBRDK	Equity
Liberty Oilfield Services Inc	LBRT	Equity
LIBERTY GLOBAL INC	LBTYA	Equity
LIBERTY GLOBAL PLC	LBTYK	Equity
LendingClub Corporation	LC	Equity
Lucid Group, Inc. (LCID)	LCID	Equity
LCI Industries (LCII)	LCII	Equity
Lineage Cell Therapeutics, Inc	LCTX	Equity
LIFETIME BRANDS, INC	LCUT	Equity
LOANDEPOT, INC.	LDI	Equity
LUMOS NETWORKS CORPORATION	LDOS	Equity
LANDS' END, INC.	LE	Equity
Lear Corporation	LEA	Equity
Lincoln Electric Holdings, Inc.	LECO	Equity
LEGETT & PLATT, INC.	LEG	Equity
LEGACY HOUSING CORPORATION	LEGH	Equity
LEGEND BIOTECH CORP	LEGN	Equity
LENNAR CORPORATION	LEN	Equity
LESLIES INC	LESL	Equity
CENTRUS ENERGY CORP.	LEU	Equity
Lion Electric Company	LEV	Equity
Levi Strauss & Co.	LEVI	Equity
Lifecore Biomedical, Inc	LFCR	Equity
LifeMD, Inc.	LFMD	Equity
LIFESTANCE HEALTH GROUP, INC.	LFST	Equity
Lifevantage Corporation	LFVN	Equity
Lions Gate Entertainment Corp.	LGFA	Equity
Lions Gate Entertainment Corporation	LGFB	Equity
LGI Homes, Inc.	LGIH	Equity
Ligand Pharmaceuticals Inc.	LGND	Equity
Largo Inc.	LGO	Equity
LABORATORY CORP OF AMER HLDG	LH	Equity
L3Harris Technologies, Inc.	LHX	Equity
Li Auto Inc.	LI	Equity
Li-Cycle Holdings Corporation	LICY	Equity
ATYR PHARMA, INC.	LIFE	Equity
MSP RECOVERY, INC.	LIFW	Equity
LENNOX INTERNATIONAL, INC.	LII	Equity
LiLAC Group	LILA	Equity
Liberty LiLAC Group	LILAK	Equity
Lilium N.V.	LILM	Equity
Linde plc	LIN	Equity
Lincoln Educational Services Corporation	LINC	Equity
Lindblad Expeditions Holdings, Inc	LIND	Equity
Global X Lithium & Battery ETF	LIT	ETF
Lumentum Holdings Inc.	LITE	Equity
SNOW LAKE RESOURCES LTD.	LITM	Equity
LivaNova PLC	LIVN	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
LKQ Corporation	LKQ	Equity
Lumber Liquidators Holdings Inc	LL	Equity
TERRAN ORBITAL CORPORATION	LLAP	Equity
ELI LILLY AND COMPANY	LLY	Equity
LeMaitre Vascular Inc.	LMAT	Equity
LIMBACH HOLDINGS, INC.	LMB	Equity
Lemonade, Inc	LMND	Equity
LOCKHEED MARTIN CORPORATION	LMT	Equity
LINCOLN NATIONAL CORPORATION	LNC	Equity
CHENIERE ENERGY, INC.	LNG	Equity
Lindsay Corporation	LNN	Equity
Alliant Energy Corporation	LNT	Equity
Lantheus Holdings, Inc	LNTH	Equity
Light & Wonder, Inc.	LNW	Equity
Live Oak Bancshares, Inc	LOB	Equity
EL POLLO LOCO HOLDINGS, INC.	LOCO	Equity
Comstock Mining, Inc.	LODE	Equity
ContextLogic Inc.	LOGC	Equity
Logitech International S.A.	LOGI	Equity
Loma Negra Cia Industrial Argentina SA	LOMA	Equity
Loop Industries, Inc	LOOP	Equity
Grand Canyon Education, Inc.	LOPE	Equity
The Lovesac Company	LOVE	Equity
LOWE'S COMPANIES INC.	LOW	Equity
Dorian LPG Ltd	LPG	Equity
LG Display Co., Ltd.	LPL	Equity
LPL Financial Holdings Inc.	LPLA	Equity
OPEN LENDING CORPORATION	LPRO	Equity
LivePerson, Inc.	LPSN	Equity
LEAP THERAPEUTICS, INC	LPTX	Equity
LOUISIANA-PACIFIC CORPORATION	LPX	Equity
iShares iBoxx \$ Invst Grade Crp Bond	LQD	ETF
Liquidia Corporation	LQDA	Equity
LIQUIDITY SERVICES, INC.	LQDT	Equity
LAM RESEARCH CORPORATION	LRCX	Equity
LARIMAR THERAPEUTICS, INC.	LRMR	Equity
K12, Inc.	LRN	Equity
Lesaka Technologies, Inc.	LSAK	Equity
Lattice Semiconductor Corporation	LSCC	Equity
LANDSEA HOMES CORPORATION	LSEA	Equity
LIGHTSPEED POS, INC.	LSPD	Equity
LANDSTAR SYSTEM INC	LSTR	Equity
Liberty SiriusXM -Series A	LSXMA	Equity
Liberty SiriusXM -Series C	LSXMK	Equity
LTC Properties Inc.	LTC	Equity
LIFE TIME GROUP HOLDINGS, INC.	LTH	Equity
PIMCO 15+ Year U.S. TIPS Index Exchange-Traded Fnd	LTPZ	ETF
LANTERN PHARMA, INC.	LTRN	Equity
LANTRONIX, INC.	LTRX	Equity
LUFAX HOLDING LTD	LU	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
LULULEMON ATHLETICA INC.	LULU	Equity
CenturyLink, Inc.	LUMN	Equity
LUNA INNOVATIONS INC	LUNA	Equity
PULMONX CORP	LUNG	Equity
INTUITIVE MACHINES, INC. CLASS A	LUNR	Equity
SOUTHWEST AIRLINES COMPANY	LUV	Equity
LULUS FASHION LOUNGE HOLDINGS, INC.	LVLU	Equity
LiveOne, Inc.	LVO	Equity
LAS VEGAS SANDS CORPORATION	LVS	Equity
LAVA THERAPEUTICS NV	LVTX	Equity
LiveWire Group, Inc.	LVWR	Equity
Lamb Weston Holdings, Inc.	LW	Equity
LIGHTWAVE LOGIC, INC.	LWLG	Equity
LexinFintech Holdings Ltd.	LX	Equity
Lexington Realty Trust	LXP	Equity
Lexicon Pharmaceuticals, Inc.	LXRX	Equity
LSB Industries Inc.	LXU	Equity
LYONDELLBASELL INDUSTRIES NV	LYB	Equity
LYELL IMMUNOPHARMA, INC.	LYEL	Equity
Lyft, Inc.	LYFT	Equity
Lloyds Banking Group Plc ADR	LYG	Equity
LYRA THERAPEUTICS, INC.	LYRA	Equity
Live Nation Entertainment Inc	LYV	Equity
LEGALZOOM.COM, INC	LZ	Equity
LA-Z-BOY INC.	LZB	Equity
MACY'S, INC.	M	Equity
MASTERCARD INCORPORATED	MA	Equity
Mid-America Apartment Communities Inc.	MAA	Equity
THE MACERICH COMPANY	MAC	Equity
MAG Silver Corp.	MAG	Equity
Main Street Capital Corporation	MAIN	Equity
MAMAS CREATIONS, INC.	MAMA	Equity
MANPOWERGROUP INC.	MAN	Equity
MANHATTAN ASSOCIATES INC.	MANH	Equity
Manchester United plc	MANU	Equity
WM Technology, Inc	MAPS	Equity
MARRIOTT INTERNATIONAL, INC.	MAR	Equity
Marathon Patent Group, Inc.	MARA	Equity
MASCO CORP.	MAS	Equity
Masimo Corporation	MASI	Equity
908 DEVICES INC	MASS	Equity
MATTEL, INC.	MAT	Equity
Mativ Holdings, Inc.	MATV	Equity
Matthews International Corporation	MATW	Equity
Matson, Inc.	MATX	Equity
MEDIAALPHA INC CLASS A	MAX	Equity
MAXEON SOLAR TECHNOLOGIES, LTD	MAXN	Equity
iShares Barclays MBS Bond Fund ETF	MBB	ETF
MBIA INC.	MBI	Equity
MOBILEYE GLOBAL, INC.	MBLY	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Malibu Boats, Inc.	MBUU	Equity
Moelis & Company	MC	Equity
METROPOLITAN BANK HOLDING CORP.	MCB	Equity
MCDONALD'S CORPORATION	MCD	Equity
MasterCraft Boat Holdings, Inc	MCFT	Equity
iShares MSCI China ETF	MCHI	ETF
MICROCHIP TECHNOLOGY INC	MCHP	Equity
MCKESSON CORPORATION	MCK	Equity
MOODY'S CORPORATION	MCO	Equity
Seres Therapeutics, Inc.	MCRB	Equity
MONRACH CASINO & RESORT, INC	MCRI	Equity
Marcus Corporation	MCS	Equity
MISTER CAR WASH INC	MCW	Equity
Mercury General Corporation	MCY	Equity
Mednax Inc	MD	Equity
MongoDB, Inc.	MDB	Equity
Madrigal Pharmaceuticals, Inc.	MDGL	Equity
MONDELEZ INTERNATIONAL, INC.	MDLZ	Equity
MEDTRONIC, INC.	MDT	Equity
MDU RESOURCES GROUP INC.	MDU	Equity
MIMEDX GROUP, INC.	MDXG	Equity
SPDR S&P MIDCAP 400	MDY	ETF
23andMe Holding Co.	ME	Equity
Medifast, Inc.	MED	Equity
Medpace Holdings, Inc	MEDP	Equity
Montrose Environmental Group, Inc	MEG	Equity
METHODE ELECTRONICS, INC.	MEI	Equity
MEI PHARMA, INC.	MEIP	Equity
Mercadolibre Inc	MELI	Equity
Methanex Corp.	MEOH	Equity
Mercer International Inc.	MERC	Equity
Mesa Air Group Inc	MESA	Equity
Mesoblast Limited	MESO	Equity
METLIFE, INC.	MET	Equity
Meta Platforms, Inc.	META	Equity
RAMACO RESOURCES, INC.	METC	Equity
Roundhill Ball Metaverse ETF	METV	ETF
MFA Financial Inc	MFA	Equity
MANULIFE FINANCIAL CORPORATION	MFC	Equity
MidCap Financial Investment Corporation	MFIC	Equity
Medallion Financial Corporation	MFIN	Equity
Mistras Group Inc	MG	Equity
Magna International Inc.	MGA	Equity
Magic Software Enterprises Ltd	MGIC	Equity
Vanguard Mega Cap 300 Growth ETF	MGK	ETF
MGM RESORTS INTERNATIONAL	MGM	Equity
Magnite, Inc.	MGNI	Equity
MacroGenics, Inc.	MGNX	Equity
MGP Ingredients Inc.	MGPI	Equity
MEIRAGTX HOLDINGS PLC	MGTX	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Magnolia Oil & Gas Corporation	MGY	Equity
MOHAWK INDUSTRIES, INC.	MHK	Equity
MAIDEN HOLDINGS LTDSHS	MHLD	Equity
M/I Homes Inc	MHO	Equity
The Middleby Corporation	MIDD	Equity
Direxionshares Daily Mid Cap Bull 3X Shares	MIDU	ETF
Mirion Technologies, Inc.	MIR	Equity
MIRUM PHARMACEUTICALS, INC.	MIRM	Equity
MILESTONE PHARMACEUTICALS, INC.	MIST	Equity
Mitek Systems, Inc.	MITK	Equity
AG Mortgage Investment Trust, Inc.	MITT	Equity
ETFMG Alternative Harvest ETF	MJ	ETF
MCCORMICK AND COMPANY, INC.	MKC	Equity
Markforged Holding Corporation	MKFG	Equity
Markel Corporation	MKL	Equity
MKS Instruments, Inc.	MKSI	Equity
MarketAxess Holdings Inc.	MKTX	Equity
Melco Resorts & Entertainment Limited	MLCO	Equity
MillerKnoll, Inc.	MLKN	Equity
MARTIN MARIETTA MATERIALS INC	MLM	Equity
MERIDIANLINK, INC.	MLNK	Equity
MILESTONE SCIENTIFIC, INC	MLSS	Equity
MOONLAKE IMMUNOTHERAPEUTICS	MLTX	Equity
MARSH & MCLENNAN INC	MMC	Equity
MARTIN MIDSTREAM PARTNERS LP	MMLP	Equity
3M COMPANY	MMM	Equity
MAXIMUS, Inc.	MMS	Equity
Merit Medical Systems, Inc.	MMSI	Equity
MakeMyTrip Ltd	MMYT	Equity
MONDAY.COM LTD	MNDY	Equity
MANNKIND CORPORATION	MNKD	Equity
MIND MEDICINE INC.	MNMD	Equity
PROG Holdings, Inc.	MNOV	Equity
Monro, Inc.	MNRO	Equity
MINISO GROUP HOLDING LTD.	MNSO	Equity
MONSTER BEVERAGE CORPORATION	MNST	Equity
Manitex International Inc	MNTX	Equity
MoneyHero Limited	MNY	Equity
ALTRIA GROUP INC.	MO	Equity
