

DATE: March 3, 2017

TO: MIAX PEARL Members

FROM: MIAX PEARL Regulatory Department

RE: Market for Underlying Security Used for Openings on MIAX PEARL for Newly Listed Option Classes Effective March 6, 2017

The following underlying symbols will start trading on MIAX PEARL beginning Monday, March 6, 2017, and, as set forth in MIAX PEARL Rule 503(a)(3), Market for the Underlying Security, MIAX PEARL 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
DDD	3D SYSTEMS CORPORATION	DDD	NYSE
WUBA	58.COM, INC.	WUBA	NYSE
ACAD	ACADIA PHARMACEUTICALS, INC.	ACAD	NASDAQ
ACN	ACCENTURE PLC	ACN	NYSE
ADBE	ADOBE SYSTEMS, INC.	ADBE	NASDAQ
AET	AETNA, INC.	AET	NYSE
AGNC	AGNC INVESTMENT CORPORATION	AGNC	NASDAQ
AKS	AK STEEL HOLDING CORPORATION	AKS	NYSE
AOBC	AMERICAN OUTDOOR BRANDS CORPORATION	AOBC	NASDAQ
AMT	AMERICAN TOWER CORPORATION	AMT	NYSE
AMGN	AMGEN, INC.	AMGN	NASDAQ
APA	APACHE CORPORATION	APA	NYSE
AMAT	APPLIED MATERIALS, INC.	AMAT	NASDAQ
MT	ARCELORMITTAL	MT	NYSE
AZN	ASTRAZENECA PLC	AZN	NYSE
T	AT&T, INC.	T	NYSE
AVP	AVON PRODUCTS, INC.	AVP	NYSE
BIDU	BAIDU, INC.	BIDU	NASDAQ
ABX	BARRICK GOLD CORPORATION	ABX	NYSE
BBT	BB&T CORPORATION	BBT	NYSE
BIIB	BIOGEN, INC.	BIIB	NASDAQ
BSX	BOSTON SCIENTIFIC CORPORATION	BSX	NYSE
BP	BP PLC	BP	NYSE
CCJ	CAMECO CORPORATION	CCJ	NYSE

COF	CAPITAL ONE FINANCIAL CORPORATION	COF	NYSE
CBS	CBS CORPORATION	CBS	NYSE
CVX	CHEVRON CORPORATION	CVX	NYSE
CIEN	CIENA CORPORATION	CIEN	NYSE
CRUS	CIRRUS LOGIC, INC.	CRUS	NASDAQ
CSCO	CISCO SYSTEMS, INC.	CSCO	NASDAQ
C	CITIGROUP, INC.	C	NYSE
CLF	CLIFFS NATURAL RESOURCES, INC.	CLF	NYSE
CLVS	CLOVIS ONCOLOGY, INC.	CLVS	NASDAQ
CMCSA	COMCAST CORPORATION	CMCSA	NASDAQ
COP	CONOCOPHILLIPS	COP	NYSE
CNX	CONSOL ENERGY, INC.	CNX	NYSE
XLY	CONSUMER DISCRETIONARY SELECT SPDR ETF	XLY	NYSE ARCA
XLP	CONSUMER STAPLES SELECT SECTOR SPDR ETF	XLP	NYSE ARCA
CXW	CORECIVIC, INC.	CXW	NYSE
GLW	CORNING, INC.	GLW	NYSE
COST	COSTCO WHOLESALE CORPORATION	COST	NASDAQ
COTY	COTY INC.	COTY	NYSE
CTRP	CTRP.COM INTERNATIONAL LIMITED	CTRP	NASDAQ
FXI	CURRENCYSHARES JAPANESE YEN ETF	FXI	NYSE ARCA
CVS	CVS HEALTH CORPORATION	CVS	NYSE
CY	CYPRESS SEMICONDUCTOR CORPORATION	CY	NASDAQ
DE	DEERE & COMPANY	DE	NYSE
DEPO	DEPOMED, INC.	DEPO	NASDAQ
DB	DEUTSCHE BANK AG	DB	NYSE
ERX	DIREXION DAILY ENERGY BULL 3X ETF	ERX	NYSE ARCA
DUST	DIREXION DAILY GOLD MINERS BEAR 3X ETF	DUST	NYSE ARCA
DG	DOLLAR GENERAL CORPORATION	DG	NYSE
DLTR	DOLLAR TREE, INC.	DLTR	NASDAQ
DPZ	DOMINO'S PIZZA, INC.	DPZ	NYSE
DNKN	DUNKIN' BRANDS GROUP, INC.	DNKN	NASDAQ
DYN	DYNEGY, INC.	DYN	NYSE
DD	E. I. DU PONT DE NEMOURS AND COMPANY	DD	NYSE
EA	ELECTRONIC ARTS, INC.	EA	NASDAQ
ECA	ENCANA CORPORATION	ECA	NYSE
XLE	ENERGY SELECT SECTOR SPDR ETF	XLE	NYSE ARCA
ESV	ENSCO PLC	ESV	NYSE
EOG	EOG RESOURCES, INC.	EOG	NYSE
EXC	EXELON CORPORATION	EXC	NYSE
EXPE	EXPEDIA, INC.	EXPE	NASDAQ
FNSR	FINISAR CORPORATION	FNSR	NASDAQ

