

Daily TAQ Client Specification

Version 1.0

Data as of September 2006

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PREFACE

CONTACT INFORMATION

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FURTHER INFORMATION

For additional information about the product, visit: http://www.nyxdata.com/Data-Products/Daily-TAQ
For updated capacity figures, visit our capacity pages at: http://www.nyxdata.com/capacity
For details of IP addresses, visit our IP address pages at: http://www.nyxdata.com/ipaddresses
For a full glossary, visit: http://www.nyxdata.com/glossary/

DISCUSSION BOARD

There is a TAQ discussion board available <u>here</u>.

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1 INTRODUCTION

Daily TAQ (Trades and Quotes) provides users with FTP access to trades and quotes for all issues traded on all CTA Participating Markets for the previous trading day.

The file contains the Master File with Primary Exchange Indicator, the "NBBO file" containing continuous National Best Bid and Offer updates, and consolidated trades and quotes for all listed and non-listed issues.

Historical information is available for an additional fee.

1.1 MARKETS COVERED

The Daily TAQ product covers:

- All CTA Participating Markets Tapes A, B and C
- NYSE
- Nasdaq (OTC)
- All regionals

1.2 INSTRUMENTS COVERED

The Daily TAQ product covers Equities.

1.3 DATASET

The dataset includes:

- Daily Trades File (Daily @ 9:00 PM EST; History: 10 Sep 2003 present.) Every trade reported to the
 consolidated tape, from all CTA participants. Each trade identifies the time, exchange, security, volume,
 price, sale condition, and more. For sample data, see Daily Trades File.
- Daily Quotes File (Daily @ 12:00 AM EST; History: 10 Sep 2003 present.) Every quote reported to the consolidated tape, from all CTA participants. Each quote identifies the time, exchange, security, bid/ask volumes, bid/ask prices, NBBO indicator, and more. For sample data, see Daily Quotes File.
- Daily TAQ Master File (Daily @ 8:45 PM EST; History: 10 Sep 2003 present.) All master securities information in NYSE-listed and non-listed stocks, including Primary Exchange Indicator. For sample data, see Daily TAQ Master File.
- **Daily NBBO File** (Daily @ 11:00 PM EST; History: 10 Sep 2003 present.) An addendum to the Daily Quotes file, containing continuous National Best Bid and Offer updates and consolidated trades and quotes for all listed and non-listed issues. For sample data, see <u>Daily NBBO File</u>.

The following is also available:

• Regulation SHO Data (History: 3 Jan 2005 - present.) In response to SEC Regulation SHO, SRO's must make Short Sale transactions data available on a monthly basis for trade dates beginning January 2005 through the pilot period ending April 2006. NYSE has released its Short Sale data to users of NYSE historical TAQ at no additional fee. For details see the Regulation Sho Daily File Specification.

1.4 DELIVERY

Clients can download the files via FTP.

1.4.1 File Details

Table 1 Daily TAQ File Details describes the format, size and availability of the daily files.

Note: File sizes, number of rows, and file time availability are an approximation that will increase or decrease according to the day's trading volume.

Table 1 Daily TAQ File Details

File	Format	Record Size (Bytes)	FTP Size in KB (Compressed)	Number of Rows	File Time Availability (EST)
TAQ Master	ASCII	252	386	8500	7pm (19:00)
TAQ Quotes	ASCII	89	1	100 million	1am (01:00)
TAQ Trades	ASCII	70	110	13 million	10pm (22:00)

File	Format	Record Size (Bytes)	FTP Size in KB (Compressed)	Number of Rows	File Time Availability (EST)
TAQ NBBO	ASCII	142	550	50 million	12am (12:00)

1.4.2 FTP Information

Files are placed in the directories described in Table 2 FTP Details.

Table 2 FTP Details

File	FTP Directory
TAQ Master	/EQY_US_ALL_REF_MASTER/EQY_US_ALL_REF_MASTER_yyyy/EQY_US_ALL_REF_MASTER_yyyymm/EQY_US_ALL_REF_MASTER_yyyymmdd.ext
TAQ Quotes	/EQY_US_ALL_BBO/EQY_US_ALL_BBO_yyyy/EQY_US_ALL_BBO_yyyymm/EQY_US_ALL_BBO_yyyymmdd.ext
TAQ Trades	/EQY_US_ALL_TRADE/EQY_US_ALL_TRADE_yyyy/EQY_US_ALL_TRADE_yyyymm/EQY_US_ALL_TRADE_yyyymmdd. ext
TAQ NBBO	/EQY_US_ALL_NBBO/EQY_US_ALL_NBBO_yyyy/EQY_US_ALL_NBBO_yyyymm/EQY_US_ALL_NBBO_yyyymmdd.ext

1.5 ALTERNATIVE PRODUCTS

For details of related TAQ products and the full range of TAQ offerings, please refer to the Historical Data Products section of NYXData at: http://www.nyxdata.com/Data-Products/Historical-Data.

