



DATE: April 05, 2019

TO: MIAX Emerald Members

FROM: MIAX Emerald Regulatory Department

RE: Market for Underlying Security Used for Openings on MIAX Emerald for Newly Listed Option Symbols Effective Monday, April 08, 2019

The following symbols will start trading on MIAX Emerald beginning Monday, April 8, 2019, and, as set forth in MIAX Emerald Rule 503(d), MIAX Emerald shall use the exchange identified below as the “market for the underlying security” for purposes of Openings on the Exchange.

UNDERLYING SYMBOL	SECURITY NAME	OPTION SYMBOL	EXCHANGE FOR OPENING
A	Agilent Technologies, Inc.	A	NYSE
AAP	Advance Auto Parts, Inc.	AAP	NYSE
AAXJ	iShares MSCI All Country Asia Ex Japan ETF	AAXJ	NASDAQ
AAXN	Axon Enterprise, Inc.	AAXN	NASDAQ
AB	AllianceBernstein Holding L.P.	AB	NYSE
ABB	ABB Ltd	ABB	NYSE
ABC	AmerisourceBergen Corporation	ABC	NYSE
ABEV	Ambev S.A.	ABEV	NYSE
ABMD	ABIOMED, Inc.	ABMD	NASDAQ
ACB	Aurora Cannabis Inc.	ACB	NYSE
ACIA	Acacia Communications, Inc.	ACIA	NASDAQ
ACOR	Acorda Therapeutics, Inc.	ACOR	NASDAQ
ACWI	iShares MSCI ACWI Index Fund	ACWI	NASDAQ
ADMP	Adamis Pharmaceuticals Corporation	ADMP	NASDAQ
ADMS	Adamas Pharmaceuticals, Inc.	ADMS	NASDAQ
ADNT	Adient Plc	ADNT	NYSE
ADT	ADT Inc.	ADT	NYSE
AEO	American Eagle Outfitters, Inc.	AEO	NYSE
AEP	American Electric Power Company, Inc.	AEP	NYSE
AES	The AES Corporation	AES	NYSE
AFMD	Affimed N.V.	AFMD	NASDAQ
AGEN	Agenus Inc.	AGEN	NASDAQ
AGG	iShares Core U.S. Aggregate	AGG	NYSE Arca



	Bond ETF		
AGO	Assured Guaranty Ltd.	AGO	NYSE
AIZ	Assurant, Inc.	AIZ	NYSE
ALK	Alaska Air Group, Inc.	ALK	NYSE
ALKS	Alkermes plc	ALKS	NASDAQ
ALLY	Ally Financial Inc.	ALLY	NYSE
ALNY	Alnylam Pharmaceuticals, Inc.	ALNY	NASDAQ
ALRM	Alarm.Com Holdings, Inc.	ALRM	NASDAQ
AMAG	AMAG Pharmaceuticals, Inc.	AMAG	NASDAQ
AMBC	Ambac Financial Group, Inc.	AMBC	NASDAQ
AMCX	AMC Networks Inc.	AMCX	NASDAQ
AME	AMETEK, Inc.	AME	NYSE
AMED	Amedisys, Inc.	AMED	NASDAQ
AMG	Affiliated Managers Group, Inc.	AMG	NYSE
AMN	AMN Healthcare Services, Inc.	AMN	NYSE
AMP	Ameriprise Financial, Inc.	AMP	NYSE
AMRS	Amyris, Inc.	AMRS	NASDAQ
AMRX	Amneal Pharmaceuticals, Inc.	AMRX	NYSE
AMX	America Movil S.A.B de C.V.	AMX	NYSE
ANAB	AnaptysBio, Inc.	ANAB	NASDAQ
ANTM	Anthem, Inc.	ANTM	NYSE
AOBC	American Outdoor Brands Corporation	AOBC	NASDAQ
APHA	Aphria Inc.	APHA	NYSE
APO	Apollo Global Management, LLC	APO	NYSE
APRN	Blue Apron Holdings, Inc.	APRN	NYSE
APTV	Aptiv PLC	APTV	NYSE
ARRAY	Accuray Incorporated	ARRAY	NASDAQ
ARLP	Alliance Resource Partners, L.P.	ARLP	NASDAQ
ARMK	Aramark	ARMK	NYSE
ARNA	Arena Pharmaceuticals, Inc.	ARNA	NASDAQ
ARQL	ArQule, Inc.	ARQL	NASDAQ
ARRY	Array Biopharma Inc.	ARRY	NASDAQ
ARWR	Arrowhead Pharmaceuticals, Inc.	ARWR	NASDAQ
ASGN	ASGN Incorporated	ASGN	NYSE
ASML	ASML Holding N.V.	ASML	NASDAQ
ASNA	Ascena Retail Group, Inc.	ASNA	NASDAQ
ATH	Athene Holding Ltd.	ATH	NYSE
ATHM	Autohome Inc.	ATHM	NYSE