Modine Manufacturing Company	MOD	Equity
Topgolf Callaway Brands Corporation	MODG	Equity
MODEL N, INC.	MODN	Equity
ModivCare Inc.	MODV	Equity
MOGO INC	MOGO	Equity
Molina Healthcare Inc.	MOH	Equity
Momo Inc.	MOMO	Equity
Market Vectors Agribusiness ETF	MOO	ETF
MORPHOSYS AG SPONSORED ADR	MOR	Equity
MORPHIC HOLDINGS INC	MORF	Equity
MORNINGSSTAR INC	MORN	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
THE MOSAIC COMPANY	MOS	Equity
Movado Group, Inc.	MOV	Equity
MP Materials Corporation	MP	Equity
Motorcar Parts of America, Inc.	MPAA	Equity
MARATHON PETROLEUM CORPORATION	MPC	Equity
MultiPlan Corporation	MPLN	Equity
MPLX LP	MPLX	Equity
Medical Properties Trust Inc	MPW	Equity
Monolithic Power Systems Inc	MPWR	Equity
Marine Products Corporation	MPX	Equity
MARQETA, INC	MQ	Equity
EVERSPIN TECHNOLOGIES, INC.	MRAM	Equity
MRC Global Inc.	MRC	Equity
Mercury Systems, Inc.	MRCY	Equity
MEREO BIOPHARMA GROUP PLC SPONSORED ADR	MREO	Equity
MERCK & COMPANY INC.	MRK	Equity
Moderna, Inc.	MRNA	Equity
Marinus Pharmaceuticals, Inc.	MRNS	Equity
MARATHON OIL CORPORATION	MRO	Equity
Mersana Therapeutics, Inc.	MRSN	Equity
Marten Transport, Ltd.	MRTN	Equity
MERUS N.V.	MRUS	Equity
Maravai LifeSciences Holdings, Inc.	MRVI	Equity
MARVELL TECHNOLOGY GROUP LTD.	MRVL	Equity
MORGAN STANLEY	MS	Equity
Mesabi Trust	MSB	Equity
MSCI Inc	MSCI	Equity
MICROSOFT CORPORATION	MSFT	Equity
Madison Square Garden Entertainment Corp	MSGE	Equity
Madison Square Garden Sports Corporation	MSGS	Equity
MOTOROLA INC (reverse split)	MSI	Equity
MSC Industrial Direct Co. Inc.	MSM	Equity
ADVISOR SHARES PURE US CANNABIS	MSOS	ETF
ADVISORSHARES MSOS 2X DAILY ETF	MSOX	ETF
MICROSTRATEGY, INC	MSTR	Equity
YIELDMAX MSTR OPTION INCOME STRATEGY ETF	MSTY	ETF
ARCELORMITTAL	MT	Equity
METALLA ROYALTY & STREAMING LTD.	MTA	Equity
M & T BANK CORP	MTB	Equity
Match Group, Inc.	MTCH	Equity
Matador Resources Company	MTDR	Equity
MGIC INVESTMENT CORPORATION	MTG	Equity
MERITAGE HOMES CORPORATION	MTH	Equity
MATERIALISE NV	MTLS	Equity
Vail Resorts, Inc.	MTN	Equity
Matrix Service Company	MTRX	Equity
MACOM Technology Solutions Holdings, Inc.	MTSI	Equity
Matterport, Inc.	MTTR	Equity
Altria Group, Inc	MTUM	ETF
Metallus Inc.	MTUS	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
THE MANITOWOC COMPANY, INC.	MTW	Equity
MASTEC INC	MTZ	Equity
MICRON TECHNOLOGY INC.	MU	Equity
iShares S&P National AMT Free Municipal Bond Fund	MUB	ETF
Mitsubishi UFJ Financial Group, Inc.	MUFG	Equity
MURPHY OIL CORPORATION	MUR	Equity
Murphy USA Inc.	MUSA	Equity
McEwen Mining Inc.	MUX	Equity
Microvision, Inc.	MVIS	Equity
MV Oil Trust	MVO	Equity
Microvast Holdings, Inc. (MVST)	MVST	Equity
Mueller Water Products, Inc.	MWA	Equity
MagnaChip Semiconductor Corp.	MX	Equity
Maxlinear, Inc.	MXL	Equity
MYRIAD GENETICS INC	MYGN	Equity
PLAYSTUDIOS, Inc.	MYPS	Equity
MYR Group Inc.	MYRG	Equity
MYT NETHERLANDS PARENT BV	MYTE	Equity
N-ABLE, INC	NABL	Equity
Direxion Daily Homebuilders & Supplies Bull 3X Shares	NAIL	ETF
Northern Dynasty Minerals Ltd.	NAK	Equity
DUCKHORN PORTFOLIO, INC.	NAPA	Equity
Inari Medical, Inc	NARI	Equity
Nordic American Tankers Ltd	NAT	Equity
NCR ATLEOS, LLC	NATL	Equity
Nautilus Biotechnology, Inc.	NAUT	Equity
NAVIENT CORPORATION	NAVI	Equity
NEUROCRINE BIOSCIENCES	NBIX	Equity
NABORS INDUSTRIES LTD.	NBR	Equity
NORWEGIAN CRUISE LINE HOLDINGS LTD.	NCLH	Equity
National Cinenedia Inc	NCMI	Equity
nCino, Inc	NCNO	Equity
Nasdaq OMX Group	NDAQ	Equity
NOODLES & COMPANY	NDLS	Equity
Nordson Corporation	NDSN	Equity
NOBLE CORPORATION	NE	Equity
NORTHEAST COMMUNITY BANCORP INC	NECB	Equity
NextEra Energy, Inc.	NEE	Equity
NEWEGG COMMERCE, INC.	NEGG	Equity
NEWMONT MINING CORPORATION	NEM	Equity
NeoGenomics, Inc.	NEO	Equity
Neogen Corp	NEOG	Equity
NEONODE INC.	NEON	Equity
NextEra Energy Partners, LP	NEP	Equity
Roundhill BITKRAFT Esports & Digital Entertainment ETF	NERD	ETF
Cloudflare, Inc.	NET	Equity
NEW PACIFIC METALS CORP	NEWP	Equity
Newtek Business Services Corp	NEWT	Equity
NEXA RESOURCES S.A.	NEXA	Equity
NEXTDECADE CORP.	NEXT	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
New Fortress Energy Inc	NFE	Equity
National Fuel Gas Company	NFG	Equity
NEW FOUND GOLD	NFGC	Equity
NETFLIX, INC.	NFLX	Equity
NOVAGOLD RESOURCES INC (dist)	NG	Equity
NEW GOLD, INC.	NGD	Equity
National Grid PLC	NGG	Equity
NGL ENERGY PARTNERS L.P.	NGL	Equity
Natural Gas Services Group	NGS	Equity
Natural Grocers by Vitamin Cottage, Inc.	NGVC	Equity
National HealthCare Corporation	NHC	Equity
National Health Investors Inc.	NHI	Equity
NATURAL HEALTH TRENDS CORP.	NHTC	Equity
NISOURCE, INC	NI	Equity
NICE Ltd.	NICE	Equity
NINE ENERGY SERVICE INC	NINE	Equity
NIO Inc.	NIO	Equity
Niu Technologies	NIU	Equity
NIKE INC.	NKE	Equity
Nikola Corporation	NKLA	Equity
NEKTAR THERAPEUTICS	NKTR	Equity
NKARTA INC	NKTX	Equity
ANNALY CAPITAL MANAGEMENT, INC.	NLY	Equity
New Mountain Finance Corporation	NMFC	Equity
NMI Holdings, Inc.	NMIH	Equity
Navios Maritime Partners LP	NMM	Equity
Nomura Holdings, Inc.	NMR	Equity
NEUMORA THERAPEUTICS INC	NMRA	Equity
Newmark Group Inc	NMRK	Equity
NEUROONE MEDICAL TECHNOLOGIES CORPORATION	NMTC	Equity
NEXTNAV INC.	NN	Equity
NN, Inc.	NNBR	Equity
NANO DIMENSION LTD	NNDM	Equity
National Retail Properties, Inc.	NNN	Equity
NANO-X IMAGING LTD	NNOX	Equity
NanoViricides, Inc	NNVC	Equity
Noah Holdings, Ltd.	NOAH	Equity
NORTHROP GRUMMAN CORP	NOC	Equity
Northern Oil and Gas Inc	NOG	Equity
NOKIA CORPORATION	NOK	Equity
Nomad Foods Limited	NOMD	Equity
FISCALNOTE HOLDINGS, INC.	NOTE	Equity
INOTIV, INC.	NOTV	Equity
NOV, Inc.	NOV	Equity
Sunnova Energy International Inc	NOVA	Equity
Novanta Inc.	NOVT	Equity
ServiceNow Inc.	NOW	Equity
EnPro Industries Inc	NPO	Equity
Newpark Resources, Inc.	NR	Equity
NERDWALLET, INC	NRDS	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Nerdy Inc.	NRDY	Equity
NRG ENERGY, INC.	NRG	Equity
Energy Vault Holdings, Inc	NRGV	Equity
NURIX THERAPEUTICS, INC.	NRIX	Equity
Natural Resource Partners L.P.	NRP	Equity
NRX PHARMACEUTICALS, INC	NRXP	Equity
National Storage Affiliates	NSA	Equity
NORFOLK SOUTHERN CORPORATION	NSC	Equity
Insperty, Inc.	NSP	Equity
INSPIREMD, INC.	NSPR	Equity
Napco Security Technologies, Inc.	NSSC	Equity
NETAPP, INC.	NTAP	Equity
THE BANK OF N.T. BUTTERFIELD & SON LIMITED	NTB	Equity
NetScout Systems, Inc.	NTCT	Equity
NETEASE, INC.	NTES	Equity
NETGEAR INC	NTGR	Equity
Intellia Therapeutics Inc.	NTLA	Equity
Nutanix, Inc.	NTNX	Equity
Nutrien Ltd.	NTR	Equity
Natera, Inc	NTRA	Equity
NORTHERN TRUST CORPORATIO	NTRS	Equity
NetSol Technologies, Inc.	NTWK	Equity
NU HOLDINGS LTD.	NU	Equity
NUCOR CORPORATION	NUE	Equity
DIREXION DAILY GOLD MINERS BULL 3X SHRS	NUGT	ETF
NU SKIN ENTERPRISES INC.	NUS	Equity
NUVATION BIO INC COM CL A	NUVB	Equity
NUVALENT, INC.	NUVL	Equity
NOVAVAX, INC	NVAX	Equity
NovoCure Limited	NVCR	Equity
GraniteShares ETF Trust 2x Short NVDA Daily ETF	NVD	ETF
NVIDIA CORPORATION	NVDA	Equity
GRANITESHARES 1.5X LONG NVDA DAILY ETF	NVDL	ETF
AXS 1.25X NVDA BEAR DAILY ETF	NVDS	ETF
DIREXION DAILY NVDA BULL 1.5X SHARES	NVDU	ETF
T-REX 2X LONG NVIDIA DAILY	NVDX	ETF
YIELDMAX NVDA OPTION INCOME STRATEGY ETF	NVDY	ETF
NV5 Global Inc.	NVEE	Equity
NUVEI CORPORATION	NVEI	Equity
NAVIGATOR HOLDINGS LTD.	NVGS	Equity
Nova Measuring Instruments Ltd.	NVMI	Equity
enVveno Medical Corporation	NVNO	Equity
Novo Nordisk	NVO	Equity
Enviri Corporation	NVRI	Equity
Nevro Corp.	NVRO	Equity
Novartis AG	NVS	Equity
Envista Holdings Corp	NVST	Equity
nVent Electric plc	NVT	Equity
NAVITAS SEMICONDUCTOR CORPORATION	NVTS	Equity
Northwest Bancshares Inc	NWBI	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
NatWest Group plc	NWG	Equity
NEWELL RUBBERMAID, INC.	NWL	Equity
Northwest Pipe Company	NWPX	Equity
News Corporation	NWS	Equity
NEWS CORPORATION	NWSA	Equity
Quanex Building Products Corporation	NX	Equity
NEXGEN ENERGY LT/NEXGEN ENERGY LTD.D.	NXE	Equity
NXP Semiconductors NV	NXPI	Equity
NexPoint Residential Trust Inc.	NXRT	Equity
NEXSTAR BROADCASTING GROUP, INC.	NXST	Equity
NEXTRACKER INC.	NXT	Equity
NextCure, Inc	NXTC	Equity
NEW YORK COMM. BANCORP	NYCB	Equity
New York Mortgage Trust, Inc.	NYMT	Equity
NEW YORK TIMES COMPANY	NYT	Equity
Realty Income Corporation	O	Equity
OMNIAB, INC.	OABI	Equity
OUTOUTBRAIN INC/BRAIN INC	OB	Equity
Blue Owl Capital Corporation	OBDC	Equity
OBSIDIAN ENERGY LTD	OBE	Equity
OWENS CORNING INC.	OC	Equity
OCEAN BIOMEDICAL, INC.	OCEA	Equity
Oceanfirst Financial Corp.	OCFC	Equity
ONECONNECT FINANCIAL TECHNOLOGY CO LTD	OCFT	Equity
OCUGEN INC	OCGN	Equity