FEYE	FIREEYE, INC.	FEYE	NASDAQ
FSLR	FIRST SOLAR, INC.	FSLR	NASDAQ
FE	FIRSTENERGY CORPORATION	FE	NYSE
F	FORD MOTOR COMPANY	F	NYSE
FTNT	FORTINET, INC.	FTNT	NASDAQ
GME	GAMESTOP CORPORATION	GME	NYSE
GGP	GGP, INC.	GGP	NYSE
GILD	GILEAD SCIENCES, INC.	GILD	NASDAQ
GSAT	GLOBALSTAR, INC.	GSAT	NYSE MKT
GLNG	GOLAR LNG LIMITED	GLNG	NASDAQ
GG	GOLDCORP, INC.	GG	NYSE
GWPH	GW PHARMACEUTICALS PLC	GWPH	NASDAQ
HAL	HALLIBURTON COMPANY	HAL	NYSE
HBI	HANESBRANDS, INC.	HBI	NYSE
HCA	HCA HOLDINGS, INC.	HCA	NYSE
XLV	HEALTH CARE SELECT SECTOR SPDR ETF	XLV	NYSE ARCA
HLF	HERBALIFE LIMITED	HLF	NYSE
HIMX	HIMAX TECHNOLOGIES, INC.	HIMX	NASDAQ
HST	HOST HOTELS & RESORTS, INC.	HST	NYSE
HSBC	HSBC HOLDINGS PLC	HSBC	NYSE
IBN	ICICI BANK LIMITED	IBN	NYSE
ILG	ILG, INC.	ILG	NASDAQ
ILMN	ILLUMINA, INC.	ILMN	NASDAQ
XLI	INDUSTRIAL SELECT SECTOR SPDR ETF	XLI	NYSE ARCA
IP	INTERNATIONAL PAPER COMPANY	IP	NYSE
ISRG	INTUITIVE SURGICAL, INC.	ISRG	NASDAQ
IEF	ISHARES 7-10 YEAR TREASURY BOND	IEF	NYSE ARCA
FXI	ISHARES CHINA LARGE-CAP	FXI	NYSE ARCA
HYG	ISHARES IBOXX \$ HIGH YIELD CORPORATE BOND	HYG	NYSE ARCA
EFA	ISHARES MSCI EAFE	EFA	NYSE ARCA
EWG	ISHARES MSCI GERMANY	EWG	NYSE ARCA
EWJ	ISHARES MSCI JAPAN	EWJ	NYSE ARCA
IYR	ISHARES US REAL ESTATE	IYR	NYSE ARCA
JBLU	JETBLUE AIRWAYS CORPORATION	JBLU	NASDAQ
KATE	KATE SPADE & COMPANY	KATE	NYSE
KMI	KINDER MORGAN, INC.	KMI	NYSE
KGC	KINROSS GOLD CORPORATION	KGC	NYSE
KSS	KOHL'S CORPORATION	KSS	NYSE
LB	L BRANDS, INC.	LB	NYSE
M	MACY'S, INC.	M	NYSE
MNK	MALLINCKRODT PLC	MNK	NYSE

MRO	MARATHON OIL CORPORATION	MRO	NYSE
MRVL	MARVELL TECHNOLOGY GROUP LIMITED	MRVL	NASDAQ
MA	MASTERCARD INCORPORATED	MA	NYSE
XLB	MATERIALS SELECT SECTOR SPDR ETF	XLB	NYSE ARCA
MAT	MATTEL, INC.	MAT	NASDAQ
MRK	MERCK & COMPANY, INC.	MRK	NYSE
MU	MICRON TECHNOLOGY, INC.	MU	NASDAQ
MSFT	MICROSOFT CORPORATION	MSFT	NASDAQ
MOMO	MOMO, INC.	MOMO	NASDAQ
MON	MONSANTO COMPANY	MON	NYSE
MS	MORGAN STANLEY	MS	NYSE
MYL	MYLAN N.V.	MYL	NASDAQ
NBR	NABORS INDUSTRIES LIMITED	NBR	NYSE
NTAP	NETAPP, INC.	NTAP	NASDAQ
NEM	NEWMONT MINING CORPORATION	NEM	NYSE
NKE	NIKE, INC.	NKE	NYSE
NE	NOBLE CORPORATION PLC	NE	NYSE
NAT	NORDIC AMERICAN TANKERS LIMITED	NAT	NYSE
JWN	NORDSTROM, INC.	JWN	NYSE
NRG	NRG ENERGY, INC.	NRG	NYSE
NUE	NUCOR CORPORATION	NUE	NYSE
OXY	OCCIDENTAL PETROLEUM CORPORATION	OXY	NYSE
PXD	PIONEER NATURAL RESOURCES COMPANY	PXD	NYSE
POST	POST HOLDINGS, INC.	POST	NYSE
SSO	PROSHARES ULTRA S&P500	SSO	NYSE ARCA
UVXY	PROSHARES ULTRA VIX SHORT-TERM FUTURES	UVXY	NYSE ARCA
TBT	PROSHARES ULTRASHORT 20+ YEAR TREASURY	TBT	NYSE ARCA
SCO	PROSHARES ULTRASHORT BLOOMBERG CRUDE OIL	SCO	NYSE ARCA
SDS	PROSHARES ULTRASHORT S&P500	SDS	NYSE ARCA
PHM	PULTEGROUP, INC.	PHM	NYSE
RRC	RANGE RESOURCES CORPORATION	RRC	NYSE
REGN	REGENERON PHARMACEUTICALS, INC.	REGN	NASDAQ
RH	RH	RH	NYSE
RIO	RIO TINTO PLC	RIO	NYSE
RCL	ROYAL CARIBBEAN CRUISES LIMITED	RCL	NYSE
CRM	SALESFORCE.COM, INC.	CRM	NYSE
SLB	SCHLUMBERGER LIMITED	SLB	NYSE
STX	SEAGATE TECHNOLOGY PLC	STX	NASDAQ
SLW	SILVER WHEATON CORPORATION	SLW	NYSE
JNK	SPDR BLMBG BARCLAYS HIGH YIELD BOND ETF	JNK	NYSE ARCA
FEZ	SPDR EURO STOXX 50 ETF	FEZ	NYSE ARCA

