



The option classes listed below will begin trading on the MIAX Emerald Exchange at the start of trading on **Monday, March 25, 2019**. All option classes on MIAX Emerald have an allocation style of Pro-Rata and billing style of Maker-Taker.

Security Symbol	Security Name	Option Class	Price Programs	Expiration Programs	Penny Pilot	Exchange for Opening	Closing Time	PLMM	Cloud
AA	Alcoa Corporation	AA	\$1.00	STO	No	NYSE	4:00	Susquehanna Securities	1
AABA	Altaba Inc.	AABA	\$2.50	STO	Yes	NASDAQ	4:00	Citadel Securities, LLC	1
AAPL	Apple Inc.	AAPL	\$5.00, 100%	STO	Yes	NASDAQ	4:00	IMC Financial Markets	1
ADI	Analog Devices, Inc.	ADI	\$2.50	STO	No	NASDAQ	4:00	Morgan Stanley	1
ADSK	Autodesk, Inc.	ADSK	Standard	STO	Yes	NASDAQ	4:00	Susquehanna Securities	1
AGNC	AGNC Investment Corp.	AGNC	\$1.00	STO	Yes	NASDAQ	4:00	IMC Financial Markets	1
ALGN	Align Technology, Inc.	ALGN	Standard	STO	No	NASDAQ	4:00	Wolverine Trading, LLC	1
AMD	Advanced Micro Devices, Inc.	AMD	\$1.00, 100%	STO	Yes	NASDAQ	4:00	Citadel Securities, LLC	1
BABA	Alibaba Group Holding Ltd.	BABA	\$5.00, 100%	STO	Yes	NYSE	4:00	Susquehanna Securities	2
BAC	Bank of America Corporation	BAC	\$1.00	STO	Yes	NYSE	4:00	Morgan Stanley	2
BB	BlackBerry Limited	BB	Standard	STO	Yes	NYSE	4:00	IMC Financial Markets	2
BLK	BlackRock Inc.	BLK	Standard	STO	No	NYSE	4:00	Wolverine Trading, LLC	2
BSX	Boston Scientific Corporation	BSX	\$1.00	STO	Yes	NYSE	4:00	Susquehanna Securities	2
BUD	Anheuser-Busch InBev SA	BUD	Standard	STO	Yes	NYSE	4:00	Morgan Stanley	2
CI	Cigna Corporation	CI	Standard	STO	Yes	NYSE	4:00	Wolverine Trading, LLC	2
CMG	Chipotle Mexican Grill, Inc.	CMG	\$5.00	STO	No	NYSE	4:00	Wolverine Trading, LLC	2
CRC	California Resources Corporation	CRC	\$1.00	Standard	No	NYSE	4:00	Citadel Securities, LLC	2
CTL	CenturyLink, Inc.	CTL	\$1.00	STO	Yes	NYSE	4:00	Citadel Securities, LLC	2
CVE	Cenovus Energy Inc.	CVE	\$1.00	Standard	No	NYSE	4:00	Citadel Securities, LLC	2
CZR	Caesars Entertainment Corporation	CZR	\$1.00	STO	Yes	NASDAQ	4:00	Susquehanna Securities	2

Security Symbol	Security Name	Option Class	Price Programs	Expiration Programs	Penny Pilot	Exchange for Opening	Closing Time	PLMM	Cloud
DE	Deere & Company	DE	Standard	STO	Yes	NYSE	4:00	Wolverine Trading, LLC	3
DISH	DISH Network Corporation	DISH	\$2.50	STO	No	NASDAQ	4:00	Morgan Stanley	3
EBAY	eBay Inc.	EBAY	\$1.00, \$2.50	STO	Yes	NASDAQ	4:00	Citadel Securities, LLC	3
EEM	iShares MSCI Emerging Markets ETF	EEM	Vol Link, Idx Link	STO, Quarterly	Yes	NYSE Arca	4:15	Morgan Stanley	3
ESV	Enesco plc	ESV	\$1.00, \$2.50	Standard	No	NYSE	4:00	Morgan Stanley	3
ETFC	E*TRADE Financial Corporation	ETFC	Standard	STO	Yes	NASDAQ	4:00	Citadel Securities, LLC	3
ETSY	Etsy, Inc.	ETSY	\$1.00	Standard	No	NASDAQ	4:00	Susquehanna Securities	3
EWJ	iShares MSCI Japan ETF	EWJ	Idx Link	STO	Yes	NYSE Arca	4:00	Morgan Stanley	3
F	Ford Motor Company	F	\$1.00	STO	Yes	NYSE	4:00	Susquehanna Securities	3
FB	Facebook, Inc.	FB	\$5.00, 100%	STO	Yes	NASDAQ	4:00	Morgan Stanley	3
FEZ	SPDR EURO STOXX 50 ETF	FEZ	Idx Link	STO	Yes	NYSE Arca	4:00	Wolverine Trading, LLC	3
FOXA	(New) Fox Corporation-Class A	FOXA	Standard	STO	No	NASDAQ	4:00	Susquehanna Securities	3
GDXJ	VanEck Vectors Junior Gold Miners ETF	GDXJ	Idx Link	STO	Yes	NYSE Arca	4:00	Susquehanna Securities	4
GLD	SPDR Gold Shares	GLD	Vol Link, Idx Link, 100%	STO, Quarterly	Yes	NYSE Arca	4:00	Optiver US LLC	4
GOOGL	Alphabet Inc. Class A	GOOGL	\$5.00, 100%	STO	No	NASDAQ	4:00	Wolverine Trading, LLC	4
GPRO	GoPro, INC.	GPRO	\$1.00	STO	Yes	NASDAQ	4:00	IMC Financial Markets	4
HCLP	Hi-Crush Partners LP	HCLP	\$0.50	Standard	No	NYSE	4:00	Citadel Securities, LLC	4
HYG	iShares iBoxx \$ High Yield Corp Bd ETF	HYG	Idx Link	STO	Yes	NYSE Arca	4:00	Wolverine Trading, LLC	4
IEF	iShares 7-10 Year Treasury Bond ETF	IEF	Idx Link	STO	No	NASDAQ	4:00	Wolverine Trading, LLC	5
IGT	International Game Technology PLC	IGT	\$1.00	Standard	No	NYSE	4:00	Morgan Stanley	5
INTC	Intel Corporation	INTC	\$1.00, \$2.50	STO	Yes	NASDAQ	4:00	Morgan Stanley	5
IWM	iShares Russell 2000 ETF	IWM	Idx Link	STO, Quarterly	Yes	NYSE Arca	4:15	Morgan Stanley	5
JCP	J. C. Penney Company, Inc.	JCP	\$0.50, \$1.00,	STO	Yes	NYSE	4:00	Morgan Stanley	5