2 DAILY TAQ MASTER FILE DATA FIELDS

Table 3 Daily TAQ Master File Data Fields describes the data fields available in the TAQ Master File. The file contains a header row that has two spaces, an eight-character date (mmddyyyy) and 201 spaces (including a Record Count).

Table 3 Daily TAQ Master File Data Fields

Field	Offset	Size	Format	Description
Blank	0	1	Text	Blank space
CUSIP	1	13	Text	Committee on Uniform Securities Identification Procedures (CUSIP) code. This field consists of the following: • Digit 1-9 = CUSIP Code • Digit 10 = Special Condition Code • Digit 11 = Foreign Company Designation • Digit 12+13 = Exchange Designation
Symbol (OTC)	14	12	Text	Symbol for OTC securities
Symbol	26	15	Text	Stock symbol
Security Description	41	60	Text	Full name/description of Security
Unit of Trading	101	1	Number	The number of shares that the security trades in
Specialist Clearing Agent	102	4	Number	Specialist Clearing Agent (NYSE)
Specialist Clearing Number	106	4	Number	Specialist Clearing Number
Specialist Post Number	110	2	Number	Post (NYSE) where the security trades
Specialist Panel	112	2	Text	Panel (NYSE) where the security trades
Reason Code	114	4	Number	Reserved for future use
Status Indicator	118	1	Number	Defines the status of the security: • '1' = Active • '2'=Deletion • '3'=Suspension • '4'=Halt • '5'=Code • '3 or 4' = Status Lifted
Status Date	119	8	Date	(CCYYMMDD) Date that the status indicator was applicable
Date Admitted Trading	127	8	Date	(CCYYMMDD) Date that the issue began trading
Date Traded – Reg Way	135	8	Date	(CCYYMMDD) Date that the security traded
Date Traded – Settlement Date	143	8	Date	(CCYYMMDD) Security Settlement Date
CCS Indicator	151	1	Number	Corresponding Clearing Services indicator: • '0'=Non - CCS • '1'= CCS

Field	Offset	Size	Format	Description
Fail Clearance Eligible	152	1	Number	'0'=Non-Eligible'1'=Eligible
Reason Code	153	3	Number	Reserved for future use
Source – Listed Exchange	156	2	Number	Primary Exchange Codes: • '00' = NEW YORK • '01' = BOSTON • '02' = CINCINNATI • '03' = ISE • '04' = MIDWEST • '05' = NYSE Arca (PC) • '06' = PHILADELPHIA • '07' = NASDAQ (NA) • '08' = AMERICAN (AM) • '09' = CBOE (WT) • '10' = NYSUPPLEMENTAL(NS) • '11' = NASD (ND)
Space	158	2	Text	Blank
Symbol	160	10	Text	Uncompressed Security symbol (six-character root, ten-character suffix).
Source Info	170	1	Text	 'H'= Halted '0'=Delayed
Local Ind.	171	1	Number	Did the security trade ONLY at the local exchange: • 'N'=No • 'Y'=Yes
ITS Issue	172	1	Text	Did the issue trade over ITS: • 'N'=No • 'Y'=Yes
NYSE Industry Code	173	4	Text	The issue's industry code; see NYSE Industry Codes.
Shares Outstanding	177	10	Number	Issue's shares outstanding (NYSE only)
Unit of Trade	187	4	Number	Issue's unit of trade in Round-Lot value
Denominator	191	1	Text	This field is no longer used. DENOM values: • I = Whole Dollars (no decimals or fraction) • 3 = 8ths (fraction) (e.g. 7/8) • 4 = 16ths (fraction) (e.g. 15/16) • 5 = 32nds (fraction) (e.g. 31/32) • 6 = 64ths (fraction) (e.g. 63/64) • 7 = 128ths (fraction) (e.g. 127/128) • 8 = 256ths (fraction) (e.g. 255/256) • A = 10ths (1 decimal place) (e.g10000000) • B = 100ths (2 decimal places) (e.g11000000) • C = 1000ths (3 decimal places) (e.g11100000)