OCWEN FINANCIAL CORPORATION	OCN	Equity
Oaktree Specialty Lending Corporation	OCSL	Equity
Ocular Therapeutix, Inc.	OCUL	Equity
OCUPHIRE PHARMA, INC.	OCUP	Equity
ODDITY TECH LTD	ODD	Equity
Old Dominion Freight Line (150 shares)	ODFL	Equity
The ODP Corporation	ODP	Equity
OSISKO DEVELOPMENT CORP	ODV	Equity
Orion Engineered Carbons S.A.	OEC	Equity
ISHARES S&P 100 ETF	OEF	ETF
Orion Energy Systems, Inc	OESX	Equity
OFG BANNCORP	OFG	Equity
OGE ENERGY CORP.	OGE	Equity
OrganiGram Holdings Inc	OGI	Equity
OSHARES GLOBAL INTERNET GIANTS ETF	OGIG	ETF
ORGANON & CO.	OGN	Equity
OMEGA Healthcare Investors, Inc.	OHI	Equity
OWENS-ILLINOIS INC.	OI	Equity
MARKET VECTORS OIL SERVICES ETF	OIH	ETF
OCEANEERING INTERNATIONAL, INC	OII	Equity
Oil States International, Inc.	OIS	Equity
ONEOK, INC.	OKE	Equity
Oklo Inc.	OKLO	Equity
Okta, Inc.	OKTA	Equity
CAMBRIDGE DISPLAY TECHNOLOGY INC.	OLED	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
OLINK HOLDING	OLK	Equity
Ollie's Bargain Outlet Holdings, Inc.	OLLI	Equity
Aurora Innovation, Inc.	OLMA	Equity
OLIN CORP.	OLN	Equity
OLO, INC.	OLO	Equity
OLAPLEX HOLDINGS INC	OLPX	Equity
OUTSET MEDICAL, INC.	OM	Equity
GRUPO AEROPORTUARIO DEL CENTRO NORTE SAB DE CV	OMAB	Equity
OMNICOM GROUP	OMC	Equity
OMNICELL, INC	OMCL	Equity
Omeros Corporation	OMER	Equity
Odyssey Marine Exploration Inc.	OMEX	Equity
OneMain Holdings, Inc.	OMF	Equity
OMEGA THERAPEUTICS, INC.	OMGA	Equity
OWENS & MINOR, INC	OMI	Equity
ON Semiconductor Corporation	ON	Equity
Old National Bancorp	ONB	Equity
ONDAS HOLDINGS, INC.	ONDS	Equity
FIDELITY NASDAQ COMPOSITE INDEX ETF	ONEQ	ETF
ONEWATER MARINE INC	ONEW	Equity
ORION OFFICE REIT INC	ONL	Equity
PROSHARES ONLINE RETAIL ETF	ONLN	ETF
ON HOLDING AG	ONON	Equity
ON24, INC	ONTF	Equity
Onto Innovation Inc.	ONTO	Equity
Ooma, Inc	OOMA	Equity
Offerpad Solutions Inc.	OPAD	Equity
Option Care Health, Inc	OPCH	Equity
Opendoor Technologies Inc.	OPEN	Equity
OppFi Inc.	OPFI	Equity
(New) Office Properties Income Trust	OPI	Equity
OPKO HEALTH, INC.	OPK	Equity
Opera Limited	OPRA	Equity
OPORTUN FINANCIAL CORP.	OPRT	Equity
OptimizeRx Corporation	OPRX	Equity
OCEAN POWER TECHNOLOGIES, INC.	OPTT	Equity
Oppenheimer Holdings Inc.	OPY	Equity
Osisko Gold Royalties Ltd	OR	Equity
Ormat Technologies, Inc.	ORA	Equity
Orange SA	ORAN	Equity
Orchid Island Capital, Inc.	ORC	Equity
ORACLE CORPORATION	ORCL	Equity
Origin Materials, Inc.	ORGN	Equity
ORGANOGENESIS HOLDINGS, INC.	ORGO	Equity
ORGENESIS INC.	ORGS	Equity
Old Republic International Corporation	ORI	Equity
ORIC PHARMACEUTICALS INC	ORIC	Equity
ORLA MINING LTD	ORLA	Equity
O'REILLY AUTOMOTIVE INC.	ORLY	Equity
Oramed Pharmaceuticals Inc.	ORMP	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Orion Marine Group, Inc.	ORN	Equity
ORRSTOWN FINANCIAL SERVICES, INC.	ORRF	Equity
OSCAR HEALTH INC.	OSCR	Equity
Overseas Shipholding Group, Inc.	OSG	Equity
OSI Systems Inc.	OSIS	Equity
Oshkosh Corporation	OSK	Equity
OneSpan Inc.	OSPN	Equity
ONE STOP SYSTEMS, INC.	OSS	Equity
ORASURE TECHNOLOGIES INC	OSUR	Equity
OneSpaWorld Holdings Limited	OSW	Equity
OPEN TEXT CORPORATION	OTEX	Equity
Otis Worldwide Corporation	OTIS	Equity
OATLY GROUP AB	OTLY	Equity
Ouster, Inc	OUST	Equity
OUTFRONT MEDIA INC.	OUT	Equity
Ovid Therapeutics Inc.	OVID	Equity
Ovintiv Inc.	OVV	Equity
Blue Owl Capital Inc.	OWL	Equity
Oxford Industries, Inc	OXM	Equity
Oxford Square Capital Corporation	OXSQ	Equity
OCCIDENTAL PETROLEUM CORPORATION	OXY	Equity
Bank OZK	OZK	Equity
PLAINS ALL AMERICAN PIPELINE, LP	PAA	Equity
PAN AMERICAN SILVER CORPORATION	PAAS	Equity
Pacific Biosciences of California Inc	PACB	Equity
RANPAK HOLDINGS CORP	PACK	Equity
PACS Group, Inc.	PACS	Equity
Penske Automotive Group Inc	PAG	Equity
PLAINS GP HOLDINGS, L.P.	PAGP	Equity
PagSeguro Digital Ltd.	PAGS	Equity
Pampa Energía S.A.	PAM	Equity
PANGAEA LOGISTICS SOLUTIONS LTD.	PANL	Equity
Palo Alto Networks Inc	PANW	Equity
PAR Technology Corporation	PAR	Equity
Paramount Global Class B	PARA	Equity
Paramount Global Class A	PARAA	Equity
Par Pacific Holdings, Inc.	PARR	Equity
Passage Bio, Inc.	PASG	Equity
UIPATH INC	PATH	Equity
Patrick Industries, Inc.	PATK	Equity
Global X U.S. Infrastructure Development ETF	PAVE	ETF
PAVMED INC	PAVM	Equity
PATRIA INVESTMENT LTD	PAX	Equity
PAYMENTUS HOLDINGS, INC	PAY	Equity
Paycom Software, Inc.	PAYC	Equity
Payoneer Global Inc.	PAYO	Equity
PaySign, Inc.	PAYS	Equity
PAYCHEX, INC	PAYX	Equity
Prosperity Bancshares, Inc.	PB	Equity
Pembina Pipeline Corporation	PBA	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
PBF ENERGY INC.	PBF	Equity
PITNEY BOWES INC.	PBI	Equity
POTBELLY CORPORATION	PBPB	Equity
PETROLEO BRASILEIRO PETROBRAS SA	PBR	Equity
PERMIAN BASIN ROYALTY TRUST	PBT	Equity
POWERSHARES WILDERHILL CLEAN ENERGY	PBW	ETF
PUMA BIOTECHNOLOGY, INC.	PBYI	Equity
PACCAR INC.	PCAR	Equity
PG & E CORP	PCG	Equity
PotlatchDeltic Corporation	PCH	Equity
PROCORE TECH.	PCOR	Equity
Pacira Pharmaceuticals, Inc./DE	PCRX	Equity
PURECYCLE TECHNOLOGIES INC	PCT	Equity
Paylocity Holding Corporation	PCTY	Equity
VAXCYTE, INC.	PCVX	Equity
PagerDuty, Inc.	PD	Equity
INVESCO OPTIMUM YIELD DIVER STARTEGY NO K-1 ETF	PDBC	ETF
Patterson Companies, Inc.	PDCO	Equity
Pinduoduo Inc.	PDD	Equity
PDF Solutions Inc	PDFS	Equity
Piedmont Office Realty Trust Inc.	PDM	Equity
Precision Drilling Corporation	PDS	Equity
PDS BIOTECHNOLOGY CORP.	PDSB	Equity
Pebblebrook Hotel Trust	PEB	Equity
PHILLIPS EDISON & COMPANY, INC.	PECO	Equity
PUBLIC SERVICE ENT GROUP INC	PEG	Equity
Pegasystems, Inc.	PEGA	Equity
INVESCO DYNAMIC LEISURE & ENTERTAINMENT ETF	PEJ	ETF
Penumbra, Inc	PEN	Equity
PENN NATIONAL GAMING INC	PENN	Equity
PEPSICO, INC.	PEP	Equity
Perion Network Ltd.	PERI	Equity
Perma-Fix Environmental Services, Inc.	PESI	Equity
PetIQ, Inc	PETQ	Equity
PETMED EXPRESS, INC.	PETS	Equity
Invesco High Yield Equity Dividend Achievers ETF	PEY	ETF
PFIZER INC.	PFE	Equity
iShares US Preferred Stock	PFF	ETF
GLOBAL X U.S. PREFERRED ETF	PFFD	ETF
PRINCIPAL FINANCIAL GROUP, INC.	PFG	Equity
Performance Food Group Company	PFGC	Equity
Pennantpark Floating Rate Capital Ltd	PFLT	Equity
Performant Financial Corporation	PFMT	Equity
PROVIDENT FINANCIAL SERVICES, INC	PFS	Equity
PennyMac Financial Services, Inc.	PFSI	Equity
PROCTER & GAMBLE COMPANY	PG	Equity
Precigen, Inc.	PGEN	Equity
PowerShares Financial Preferred ETF	PGF	ETF
PowerShares Golden Dragon China Portfolio	PGJ	ETF
Progyny Inc	PGNY	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
PROGRESSIVE CORPORATION	PGR	Equity
Paramount Group Inc.	PGRE	Equity
PropertyGuru Group Limited	PGRU	Equity
PAGAYA TECHNOLOGIES LTD	PGY	Equity
PARKER-HANNIFIN CORP	PH	Equity
PHATHOM PHARMACEUTICALS, INC.	PHAT	Equity
Koninklijke Philips N.V	PHG	Equity
PHINIA INC.	PHIN	Equity
PULTEGROUP, INC.	PHM	Equity
Invesco Water Resources ETF	PHO	ETF
PHRESIA, INC.	PHR	Equity
PANHANDLE OIL AND GAS, INC.	PHX	Equity
Impinj, Inc.	PI	Equity
iShares MSCI Global Metals & Mining Producers ETF	PICK	ETF
POLARIS INDUSTRIES, INC.	PII	Equity
Premier Inc	PINC	Equity
Pinterest, Inc.	PINS	Equity
Piper Sandler Companies	PIPR	Equity
PJT Partners Inc.	PJT	Equity
Park Hotels & Resorts Inc.	PK	Equity
PARKE BANCORP, INC.	PKBK	Equity
Park Aerospace Corp.	PKE	Equity
PACKAGING CORP OF AMERICA	PKG	Equity
POSCO	PKX	Equity
Planet Labs PBC	PL	Equity
Photronics Inc.	PLAB	Equity
Dave & Buster's Entertainment, Inc.	PLAY	Equity
PLBY GROUP, INC.	PLBY	Equity
CHILDREN'S PLACE RETAIL	PLCE	Equity
PROLOGIS INC.	PLD	Equity
PLATINUM GROUP METALS LTD.	PLG	Equity
PIEDMONT LITHIUM LTD	PLL	Equity
Palomar Holdings, Inc	PLMR	Equity
Planet Fitness, Inc.	PLNT	Equity
Douglas Dynamics, Inc.	PLOW	Equity
PLIANT THERAPEUTICS, INC.	PLRX	Equity
Pulse Biosciences, Inc.	PLSE	Equity
PLAYTIKA HOLDING CORP.	PLTK	Equity
Palantir Technologies Inc.	PLTR	Equity
PLUG POWER INC	PLUG	Equity
Protalix BioTherapeutics Inc.	PLX	Equity
Playa Hotels & Resorts N.V.	PLYA	Equity
PHILIP MORRIS INTERNATIONAL, INC.	PM	Equity
PHARMACYTE BIOTECH, INC.	PMCB	Equity
Pennymac Mortgage Investment Trust	PMT	Equity
PMV PHARMACEUTICALS, INC.	PMVP	Equity
PNC FINANCIAL SERVICES GROUP INC.	PNC	Equity
Pinnacle Financial Partners, Inc.	PNFP	Equity
PNM Resources, Inc	PNM	Equity
PennantPark Investment Corp	PNNT	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Pentair plc	PNR	Equity
The Pennant Group, Inc	PNTG	Equity
Pinnacle West Capital Corporation	PNW	Equity
Insulet Corporation	PODD	Equity
Pool Corporation	POOL	Equity
PORTLAND GENERAL ELECTRIC COMPANY	POR	Equity
Post Holdings, Inc.	POST	Equity
Power Integrations Inc	POWI	Equity