Security Symbol	Security Name	Option Class	Price Programs	Expiration Programs	Penny Pilot	Exchange for Opening	Closing Time	PLMM	Cloud
			\$1.00 LTO						
JNPR	Juniper Networks, Inc.	JNPR	\$1.00	STO	Yes	NYSE	4:00	Morgan Stanley	5
JWN	Nordstrom, Inc.	JWN	\$2.50	STO	Yes	NYSE	4:00	Citadel Securities, LLC	5
KBH	KB Home	KBH	\$1.00	Standard	Yes	NYSE	4:00	Susquehanna Securities	5
KMI	Kinder Morgan, Inc.	KMI	\$1.00	STO	Yes	NYSE	4:00	Morgan Stanley	5
KO	The Coca-Cola Company	KO	\$1.00, \$2.50	STO	Yes	NYSE	4:00	Susquehanna Securities	5
LEN	Lennar Corporation	LEN	\$2.50	Standard	Yes	NYSE	4:00	Wolverine Trading, LLC	5
M	Macy's, Inc.	M	\$1.00	STO	Yes	NYSE	4:00	Citadel Securities, LLC	6
MAT	Mattel, Inc.	MAT	\$1.00	STO	No	NASDAQ	4:00	Susquehanna Securities	6
MGM	MGM Resorts International	MGM	\$1.00	STO	Yes	NYSE	4:00	Morgan Stanley	6
MOS	The Mosaic Company	MOS	\$1.00	STO	Yes	NYSE	4:00	IMC Financial Markets	6
MRO	Marathon Oil Corporation	MRO	\$1.00	STO	Yes	NYSE	4:00	Morgan Stanley	6
MU	Micron Technology, Inc.	MU	\$1.00, 100%	STO	Yes	NASDAQ	4:00	Morgan Stanley	6
NOK	Nokia Corporation	NOK	\$1.00, \$1.00 LTO	STO	Yes	NYSE	4:00	Susquehanna Securities	6
NTNX	Nutanix, Inc.	NTNX	\$2.50	STO	No	NASDAQ	4:00	Susquehanna Securities	6
NUE	Nucor Corporation	NUE	\$2.50	STO	Yes	NYSE	4:00	Susquehanna Securities	6
PANW	Palo Alto Networks, Inc.	PANW	Standard	STO	Yes	NYSE	4:00	Wolverine Trading, LLC	7
PBR	Petróleo Brasileiro S.A. - Petrobras	PBR	\$1.00, \$1.00 LTO	STO	Yes	NYSE	4:00	Morgan Stanley	7
PCG	PG&E Corporation	PCG	\$1.00, \$2.50	STO	No	NYSE	4:00	Citadel Securities, LLC	7
PZZA	Papa John's International, Inc.	PZZA	\$2.50	STO	No	NASDAQ	4:00	Citadel Securities, LLC	7
QQQ	Invesco QQQ Trust	QQQ	Idx Link	STO, Quarterly	Yes	NASDAQ	4:15	IMC Financial Markets	7
RF	Regions Financial Corporation	RF	\$1.00	Standard	Yes	NYSE	4:00	Morgan Stanley	7
ROKU	Roku, Inc.	ROKU	\$1.00	STO	Yes	NASDAQ	4:00	Citadel Securities, LLC	7