Field	Offset	Size	Format	Description
				 D = 10000ths (4 decimal places) (e.g11110000) E = 100000ths (5 decimal places) (e.g11111000) F = 1000000ths (6 decimal places) (e.g11111100) G = 100000000ths (7 decimal places) (e.g111111110) H = 100000000ths (8 decimal places) (e.g111111111)
Issue Type	192	1	Text	Issue Type: 1 = Common Stock 1 = Fund 1 = ADS Common 1 = Basket 1 = Global Registered Share 1 = New York Registered Share 1 = Unit 1 = Liquidating Trust 2 = Preferred Stock 2 = ADS Preferred 3 = ADS Warrant 3 = Warrant 4 = ADS Rights 4 = Right 7 = Index 8 = ADS Corporate Bond 8 = Treasury Bond 0 = Structured Product
Listing Type	193	8	Date	Date that the issue was listed on its home exchange (CCYYMMDD)
NYSE Trade Today	201	1	Number	Did the issue trade on the NYSE today: • '0'=No • '1'=Yes
AMEX Trade Today	202	1	Number	Did the issue trade on the Amex today: • '0'=No • '1'=Yes
Boston Trade Today	203	1	Number	Did the issue trade on Boston today: • '0'=No • '1'=Yes
Not Used	204	1	Number	Blank
Not Used	205	1	Number	Blank
NYSE Arca Trade Today	206	1	Number	Did the issue trade on the Pacific today: • '0'=No

Field	Offset	Size	Format	Description
				• '1'=Yes
Philadelphia Trade Today	207	1	Number	Did the issue trade on Philadelphia today: • '0'=No • '1'=Yes
NASD Trade Today	208	1	Number	Did the issue trade on the NASD today: • '0'=No • '1'=Yes
OTC Trade Today	209	1	Number	Did the issue trade OTC today: • '0'=No • '1'=Yes
CBOE Trade Today	210	1	Number	Did the issue trade on the CBOE today: • '0'=No • '1'=Yes
Position Filler Lines	211	39	Number	Reserved for future use
Line Change	250	1	Number	New Line indicator

3 DAILY QUOTES FILE DATA FIELDS

Table 4 Daily Quotes File Data Fields describes the data fields available in the Daily Quotes File. The file contains a header row that has two spaces, an eight-character date (mmddyyyy) and 79 spaces (including a Record Count).

Table 4 Daily Quotes File Data Fields

Field	Offset	Size	Format	Description
Time	0	9	Date	Time of quote with milliseconds (HHMMSSXXX)
Exchange	9	1	Text	 The Exchange that issued the quote: A – American Stock Exchange B – Boston Stock Exchange C – National Stock Exchange D – National Association of Securities Dealer I – International Stock Exchange M – Chicago Stock Exchange N – New York Stock Exchange P – Pacific Stock Exchange (NYSE Arca) Q – NASDAQ Stock Exchange S – Consolidated Tape System W – CBOE Stock Exchange X – Philadelphia Stock Exchange
Symbol	10	16	Text	Security symbol (six-character root, ten-character suffix)
Bid Price	26	11	Number	Bid price, seven characters for the whole number, four characters for decimals
Bid Size	37	7	Number	Bid size in units of trade, seven characters
Ask Price	44	11	Number	Ask price, seven characters for the whole number, four characters for decimals
Ask Size	55	7	Number	Ask size in units of trade, seven characters
Quote Condition	62	1	Text	 Condition of Quote issued: 'A' = Slow on the Ask Side 'B' = Slow on the Bid Side 'C' = Closing 'D' = News Dissemination 'E' = Slow on the Bid due to LRP or GAP Quote 'F' = Slow on the Ask due to LRP or GAP Quote 'G' = Trading Range Indication 'H' = Slow on the Bid and Ask side 'I' = Order Imbalance 'J' = Due to a Related Security - News Dissemination 'K' = Due to a Related Security - News Pending 'L' = Closed Market Maker (NASD)