ATHX	Athersys, Inc.	ATHX	NASDAQ
ATI	Allegheny Technologies Incorporated	ATI	NYSE
ATRS	Antares Pharma, Inc.	ATRS	NASDAQ
ATUS	Altice USA, Inc.	ATUS	NYSE
AVAV	AeroVironment, Inc.	AVAV	NASDAQ
AVB	AvalonBay Communities, Inc.	AVB	NYSE
AVP	Avon Products, Inc.	AVP	NYSE
AXDX	Accelerate Diagnostics, Inc.	AXDX	NASDAQ
AXTI	AXT, Inc.	AXTI	NASDAQ
AYI	Acuity Brands, Inc.	AYI	NYSE
AYX	Alteryx, Inc.	AYX	NYSE
BANC	Banc Of California, Inc.	BANC	NYSE
BBL	BHP Group	BBL	NYSE
BBVA	Banco Bilbao Vizcaya Argentaria, S.A.	BBVA	NYSE
BCO	The Brink's Company	BCO	NYSE
BDSI	BioDelivery Sciences International, Inc.	BDSI	NASDAQ
BDX	Becton, Dickinson And Company	BDX	NYSE
BEAT	BioTelemetry, Inc.	BEAT	NASDAQ
BEN	Franklin Resources, Inc.	BEN	NYSE
BERY	Berry Global Group, Inc.	BERY	NYSE
BGFV	Big 5 Sporting Goods Corporation	BGFV	NASDAQ
BGS	B&G Foods, Inc.	BGS	NYSE
BHF	Brighthouse Financial, Inc.	BHF	NASDAQ
BID	Sotheby's	BID	NYSE
BIG	Big Lots, Inc.	BIG	NYSE
BILI	Bilibili Inc.	BILI	NASDAQ
BJ	BJ's Wholesale Club Holdings, Inc.	BJ	NYSE
BKD	Brookdale Senior Living Inc.	BKD	NYSE
BLD	TopBuild Corp.	BLD	NYSE
BLDR	Builders FirstSource, Inc.	BLDR	NASDAQ
BLL	Ball Corporation	BLL	NYSE
BLMN	Bloomin Brands, Inc.	BLMN	NASDAQ
BLUE	bluebird bio, Inc.	BLUE	NASDAQ
BMA	Banco Macro S.A.	BMA	NYSE
BMRN	BioMarin Pharmaceutical Inc.	BMRN	NASDAQ



BOIL	ProShares Ultra Bloomberg Natural Gas	BOIL	NYSE Arca
BOOT	Boot Barn Holdings, Inc.	BOOT	NYSE
BPL	Buckeye Partners, L.P.	BPL	NYSE
BPMC	Blueprint Medicines Corporation	BPMC	NASDAQ
BPT	BP Prudhoe Bay Royalty Trust	BPT	NYSE
BPY	Brookfield Property Partners L.P.	BPY	NASDAQ
BRKS	Brooks Automation, Inc.	BRKS	NASDAQ
BTG	B2Gold Corp.	BTG	AMEX
BTI	British American Tobacco p.l.c.	BTI	NYSE
BTU	Peabody Energy Corporation	BTU	NYSE
BURL	Burlington Stores, Inc.	BURL	NYSE
BVN	Compania de Minas Buenaventura S.A.A.	BVN	NYSE
BWA	BorgWarner Inc.	BWA	NYSE
BZH	Beazer Homes USA, Inc.	BZH	NYSE
CAKE	The Cheesecake Factory Incorporated	CAKE	NASDAQ
CARA	Cara Therapeutics, Inc.	CARA	NASDAQ
CARG	CarGurus, Inc.	CARG	NASDAQ
CARS	Cars.Com Inc.	CARS	NYSE
CASA	Casa Systems, Inc.	CASA	NASDAQ
CATM	Cardtronics plc	CATM	NASDAQ
CB	Chubb Limited	CB	NYSE
CBOE	Cboe Global Markets, Inc.	CBOE	BATS
CBRL	Cracker Barrel Old Country Store, Inc.	CBRL	NASDAQ
CCI	Crown Castle International Corp.	CCI	NYSE
CDE	Coeur Mining, Inc.	CDE	NYSE
CDEV	Centennial Resource Development, Inc.	CDEV	NASDAQ
CDNS	Cadence Design Systems, Inc.	CDNS	NASDAQ
CDW	CDW Corporation	CDW	NASDAQ
CE	Celanese Corporation	CE	NYSE
CERN	Cerner Corporation	CERN	NASDAQ
CFG	Citizens Financial Group, Inc.	CFG	NYSE
CFX	Colfax Corporation	CFX	NYSE
CG	The Carlyle Group L.P.	CG	NASDAQ
CHD	Church & Dwight Co., Inc.	CHD	NYSE
CHGG	Chegg, Inc.	CHGG	NYSE
CHKP	Check Point Software Technologies Ltd.	CHKP	NASDAQ



CHL	China Mobile Limited	CHL	NYSE
CHRW	C.H. Robinson Worldwide, Inc.	CHRW	NASDAQ
CHTR	Charter Communications, Inc.	CHTR	NASDAQ
CIG	Companhia Energetica de Minas Gerais	CIG	NYSE
CIM	Chimera Investment Corporation	CIM	NYSE
CIT	CIT Group Inc.	CIT	NYSE
CLMT	Calumet Specialty Products Partners, L.P.	CLMT	NASDAQ
CLNY	Colony Capital, Inc.	CLNY	NYSE
CMA	Comerica Incorporated	CMA	NYSE
CMP	Compass Minerals International, Inc.	CMP	NYSE
CNAT	Conatus Pharmaceuticals Inc.	CNAT	NASDAQ
CNC	Centene Corporation	CNC	NYSE
CNI	Canadian National Railway Company	CNI	NYSE
CNP	CenterPoint Energy, Inc.	CNP	NYSE
CNQ	Canadian Natural Resources Limited	CNQ	NYSE
CNSL	Consolidated Communications Holdings, Inc.	CNSL	NASDAQ
CNX	CNX Resources Corporation	CNX	NYSE
COHR	Coherent, Inc.	COHR	NASDAQ
CONN	Conn's, Inc.	CONN	NASDAQ
CORT	Corcept Therapeutics Incorporated	CORT	NASDAQ
COUP	Coupa Software Incorporated	COUP	NASDAQ
CP	Canadian Pacific Railway Limited	CP	NYSE
CPA	Copa Holdings, S.A.	CPA	NYSE
CPRT	Copart, Inc.	CPRT	NASDAQ
CRBP	Corbus Pharmaceuticals Holdings, Inc.	CRBP	NASDAQ
CRMD	CorMedix, Inc.	CRMD	AMEX
CROX	Crocs, Inc.	CROX	NASDAQ
CRSP	CRISPR Therapeutics AG	CRSP	NASDAQ
CRUS	Cirrus Logic, Inc.	CRUS	NASDAQ
CRZO	Carrizo Oil & Gas, Inc.	CRZO	NASDAQ
CSTM	Constellium N.V	CSTM	NYSE
CTB	Cooper Tire & Rubber Company	CTB	NYSE
CTXS	Citrix Systems, Inc.	CTXS	NASDAQ
CVI	CVR Energy, Inc.	CVI	NYSE