Security Symbol	Security Name	Option Class	Price Programs	Expiration Programs	Penny Pilot	Exchange for Opening	Closing Time	PLMM	Cloud
SBUX	Starbucks Corporation	SBUX	\$1.00, \$2.50	STO	Yes	NASDAQ	4:00	Susquehanna Securities	8
SDS	ProShares UltraShort S&P500	SDS	Idx Link	STO	Yes	NYSE Arca	4:00	IMC Financial Markets	8
SGMO	Sangamo Therapeutics, Inc.	SGMO	\$1.00	Standard	No	NASDAQ	4:00	Susquehanna Securities	8
SKX	Skechers U.S.A., Inc.	SKX	\$1.00	STO	No	NYSE	4:00	Wolverine Trading, LLC	8
SNE	Sony Corporation	SNE	\$2.50	STO	No	NYSE	4:00	Morgan Stanley	8
SQQQ	ProShares UltraPro Short QQQ	SQQQ	Idx Link	Standard	No	NASDAQ	4:00	Susquehanna Securities	8
SRPT	Sarepta Therapeutics, Inc.	SRPT	Standard	STO	Yes	NASDAQ	4:00	Citadel Securities, LLC	8
T	AT&T, Inc.	T	\$1.00	STO	Yes	NYSE	4:00	Morgan Stanley	8
TBT	ProShares UltraShort 20+ Year Treasury	TBT	Idx Link	STO	Yes	NYSE Arca	4:00	IMC Financial Markets	8
TLT	iShares 20+ Year Treasury Bond ETF	TLT	Idx Link	STO	Yes	NASDAQ	4:00	Wolverine Trading, LLC	8
TNA	Direxion Daily Small Cap Bull 3X ETF	TNA	Idx Link, 100%	STO	Yes	NYSE Arca	4:00	IMC Financial Markets	8
TNDM	Tandem Diabetes Care, Inc.	TNDM	\$1.00	STO	No	NASDAQ	4:00	Citadel Securities, LLC	8
TSLA	Tesla, Inc.	TSLA	\$5.00, 100%	STO	Yes	NASDAQ	4:00	IMC Financial Markets	8
TZA	Direxion Daily Small Cap Bear 3X ETF	TZA	Idx Link	STO	Yes	NYSE Arca	4:00	IMC Financial Markets	8
UNIT	Uniti Group Inc.	UNIT	Standard	Standard	No	NASDAQ	4:00	Susquehanna Securities	9
URI	United Rentals, Inc.	URI	Standard	STO	No	NYSE	4:00	Susquehanna Securities	9
USB	U.S. Bancorp	USB	\$2.50	STO	Yes	NYSE	4:00	Susquehanna Securities	9
USO	United States Oil	USO	Vol Link, Idx Link	STO	Yes	NYSE Arca	4:00	IMC Financial Markets	9
VALE	VALE S.A.	VALE	\$1.00	STO	Yes	NYSE	4:00	Susquehanna Securities	9
VIAB	Viacom Inc.	VIAB	\$2.50	STO	No	NASDAQ	4:00	Wolverine Trading, LLC	9
WLL	Whiting Petroleum Corporation	WLL	\$1.00, \$1.00 LTO	STO	Yes	NYSE	4:00	Susquehanna Securities	10
WMT	Walmart Inc.	WMT	\$2.50	STO	Yes	NYSE	4:00	Morgan Stanley	10
WTW	Weight Watchers International, Inc.	WTW	Standard	STO	No	NASDAQ	4:00	Susquehanna Securities	10



Security Symbol	Security Name	Option Class	Price Programs	Expiration Programs	Penny Pilot	Exchange for Opening	Closing Time	PLMM	Cloud
WY	Weyerhaeuser Company	WY	\$1.00	STO	No	NYSE	4:00	IMC Financial Markets	10
XHB	SPDR S&P Homebuilders	XHB	Idx Link	STO	Yes	NYSE Arca	4:15	IMC Financial Markets	10
XLF	Financial Select Sector SPDR ETF	XLF	Idx Link	STO, Quarterly	Yes	NYSE Arca	4:15	Morgan Stanley	10
XLK	Technology Select Sector SPDR ETF	XLK	Idx Link	STO	Yes	NYSE Arca	4:15	Citadel Securities, LLC	10
XLP	Consumer Staples Select Sector SPDR ETF	XLP	Idx Link	STO	Yes	NYSE Arca	4:15	Morgan Stanley	10
XOP	SPDR S&P Oil & Gas Exploration & Prodrn ETF	XOP	Idx Link	STO	Yes	NYSE Arca	4:00	Citadel Securities, LLC	10
ZNGA	Zynga Inc.	ZNGA	\$0.50,\$1.00, \$1.00 LTO	STO	Yes	NASDAQ	4:00	Susquehanna Securities	11

Please contact MIAX Options Listings with any questions.

Listings@MIAXOptions.com

(609) 897-7308