Field	Offset	Size	Format	Description
				 'M' - Additional Information 'N' = Non-firm quote 'O' = Opening Quote 'P' = News Pending 'Q' = Additional Information - Due to Related Security 'R' = Regular, two-sided open quote 'S' = Due to Related Security 'T' = Resume 'U' = Slow on the Bid and Ask due to LRP or GAP Quote 'V' = In View of Common 'W' - Slow Quote due to a Set Slow list on both the bid and offer sides 'X' = Equipment Changeover 'Y' = Regular - One Sided Quote (NASDAQ) 'Z' = No open/no resume
Market Maker Bid Exchange	63	1	Number Text	NASDAQ Market Maker ID, four characters The Exchange associated with the Bid: • A – American Stock Exchange • B – Boston Stock Exchange • C – National Stock Exchange • D – National Association of Securities Dealer • I – International Stock Exchange • M – Chicago Stock Exchange • N – New York Stock Exchange • P – Pacific Stock Exchange (NYSE Arca) • Q – NASDAQ Stock Exchange • S – Consolidated Tape System • W – CBOE Stock Exchange • X – Philadelphia Stock Exchange
Ask Exchange	68	1	Text	The Exchange associated with the Ask: • A – American Stock Exchange • B – Boston Stock Exchange • C – National Stock Exchange • D – National Association of Securities Dealer • I – International Stock Exchange • M – Chicago Stock Exchange • N – New York Stock Exchange • P – Pacific Stock Exchange (NYSE Arca) • Q – NASDAQ Stock Exchange • S – Consolidated Tape System • W – CBOE Stock Exchange • X – Philadelphia Stock Exchange

Field	Offset	Size	Format	Description
Sequence Number	69	16	Number	Message sequence number
National BBO Ind	85	1	Number	 CQS Only - National BBO Indicator: '0' = No National BBO change - Current quote does not affect the BBO. No National appendage is required. '1' = Quote Contains all National BBO Information – Current quote is itself the new National BBO. No National appendage is required. '2' = No National BBO - There is no calculation of National BBO such as before Market Open or after Market Close. No National appendage is required. '4' = Long Format of National BBO Appendage - A new National BBO is generated and the new BBO information is contained in the Long National BBO appendage. '6' = Expanded Price Short Format of National BBO Appendage - a new National BBO is generated and the new BBO information is contained in the Expanded Price Short National BBO appendage.
NASDAQ BBO Ind	86	1	Number	 NASD BBO Indicator(CQS): '0'=No NASD BBO Change, current quote does not affect the BBO. No NASD appendage is required. '1'= Quote Contains all NASD BBO Information - Current quote is itself the new NASD BBO. No NASD appendage is required. '2'= No NASD BBO - There is no calculation of NASD BBO such as before Market Open or after Market Close. No NASD appendage is required. '3'= NASD BBO Appendage - A new NASD BBO is generated and the new BBO information is contained in the NASD BBO appendage. NASDAQ NBBO Appendage Indicator: '0'=No National BBO change - Current quote does not affect the BBO. No National appendage is required. '1' = No National BBO Can be Calculated-The National BBO cannot be calculated therefore vendors should show National BBO fields as blank. No Appendage is required. '2'= Short Form National BBO Appendage Attached - A new National BBO was generated as a result of the UTP participant's quote update and the new information is contained in the short form appendage (NBBO FILE) '3'= Long Format of National BBO Appendage - A new National BBO is generated and the new BBO information is contained in the Long

Field	Offset	Size	Format	Description
				National BBO appendage (NBBO FILE) • '4'= Quote Contains all NASD BBO Information - Current quote is itself the new NASD BBO. No NASD appendage is required.
Quote Cancel/Correction	87	1	Text	 CQS only: 'A' = Not a Cancel Quote 'B'= Cancel quote/Cancel Price Indication/Cancel Trading Range Indication 'C'=Corrected Price Indication
Source of Quote	88	1	Text	'C'= CQS'N'= NASDAQ
Line Change	89	2	Text	New Line Indicator

4 DAILY TRADES FILE DATA FIELDS

Table 5 Daily Trades File Data Fields describes the data fields available in the Daily Trades File. The file contains a header row that has two spaces, an eight-character date (mmddyyyy), and 60 spaces (including a Record Count).

Table 5 Daily Trades File Data Fields

Field	Offset	Size	Format	Description
Time	0	9	Date	Time of quote with milliseconds (HHMMSSXXX)
Exchange	9	1	Text	The Exchange where the trade took place: 1 – NASDAQ execution printed to TRF A – American Stock Exchange B – Boston Stock Exchange C – National Stock Exchange D – National Association of Securities Dealer I – International Stock Exchange M – Chicago Stock Exchange N – New York Stock Exchange P – Pacific Stock Exchange (NYSE Arca) Q – NASDAQ Stock Exchange S – Consolidated Tape System W – CBOE Stock Exchange X – Philadelphia Stock Exchange
Symbol	10	16	Text	Security symbol (six-character root, ten-character suffix)
Sale Condition	26	4	Text	A Sale Condition (applies to all exchanges). Up to four codes are displayed per trade. CTS issues: Blank or '@' - Regular Sale (no condition) B' = Average Price Trade C' = Cash Trade (same day clearing) F' = Automatic Execution F' = Intermarket Sweep Order G' = Opening/Reopening Trade Detail H' = Intraday Trade Detail H' = CAP Election Trade K' = Rule 127 trade (NYSE only) or Rule 155 trade (AMEX only) K' = Sold Last (late reporting) N' = Next Day Trade (next day clearing) N' = Seller T' = Extended Hours Trade U' = Extended Hours Trade T' = Extended Hours (Sold Out of Sequence) T' = Sold (out of sequence)