XBI	SPDR S&P BIOTECH ETF	XBI	NYSE ARCA
XOP	SPDR S&P OIL & GAS EXPLORATION & PROD ETF	XOP	NYSE ARCA
SPLK	SPLUNK, INC.	SPLK	NASDAQ
SPLS	STAPLES, INC.	SPLS	NASDAQ
STLD	STEEL DYNAMICS, INC.	STLD	NASDAQ
SU	SUNCOR ENERGY, INC.	SU	NYSE
SYMC	SYMANTEC CORPORATION	SYMC	NASDAQ
DATA	TABLEAU SOFTWARE, INC.	DATA	NYSE
TLRD	TAILORED BRANDS, INC.	TLRD	NYSE
TGT	TARGET CORPORATION	TGT	NYSE
XLK	TECHNOLOGY SELECT SECTOR SPDR ETF	XLK	NYSE ARCA
TECK	TECK RESOURCES LIMITED	TECK	NYSE
TSRO	TESARO, INC.	TSRO	NASDAQ
TSO	TESORO CORPORATION	TSO	NYSE
TEVA	TEVA PHARMACEUTICAL INDUSTRIES LIMITED	TEVA	NYSE
BX	THE BLACKSTONE GROUP L.P.	BX	NYSE
DOW	THE DOW CHEMICAL COMPANY	DOW	NYSE
GPS	THE GAP, INC.	GPS	NYSE
HIG	THE HARTFORD FINANCIAL SERVICES GROUP, INC.	HIG	NYSE
KHC	THE KRAFT HEINZ COMPANY	KHC	NASDAQ
MOS	THE MOSAIC COMPANY	MOS	NYSE
PNC	THE PNC FINANCIAL SERVICES GROUP, INC.	PNC	NYSE
SO	THE SOUTHERN COMPANY	SO	NYSE
TJX	THE TJX COMPANIES, INC.	TJX	NYSE
DIS	THE WALT DISNEY COMPANY	DIS	NYSE
TWX	TIME WARNER, INC.	TWX	NYSE
TOL	TOLL BROTHERS, INC.	TOL	NYSE
FOXA	TWENTY-FIRST CENTURY FOX, INC.	FOXA	NASDAQ
TSN	TYSON FOODS, INC.	TSN	NYSE
USB	U.S. BANCORP	USB	NYSE
ULTA	ULTA BEAUTY, INC.	ULTA	NASDAQ
UPS	UNITED PARCEL SERVICE, INC.	UPS	NYSE
URI	UNITED RENTALS, INC.	URI	NYSE
UNG	UNITED STATES NATURAL GAS	UNG	NYSE ARCA
X	UNITED STATES STEEL CORPORATION	X	NYSE
UNH	UNITEDHEALTH GROUP INCORPORATED	UNH	NYSE
URBN	URBAN OUTFITTERS, INC.	URBN	NASDAQ
GDXJ	VANECK VECTORS JUNIOR GOLD MINERS ETF	GDXJ	NYSE ARCA
RSX	VANECK VECTORS RUSSIA ETF	RSX	NYSE ARCA
VNQ	VANGUARD REIT ETF	VNQ	NYSE ARCA
PAY	VERIFONE SYSTEMS, INC.	PAY	NYSE

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VZ	VERIZON COMMUNICATIONS, INC.	VZ	NYSE
WY	WEYERHAEUSER COMPANY	WY	NYSE
WYNN	WYNN RESORTS LIMITED	WYNN	NASDAQ
YHOO	YAHOO!, INC.	YHOO	NASDAQ
YUM	YUM! BRANDS, INC.	YUM	NYSE
YY	YY, INC.	YY	NASDAQ
ZIOP	ZIOPHARM ONCOLOGY, INC.	ZIOP	NASDAQ

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