CXO	Concho Resources Inc.	CXO	NYSE
CYBR	CyberArk Software Ltd.	CYBR	NASDAQ
CYH	Community Health Systems, Inc.	CYH	NYSE
DAN	Dana Incorporated	DAN	NYSE
DBA	Invesco DB Agriculture	DBA	NYSE Arca
DBD	Diebold Nixdorf, Incorporated	DBD	NYSE
DDS	Dillard's, Inc.	DDS	NYSE
DEO	Diageo plc	DEO	NYSE
DERM	Dermira, Inc.	DERM	NASDAQ
DF	Dean Foods Company	DF	NYSE
DFS	Discover Financial Services	DFS	NYSE
DHR	Danaher Corporation	DHR	NYSE
DIN	Dine Brands Global, Inc.	DIN	NYSE
DISCK	Discovery, Inc.	DISCK	NASDAQ
DK	Delek US Holdings, Inc.	DK	NYSE
DLPH	Delphi Technologies PLC	DLPH	NYSE
DLR	Digital Realty Trust, Inc.	DLR	NYSE
DNKN	Dunkin' Brands Group, Inc.	DNKN	NASDAQ
DO	Diamond Offshore Drilling, Inc.	DO	NYSE
DOV	Dover Corporation	DOV	NYSE
DPZ	Domino's Pizza, Inc.	DPZ	NYSE
DRI	Darden Restaurants, Inc.	DRI	NYSE
DRIP	Direxion Dly S&P Oil&Gs Ex&Prd Br 3X ETF	DRIP	NYSE Arca
DBI	Designer Brands Inc.	DBI	NYSE
DVAX	Dynavax Technologies Corporation	DVAX	NASDAQ
DXCM	DexCom, Inc.	DXCM	NASDAQ
EAF	GrafTech International Ltd.	EAF	NYSE
EAT	Brinker International, Inc.	EAT	NYSE
EBIX	Ebix, Inc.	EBIX	NASDAQ
EC	Ecopetrol S.A.	EC	NYSE
ECHO	Echo Global Logistics, Inc.	ECHO	NASDAQ
ECL	Ecolab Inc.	ECL	NYSE
ED	Consolidated Edison, Inc.	ED	NYSE
EDIT	Editas Medicine, Inc.	EDIT	NASDAQ
EFX	Equifax Inc.	EFX	NYSE
EIX	Edison International	EIX	NYSE
EL	The Estée Lauder Companies Inc.	EL	NYSE
ELLI	Ellie Mae, Inc.	ELLI	NYSE



EMES	Emerge Energy Services LP	EMES	NYSE
EMN	Eastman Chemical Company	EMN	NYSE
ENB	Enbridge Inc.	ENB	NYSE
ENPH	Enphase Energy, Inc.	ENPH	NASDAQ
ENT	Global Eagle Entertainment Inc.	ENT	NASDAQ
EPC	Edgewell Personal Care Company	EPC	NYSE
EPI	WisdomTree India Earnings ETF	EPI	NYSE Arca
EQM	EQM Midstream Partners, LP	EQM	NYSE
ERI	Eldorado Resorts, Inc.	ERI	NASDAQ
EROS	Eros International Plc	EROS	NYSE
ESI	Element Solutions Inc.	ESI	NYSE
ETM	Entercom Communications Corp.	ETM	NYSE
ETR	Entergy Corporation	ETR	NYSE
EUFN	iShares MSCI Europe Financials ETF	EUFN	NASDAQ
EUO	Proshares UltraShort Euro	EUO	NYSE Arca
EVRI	Everi Holdings Inc.	EVRI	NYSE
EWA	iShares MSCI Australia ETF	EWA	NYSE Arca
EWC	iShares MSCI Canada ETF	EWC	NYSE Arca
EWG	iShares MSCI Germany ETF	EWG	NYSE Arca
EWH	iShares MSCI Hong Kong ETF	EWH	NYSE Arca
EWI	iShares MSCI Italy Capped ETF	EWI	NYSE Arca
EWT	iShares MSCI Taiwan Capped ETF	EWT	NYSE Arca
EWY	iShares MSCI South Korea Capped ETF	EWY	NYSE Arca
EXP	Eagle Materials Inc.	EXP	NYSE
EXPR	Express, Inc.	EXPR	NYSE
EXR	Extra Space Storage Inc.	EXR	NYSE
EXTR	Extreme Networks, Inc.	EXTR	NASDAQ
EYPT	EyePoint Pharmaceuticals, Inc.	EYPT	NASDAQ
EZA	iShares MSCI South Africa ETF	EZA	NYSE Arca
FBP	First BanCorp.	FBP	NYSE
FCG	First Trust Natural Gas ETF	FCG	NYSE Arca
FE	FirstEnergy Corp.	FE	NYSE
FFIV	F5 Networks, Inc.	FFIV	NASDAQ
FGEN	FibroGen, Inc.	FGEN	NASDAQ
FIS	Fidelity National Information Services, Inc.	FIS	NYSE
FLR	Fluor Corporation	FLR	NYSE
FLT	FleetCor Technologies, Inc.	FLT	NYSE