Field	Offset	Size	Format	Description
				 '5' - Market Center Re-opening Prints '6' - Market Center Closing Prints NASD issues: '@' = Regular Trade 'A' = Acquisition 'B' = Bunched Trade 'C' = Cash Trade 'D' = Distribution 'F' - Intermarket Sweep 'G' = Bunched Sold Trade 'K' = Rule 155 Trade (AMEX Only) 'L' = Sold Last 'M' = Market Center Close Price 'N' = Next Day 'O' = Opening Prints 'P' = Prior Reference Price 'Q' = Market Center Open Price 'R' = Seller (Long-Form Message Formats Only) 'S' = Split Trade 'T' = Form - T Trade 'U' = Extended Hours (Sold Out of Sequence) 'W' = Average Price Trade 'Y' - Yellow Flag 'Z' = Sold (Out of Sequence) '1' = Stopped Stock - Regular Trade '2' = Stopped Stock - Sold Last '3' = Re-opening Prints '6' - Closing Prints '6' - Closing Prints '7' - Placeholder for 611 Exempt '8' - Placeholder for 611 Exempt '9' - Placeholder for 611 Exempt
Trade Volume	30	9	Number	The total volume of shares traded in the trade that is represented by that line in the report (each line in the report represents a trade).
Trade Price	39	11	Number	The price of the trade (seven characters for the whole number, four characters for decimals).
Trade Stop Stock Indicator	50	1	Text	This value indicates that this Trade (NYSE only) is indicated as a Stop Stock. Possible values are: • Blank = N/A (Correction or NASDAQ) • N = Not Indicated as Stop Stock • Y = Indicated as Stop Stock Note: For a detailed explanation of "Stopped Stock," a useful resource is the Glossary (Appendix B) in the

Field	Offset	Size	Format	Description
				CTA Output Multicast Interface Specification.
Trade Correction Indicator	51	2	Text	 Trade Correction Indications. Possible values are: 00 = Regular trade which was not corrected, changed or signified as cancel or error 01 = Original trade which was late corrected (This record contains the original time - HHMM and the corrected data for the trade) 07 = Original trade which was later signified as error 08 = Original trade which was later signified as error 10 = Cancel record (This record follows '08' records) 11 = Error record (This record follows '07' records) 12 = Correction record (This record follows '01' records and contains the correction time and the original "incorrect" data)
Trade Sequence Number	53	16	Number	Unique sequence number for both CTS and NASDAQ trade messages
Source of Trade	69	1	Text	Source of Trade Message. Possible values are: • C = CTS • N = NASDAQ NTDS
Line Change	70	2	Text	New Line Indicator

5 DAILY NBBO FILE DATA FIELDS

Table 6 Daily NBBO File Data Fields describes the data fields available in the Daily NBBO File. The file contains a header row that has two spaces, an eight-character date (mmddyyyy), and 79 spaces (including a Record Count).

Table 6 Daily NBBO File Data Fields

Field	Offset	Size	Format	Description
Time	0	9	Date	Time of quote with milliseconds (HHMMSSXXX)
Exchange	9	1	Text	 The Exchange that issued the quote: A – American Stock Exchange B – Boston Stock Exchange C – National Stock Exchange D – National Association of Securities Dealer I – International Stock Exchange M – Chicago Stock Exchange N – New York Stock Exchange P – Pacific Stock Exchange (NYSE Arca) Q – NASDAQ Stock Exchange S – Consolidated Tape System W – CBOE Stock Exchange X – Philadelphia Stock Exchange
Symbol	10	16	Text	Security symbol (sic-character root, ten-character suffix)
Bid Price	26	11	Number	Bid price, seven characters for the whole number, four characters for decimals
Bid Size	37	7	Number	Bid size in units of trade, seven characters
Ask Price	44	11	Number	Ask price, seven characters for the whole number, four characters for decimals
Ask Size	55	7	Number	Ask size in units of trade, seven characters
Quote Condition	62	1	Text	 Condition of Quote issued: 'A' = Slow on the Ask Side 'B' = Slow on the Bid Side 'C' = Closing 'D' = News Dissemination 'E' = Slow on the Bid due to LRP or GAP Quote 'F' = Slow on the Ask due to LRP or GAP Quote 'G' = Trading Range Indication 'H' = Slow on the Bid and Ask side 'I' = Order Imbalance 'J' = Due to a Related Security - News Dissemination 'K' = Due to a Related Security - News Pending 'L' = Closed Market Maker (NASD)