POWELL INDUSTRIES, INC.	POWL	Equity
AMMO INC	POWW	Equity
INVESCO AEROSPACE & DEFENSE ETF	PPA	ETF
Purple Biotech Ltd.	PPBT	Equity
PILGRIMS PRIDE CORP	PPC	Equity
PPG INDUSTRIES INC.	PPG	Equity
Market Vectors Pharmaceutical ETF	PPH	ETF
PPL CORPORATION	PPL	Equity
PIONEER POWER SOLUTIONS, INC.	PPSI	Equity
PERPETUA RESOURCES CORP.	PPTA	Equity
Permian Resources Corporation	PR	Equity
ProAssurance Corporation	PRA	Equity
PRA GROUP, INC.	PRAA	Equity
PRAXIS PRECISION MEDICINES, INC.	PRAX	Equity
PORCH GROUP, INC.	PRCH	Equity
PROCEPT BIROBOTICS CORP.	PRCT	Equity
Perdoceo Education Corporation	PRDO	Equity
Perficient, Inc.	PRFT	Equity
PROG Holdings, Inc.	PRG	Equity
PERRIGO COMPANY	PRGO	Equity
Progress Software Corporation	PRGS	Equity
Primerica, Inc.	PRI	Equity
Primoris Services Corporation	PRIM	Equity
o United Parks & Resorts Inc.	PRKS	Equity
Proto Labs Inc	PRLB	Equity
PRELUDE THERAPEUTICS, INC.	PRLD	Equity
PERIMETER SOLUTIONS SA	PRM	Equity
PRIME MEDICINE, INC.	PRME	Equity
Primo Water Corp.	PRMW	Equity
Pros Holdings Inc	PRO	Equity
PROFOUND MEDICAL CORP	PROF	Equity
PROPHASE LABS, INC	PRPH	Equity
Purple Innovation, Inc.	PRPL	Equity
Proqr Therapeutics N.V.	PRQR	Equity
PROTHENA CORPORATION PLC	PRTA	Equity
CarParts.com, Inc	PRTS	Equity
PRUDENTIAL FINANCIAL, INC.	PRU	Equity
PRIVIA HEALTH GROUP INC	PRVA	Equity
Public Storage	PSA	Equity
INVESCO S&P SMALLCAP ENERGY ETF	PSCE	ETF
Prospect Captial Corporation	PSEC	Equity
Paysafe Limited	PSFE	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
PriceSmart, Inc.	PSMT	Equity
Parsons Corporation	PSN	Equity
PERSONALIS, INC.	PSNL	Equity
Polestar Automotive Holding UK PLC	PSNY	Equity
Pearson plc	PSO	Equity
ProShares Short QQQ	PSQ	ETF
PSQ Holdings, Inc. (PSQH)	PSQH	Equity
ProShares UltraShort 7-10 Year Treasury	PST	ETF
Pure Storage, Inc.	PSTG	Equity
POSTAL REALTY TRUST INC CL A	PSTL	Equity
POSEIDA THERAPEUTICS, INC.	PSTX	Equity
PHILLIPS 66	PSX	Equity
PTC Inc.	PTC	Equity
PTC Therapeutics, Inc.	PTCT	Equity
PATTERSON-UTI ENERGY INC.	PTEN	Equity
PROTAGONIST THERAPEUTICS, INC.	PTGX	Equity
PORTILLOS INC	PTLO	Equity
Portman Ridge Finance Corporation	PTMN	Equity
PALATIN TECHNOLOGIES, INC.	PTN	Equity
Peloton Interactive, Inc.	PTON	Equity
PUBMATIC INC	PUBM	Equity
ProPetro Holding Corp.	PUMP	Equity
PROVIDENT BANCORP INC	PVBC	Equity
PVH Corp.	PVH	Equity
Permianville Royalty Trust	PVL	Equity
PowerFleet, Inc	PWFL	Equity
Perella Weinberg Partners	PWP	Equity
QUANTA SERVICES, INC.	PWR	Equity
POWERSCHOOL HOLDINGS INC	PWSC	Equity
P10, INC.	PX	Equity
Invesco Dynamic Oil & Gas Services ETF	PXJ	ETF
PIXELWORKS, INC.	PXLW	Equity
PAYCOR HCM, INC.	PYCR	Equity
PayPal Holdings, Inc.	PYPL	Equity
PYXIS ONCOLOGY, INC.	PYXS	Equity
Papa John's International, Inc.	PZZA	Equity
D-WAVE QUANTUM INC.	QBTS	Equity
FIRST TRUST NASDAQ CLEAN EDGE GREEN	QCLN	Equity
QUALCOMM INCORPORATED	QCOM	Equity
Qudian, Inc.	QD	Equity
QUIDEL CORPORATION	QDEL	Equity
360 DIGITECH, INC.	QFIN	Equity
QIAGEN N V	QGEN	Equity
PROSHARES ULTRASHORT QQQ	QID	ETF
QUIPT HOME MEDICAL CORP	QUIPT	Equity
PROSHARES ULTRA QQQ	QLD	ETF
QUALYS, INC.	QLYS	Equity
QUANTUM CORPORATION	QMCO	Equity
Quince Therapeutics, Inc	QNCX	Equity
Quinstreet, Inc.	QNST	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
INVESCO QQQ Trust	QQQ	ETF
Direxion NASDAQ-100 Equal Weighted Index Shares	QQQE	ETF
INVESCO NASDAQ NEXT GEN 100 ETF	QQQJ	Equity
DEFIANCE NASDAQ 100 ENHANCED OPTIONS INCOME ETF	QQQY	ETF
QUEST RESOURCE HOLDING CORPORATION	QRHC	Equity
Qurate Retail, Inc.	QRTEA	Equity
Qorvo, Inc.	QRVO	Equity
QuantumScape Corporation	QS	Equity
Quantum-Si Incorporated	QSI	Equity
Restaurant Brands International Inc.	QSR	Equity
QUANTERIX CORPORATION	QTRX	Equity
Q2 Holdings, Inc.	QTWO	Equity
Quad/Graphics, Inc.	QUAD	Equity
iShares MSCI USA Quality Factor ETF	QUAL	ETF
QUANTUM COMPUTING INC.	QUBT	Equity
QuickLogic Corporation	QUIK	Equity
uniQure N.V.	QURE	Equity
GLOBAL X NASDAQ 100 COVERED CALL ETF	QYLD	ETF
RYDER SYSTEMS INC.	R	Equity
Ferrari N.V.	RACE	Equity
Freight Car America Inc	RAIL	Equity
LiveRamp Holdings, Inc.	RAMP	Equity
RANI THERAPEUTICS HOLDINGS, INC.	RANI	Equity
RAPT THERAPEUTICS, INC.	RAPT	Equity
Ultragenyx Pharmaceutical Inc.	RARE	Equity
Ritchie Bros. Auctioneers Incorporated	RBA	Equity
Ribbon Communications Inc	RBBN	Equity
RBC Bearings Incorporated	RBC	Equity
Roblox Corporation	RBLX	Equity
Vicarious Surgical Inc.	RBOT	Equity
Rubrik, Inc.	RBRK	Equity
Rubicon Technologies, Inc.	RBT	Equity
Ready Capital Corporation	RC	Equity
RED CAT HOLDINGS, INC.	RCAT	Equity
Avita Therapeutics, Inc.	RCEL	Equity
Rogers Communication, Inc.	RCI	Equity
Rocket Pharmaceuticals, Inc.	RCKT	Equity
ROYAL CARIBBEAN CRUISES LTD.	RCL	Equity
R1 RCM Inc	RCM	Equity
RCM Technologies, Inc.	RCMT	Equity
Arcus Biosciences, Inc.	RCUS	Equity
Reddit, Inc.	RDDT	Equity
Redfin Corporation	RDFN	Equity
Reading International Inc	TDI	Equity
RADIAN GROUP INC.	TDN	Equity
RadNet, Inc.	TDNT	Equity
Schnitzer Steel Industries, Inc.	TDUS	Equity
Redwire Corporation	TDW	Equity
RADWARE LTD.	TDWR	Equity
Dr. Reddy's Laboratories Limited	TDY	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
RealReal Inc	REAL	Equity
REAL BROKERAGE INC.	REAX	Equity
iShares Global REIT ETF	REET	ETF
Research Frontiers Inc.	REFR	Equity
REGENCY CENTERS CORP	REG	Equity
REGENERON PHARMACEUTICALS	REGN	Equity
Ring Energy, Inc.	REI	Equity
ProShares Short Real Estate	REK	ETF
REKOR SYSTEMS, INC.	REKR	Equity
Richardson Electronics Ltd	RELL	Equity
REMITLY GLOBAL, INC	RELY	Equity
ISHARES MORTGAGE REAL ESTATE ETF	REM	ETF
Market Vectors Rare Earth/Strategic Metals ETF	REMX	ETF
Renovaro Biosciences Inc.	RENB	Equity
REPLIMUNE GROUP, INC.	REPL	Equity
RPC INC	RES	Equity
Direxion Daily Retail Bull 3X Shares	RETL	ETF
REV Group, Inc.	REVG	Equity
REX AMERICAN RESOURCES CORP	REX	Equity
Rexford Industrial Realty, Inc.	REXR	Equity
REYNOLDS CONSUMER PRODUCTS	REYN	Equity
Resideo Technologies Inc	REZI	Equity
REGIONS FINANCIAL CORPORATION	RF	Equity
RF Industries, Ltd.	RFIL	Equity
RAFAEL HOLDINGS, INC.	RFL	Equity
Reinsurance Group of America Inc	RGA	Equity
Repligen Corporation	RGEN	Equity
ROYAL GOLD, INC.	RGLD	Equity
REGULUS THERAPEUTICS INC.	RGLS	Equity
REGENXBIO Inc.	RGNX	Equity
Resources Connection, Inc.	RGP	Equity
STURM, RUGER & COMPANY INC.	RGR	Equity
Rigetti Computing, Inc	RGTI	Equity
RESTORATION HARDWARE HOLDINGS, INC	RH	Equity
ROBERT HALF INTERNATIONAL	RHI	Equity
Ryman Hospitality Properties, Inc.(Stk Div)	RHP	Equity
RCI HOSPITALITY HOLDINGS, INC.	RICK	Equity
TRANSOCEAN LTD.	RIG	Equity
Rigel Pharmaceuticals, Inc.	RIGL	Equity
B Riley Financial Inc	RILY	Equity
AXS Real Estate Income ETF	RINC	ETF
RIO TINTO PLC	RIO	Equity
Riot Blockchain, Inc.	RIOT	Equity
Rithm Capital Corporation	RITM	Equity
Rivian Automotive, Inc.	RIVN	Equity
RAYMOND JAMES FINANCIAL INC	RJF	Equity
Rocket Lab USA, Inc.	RKLB	Equity
Rocket Companies, Inc.	RKT	Equity
RALPH LAUREN CORPORATION	RL	Equity
RELAY THERAPEUTICS INC	RLAY	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Radiant Logistics, Inc.	RLGT	Equity
RLI Corporation	RLI	Equity
RLJ Lodging Trust	RLJ	Equity
RELMADA THERAPEUTICS INC	RLMD	Equity
RLX TECHNOLOGY INC	RLX	Equity
REGIONAL MANAGEMENT CORP.	RM	Equity
RUMBLEON, INC.	RMBL	Equity
RAMBUS INC	RMBS	Equity
RESMED, INC.	RMD	Equity
RIMINI STREET, INC.	RMNI	Equity
Rockwell Medical, Inc.	RMTI	Equity
AVIDITY BIOSCIENCES INC	RNA	Equity
RINGCENTRAL, INC.	RNG	Equity
RENALYTIX AI PLC ADR	RNLX	Equity
RENAISSANCERE HOLDINGS LTD.	RNR	Equity
ReNew Energy Global plc	RNW	Equity
CONSTRUCTION PARTNERS, INC	ROAD	Equity
ROGERS CORPORATION	ROG	Equity
Retail Opportunity Investments Corp.	ROIC	Equity
ROIVANT SCIENCES LTD	ROIV	Equity
ROCKWELL AUTOMATION	ROK	Equity
Roku, Inc.	ROKU	Equity
Rollins, Inc.	ROL	Equity
ProShares Ultra Technology	ROM	ETF
ROOT, INC. DELAWARE	ROOT	Equity
Roper Technologies, Inc.	ROP	Equity
ROSS STORES INC.	ROST	Equity
RPAR RISK PARITY	RPAR	Equity
REPAY HOLDINGS CORP.	RPAY	Equity
Rapid7, Inc.	RPD	Equity
Invesco S&P 500 Pure Growth ETF	RPG	ETF
RENEO PHARMACEUTICALS, INC	RPHM	Equity
RPM INTERNATIONAL, INC	RPM	Equity
ROYALTY PHARMA PLC	RPRX	Equity
REPARE THERAPEUTICS INC.	RPTX	Equity
RANGE RESOURCES CORPORATION	RRC	Equity
Red Robin Gourmet Burgers, Inc.	RRGB	Equity
Red Rock Resorts, Inc.	RRR	Equity
Regal Rexnord Corporation	RRX	Equity
RELIANCE STEEL & ALUMINUM CO.	RS	Equity
REPUBLIC SERVICES	RSG	Equity
Rush Street Interactive, Inc.	RSI	Equity
RISKIFIED LTD.	RSKD	Equity
Invesco S&P 500 Equal Weight ETF	RSP	ETF
Market Vectors Retail ETF	RTH	ETF