FLXN	Flexion Therapeutics, Inc.	FLXN	NASDAQ
FMC	FMC Corporation	FMC	NYSE
FND	Floor & Decor Holdings, Inc.	FND	NYSE
FNV	Franco-Nevada Corporation	FNV	NYSE
FOE	Ferro Corporation	FOE	NYSE
FOLD	Amicus Therapeutics, Inc.	FOLD	NASDAQ
FOMX	Foamix Pharmaceuticals Ltd.	FOMX	NASDAQ
FOSL	Fossil Group, Inc.	FOSL	NASDAQ
FRAN	Francesca's Holding Corporation	FRAN	NASDAQ
FRED	Fred's, Inc.	FRED	NASDAQ
FRO	Frontline Ltd.	FRO	NYSE
FTI	TechnipFMC plc	FTI	NYSE
FXA	Invesco CcyShrs Australian Dllr Trust	FXA	NYSE Arca
FXH	First Trust Health Care AlphaDEX ETF	FXH	NYSE Arca
FXY	Invesco CurrencyShares Japanese Yen	FXY	NYSE Arca
GALT	Galectin Therapeutics, Inc.	GALT	NASDAQ
GCAP	GAIN Capital Holdings, Inc.	GCAP	NYSE
GD	General Dynamics Corporation	GD	NYSE
GDDY	GoDaddy Inc.	GDDY	NYSE
GDOT	Green Dot Corporation	GDOT	NYSE
GDS	GDS Holdings Limited	GDS	NASDAQ
GES	Guess?, Inc.	GES	NYSE
GFI	Gold Fields Limited	GFI	NYSE
GGAL	Grupo Financiero Galicia S.A.	GGAL	NASDAQ
GIII	G-III Apparel Group, Ltd.	GIII	NASDAQ
GLOG	GasLog Ltd.	GLOG	NYSE
GLPI	Gaming and Leisure Properties, Inc.	GLPI	NASDAQ
GMLP	Golar LNG Partners LP	GMLP	NASDAQ
GNC	GNC Holdings, Inc.	GNC	NYSE
GNRC	Generac Holdings Inc.	GNRC	NYSE
GNTX	Gentex Corporation	GNTX	NASDAQ
GNW	Genworth Financial, Inc.	GNW	NYSE
GOLD	Barrick Gold Corporation	GOLD	NYSE
GPC	Genuine Parts Company	GPC	NYSE
GPRE	Green Plains Inc.	GPRE	NASDAQ
GRA	W.R. Grace & Co.	GRA	NYSE
GRMN	Garmin Ltd.	GRMN	NASDAQ



GSKY	GreenSky, Inc.	GSKY	NASDAQ
GTT	GTT Communications, Inc.	GTT	NYSE
GUSH	Direxion Dly S&P Oil&Gs Ex&Prd BI 3x ETF	GUSH	NYSE Arca
GWPH	GW Pharmaceuticals plc	GWPH	NASDAQ
GWW	W.W. Grainger, Inc.	GWW	NYSE
HAIN	The Hain Celestial Group, Inc.	HAIN	NASDAQ
HBAN	Huntington Bancshares Incorporated	HBAN	NASDAQ
HCA	HCA Healthcare, Inc.	HCA	NYSE
HCP	HCP, Inc.	HCP	NYSE
HFC	HollyFrontier Corporation	HFC	NYSE
HIBB	Hibbett Sports, Inc.	HIBB	NASDAQ
HIG	The Hartford Financial Services Group, Inc.	HIG	NYSE
HIIQ	Health Insurance Innovations, Inc.	HIIQ	NASDAQ
HL	Hecla Mining Company	HL	NYSE
HMY	Harmony Gold Mining Company Limited	HMY	NYSE
HOME	At Home Group Inc.	HOME	NYSE
HP	Helmerich & Payne, Inc.	HP	NYSE
HPR	HighPoint Resources Corporation	HPR	NYSE
HRB	H&R Block, Inc.	HRB	NYSE
HRL	Hormel Foods Corporation	HRL	NYSE
HSIC	Henry Schein, Inc.	HSIC	NASDAQ
HSY	The Hershey Company	HSY	NYSE
HTHT	Huazhu Group Limited	HTHT	NASDAQ
HUBG	Hub Group, Inc.	HUBG	NASDAQ
HUBS	HubSpot, Inc.	HUBS	NYSE
HUM	Humana, Inc.	HUM	NYSE
HZNP	Horizon Pharma plc	HZNP	NASDAQ
IAC	IAC/InterActiveCorp	IAC	NASDAQ
IAG	IAMGOLD Corporation	IAG	NYSE
IAU	iShares Gold Trust	IAU	NYSE Arca
IBKR	Interactive Brokers Group, Inc.	IBKR	Investor's Exchange, LLC
ICE	Intercontinental Exchange, Inc.	ICE	NYSE
ICHR	Ichor Holdings, Ltd.	ICHR	NASDAQ
ICPT	Intercept Pharmaceuticals, Inc.	ICPT	NASDAQ
IDCC	InterDigital, Inc.	IDCC	NASDAQ
IDXX	IDEXX Laboratories, Inc.	IDXX	NASDAQ



IGV	Ishares North American Tech-Software	IGV	BATS
IMGN	ImmunoGen, Inc.	IMGN	NASDAQ
INCY	Incyte Corporation	INCY	NASDAQ
INDA	iShares MSCI India ETF	INDA	BATS
INFO	IHS Markit Ltd.	INFO	NASDAQ
INFY	Infosys Limited	INFY	NYSE
ING	ING Groep N.V.	ING	NYSE
INO	Inovio Pharmaceuticals, Inc.	INO	NASDAQ
INSG	Inseego Corp.	INSG	NASDAQ
INSM	Insmed Incorporated	INSM	NASDAQ
INTU	Intuit Inc.	INTU	NASDAQ
INVA	Innoviva, Inc.	INVA	NASDAQ
IONS	Ionis Pharmaceuticals, Inc.	IONS	NASDAQ
IPG	The Interpublic Group Of Companies, Inc.	IPG	NYSE
IQV	IQVIA Holdings Inc.	IQV	NYSE
IR	Ingersoll-Rand Plc	IR	NYSE
IRDM	Iridium Communications Inc.	IRDM	NASDAQ
IRM	Iron Mountain Incorporated	IRM	NYSE
IT	Gartner, Inc.	IT	NYSE
ITCI	Intra-Cellular Therapies, Inc.	ITCI	NASDAQ
ITT	ITT Inc.	ITT	NYSE
ITW	Illinois Tool Works Inc.	ITW	NYSE
IVV	iShares Core S&P 500 ETF	IVV	NYSE Arca
IVW	iShares S&P 500 Growth ETF	IVW	NYSE Arca
IWF	iShares Russell 1000 Growth ETF	IWF	NYSE Arca
IYT	iShares Dow Jones Transportation Average	IYT	BATS
JACK	Jack In The Box Inc	JACK	NASDAQ
JAZZ	Jazz Pharmaceuticals plc	JAZZ	NASDAQ
JBL	Jabil Inc.	JBL	NYSE
JDST	Direxion Daily Jr Gld Mnrs Bear 3x ETF	JDST	NYSE Arca
JEC	Jacobs Engineering Group Inc.	JEC	NYSE
JEF	Jefferies Financial Group Inc.	JEF	NYSE
JKS	JinkoSolar Holding Co., Ltd.	JKS	NYSE
KDP	Keurig Dr Pepper Inc.	KDP	NYSE
KEX	Kirby Corporation	KEX	NYSE
KEYS	Keysight Technologies, Inc.	KEYS	NYSE