Field	Offset	Size	Format	Description
				 'M' - Additional Information 'N' = Non-firm quote 'O' = Opening Quote 'P' = News Pending 'Q' = Additional Information - Due to Related Security 'R' = Regular, two-sided open quote 'S' = Due to Related Security 'T' = Resume 'U' = Slow on the Bid and Ask due to LRP or GAP Quote 'V' = In View of Common 'W' - Slow Quote due to a Set Slow list on both the bid and offer sides 'X' = Equipment Changeover 'Y' = Regular - One Sided Quote (NASDAQ) 'Z' = No open/no resume
Market Maker	63	4	Number	NASDAQ Market Maker ID, 4 characters
Bid Exchange	67	1	Text	 The Exchange associated with the Bid: A – American Stock Exchange B – Boston Stock Exchange C – National Stock Exchange D – National Association of Securities Dealer I – International Stock Exchange M – Chicago Stock Exchange N – New York Stock Exchange P – Pacific Stock Exchange (NYSE Arca) Q – NASDAQ Stock Exchange S – Consolidated Tape System W – CBOE Stock Exchange X – Philadelphia Stock Exchange
Ask Exchange	68	1	Text	 The Exchange associated with the Ask: A – American Stock Exchange B – Boston Stock Exchange C – National Stock Exchange D – National Association of Securities Dealer I – International Stock Exchange M – Chicago Stock Exchange N – New York Stock Exchange P – Pacific Stock Exchange (NYSE Arca) Q – NASDAQ Stock Exchange S – Consolidated Tape System W – CBOE Stock Exchange X – Philadelphia Stock Exchange

Field	Offset	Size	Format	Description
Sequence Number	69	16	Number	Message sequence number
National BBO Ind	85	1	Number	 CQS only - National BBO Indicator: '0' = No National BBO change - Current quote does not affect the BBO. No National appendage is required. '1' = Quote Contains all National BBO Information – Current quote is itself the new National BBO. No National appendage is required. '2' = No National BBO - There is no calculation of National BBO such as before Market Open or after Market Close. No National appendage is required. '4'= Long Format of National BBO Appendage - A new National BBO is generated and the new BBO information is contained in the Long National BBO appendage. '6' = Expanded Price Short Format of National BBO Appendage - a new National BBO is generated and the new BBO information is contained in the Expanded Price Short National BBO appendage. UTP only - National BBO Indicator: '0' =No National BBO Change - The participant's quote does not affect the National BBO. '1' =No National BBO Can be Calculated - The National BBO cannot be calculated. '2' =Short Form National BBO Appendage Attached - A new National BBO was generated as a result of the UTP participant's quote update and the new National BBO information is contained in the attached short form appendage. '3' =Long Form National BBO Appendage Attached - A new National BBO was generated as a result of the UTP participant's quote update and the new National BBO information is contained in the attached long form appendage. '4' =Quote Contains All National BBO Information - Current UTP participant's quote is itself the National BBO.
NASDAQ BBO Ind	86	1	Number	 NASD BBO Indicator (CQS only): '0'=No NASD BBO Change, current quote does not affect the BBO. No NASD appendage is required. '1'= Quote Contains all NASD BBO Information – Current quote is itself the new NASD BBO. No NASD appendage is required. '2'= No NASD BBO - There is no calculation of NASD BBO such as before Market Open or after Market Close. No NASD appendage is required. '3'= NASD BBO Appendage - A new NASD BBO is generated and the new BBO