RENTOKIL INITIAL PLC	RTO	Equity
Raytheon Technologies Corporation	RTX	Equity
Rumble Inc.	RUM	Equity
Sunrun Inc.	RUN	Equity
Rush Enterprises Inc	RUSHA	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Revolve Group, Inc.	RVLV	Equity
REVOLUTION MEDICINES, INC.	RVMD	Equity
Revance Therapeutics, Inc.	RVNC	Equity
RETRACTABLE TECHNOLOGIES, INC.	RVP	Equity
REVIVA PHARMACEUTICALS HOLDINGS, INC.	RVPH	Equity
Riverview Bancorp, Inc.	RVSB	Equity
Revvity, Inc.	RVTY	Equity
RUNWAY GROWTH FINANCE CORP.	RWAY	Equity
ProShares Short Russell2000	RWM	ETF
SPDR Dow Jones REIT ETF	RWR	ETF
REDWOOD TRUST, INC.	RWT	Equity
RXO, INC.	RXO	Equity
RECURSION PHARMACEUTICALS	RXRK	Equity
RXSIGHT, INC.	RXST	Equity
RACKSPACE TECHNOLOGY, INC.	RXT	Equity
ROYAL BANK OF CANADA	RY	Equity
Ryanair Holdings plc	RYAAY	Equity
RAYONIER ADVANCED MATERIALS INC.	RYAM	Equity
RYAN SPECIALITY GROUP	RYAN	Equity
Ryerson Holding Corporation	RYI	Equity
GLOBAL X FDS RUSSELL 2000	RYLD	ETF
Rayonier Inc.	RYN	Equity
Rhythm Pharmaceuticals, Inc	RYTM	Equity
SENTINELONE, INC	S	Equity
SEABRIDGE GOLD INC	SA	Equity
SABRE CORPORATION	SABR	Equity
SACHEM CAPITAL CORP.	SACH	Equity
Safehold Inc	SAFE	Equity
Safety Insurance Group Inc.	SAFT	Equity
Sage Therapeutics, Inc.	SAGE	Equity
SONIC AUTOMOTIVE, INC.	SAH	Equity
Saia, Inc.	SAIA	Equity
Science Applications International Corporation	SAIC	Equity
Boston Beer Company, Inc.	SAM	Equity
BANCO SANTANDER, S.A.	SAN	Equity
SANA BIOTECHNOLOGY INC.	SANA	Equity
Sandstorm Gold Ltd.	SAND	Equity
Sanmina Corporation	SANM	Equity
S&W SEED COMPANY	SANW	Equity
SAP AG	SAP	Equity
TUTTLE CAPITAL SHORT INNOVATION ETF	SARK	ETF
SATELLOGIC INC	SATL	Equity
EchoStar Corp	SATS	Equity
Cassava Sciences Inc	SAVA	Equity
SPIRIT AIRLINES, INC.	SAVE	Equity
Safe Bulkers Inc.	SB	Equity
SBA COMMUNICATION CORP	SBAC	Equity
SPLASH BEVERAGE GROUP, INC.	SBEV	Equity
SINCLAIR BROADCASTING GRP	SBGI	Equity
Sally Beauty Holdings Inc	SBH	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Star Bulk Carriers Corporation	SBLK	Equity
SILVERBOW RESOURCES INC	SBOW	Equity
Sabra Health Care REIT, Inc.	SBRA	Equity
Companhia de Saneamento Basico do Estado de Sao Paulo	SBS	Equity
Sibanye-Stillwater	SBSW	Equity
STARBUCKS CORPORATION	SBUX	Equity
SOUTHERN COPPER CORPORATION	SCCO	Equity
Schwab US Broad Market ETF	SCHB	ETF
Schwab US Dividend Equity ETF	SCHD	ETF
Schwab U.S. Large-Cap Growth ETF	SCHG	ETF
Scholastic Corporation	SCHL	Equity
Schwab U.S. TIPS ETF	SCHP	ETF
THE CHARLES SCHWAB CORPORATION	SCHW	Equity
SERVICE CORPORATION INTERNATIONAL	SCI	Equity
SCILEX HOLDING COMPANY COMMON STOCK	SCLX	Equity
Stellus Capital Investment Corp	SCM	Equity
ProShare UltraShort DJ UBS Crude Oil	SCO	ETF
SCPHARMACEUTICALS, INC.	SCPH	Equity
Scorpius Holdings, Inc.	SCPX	Equity
STEELCASE, INC. CLASS A	SCS	Equity
SCANSOURCE, INC.	SCSC	Equity
Shoe Carnival Inc	SCVL	Equity
SecureWorks Corp.	SCWX	Equity
SCYNEXIS, Inc.	SCYX	Equity
iShares MSCI EAFE Small Cap Index Fund	SCZ	ETF
SandRidge Energy, Inc.	SD	Equity
SCHRODINGER, INC.	SDGR	Equity
Global X SuperDividend ETF	SDIV	Equity
ProShares UltraPro Short Dow30	SDOW	ETF
SEADRILL LIMITED	SDRL	Equity
PROSHARES ULTRASHORT S&P500	SDS	ETF
SPDR S&P Dividend ETF	SDY	ETF
Sea Limited	SE	Equity
VIVID SEATS INC	SEAT	Equity
SolarEdge Technologies, Inc.	SEDG	Equity
SEALED AIR CORP	SEE	Equity
SEER, INC.	SEER	Equity
Short Financials ProShares	SEF	ETF
SEI INVESTMENTS CO	SEIC	Equity
Select Medical Holdings Corporation	SEM	Equity
SEMRUSH HOLDINGS, INC.	SEMR	Equity
Senseonics Holdings Inc.	SENS	Equity
SES AI Corporation	SES	Equity
Stifel Financial Corp.	SF	Equity
Stitch Fix, Inc.	SFIX	Equity
SHIP FINANCE INTERNATIONAL LIMITED	SFL	Equity
SPROUTS FARMERS MARKET, INC.	SFM	Equity
SWEETGREEN, INC.	SG	Equity
Superior Group of Companies, Inc.	SGC	Equity
SMART Global Holdings, Inc.	SGH	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Super Group	SGHC	Equity
SIGHT SCIENCES, INC.	SGHT	Equity
SIGMA LITHIUM CORP	SGML	Equity
Sangamo Therapeutics, Inc.	SGMO	Equity
ETFS Physical Swiss Gold Shares ETF	SGOL	ETF
Surgery Partners Inc.	SGRY	Equity
ProShares Short S&P 500	SH	ETF
Shake Shack Inc.	SHAK	Equity
SOTERA HEALTH COMPANY	SHC	Equity
Soho House & Co Inc.	SHCO	Equity
Sharecare, Inc.	SHCR	Equity
Shell plc	SHEL	Equity
SHENANDOAH TELECOMMUNICATIONS CO	SHEN	Equity
SEANERGY MARITIME HOLDINGS CORP	SHIP	Equity
SHOALS TECHNOLOGIES GROUP	SHLS	Equity
Sunstone Hotel Investors, Inc.	SHO	Equity
STEVEN MADDEN, LTD.	SHOO	Equity
Shopify Inc.	SHOP	Equity
SAFETY SHOT, INC.	SHOT	Equity
THE SHERWIN-WILLIAMS COMPANY	SHW	Equity
Ishares Barclays 1-3 Year Treasury Bond	SHY	ETF
The Shyft Group, Inc.	SHYF	Equity
SI-BONE, INC.	SIBN	Equity
COMPANHIA SIDERURGICAL NACIONAL ADR	SID	Equity
Siebert Financial Corp	SIEB	Equity
Sify Technologies Ltd.	SIFY	Equity
SIGNET JEWELERS LIMITEDSHS	SIG	Equity
SIGA Technologies Inc.	SIGA	Equity
Sprott Inc	SII	Equity
Global X Silver Miners ETF	SIL	ETF
ETFMG Prime Junior Silver ETF	SILJ	ETF
SILK ROAD MEDICAL, INC.	SILK	Equity
SilverCrest Metals Inc.	SILV	Equity
Silicon Motion Technology Corp.	SIMO	Equity
SIRIUS XM RADIO INC.	SIRI	Equity
SITE Centers Corporation	SITC	Equity
SITIME CORP	SITM	Equity
ETFS Physical Silver	SIVR	ETF
Six Flags Entertainment Corporation	SIX	Equity
J M SMUCKER COMPANY (THE)	SJM	Equity
SPDR Barclays Short Term High Yield Bond ETF	SJNK	ETF
San Juan Basin Royalty Trust	SJT	Equity
ProShares UltraShort Financials	SKF	ETF
The Beauty Health Company	SKIN	Equity
Skillz Inc.	SKLZ	Equity
SK TELECOM CO. LTD	SKM	Equity
Tanger Factory Outlet Centers, Inc.	SKT	Equity
SKETCHERS USA INCORPORATED	SKX	Equity
Skyline Champion Corporation	SKY	Equity
SKYWATER TECHNOLOGY INC	SKYT	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
SkyWest Inc.	SKYW	Equity
First Trust ISE Cloud Computing Index Fund	SKYY	ETF
SILICON LABORATORIES INC.	SLAB	Equity
SCHLUMBERGER LIMITED	SLB	Equity
US Silica Holdings Inc.	SLCA	Equity
Solid Power, Inc.	SLDP	Equity
SUN LIFE FINANCIAL INC.	SLF	Equity
SL Green Realty Corp.	SLG	Equity
SOL-GEL TECHNOLOGIES LTD.	SLGL	Equity
Silgan Holdings Inc.	SLGN	Equity
STANDARD LITHIUM LTD.	SLI	Equity
SLM CORP	SLM	Equity
SOLENO THERAPEUTICS INC	SLNO	Equity
Simulations Plus, Inc	SLP	Equity
SELECTQUOTE, INC.	SLQT	Equity
ACELYRIN INC	SLRN	Equity
SELLAS LIFE SCIENCES GROUP, INC.	SLS	Equity
ISHARES SILVER TRUST	SLV	ETF
SYLVAMO CORPORATION	SLVM	Equity
VanEck Vectors Steel ETF	SLX	ETF
SM Energy Company	SM	Equity
Smartsheet Inc.	SMAR	Equity
SUPER MICRO COMPUTER INC	SMCI	Equity
SUMITOMO MITSUI FINANCIAL GROUP, INC.	SMFG	Equity
The Scotts Miracle-Gro Company	SMG	Equity
MARKET VECTORS SEMICONDUCTOR ETF	SMH	ETF
SEACOR MARINE HOLDINGS INC	SMHI	Equity
Summit Therapeutics Inc.	SMMT	Equity
Simply Good Foods Co	SMPL	Equity
NuScale Power Corporation	SMR	Equity
SmartRent, Inc.	SMRT	Equity
Smith Micro Software, Inc.	SMSI	Equity
SEMTECH CORPORATION	SMTC	Equity
SIMILARWEB LTD.SIMILARWEB LTD.	SMWB	Equity
SHARKNINJA INC	SN	Equity
SNAP-ON INCORPORATED	SNA	Equity
Snap, Inc	SNAP	Equity
Sleep Number Corporation	SNBR	Equity
Synchronoss Technologies, Inc.	SNCR	Equity
SUN COUNTRY AIRLINES HOLDINGS, INC.	SNCY	Equity
Smart Sand, Inc.	SND	Equity
SNDL Inc	SNDL	Equity
Schneider National, Inc	SNDR	Equity
Syndax Pharmaceuticals, Inc	SNDX	Equity
SMITH & NEPHEW PLC	SNN	Equity
Snowflake Inc.	SNOW	Equity
Synopsys Inc.	SNPS	Equity
SYNOVUS FINANCIAL CORPORATION	SNV	Equity
Synnex Corporation	SNX	Equity
Sanofi	SNY	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
SOUTHERN COMPANY	SO	Equity
GLOBAL X SOCIAL MEDIA INDEX ETF	SOCL	ETF
SoFi Technologies, Inc.	SOFI	Equity
SOHU.COM INC.	SOHU	Equity
Solaris Oilfield Infrastructure, Inc.	SOI	Equity
ReneSola Ltd (ADS)	SOL	Equity
SOLVENTUM CORPORATION	SOLV	Equity
Sonoco Products Co.	SON	Equity
SONDER HOLDINGS INC.	SOND	Equity
Sonos, Inc.	SONO	Equity
Sony Group Corporation	SONY	Equity
SOUNDHOUND AI, INC	SOUN	Equity
DIREXION DAILY SEMICONDUCTOR BULL 3X ETF	SOXL	ETF
Direxion Daily Semiconductor Bear 3X ETF	SOXS	ETF
iShares PHLX Semiconductor Index Fund	SOXX	ETF
Teucrium Soybean ETF	SOYB	ETF
Spectrum Brands Holdings Inc.	SPB	Equity
Virgin Galactic Holdings, Inc.	SPCE	Equity
SPAC and New Issue ETF	SPCX	Equity
SIMON PROPERTY GROUP INC.	SPG	Equity
S&P Global Inc.	SPGI	Equity
Suburban Propane Partners, L.P.	SPH	Equity
Invesco S&P 500 High Beta ETF	SPHB	ETF
Invesco S&P 500 High Dividend Low Volatility ETF	SPHD	ETF
Sphere Entertainment Co.	SPHR	Equity
SPI ENERGY CO LTD	SPI	Equity
Spire Global, Inc.	SPIR	Equity