KIM	Kimco Realty Corporation	KIM	NYSE
KL	Kirkland Lake Gold Ltd.	KL	NYSE
KLAC	KLA-Tencor Corporation	KLAC	NASDAQ
KN	Knowles Corporation	KN	NYSE
KNDI	Kandi Technologies Group, Inc.	KNDI	NASDAQ
KODK	Eastman Kodak Company	KODK	NYSE
KOS	Kosmos Energy Ltd.	KOS	NYSE
KSU	Kansas City Southern	KSU	NYSE
KTOS	Kratos Defense & Security Solutions, Inc.	KTOS	NASDAQ
LABD	Direxion Daily S&P Biotech Bear 3x ETF	LABD	NYSE Arca
LBTYK	Liberty Global Plc	LBTYK	NASDAQ
LC	LendingClub Corporation	LC	NYSE
LCI	Lannett Company, Inc.	LCI	NYSE
LDOS	Leidos Holdings, Inc.	LDOS	NYSE
LE	Lands' End, Inc.	LE	NASDAQ
LEA	Lear Corporation	LEA	NYSE
LGCY	Legacy Reserves Inc.	LGCY	NASDAQ
LGIH	LGI Homes, Inc.	LGIH	NASDAQ
LGND	Ligand Pharmaceuticals Incorporated	LGND	NASDAQ
LIN	Linde plc	LIN	NYSE
LIVN	LivaNova PLC	LIVN	NASDAQ
LKQ	LKQ Corporation	LKQ	NASDAQ
LNC	Lincoln National Corporation	LNC	NYSE
LOCO	El Pollo Loco Holdings, Inc.	LOCO	NASDAQ
LPI	Laredo Petroleum, Inc.	LPI	NYSE
LPX	Louisiana-Pacific Corporation	LPX	NYSE
LYV	Live Nation Entertainment, Inc.	LYV	NYSE
MAC	Macerich Company	MAC	NYSE
MAS	Masco Corporation	MAS	NYSE
MBI	MBIA Inc.	MBI	NYSE
MBT	Mobile Tele Systems	MBT	NYSE
MCHI	iShares MSCI China ETF	MCHI	NASDAQ
MCHP	Microchip Technology Incorporated	MCHP	NASDAQ
MCK	McKesson Corporation	MCK	NYSE
MCO	Moody's Corporation	MCO	NYSE



MDB	MongoDB, Inc.	MDB	NASDAQ
MDCO	The Medicines Company	MDCO	NASDAQ
MDY	SPDR S&P MidCap 400 ETF	MDY	NYSE Arca
MEET	The Meet Group, Inc.	MEET	NASDAQ
MEOH	Methanex Corporation	MEOH	NASDAQ
MFC	Manulife Financial Corporation	MFC	NYSE
MFIN	Medallion Financial Corp.	MFIN	NASDAQ
MGA	Magna International Inc.	MGA	NYSE
MHK	Mohawk Industries, Inc.	MHK	NYSE
MIC	Macquarie Infrastructure Corporation	MIC	NYSE
MIK	The Michaels Companies, Inc.	MIK	NASDAQ
MKC	McCormick & Company, Incorporated	MKC	NYSE
MLM	Martin Marietta Materials, Inc.	MLM	NYSE
MLNX	Mellanox Technologies, Ltd.	MLNX	NASDAQ
MMP	Magellan Midstream Partners, L.P.	MMP	NYSE
MPLX	MPLX LP	MPLX	NYSE
MPWR	Monolithic Power Systems, Inc.	MPWR	NASDAQ
MRNS	Marinus Pharmaceuticals, Inc.	MRNS	NASDAQ
MRTX	Mirati Therapeutics, Inc.	MRTX	NASDAQ
MSB	Mesabi Trust	MSB	NYSE
MTG	MGIC Investment Corporation	MTG	NYSE
MTZ	Mas Tec, Inc.	MTZ	NYSE
MUR	Murphy Oil Corporation	MUR	NYSE
MUX	McEwen Mining Inc.	MUX	NYSE
MXIM	Maxim Integrated Products, Inc.	MXIM	NASDAQ
MXL	MaxLinear, Inc.	MXL	NYSE
MYGN	Myriad Genetics, Inc.	MYGN	NASDAQ
NAT	Nordic American Tankers Limited	NAT	NYSE
NAV	Navistar International Corporation	NAV	NYSE
NAVI	Navient Corporation	NAVI	NASDAQ
NBEV	New Age Beverages Corporation	NBEV	NASDAQ
NBIX	Neurocrine Biosciences, Inc.	NBIX	NASDAQ
NCLH	Norwegian Cruise Line Holdings Ltd.	NCLH	NYSE
NCR	NCR Corporation	NCR	NYSE
NDAQ	Nasdaq, Inc.	NDAQ	NASDAQ
NEE	NextEra Energy, Inc.	NEE	NYSE
NEWR	New Relic, Inc.	NEWR	NYSE