Field	Offset	Size	Format	Description
				information is contained in the NASD BBO appendage. NASDAQ NBBO Appendage Indicator: • '0'=No National BBO change - Current quote does not affect the BBO. No National appendage is required. • '1' = Quote Contains all National BBO Information – Current quote is itself the new National BBO. No National appendage is required. • '2'= No National BBO - There is no calculation of National BBO such as before Market Open or after Market Close. No National appendage is required. • '4'= Long Format of National BBO Appendage - A new National BBO is generated and the new BBO information is contained in the Long National BBO appendage. • '6' = Expanded Price Short Format of National BBO Appendage - A new National BBO is generated and the new BBO information is contained in the Expanded Price Short National BBO appendage.
Quote Cancel/Correction	87	1	Text	CQS only: • 'A' = Not a Cancel Quote • 'B'= Cancel quote/Cancel Price Indication/Cancel Trading Range Indication • 'C'=Corrected Price Indication
Source of Quote	88	1	Text	 'C'= CQS 'N'= NASDAQ
NBBO Quote Condition	89	1	Text	 'A' = Slow on the Ask Side 'B' = Slow on the Bid Side 'C' = Closing 'D' = News Dissemination 'E' = Slow on the Bid due to LRP or GAP Quote 'F' = Slow on the Ask due to LRP or GAP Quote 'G' = Trading Range Indication 'H' = Slow on the Bid and Ask side 'I' = Order Imbalance 'J' = Due to a Related Security - News Dissemination 'K' = Due to a Related Security - News Pending 'L' = Closed Market Maker (NASD) 'M' - Additional Information 'N' = Non-firm quote 'O' = Opening Quote 'P' = News Pending

Field	Offset	Size	Format	Description
				 'Q' = Additional Information - Due to Related Security 'R' = Regular, two-sided open quote 'S' = Due to Related Security 'T' = Resume 'U' = Slow on the Bid and Ask due to LRP or GAP Quote 'V' = In View of Common 'W' - Slow Quote due to a Set Slow list on both the bid and offer sides 'X' = Equipment Changeover 'Y' = Regular - One Sided Quote (NASDAQ) 'Z' = No open/no resume
Best Bid Exchange	90	1	Text	 The Exchange associated with the Best Bid: A – American Stock Exchange B – Boston Stock Exchange C – National Stock Exchange D – National Association of Securities Dealer I – International Stock Exchange M – Chicago Stock Exchange N – New York Stock Exchange P – Pacific Stock Exchange (NYSE Arca) Q – NASDAQ Stock Exchange S – Consolidated Tape System W – CBOE Stock Exchange X – Philadelphia Stock Exchange
Best Bid Price	91	11	Number	Best Bid price, seven characters for the whole number, four characters for decimals
Best Bid Size	102	7	Number	Best Bid size in units of trade, seven characters
Best Bid Market Maker	109	4	Text	Best Bid NASDAQ Market Maker ID (Long Appendage)
Best Bid MM Location	113	2	Text	Best Bid NASDAQ Market Maker geographic location (Long Appendage)
Best Bid MM Desk Location	115	1	Text	Best Bid NASDAQ Market Maker desk location (Long Appendage)
Best Ask Exchange	116	1	Text	The Exchange associated with the Best Ask: • A – American Stock Exchange • B – Boston Stock Exchange • C – National Stock Exchange • D – National Association of Securities Dealer • I – International Stock Exchange • M – Chicago Stock Exchange • N – New York Stock Exchange • P – Pacific Stock Exchange (NYSE Arca) • Q – NASDAQ Stock Exchange

Field	Offset	Size	Format	Description
				 S – Consolidated Tape System W – CBOE Stock Exchange X – Philadelphia Stock Exchange
Best Ask Price	117	11	Number	Best offer price, seven characters for the whole number, four characters for decimals
Best Ask Size	128	7	Number	Best Offer size in units of trade, seven characters
Best Ask Market Maker	135	4	Text	Best Offer NASDAQ Market Maker ID (Long Appendage)
Best Ask MM Location	139	2	Text	Best Offer NASDAQ Market Maker geographic location (Long Appendage)
Best Ask MM Desk Location	141	1	Text	Best Offer NASDAQ Market Maker desk location (Long Appendage)
Line Change	142	2	Text	New Line Indicator

APPENDIX A BBO QUALIFYING CONDITIONS

Table 7 BBO Qualifying Conditions contains the quote conditions that are eligible to be the best bid or offer.

Table 7 BBO Qualifying Conditions

Code	BBO Qualifying Quote Conditions
Α	Slow Quote on the Offer Side
В	Slow Quote on the Bid Side
Н	Slow Quote on the Bid and Offer Sides
0	Opening Quote
R	Regular Quote
W	Slow Quote due to a Set Slow list on both the bid and offer sides