SPDR Portfolio S&P 500 ETF	SPLG	ETF
PowerShares S&P 500 Low Volatility ETF	SPLV	ETF
Sapiens International Corporation NV	SPNS	Equity
Spok Holdings, Inc.	SPOK	Equity
Spotify Technology S.A.	SPOT	Equity
Spirit Aerosystems Holdings Inc	SPR	Equity
SPRUCE BIOSCIENCES, INC.	SPRB	Equity
Spero Therapeutics Inc	SPRO	Equity
Spruce Power Holding Corporation	SPRU	Equity
ARS Pharmaceuticals, Inc.	SPRY	Equity
SPS Commerce, Inc.	SPSC	Equity
SPDR Portfolio S&P 600 Small Cap ETF	SPSM	ETF
SPROUT SOCIAL INC	SPT	Equity
SPDR PORTFOLIO INTERMEDIATE TERM TREASURY ETF	SPTI	ETF
SPDR PORTFOLIO LONG TERM TREASURY ETF	SPTL	ETF
SPDR Portfolio Total Stock Market ETF	SPTM	ETF
Spartan Stores, Inc.	SPTN	Equity
Sportsman's Warehouse Holdings, Inc.	SPWH	Equity
SUNPOWER CORPORATION	SPWR	Equity
SPX Corporation	SPXC	Equity
Direxion Daily S&P 500 Bull 3X Shares	SPXL	ETF
Direxion Daily S&P 500 Bear 3X Shares (1:5 reverse)	SPXS	ETF
PROSHARES ULTRAPRO SHORT S&P500	SPXU	ETF

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
SPDR S&P 500 TRUST	SPY	ETF
SPDR PORTFOLIO S&P 500 HIGH DIVIDEND	SPYD	ETF
SPDR PORTFOLIO S&P 500 GROWTH ETF	SPYG	ETF
SPDR PORTFOLIO S&P 500 VALUE ETF	SPYV	ETF
Square, Inc.	SQ	Equity
CHEMICAL & MINING CO. OF CHILE INC.	SQM	Equity
PROSHARES ULTRAPRO SHORT QQQ	SQQQ	ETF
Squarespace, Inc.	SQSP	Equity
SPORTRADAR GROUP	SRAD	Equity
STERICYCLE, INC.	SRCL	Equity
Surmodics, Inc.	SRDX	Equity
SEMPRA ENERGY	SRE	Equity
Seritage Growth Properties	SRG	Equity
Stoneridge, Inc.	SRI	Equity
SPDR Blackstone Senior Loan ETF	SRLN	ETF
SAREPTA THERAPEUTICS, INC.	SRPT	Equity
SCHOLAR ROCK HOLDING CORP.	SRRK	Equity
ProShares UltraShort Real Estate	SRS	ETF
SENSUS HEALTHCARE, INC	SRTS	Equity
ProShares UltraPro Short Russell2000	SRTY	ETF
South State Corporation	SSB	Equity
Simpson Manufacturing Co., Inc.	SSD	Equity
SS&C Technologies Holdings, Inc.	SSNC	Equity
PROSHARES ULTRA S&P500	SSO	ETF
The E.W. Scripps Company	SSP	Equity
SSR Mining Inc.	SSRM	Equity
Sutter Rock Capital Corporation	SSSS	Equity
System1, Inc	SST	Equity
SoundThinking, Inc.	SSTI	Equity
SHUTTERSTOCK, INC.	SSTK	Equity
STRATASYS INC.	SSYS	Equity
Sensata Technologies Holding	ST	Equity
STAAR SURGICAL COMPANY	STAA	Equity
STAG Industrial, Inc.	STAG	Equity
STERIS Corp.	STE	Equity
Stem, Inc.	STEM	Equity
STEPSTONE GROUP INC	STEP	Equity
Stagwell Inc.	STGW	Equity
NEURONETICS, INC.	STIM	Equity
SunOpta Inc.	STKL	Equity
ONE GROUP HOSPITALITY, INC.	STKS	Equity
Stellantis N.V.	STLA	Equity
STEEL DYNAMICS INC	STLD	Equity
STMicroelectronics NV	STM	Equity
StoneCo Ltd.	STNE	Equity
SCORPIO TANKERS, INC.	STNG	Equity
STOKE THERAPEUTICS, INC.	STOK	Equity
Sitio Royalties Corporation	STR	Equity
STRAYER EDUCATION, INC.	STRA	Equity
Sterling Construction Company Inc.	STRL	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
SUTRO BIOPHARMA, INC.	STRO	Equity
STATE STREET CORPORATION	STT	Equity
SHATTUCK LABS, INC.	STTK	Equity
Starwood Property Trust, Inc.	STWD	Equity
SEAGATE TECHNOLOGY PUBLIC LIMITED COMPANY	STX	Equity
STEREOTAXIS, INC.	STXS	Equity
CONSTELLATION BRANDS INC.	STZ	Equity
SUNCOR ENERGY INC.	SU	Equity
Sun Communities, Inc.	SUI	Equity
Summit Materials, Inc.	SUM	Equity
SUNOCO L.P.	SUN	Equity
SUPERIOR INDUSTRIES INT	SUP	Equity
SUPERNUS PHARMACEUTICALS, INC.	SUPN	Equity
GRUPO SUPERVIELLE SA	SUPV	Equity
SURGEPAYS INC	SURG	Equity
Service Properties Trust	SVC	Equity
-1X SHORT VIX FUTURES ETF	SVIX	ETF
SILVERCORP METALS INC	SVM	Equity
SIMPLITY ETF VOL PREM	SVOL	ETF
Savara Inc.	SVRA	Equity
SAVERS VALUE VILLAGE, INC	SVV	Equity
ProShares Short VIX Short-Term Futures	SVXY	ETF
SHOCKWAVE MEDICAL INC.	SWAV	Equity
Smith & Wesson Brands, Inc. (SWBI)	SWBI	Equity
Solarwinds Corp.	SWI	Equity
LATHAM GROUP INC	SWIM	Equity
Stanley Black & Decker	SWK	Equity
SKYWORKS SOLUTIONS INC.	SWKS	Equity
SOUTHWESTERN ENERGY COMPANY	SWN	Equity
SPRINGWORKS THERAPEUTICS INC	SWTX	Equity
SunCoke Energy, Inc.	SXC	Equity
SO-YOUNG INTERNATIONAL, INC.	SY	Equity
SYNCHRONY FINANCIAL	SYF	Equity
STRYKER CORP	SYK	Equity
SYMBOTIC INC	SYM	Equity
SYNAPTICS, INC.	SYNA	Equity
SYPRIS SOLUTIONS, INC.	SYPR	Equity
SYSCO CORPORATION	SYI	Equity
AT&T, INC.	T	Equity
TRANSALTA CORP	TAC	Equity
CAMBRIA TAIL RISK ETF	TAIL	ETF
Takeda Pharmaceutical Company Limited	TAK	Equity
TAL International Group Inc	TAL	Equity
Talkspace, Inc.	TALK	Equity
Talos Energy Inc.	TALO	Equity
Guggenheim Solar ETF	TAN	ETF
Molson Coors Brewing Co.	TAP	Equity
PROTARA THERAPEUTICS, INC.	TARA	Equity
AXS 2X INNOVATION ETF	TARK	ETF
TARSUS PHARMACEUTICALS, INC.	TARS	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
TASKUS, INC.	TASK	Equity
Bancorp Inc/DE	TBBK	Equity
ProShares Short 20+ Year Treasury	TBF	ETF
TrueBlue, Inc.	TBI	Equity
Taboola.com Ltd.	TBLA	Equity
Territorial Bancorp Inc.	TBNK	Equity
Theravance Biopharma, Inc.	TBPH	Equity
PROSHARES ULTRASHORT 20+ YEAR TREASURY	TBT	ETF
Texas Capital Bancshares, Inc.	TCBI	Equity
Tactile Systems Technology I	TCMD	Equity
Trip.com Group Limited	TCOM	Equity
BlackRock TCP Capital Corp.	TCPC	Equity
Alaunos Therapeutics, Inc.	TCRT	Equity
THE CONTAINER STORE GROUP, INC.	TCS	Equity
TUCOWS, INC	TCX	Equity
TORONTO DOMINION BANK	TD	Equity
Teradata Corp.	TDC	Equity
TransDigm Group, Inc.	TDG	Equity
Teladoc, Inc.	TDOC	Equity
TELEPHONE & DATA SYSTEMS INC.	TDS	Equity
THREDUP INC	TDUP	Equity
TIDEWATER INC.	TDW	Equity
Teledyne Technologies Inc	TDY	Equity
Atlassian Corporation Plc	TEAM	Equity
Bio-Techne Corporation	TECH	Equity
Teck Resources Limited	TECK	Equity
Direxion Daily Technology Bull 3X ETF	TECL	ETF
Direxion Daily Technology Bear 3X ETF	TECS	ETF
TELEFONICA S.A.	TEF	Equity
TE Connectivity Ltd.	TEL	Equity
Tellurian Inc.	TELL	Equity
TENABLE HOLDINGS INC	TENB	Equity
Telecom Argentina S.A.	TEO	Equity
TERADYNE,INC	TER	Equity
TERNS PHARMACEUTICALS, INC.	TERN	Equity
TEVA PHARMACEUTICAL INDUSTRIES LIMITED	TEVA	Equity
TEREX CORPORATION	TEX	Equity
Truist Financial Corporation	TFC	Equity
TFI INTERNATIONAL INC.	TFII	Equity
Triumph Financial Inc	TFIN	Equity
TFS Financial Corporation	TFSL	Equity
Teleflex Incorporated	TFX	Equity
Tredegar Corp	TG	Equity
Taseko Mines Limited	TGB	Equity
Triumph Group, Inc.	TGI	Equity
TECNOGLASS INC.	TGLS	Equity
TEGNA, Inc.	TGNA	Equity
TARGET CORPORATION	TGT	Equity
TG THERAPEUTICS, INC.	TGTX	Equity
TARGET HOSPITALITY CORP.	TH	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
TENET HEALTHCARE CORP (25 shrs)	THC	Equity
TH International Limited	THCH	Equity
iShares MSCI Thailand ETF	THD	ETF
THOR INDUSTRIES INC	THO	Equity
Thermon Group Holdings Inc	THR	Equity
Gentherm Inc	THRM	Equity
THRYV HOLDINGS, INC.	THRY	Equity
Treehouse Foods, Inc.	THS	Equity
THERATECHNOLOGIES INC.	THTX	Equity
UP FINTECH HOLDINGS LIMITED	TIGR	Equity
Interface, Inc.	TILE	Equity
TIM S.A.	TIMB	Equity
iShares Barclays TIPS Bond Fund	TIP	ETF
TIPTREE INC.	TIPT	Equity
Titan Machinery, Inc.	TITN	Equity
TELUS INTERNATIONAL CDA, INC.	TIXT	Equity
THE TJX COMPANIES, INC.	TJX	Equity
Teekay Corp	TK	Equity
Turkcell Iletisim Hizmetleri AS	TKC	Equity
TKO Group Holdings, Inc.	TKO	Equity
TIMKEN COMPANY	TKR	Equity
iShares 10-20 Year Treasury Bond ETF	TLH	ETF
Talpheria, Inc.	TLPH	Equity
Tilray, Inc.	TLRY	Equity
TELOS CORPORATION	TLS	Equity
TIZIANA LIFE SCIENCES PLC	TLSA	Equity
ISHARES 20+ YEAR TREASURY BOND ETF	TLT	ETF
Tilly's Inc.	TLYS	Equity
TOYOTA MOTOR CORP	TM	Equity
TMC the metals company Inc.	TMC	Equity
TREACE MEDICAL CONCEPTS, INC.	TMCI	Equity
TRANSMEDICS GROUP, INC.	TMDX	Equity
Tencent Music Entertainment Group	TME	Equity
DIREXION DAILY 20+ YR TRSY BULL 3X ETF	TMF	ETF
Taylor Morrison Home Corp	TMHC	Equity
Thermo Fisher Scientific Inc.	TMO	Equity
Trilogy Metals Inc.	TMQ	Equity
T-MOBILE US, INC.	TMUS	Equity
Direxion Daily 20 Year Treasury Bear 3X Shares	TMV	ETF
DIREXION DAILY SMALL CAP BULL 3X SHARES	TNA	ETF
Tandem Diabetes Care, Inc.	TNDM	Equity
TRINET GROUP, INC.	TNET	Equity
Teekay Tankers Ltd	TNK	Equity
Travel + Leisure Co.	TNL	Equity
TSAKOS ENERGY NAVIGATION LTD	TNP	Equity
TENAYA THERAPEUTICS, INC.	TNYA	Equity
CAMBRIA CANNABIS ETF	TOKE	ETF
TOLL BROTHERS INC.	TOL	Equity
Kartoon Studios, Inc.	TOON	Equity
TOAST, INC	TOST	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
TUNIU CORPORATION	TOUR	Equity
TowneBank	TOWN	Equity
Turning Point Brands Inc	TPB	Equity
Tutor Perini Corporation	TPC	Equity
TPG INC	TPG	Equity
TRI POINTE HOMES, INC.	TPH	Equity
TPI Composites Inc	TPIC	Equity
Tapestry, Inc.	TPR	Equity
TEMPEST THERAPEUTICS INC	TPST	Equity
TriplePoint Venture Growth BDC Corp.	TPVG	Equity
TEMPUR-PEDIC INTERNATIONAL INC.	TPX	Equity