NGD	New Gold, Inc.	NGD	AMEX
NGG	National Grid plc	NGG	NYSE
NGL	NGL Energy Partners LP	NGL	NYSE
NIO	NIO Inc.	NIO	NYSE
NNBR	NN, Inc.	NNBR	NASDAQ
NPTN	NeoPhotonics Corporation	NPTN	NYSE
NRZ	New Residential Investment Corp.	NRZ	NYSE
NTR	Nutrien Ltd.	NTR	NYSE
NUAN	Nuance Communications, Inc.	NUAN	NASDAQ
NUS	Nu Skin Enterprises, Inc.	NUS	NYSE
NVCR	NovoCure Limited	NVCR	NASDAQ
NVLN	Novelion Therapeutics Inc.	NVLN	NASDAQ
NVO	Novo Nordisk A/S	NVO	NYSE
NVTA	Invitae Corporation	NVTA	NYSE
NXST	Nexstar Media Group, Inc.	NXST	NASDAQ
NYCB	New York Community Bancorp, Inc.	NYCB	NYSE
NYT	The New York Times Company	NYT	NYSE
O	Realty Income Corporation	O	NYSE
OC	Owens Corning	OC	NYSE
ODP	Office Depot, Inc.	ODP	NASDAQ
OHI	Omega Healthcare Investors, Inc.	OHI	NYSE
OKE	ONEOK, Inc.	OKE	NYSE
OLLI	Ollie's Bargain Outlet Holdings, Inc.	OLLI	NASDAQ
OLN	Olin Corporation	OLN	NYSE
OMER	Omeros Corporation	OMER	NASDAQ
OPI	Office Properties Income Trust	OPI	NASDAQ
ORLY	O'Reilly Automotive, Inc.	ORLY	NASDAQ
OZK	Bank OZK	OZK	NASDAQ
PAA	Plains All American Pipeline, L.P.	PAA	NYSE
PAAS	Pan American Silver Corporation	PAAS	NASDAQ
PAGP	Plains GP Holdings, L.P.	PAGP	NYSE
PAYC	Paycom Software, Inc.	PAYC	NYSE
PBF	PBF Energy Inc.	PBF	NYSE
PBI	Pitney Bowes Inc.	PBI	NYSE
PBYI	Puma Biotechnology, Inc.	PBYI	NASDAQ
PCAR	PACCAR Inc	PCAR	NASDAQ
PCRX	Pacira Pharmaceuticals, Inc.	PCRX	NASDAQ



PDCE	PDC Energy, Inc.	PDCE	NASDAQ
PDD	Pinduoduo Inc.	PDD	NASDAQ
PE	Parsley Energy, Inc.	PE	NYSE
PEGI	Pattern Energy Group Inc.	PEGI	NASDAQ
PEI	Pennsylvania Real Estate Investment Trust	PEI	NYSE
PFF	iShares Preferred&Income Securities ETF	PFF	NASDAQ
PFPT	Proofpoint, Inc.	PFPT	NASDAQ
PGNX	Progenics Pharmaceuticals, Inc.	PGNX	NASDAQ
PGTI	PGT Innovations, Inc.	PGTI	NYSE
PH	Parker-Hannifin Corporation	PH	NYSE
PHG	Koninklijke Philips N.V	PHG	NYSE
PII	Polaris Industries, Inc.	PII	NYSE
PKG	Packaging Corporation of America	PKG	NYSE
PLAY	Dave & Buster's Entertainment, Inc.	PLAY	NASDAQ
PLCE	The Children's Place, Inc.	PLCE	NASDAQ
PLNT	Planet Fitness, Inc.	PLNT	NYSE
PLUG	Plug Power Inc.	PLUG	NASDAQ
POST	Post Holdings, Inc.	POST	NYSE
PPC	Pilgrims Pride Corporation	PPC	NASDAQ
PPG	PPG Industries, Inc.	PPG	NYSE
PRGO	Perrigo Company plc	PRGO	NYSE
PRTK	Paratek Pharmaceuticals, Inc.	PRTK	NASDAQ
PRTY	Party City Holdco Inc.	PRTY	NYSE
PSA	Public Storage	PSA	NYSE
PTC	PTC Inc.	PTC	NASDAQ
PTCT	PTC Therapeutics, Inc.	PTCT	NASDAQ
PTE	PolarityTE, Inc.	PTE	NASDAQ
PTEN	Patterson-UTI Energy, Inc.	PTEN	NASDAQ
PTI	Proteostasis Therapeutics, Inc.	PTI	NASDAQ
PTLA	Portola Pharmaceuticals, Inc.	PTLA	NASDAQ
PUMP	ProPetro Holding Corp.	PUMP	NYSE
PVH	PVH Corp.	PVH	NYSE
PWR	Quanta Services, Inc.	PWR	NYSE
PYX	Pyxus International, Inc.	PYX	NYSE
QD	Qudian, Inc.	QD	NYSE
QID	ProShares UltraShort QQQ	QID	NYSE Arca



QIWI	Qawi plc	QIWI	NASDAQ
QLD	ProShares Ultra QQQ	QLD	NYSE Arca
QLYS	Qualys, Inc.	QLYS	NASDAQ
QRVO	Qorvo, Inc.	QRVO	NASDAQ
QSR	Restaurant Brands International Inc.	QSR	NYSE
RACE	Ferrari N.V.	RACE	NYSE
RBS	The Royal Bank Of Scotland Group plc	RBS	NYSE
RCII	Rent-A-Center, Inc.	RCII	NASDAQ
RDFN	Redfin Corporation	RDFN	NASDAQ
RDNT	RadNet, Inc.	RDNT	NASDAQ
RDSB	Royal Dutch Shell plc	RDSB	NYSE
RDUS	Radius Health, Inc.	RDUS	NASDAQ
RESI	Front Yard Residential Corporation	RESI	NYSE
REV	Revlon, Inc.	REV	NYSE
RGLD	Royal Gold, Inc.	RGLD	NASDAQ
RGNX	REGENXBIO Inc.	RGNX	NASDAQ
RIGL	Rigel Pharmaceuticals, Inc.	RIGL	NASDAQ
RJF	Raymond James Financial, Inc.	RJF	NYSE
RMD	ResMed Inc.	RMD	NYSE
RNG	RingCentral, Inc.	RNG	NYSE
ROK	Rockwell Automation, Inc.	ROK	NYSE
ROST	Ross Stores, Inc.	ROST	NASDAQ
ROYT	Pacific Coast Oil Trust	ROYT	NYSE
RRD	R.R. Donnelley & Sons Company	RRD	NYSE
RRGB	Red Robin Gourmet Burgers, Inc.	RRGB	NASDAQ
RRR	Red Rock Resorts, Inc.	RRR	NASDAQ
RUN	Sunrun Inc.	RUN	NASDAQ
SA	Seabridge Gold Inc.	SA	NYSE
SABR	Sabre Corporation	SABR	NASDAQ
SAGE	Sage Therapeutics, Inc.	SAGE	NASDAQ
SAN	Banco Santander, S.A.	SAN	NYSE
SAND	Sandstorm Gold Ltd.	SAND	AMEX
SAP	SAP SE	SAP	NYSE
SBAC	SBA Communications Corporation	SBAC	NASDAQ
SBGI	Sinclair Broadcasting Group, Inc.	SBGI	NASDAQ
SBGL	Sibanye Gold Limited	SBGL	NYSE
SCCO	Southern Copper Corporation	SCCO	NYSE
SCI	Service Corporation International	SCI	NYSE
SCO	ProShares UltraShort Bloomberg Crude Oil	SCO	NYSE Arca
SCS	Steelcase Inc.	SCS	NYSE
SCVL	Shoe Carnival, Inc.	SCVL	NASDAQ
SE	Sea Limited	SE	NYSE
SEDG	SolarEdge Technologies, Inc.	SEDG	NASDAQ