ProShares Ultra Pro QQQ	TQQQ	ETF
Tootsie Roll Industries Inc	TR	Equity
ReposiTrak	TRAK	Equity
Traws Pharma, Inc.	TRAW	Equity
LendingTree, Inc.	TREE	Equity
Trex Co. Inc.	TREX	Equity
Targa Resources Corp.	TRGP	Equity
Thomson Reuters Corporation	TRI	Equity
TRINITY CAPITAL, INC.	TRIN	Equity
TRIPADVISOR INC.	TRIP	Equity
TRIMBLE NAVIGATION LIMITED	TRMB	Equity
TORM PLC	TRMD	Equity
Trustmark Corporation	TRMK	Equity
TOURMALINE BIO, INC.	TRML	Equity
TRINITY INDUSTRIES INC.	TRN	Equity
TROOPS, Inc.	TROO	Equity
T. ROWE PRICE GROUP INC.	TROW	Equity
Tronox Ltd.	TROX	Equity
TransCanada Corp.	TRP	Equity
TPG RE Finance Trust, Inc.	TRTX	Equity
TransUnion	TRU	Equity
TRUECAR, INC.	TRUE	Equity
Trupanion, Inc.	TRUP	Equity
THE TRAVELERS COMPANIES, INC.	TRV	Equity
trivago N.V.	TRVG	Equity
Trevena, Inc.	TRVN	Equity
Tanzanian Royalty Exploration	TRX	Equity
TENARIS SA	TS	Equity
Telesat Corporation	TSAT	Equity
TRACTOR SUPPLY COMPANY	TSCO	Equity
Trinseo S.A.	TSE	Equity
TOWER SEMICONDUCTOR LTD.	TSEM	Equity
TAYSHA GENE THERAPIES, INC.	TSHA	Equity
TESLA MOTORS, INC.	TSLA	Equity
DIREXION DAILY TSLA BULL 1.5X SHARES	TSLB	ETF
AXS TSLA BEAR DAILY ETF	TSLQ	ETF
DIREXDIREXION DAILY TSLA BEAR 1X SHARES	TSLS	ETF
T-Rex 2X Long Tesla Daily Target ETF	TSLT	ETF
Sixth Street Specialty Lending, Inc.	TSLX	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
YIELDMAX TSLA OPTION INCOME STRATEGY ETF	TSLY	ETF
ETF OPPORTUNITIES TRUSTT-REX 2X INVERSE	TS LZ	ETF
TAIWAN SEMICONDUCTOR MFG. CO.	TSM	Equity
TYSON FOODS, INC.	TSN	Equity
Townsquare Media, Inc.	TSQ	Equity
2SEVENTY BIO, INC.	TSVT	Equity
Trane Technologies plc	TT	Equity
THE TORO COMPANY	TTC	Equity
The Trade Desk, Inc.	TTD	Equity
TotalEnergies SE	TTE	Equity
TTEC Holdings, Inc.	TTEC	Equity
Tetra Tech, Inc.	TTEK	Equity
TechTarget, Inc.	TTGT	Equity
TETRA Technologies, Inc.	TTI	Equity
TTM Technologies, Inc.	TTMI	Equity
Tile Shop Holdings, Inc.	TTSH	Equity
ProShares UltraPro Short 20+ Year Treasury	TTT	ETF
TAKE-TWO INTERACTIVE	TTWO	Equity
Telus Corporation	TU	Equity
SIMPLIFY SHORT TERM TREASURY FUTURES STRATEGY ETF	TUA	ETF
Tupperware Brands Corp	TUP	Equity
ISHARES MSCI TURKEY	TUR	ETF
180 Degree Capital Corporation	TURN	Equity
Mammoth Energy Services Inc	TUSK	Equity
TUYA INC	TUYA	Equity
GRUPO TELEvisa, S.A.B.	TV	Equity
Travere Therapeutics, Inc	TVTX	Equity
Tradeweb Markets Inc.	TW	Equity
Titan International, Inc.	TWI	Equity
THOUGHTWORKS HOLDINGS	TWKS	Equity
Twilio, Inc.	TWLO	Equity
Proshares UltrShort Russell 2000(reverse split)	TWM	Equity
Two Harbors Investment Corporation	TWO	Equity
2U, Inc.	TWOU	Equity
TWIST BIOSCIENCE CORP.	TWST	Equity
Ternium S.A.	TX	Equity
10X Genomics Inc	TXG	Equity
THERAPEUTICSMD, INC	TXMD	Equity
TEXAS INSTRUMENTS INC.	TXN	Equity
Texas Roadhouse, Inc.	TXRH	Equity
TEXTRON INC.	TXT	Equity
Direxion Daily 7 to 10 Year Treasury Bull 3X Shrs	TYD	ETF
Tyler Technologies, Inc.	TYL	Equity
DIREXION DAILY SMALL CAP BEAR 3X SHARES	TZA	ETF
UNITY SOFTWARE, INC.	U	Equity
UNDER ARMOUR, INC.	UA	Equity
Under Armour, Inc.	UAA	Equity
UNITED CONTINENTAL HOLDINGS, INC.	UAL	Equity
US Antimony Corp.	UAMY	Equity
CVR Partners LP	UAN	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
AGEAGLE AERIAL SYSTEM INC.	UAVS	Equity
Uber Technologies, Inc.	UBER	Equity
UBS Group Ag	UBS	Equity
UNITY BIOTECHNOLOGY INC.	UBX	Equity
PROSHARES ULTRA DJ-UBS CRUDE OIL	UCO	ETF
Ultra Clean Holdings, Inc.	UCTT	Equity
UDEMY, INC.	UDMY	Equity
PowerShares DB US Dollar Index Bearish Fund	UDN	ETF
ProShares UltraPro Dow30	UDOW	ETF
UDR, Inc.	UDR	Equity
Urban Edge Properties	UE	Equity
Uranium Energy Corp	UEC	Equity
UNIVERSAL ELECTRONICS, INC.	UEIC	Equity
Universal Forest Products, Inc.	UFPI	Equity
United States Gasoline	UGA	ETF
UGI Corporation	UGI	Equity
ProShares Ultra Gold	UGL	ETF
Ultrapar Participacoes SA	UGP	Equity
URBAN-GRO INC	UGRO	Equity
AMERCO	UHAL	Equity
UNIVERSAL HEALTH SERVICES INC	UHS	Equity
UNISYS CORPORATION	UIS	Equity
Unilever PLC	UL	Equity
Frontier Group Holdings, Inc.	ULCC	Equity
ProShares Ultra Euro	ULE	ETF
UL Solutions Inc.	ULS	Equity
ULTA SALON COSMETICS & FRAGRANCE INC	ULTA	Equity
United Microelectronics Corporation	UMC	Equity
UMH Properties, Inc.	UMH	Equity
UNITED NATURAL FOODS, INC.	UNFI	Equity
UNITED STATES NATURAL GAS	UNG	ETF
UNITEDHEALTH GROUP INCORPORATED	UNH	Equity
Uniti Group Inc.	UNIT	Equity
Unum Group	UNM	Equity
UNION PACIFIC CORPORATION	UNP	Equity
URBAN ONE INC	UONE	Equity
URBAN ONE INC	UONEK	Equity
Wheels Up Experience Inc.	UP	Equity
Upbound Group, Inc.	UPBD	Equity
Upland Software, Inc.	UPLD	Equity
ProShares Ultrapro S&P 500	UPRO	ETF
UNITED PARCEL SERVICE, INC.	UPS	Equity
UPSTART HOLDINGS, INC.	UPST	Equity
Upwork Inc.	UPWK	Equity
Global X Uranium ETF	URA	ETF
URBAN OUTFITTERS INC	URBN	Equity
ProShares Ultra Real Estate	URE	ETF
Urogen Pharma Ltd	URGN	Equity
UNITED RENTALS, INC.	URI	Equity
SPROTT JUNIOR URANIUM MINERS ETF	URNJ	ETF

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
NORTHSHORE GLOBAL URANIUM MINING ETF	URNM	ETF
URANIUM ROYALTY CORP	UROY	Equity
ProShares UltraPro Russell2000	URTY	ETF
USA COMPRESSION PARTNERS, L.P.	USAC	Equity
U.S. GOLD CORP.	USAU	Equity
U.S. BANCORP	USB	Equity
ProShares Ultra Semiconductors	USD	ETF
US Foods Holding Corp.	USFD	Equity
United States 12 Month Oil Fund, LP	USL	ETF
U.S. Cellular Corporation	USM	Equity
iShares MSCI USA Minimum Volatility	USMV	ETF
USANA Health Sciences, Inc.	USNA	Equity
UNITED STATES OIL FUND	USO	ETF
US PHYSICAL THERAPY INC	USPH	Equity
UNITED THERAPEUTICS CORP	UTHR	Equity
Universal Technical Institute, Inc.	UTI	Equity
Utz Brands, Inc.	UTZ	Equity
POWERSHARES DB US DOLLAR INDEX BULLISH	UUP	ETF
Energy Fuels Inc.	UUUU	Equity
UNIVERSAL INSURANCE HOLDINGS, INC.	UVE	Equity
2X LONG VIX FUTURES ETF	UVIX	ETF
UNIVERSAL CORPORATION	UVV	Equity
PROSHARES ULTRA VIX SHORT-TERM FUT ETF	UVXY	ETF
PROSHARES ULTRA VIX SHORT-TERM FUT ETF	UVXY1	ETF
ProShares Ultra Russell2000	UWM	ETF
UWM Holdings Corporation	UWMC	Equity
ProShares Ultra Financials	UYG	ETF
VISA INC.	V	Equity
Marriott Vacations Worldwide Corp.	VAC	Equity
VALARIS LIMITED	VAL	Equity
VALE S.A.	VALE	Equity
Vivani Medical, Inc	VANI	Equity
INNOVATE Corp.	VATE	Equity
Vanguard Small-Cap ETF	VB	ETF
VBI Vaccines Inc.	VBIV	Equity
Vanguard Small-Cap Growth ETF	VBK	Equity
Vanguard Small-Cap Value ETF	VBR	ETF
Veritex Holdings Inc	VBTX	Equity
Visteon Corp.	VC	Equity
Vericel Corporation	VCEL	Equity
Vanguard Long-Term Corporate Bond ETF	VCLT	ETF
Veracyte, Inc.	VCYT	Equity
Vanguard Energy ETF	VDE	ETF
Vanguard FTSE Developed Markets ETF	VEA	ETF
VEECO INSTRUMENTS	VECO	Equity
VEEVA SYSTEMS INC.	VEEV	Equity
VERA THERAPEUTICS INC. CL A	VERA	Equity
Veritone, Inc.	VERI	Equity
Veru Inc	VERU	Equity
VERVE THERAPEUTICS INC	VERV	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
VERTEX, INC.	VERX	Equity
Vermilion Energy Inc	VET	Equity
VF CORPORATION	VFC	Equity
Village Farms International, Inc.	VFF	Equity
Vanguard Financials ETF	VFH	ETF
VINFAST AUTO LTD.	VFS	Equity
Vanguard FTSE Europe ETF	VGK	ETF
VANGUARD LONG-TERM TREASURY ETF	VGLT	ETF
VECTOR GROUP LTD.	VGR	Equity
Vanguard Information Technology ETF	VGT	Equity
Vista Gold Corp.	VGZ	Equity
Vanguard Health Care ETF	VHT	ETF
Viavi Solutions Inc.	VIAB	Equity
VICI Properties Inc.	VICI	Equity
Vicor Corporation	VICR	Equity
Vanguard Dividend Appreciation ETF	VIG	ETF
Viking Holdings Ltd Ordinary Shares	VIK	Equity
VIPSHOP HOLDINGS LIMITED	VIPS	Equity
Vir Biotechnology, Inc.	VIR	Equity
VIRIOS THERAPEUTICS, INC.	VIRI	Equity
Virtu Financial, Inc.	VIRT	Equity
Viracta Therapeutics, Inc.	VIRX	Equity
VISTA OIL & GAS SAB DE CV	VIST	Equity
VITAL FARMS, INC.	VITL	Equity
Telefonica Brasil S.A.	VIV	Equity
ProShares VIX Mid-Term Futures	VIXM	ETF
ProShares VIX Short-Term Futures ETF	VIXY	ETF
ProShares VIX Short-Term Futures ETF	VIXY1	ETF
Viking Therapeutics, Inc.	VKTX	Equity
Velo3D, Inc	VLD	Equity
VALERO ENERGY CORPORATION	VLO	Equity
Controladora Vuela Compania de	VLRS	Equity
VERALTO CORP	VLTO	Equity
VALLEY NATIONAL BANCORP	VLV	Equity
VANGUARD MORTGAGE-BACKED SECURITIES ETF	VMBS	ETF
VULCAN MATERIALS COMPANY	VMC	Equity
VIMEO, INC.	VMEO	Equity
Valmont Industries, Inc.	VMI	Equity
Vanda Pharmaceuticals, Inc.	VNDA	Equity
21Vianet Group Inc	VNET	Equity
VORNADO REALTY TRUST	VNO	Equity
Viper Energy Partners LP	VNOM	Equity
Vanguard REIT ETF	VNQ	ETF
VOLITIONRX LIMITED	VNRX	Equity
VONTIER CORP	VNT	Equity
Vanguard Mid-Cap ETF	VO	ETF
Voc Energy Trust	VOC	Equity
VODAFONE GROUP PUBLIC LIMITED COMPANY	VOD	Equity
Vanguard Mid-Cap Value ETF	VOE	ETF
Vanguard S&P 500 ETF	VOO	ETF