SEE	Sealed Air Corporation	SEE	NYSE
SFLY	Shutterfly, Inc.	SFLY	NASDAQ
SFM	Sprouts Farmers Market, Inc.	SFM	NASDAQ
SH	ProShares Short S&P500	SH	NYSE Arca
SHAK	Shake Shack Inc.	SHAK	NYSE
SHW	The Sherwin-Williams Company	SHW	NYSE
SHY	iShares 1-3 Year Treasury Bond ETF	SHY	NASDAQ
SIEN	Sientra, Inc.	SIEN	NASDAQ
SIG	Signet Jewelers Limited	SIG	NYSE
SIL	Global X Silver Miners ETF	SIL	NYSE Arca
SINA	SINA Corporation	SINA	NASDAQ
SIX	Six Flags Entertainment Corporation	SIX	NYSE
SJM	The J. M. Smucker Company	SJM	NYSE
SKT	Tanger Factory Outlet Centers, Inc.	SKT	NYSE
SLM	SLM Corporation	SLM	NASDAQ
SM	SM Energy Company	SM	NYSE
SMG	The Scotts Miracle-Gro Company	SMG	NYSE
SNBR	Sleep Number Corporation	SNBR	NASDAQ
SNPS	Synopsys, Inc.	SNPS	NASDAQ
SNX	SYNNEX Corporation	SNX	NYSE
SNY	Sanofi	SNY	NASDAQ
SOGO	Sogou Inc.	SOGO	NYSE
SOHU	Sohu.Com Limited	SOHU	NASDAQ
SOXL	Direxion Daily Semiconductor Bull 3x Shares	SOXL	NYSE Arca
SOXS	Direxion Daily Semiconductor Bear 3x Shares	SOXS	NYSE Arca
SOXX	iShares PHLX Semiconductor ETF	SOXX	NASDAQ
SPG	Simon Property Group, Inc.	SPG	NYSE
SPPI	Spectrum Pharmaceuticals, Inc.	SPPI	NASDAQ
SPR	Spirit Aerosystems Holdings, Inc.	SPR	NYSE
SRCI	SRC Energy Inc.	SRCI	AMEX
SRE	Sempra Energy	SRE	NYSE
SRG	Seritage Growth Properties	SRG	NYSE
SRNE	Sorrento Therapeutics, Inc.	SRNE	NASDAQ
SSNC	SS&C Technologies Holdings, Inc.	SSNC	NASDAQ
SSP	The E.W. Scripps Company	SSP	NASDAQ
SSRM	SSR Mining Inc.	SSRM	NASDAQ
SSW	Seaspan Corporation	SSW	NYSE
SSYS	Stratasys Ltd.	SSYS	NASDAQ
STAA	STAAR Surgical Company	STAA	NASDAQ
STLD	Steel Dynamics, Inc.	STLD	NASDAQ
STMP	Stamps.com, Inc.	STMP	NASDAQ
STNG	Scorpio Tankers Inc.	STNG	NYSE
STT	State Street Corporation	STT	NYSE
SUM	Summit Materials, Inc.	SUM	NYSE
SUN	Sunoco LP	SUN	NYSE



SYK	Stryker Corporation	SYK	NYSE
SYNA	Synaptics Incorporated	SYNA	NASDAQ
SYZ	Sysco Corporation	SYZ	NYSE
TBF	Proshares Short 20+ Year Treasury	TBF	NYSE Arca
TD	The Toronto Dominion Bank	TD	NYSE
TDC	Teradata Corporation	TDC	NYSE
TEAM	Atlassian Corporation Plc	TEAM	NASDAQ
TECS	Direxion Daily Technology Bear 3x Shares	TECS	NYSE Arca
TEL	TE Connectivity Ltd.	TEL	NYSE
TELL	Tellurian Inc.	TELL	NASDAQ
TER	Teradyne, Inc.	TER	NASDAQ
TEX	Terex Corporation	TEX	NYSE
TGP	Teekay LNG Partners L.P.	TGP	NYSE
THO	Thor Industries, Inc.	THO	NYSE
THS	TreeHouse Foods, Inc.	THS	NYSE
TIVO	TiVo Corporation	TIVO	NASDAQ
TK	Teekay Corporation	TK	NYSE
TLRD	Tailored Brands, Inc.	TLRD	NYSE
TMF	Direxion Daily 20+ Year Treasury Bull 3X Shares	TMF	NYSE Arca
TMO	Thermo Fisher Scientific Inc.	TMO	NYSE
TOT	TOTAL S.A.	TOT	NYSE
TRCO	Tribune Media Company	TRCO	NYSE
TREE	LendingTree, Inc.	TREE	NASDAQ
TREX	Trex Company, Inc.	TREX	NYSE
TRGP	Targa Resources Corp.	TRGP	NYSE
TROW	T. Rowe Price Group, Inc.	TROW	NASDAQ
TRQ	Turquoise Hill Resources Ltd.	TRQ	NYSE
TRTN	Triton International Limited	TRTN	NYSE
TRU	TransUnion	TRU	NYSE
TRUP	Trupanion, Inc.	TRUP	NASDAQ
TRV	The Travelers Companies, Inc.	TRV	NYSE
TRVG	trivago N.V.	TRVG	NASDAQ
TSCO	Tractor Supply Company	TSCO	NASDAQ
TSG	The Stars Group Inc.	TSG	NASDAQ
TSS	Total System Services, Inc.	TSS	NYSE
TTOO	T2 Biosystems, Inc.	TTOO	NASDAQ
TTPH	Tetraphase Pharmaceuticals, Inc.	TTPH	NASDAQ
TWM	Proshares UltraShort Russell 2000	TWM	NYSE Arca
TXT	Textron Inc.	TXT	NYSE
UBNT	Ubiquiti Networks, Inc.	UBNT	NASDAQ
UBS	UBS Group AG	UBS	NYSE
UDOW	ProShares UltraPro Dow30	UDOW	NYSE Arca
UEC	Uranium Energy Corp.	UEC	AMEX
UEPS	Net 1 UEPS Technologies, Inc.	UEPS	NASDAQ
UIS	Unisys Corporation	UIS	NYSE
UL	Unilever PLC	UL	NYSE



ULTI	The Ultimate Software Group, Inc.	ULTI	NASDAQ
UN	Unilever N.V.	UN	NYSE
UNFI	United Natural Foods, Inc.	UNFI	NYSE
UPL	Ultra Petroleum Corp.	UPL	NASDAQ
USAT	USA Technologies, Inc.	USAT	NASDAQ
USCR	U.S. Concrete, Inc.	USCR	NASDAQ
UXIN	Uxin Limited	UXIN	NASDAQ
VAC	Marriott Vacations Worldwide Corporation	VAC	NYSE
VC	Visteon Corporation	VC	NASDAQ
VGK	Vanguard FTSE Europe Index Fund ETF Shares	VGK	NYSE Arca
VGR	Vector Group Ltd.	VGR	NYSE
VHC	VirnetX Holding Corp	VHC	AMEX
VIAV	Viavi Solutions Inc.	VIAV	NASDAQ
VICR	Vicor Corporation	VICR	NASDAQ
VIRT	Virtu Financial, Inc.	VIRT	NASDAQ
VIXY	ProShares VIX Short-Term Futures ETF	VIXY	NYSE Arca
VLV	Valley National Bancorp	VLV	NASDAQ
VMC	Vulcan Materials Company	VMC	NYSE
VNET	21Vianet Group, Inc.	VNET	NASDAQ
VNOM	Viper Energy Partners LP	VNOM	NASDAQ
VOO	Vanguard S&P 500 ETF	VOO	NYSE Arca
VRSN	VeriSign, Inc.	VRSN	NASDAQ
VRTX	Vertex Pharmaceuticals Incorporated	VRTX	NASDAQ
VSAT	Viasat, Inc.	VSAT	NASDAQ
VSH	Vishay Intertechnology, Inc.	VSH	NYSE
VSTM	Verastem, Inc.	VSTM	NASDAQ
VTL	Vital Therapies, Inc.	VTL	NASDAQ
VTR	Ventas, Inc.	VTR	NYSE
VUZI	Vuzix Corporation	VUZI	NASDAQ
VXXB	iPath Series B S&P 500 VIX Short-Term Futures ETN	VXXB	BATS
WAB	Wabtec Corporation	WAB	NYSE
WATT	Energous Corporation	WATT	NASDAQ
WELL	Welltower Inc.	WELL	NYSE
WEN	The Wendy's Company	WEN	NASDAQ
WES	Western Midstream Partners, LP	WES	NYSE
WGO	Winnebago Industries, Inc.	WGO	NYSE
WING	Wingstop Inc.	WING	NASDAQ
WIX	Wix.Com Ltd.	WIX	NASDAQ
WLK	Westlake Chemical Corporation	WLK	NYSE
WLTW	Willis Towers Watson Public Limited Company	WLTW	NASDAQ
WM	Waste Management, Inc.	WM	NYSE
WP	Worldpay, Inc.	WP	NYSE
WPG	Washington Prime Group Inc.	WPG	NYSE



WRK	WestRock Company	WRK	NYSE
WTI	W&T Offshore, Inc.	WTI	NYSE
WU	The Western Union Company	WU	NYSE
WUBA	58.com Inc.	WUBA	NYSE
WWW	Wolverine World Wide, Inc.	WWW	NYSE
XEC	Cimarex Energy Co.	XEC	NYSE
XLC	Communication Services Select Sector SPDR Fund	XLC	NYSE Arca
XLRE	The Real Estate Select Sector SPDR Fund	XLRE	NYSE Arca
XON	Intrexon Corporation	XON	NASDAQ
XRAY	DENTSPLY SIRONA Inc.	XRAY	NASDAQ
XXII	22nd Century Group, Inc.	XXII	AMEX
YEXT	Yext, Inc.	YEXT	NYSE
YINN	Direxion Daily FTSE China Bull 3X Shares	YINN	NYSE Arca
YRCW	YRC Worldwide Inc.	YRCW	NASDAQ
YRD	Yirendai Ltd.	YRD	NYSE
YUMC	Yum China Holdings, Inc.	YUMC	NYSE
ZAYO	Zayo Group Holdings, Inc.	ZAYO	NYSE
ZEN	Zendesk, Inc.	ZEN	NYSE
ZG	Zillow Group, Inc.	ZG	NASDAQ
ZGNX	Zogenix, Inc.	ZGNX	NASDAQ
ZIOP	ZIOPHARM Oncology, Inc.	ZIOP	NASDAQ
ZN	Zion Oil & Gas, Inc.	ZN	NASDAQ
ZTS	Zoetis Inc.	ZTS	NYSE
ZUO	Zuora, Inc.	ZUO	NYSE

Regulatory questions may be directed to the MIAX Emerald Regulatory Department at Regulatory@MIAXOptions.com or (609) 897-7309.