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
VOXX International Corporation	VOXX	Equity
VOYA FINANCIAL INC.	VOYA	Equity
Vanguard Utilities Index Fund ETF	VPU	ETF
Vera Bradley, Inc.	VRA	Equity
THE GLIMPSE GROUP INC	VRAR	Equity
VERRICA PHARMACEUTICALS INC.	VRCA	Equity
VIRIDIAN THERAPEUTICS, INC.	VRDN	Equity
Veris Residential, Inc.	VRE	Equity
Varex Imaging Corporation	VREX	Equity
Veren Inc	VRN	Equity
VERONA PHARMA PLC	VRNA	Equity
Varonis Systems, Inc.	VRNS	Equity
Verint Systems, Inc.	VRNT	Equity
VERRA MOBILITY CORP.	VRRM	Equity
Verisk Analytics, Inc.	VRSK	Equity
VERISIGN, INC.	VRSN	Equity
VERTIV HOLDINGS CO	VRT	Equity
VERTEX PHARMACEUTICALS INCORPORATED	VRTX	Equity
ViaSat, Inc.	VSAT	Equity
VICTORIAS SECRET & CO	VSCO	Equity
VISHAY INTERTECHNOLOGY	VSH	Equity
Vistra Energy Corp.	VST	Equity
Verastem, Inc.	VSTM	Equity
Vista Outdoor Inc.	VSTO	Equity
VESTIS CORPORATION	VSTS	Equity
Vanguard Total World Stock ETF	VT	ETF
VTEX	VTEX	Equity
VISTAGEN THERAPEUTICS, INC.	VTGN	Equity
Vanguard Total Stock Market ETF	VTI	ETF
VANGUARD SHORT-TERM INFLATION-PROTECTED SECURITIES	VTIP	ETF
Vital Energy, Inc.	VTLE	Equity
VERTEX ENERGY, INC.	VTNR	Equity
BRISTOW GROUP INC	VTOL	Equity
Ventas, Inc.	VTR	Equity
Viatis Inc.	VTRS	Equity
VITESSE ENERGY, INC.	VTS	Equity
VIRTRA, INC.	VTSI	Equity
Vanguard Value ETF	VTV	ETF
Vanguard Russell 2000 ETF	VTWO	ETF
VENTYX BIOSCIENCES, INC.	VTYX	Equity
Vanguard Growth ETF	VUG	ETF
Vuzix Corporation	VUZI	Equity
Vanguard Large-Cap ETF	VV	ETF
Valvoline Inc.	VVV	Equity
V2X, Inc.	VVX	Equity
Vintage Wine Estates, Inc.	VWE	Equity
Vanguard MSCI Emerging Markets ETF	VWO	ETF
VAXART, INC.	VXRT	Equity
Vanguard Total International Stock ETF	VXUS	ETF
iPath Series B S&P 500 VIX Short-Term Futures ETN	VXX	ETF

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
iPath Series B S&P 500 VIX Mid-Term Futures ETN	VXZ	ETF
Voyager Therapeutics, Inc.	VYGR	Equity
Vanguard High Dividend Yield ETF	VYM	ETF
NCR Voyix Corporation	VYX	Equity
VERIZON COMMUNICATIONS INC.	VZ	Equity
VIZIO HOLDING CORP	VZIO	Equity
Wayfair Inc.	W	Equity
Westinghouse Air Brake Technologies Corporation	WAB	Equity
WASHINGTON FEDERAL INC.	WAFD	Equity
Western Alliance Bancorp	WAL	Equity
WATERS CORPORATION	WAT	Equity
WEIBO CORP. (ADR)	WB	Equity
Walgreens Boots Alliance, Inc.,	WBA	Equity
Warner Bros. Discovery, Inc.	WBD	Equity
WEBSTER FINANCIAL CORPORATION	WBS	Equity
Wallbox N.V.	WBX	Equity
WESCO INTERNATIONAL	WCC	Equity
WISDOMTREE CLOUD COMPUTING FUND	WCLD	ETF
Waste Connections Inc.	WCN	Equity
Walker & Dunlop, Inc.	WD	Equity
Workday, Inc.	WDAY	Equity
WESTERN DIGITAL CORPORATION	WDC	Equity
WD-40 Company	WDFC	Equity
WOODSIDE ENERGY GROUP LTD	WDS	Equity
Teucrium Wheat ETF	WEAT	ETF
WEAVE COMMUNICATIONS, INC.	WEAV	Equity
DIREXION DAILY DOW JONES INTERNET BULL 3X SHARES	WEBL	ETF
WISCONSIN ENERGY CORP.	WEC	Equity
Welltower Inc.	WELL	Equity
The Wendy's Company	WEN	Equity
WERNER ENTERPRISES INC.	WERN	Equity
Western Midstream Partners L.P.	WES	Equity
Westrock Coffee Company	WEST	Equity
WEX Inc.	WEX	Equity
WELLS FARGO & COMPANY	WFC	Equity
WEST FRASER TIMBER CO. LTD.	WFG	Equity
WEATHERFORD INTERNATIONAL PLC	WFRD	Equity
VALKYRIE BITCOIN MINERS ETF	WGMI	ETF
WINNEBAGO INDUSTRIES, INC	WGO	Equity
GeneDx Holdings Corporation	WGS	Equity
Wyndham Hotels & Resorts, Inc.	WH	Equity
Cactus Inc	WHD	Equity
WHIRLPOOL CORPORATION	WHR	Equity
WIMI HOLOGRAM CLOUD INC	WIMI	Equity
Wingstop Inc.	WING	Equity
ENCORE WIRE CORPORATION	WIRE	Equity
WIPRO LTD.	WIT	Equity
WIX.COM LTD.	WIX	Equity
Workiva Inc.	WK	Equity
World Kinect Corporation	WKC	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Workhorse Group Inc.	WKHS	Equity
WALKME LTD.	WKME	Equity
WORKSPORT, LTD	WKSP	Equity
WILLDAN GROUP INC	WLDN	Equity
Westlake Chemical Corp	WLK	Equity
Westlake Chemical Partners LP	WLKP	Equity
John Wiley & Sons, Inc.	WLY	Equity
WASTE MANAGEMENT, INC.	WM	Equity
WILLIAMS COMPANIES, INC.	WMB	Equity
Warner Music Group Corp.	WMG	Equity
Advanced Drainage Systems, Inc.	WMS	Equity
WAL-MART INC.	WMT	Equity
WABASH NATIONAL CORP.	WNC	Equity
WNS Holdings Ltd	WNS	Equity
Wolfspeed, Inc.	WOLF	Equity
PETCO HEALTH AND WELLNESS COMPANY, INC.	WOOF	Equity
WORTHINGTON INDUSTRIES,INC.	WOR	Equity
WideOpenWest, Inc.	WOW	Equity
W.P. Carey Inc.	WPC	Equity
Wheaton Precious Metals Corporation	WPM	Equity
WPP plc	WPP	Equity
WESTPORT INNOVATIONS INC.	WPRT	Equity
Wrap Technologies, Inc.	WRAP	Equity
BERKLEY(WR) CORP	WRB	Equity
WARBY PARKER, INC.	WRBY	Equity
WestRock Company	WRK	Equity
Waterstone Financial, Inc.	WSBF	Equity
WillScot Corporation	WSC	Equity
WILLIAMS-SONOMA INC	WSM	Equity
WATSCO INC	WSO	Equity
Whitestone REIT	WSR	Equity
West Pharmaceutical Services Inc	WST	Equity
WisdomTree, Inc.	WT	Equity
Wintrust Financial Corporation	WTFC	Equity
W&T OFFSHORE INC	WTI	Equity
Essential Utilities, Inc.	WTRG	Equity
Select Energy Services, Inc.	WTTR	Equity
Willis Towers Watson Public Limited Company	WTW	Equity
THE WESTERN UNION COMPANY	WU	Equity
TERAWULF INC.	WULF	Equity
WAVE Life Sciences Ltd	WVE	Equity
Weight Watchers International, Inc.	WW	Equity
Woodward, Inc.	WWD	Equity
WESTWATER RESOURCES INC	WWR	Equity
WOLVERINE WORLD WIDE INC	WWW	Equity
WEYERHAEUSER COMPANY	WY	Equity
WYNN RESORTS LTD.	WYNN	Equity
WIDEPOINT CORPORATION	WYY	Equity
UNITED STATES STEEL CORPORATION	X	Equity
BEYOND AIR INC	XAIR	Equity

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
SPDR S&P Biotech ETF	XBI	ETF
XBiotech, Inc.	XBIT	Equity
XCEL ENERGY INC	XEL	Equity
EXELA TECHNOLOGIES INC	XELA	Equity
Xenon Pharmaceuticals Inc.	XENE	Equity
Xeris Biopharma Holdings, Inc.	XERS	Equity
SPDR S&P Oil & Gas Equipment & Svcs ETF	XES	ETF
X4 PHARMACEUTICALS, INC.	XFOR	Equity
EXAGEN, INC.	XGN	Equity
SPDR S&P HOMEBUILDERS	XHB	ETF
Xenia Hotels & Resorts, Inc.	XHR	Equity
MATERIALS SELECT SECTOR SPDR	XLB	ETF
Communication Services Select Sect SPDR ETF	XLC	ETF
ENERGY SELECT SECTOR SPDR	XLE	ETF
FINANCIAL SELECT SECTOR SPDR	XLF	ETF
INDUSTRIAL SELECT SECTOR SPDR	XLI	ETF
TECHNOLOGY SELECT SECTOR SPDR	XLK	ETF
CONSUMER STAPLES SELECT SECTOR SPDR	XLP	ETF
Real Estate Select Sector SPDR	XLRE	ETF
UTILITIES SELECT SECTOR SPDR	XLU	ETF
HEALTH CARE SELECT SECTOR SPDR	XLV	ETF
CONSUMER DISCRETIONARY SELECT SPDR	XLY	ETF
SPDR S&P METALS & MINING	XME	ETF
XOMETRY INC.	XMTR	Equity
Xencor, Inc.	XNCR	Equity
Xunlei Limited	XNET	Equity
EXXON MOBIL CORPORATION	XOM	Equity
XOMA CORPORATION	XOMA	Equity
SPDR S&P OIL & GAS EXPLORATION & PROD	XOP	ETF
XP Inc.	XP	Equity
XPEL, INC.	XPEL	Equity
XPENG, INC. ADR CLASS A	XPEV	Equity
XPO Logistics, Inc.	XPO	Equity
XPONENTIAL FITNESS, INC	XPOF	Equity
ProShares Ultra FTSE China 50	XPP	ETF
Expro Group Holdings N.V.	XPRO	Equity
DENTSPLY INTL, INC.	XRAY	Equity
SPDR S&P RETAIL	XRT	ETF
XEROX CORPORATION	XRX	Equity
SPDR S&P Semiconductor ETF	XSD	ETF
Xylem Inc.	XYL	Equity
GLOBAL X S&P 500 COVERED CALL ETF	XYLD	ETF
YALLA GROUP LIMITED	YALA	Equity
Direxion Daily FTSE China Bear 3x Shares	YANG	ETF
ProShares Ultra Yen	YCL	ETF
ProShares UltraShort Yen	YCS	ETF
YELP, INC.	YELP	Equity
YETI Holdings, Inc.	YETI	Equity
Yext, Inc.	YEXT	Equity
Direxion Daily China 3X Bull Shares	YINN	ETF

MIAX Emerald Options as of 5/31/24

Company Name	Symbol	Inst Type
Y-MABS THERAPEUTICS INC	YMAB	Equity
FULL TRUCK ALLIANCE CO. LTD.	YMM	Equity
ADVISORSHARES PURE CANNABIS ETF	YOLO	ETF
CLEAR SECURE, INC	YOU	Equity
YPF S.A.	YPF	Equity
Yirendai Ltd.	YRD	Equity
YATSEN HOLDING LTD	YSG	Equity
YUM! BRANDS, INC.	YUM	Equity
Yum China Holdings, Inc.	YUMC	Equity
YY INC.	YY	Equity
ZILLOW GROUP, INC.	Z	Equity
Zimmer Bionet Holdings, Inc.	ZBH	Equity
ZEBRA TECHNOLOGIES CORP.	ZBRA	Equity
Ziff Davis, Inc.	ZD	Equity
ZEDGE INC	ZDGE	Equity
Zepp Health Corporation	ZEPP	Equity
ZETA GLOBAL HOLDINGS CORP.	ZETA	Equity
OLYMPIC STEEL INC.	ZEUS	Equity
Zillow Group, Inc	ZG	Equity
ZHIHU INC	ZH	Equity
ZOOMINFO TECHNOLOGIES INC.	ZI	Equity
ZIM INTEGRATED SHIPPING SERVICE	ZIM	Equity
ZIMVIE INC.	ZIMV	Equity
ZIONS BANCORP	ZION	Equity
ZIPRECRUITER, INC	ZIP	Equity
ZEEKR Intelligent Technology Holding Limited	ZK	Equity
ZK INTERNATIONAL GROUP CO., LTD.	ZKIN	Equity
ZAI LAB LTD	ZLAB	Equity
Zoom Video Communications. Inc.	ZM	Equity
ZENTALIS PHARMACEUTICALS, INC.	ZNTL	Equity
Zscaler, Inc.	ZS	Equity
ProShares UltraShort Silver (20 shares)	ZSL	ETF
ZTO Express (Cayman) Inc.	ZTO	Equity
ZOETIS INC.	ZTS	Equity
ZUMIEZ INC	ZUMZ	Equity
Zuora, Inc.	ZUO	Equity
Zevra Therapeutics, Inc.	ZVRA	Equity
Zurn Water Solutions Corporation	ZWS	Equity
Zymeworks Inc	ZYME	Equity
Zynex, Inc.	ZYXI	Equity