APPENDIX B NYSE STOCK SYMBOL SUFFIXES

Table 8 NYSE Stock Symbol Suffixes

Suffix	Description
<v></v>	<v> represents a character; Series (or Class) A-T & V-Z; Examples include the following: ZZZ A is the same as ZZZ/A ZZZ T is the same as ZZZ/T</v>
<v>CL</v>	Series (or Class) A-T & V-Z Called. Examples include the following: ZZZ ACL is the same as ZZZ/A/CL
<v>CV</v>	Series (or Class) A-T & V-Z Convertible. Examples include the following: ZZZ ACV is the same as ZZZ/A/CV
<v>WI</v>	Series (or Class) A-T & V-Z When Issued. Examples include the following: ZZZ AWI is the same as ZZZ/Aw
CL	Called. Examples include the following: ZZZ CL is the same as ZZZ/CL
СТ	Certificates. Examples include the following: ZZZ CT is the same as ZZZ/CT
CV	Convertible. Examples include the following: ZZZ CV is the same as ZZZ/CV (ZZZ/CV)
CVR	Contingent Value Right. Examples include the following: ZZZ CVR is the same as ZZZ/CVR
CVCL	Convertible Called. Examples include the following: ZZZ CVCL is the same as ZZZ/CV/CL
DP	Amount of most-recent dividend to go "ex-distribution". Examples include the following: ZZZ DP is the same as ZZZ/DP
DV	Accumulated dividend per share, net of expenses, through and including the previous day's close of trading. Examples include the following: ZZZ DV is the same as ZZZ/DV
EC	Emerging Company Marketplace. Examples include the following: ZZZ EC is the same as ZZZ/EC
EU	Estimated cash amount for creation unit. Examples include the following: ZZZ EU is the same as ZZZ/EU
FN	Foreign News. Examples include the following: ZZZ FN is the same as ZZZ/F/N
ID	Index – differentiates an index from a stock with the same root symbol. Examples include the following: III ID is the same as III/ID
IV	Intra-day Net Asset Value per share. Examples include the following: ZZZ IV is the same as ZZZ/IV
NV	Net Asset Value per share, as of the close on the previous trading day. Examples include the following: ZZZ NV is the same as ZZZ/NV
PP	Partial Paid. Examples include the following: ZZZ PP is the same as ZZZ/PP
PTCL	Part Called. Examples include the following: ZZZ PTCL is the same as ZZZ/PT/CL
PR	Preferred. Examples include the following: ZZZ PR is the same as ZZZp
PR <v></v>	<v> represents a character; Preferred Series A-T & V-Z. Examples include the following: ZZZ PRA is the same as ZZZpA ZZZ, PRB is the same as ZZZpB</v>
PR <v>CL</v>	<v> represents a character; Preferred Series A-T & V-Z Called. Examples include the following: ZZZ PRACL is the same as ZZZpA/CL ZZZ, PRBCL is the same as ZZZpB/CL</v>
PR <v>CV</v>	<v> represents a character; Preferred Series A-T & V-Z Convertible. Examples include the following: ZZZ PRACV is the same as ZZZpA/CV ZZZ, PRBCV is the same as ZZZpB/CV</v>
PR <v>WI</v>	<v> represents a character; Preferred Series A-T & V-Z When Issued. Examples include the following: ZZZ PRAWI is the same as ZZZpAw ZZZ, PRBWI is the same as ZZZpBw</v>
PRWI	Preferred When Issued. Examples include the following: ZZZ PRWI is the same as ZZZpw

Suffix	Description
PRCL	Preferred Called. Examples include the following: ZZZ PRCL is the same as ZZZp/CL
PRCV	Preferred Convertible. Examples include the following: ZZZ PRCV is the same as ZZZp/CV
PRWD	Preferred When Distributed. Examples include the following: ZZZ PRWD is the same as ZZZp/WD
PRC <v></v>	Indicates Class A; could also be B-K and M-S; Second Category of Preferred. Examples include the following: ZZZ PRCA is the same as ZZZpCA ZZZ, PRCB is the same as ZZpCB
RT	Rights. Examples include: ZZZ R is the same as ZZZr
RWI	Rights When Issued. Examples include: ZZZ RWI is the same as ZZZrw
SC	Small Corporate Offering Registration. Examples include the following: ZZZ SC is the same as ZZZ/SC
SP	Special. Examples include the following: ZZZ SP is the same as ZZZ/SP
SD	Stamped. Examples include the following: ZZZ SD is the same as ZZZ/SD
SO	Current Shares Outstanding, in thousands. Examples include the following: ZZZ SO is the same as ZZZ/SO
ТС	Total cash amount per creation unit, in thousands. Examples include the following: ZZZ TC is the same as ZZZ/TC
TEST	Exclusive suffix used for intraday test message. Examples include the following: ZZZ TEST is the same as ZZZ/TEST
тт	Tier II Securities. Examples include the following: ZZZ TT is the same as ZZZ/TT
U	Units (a combination of securities composed of two or more of warrants, common stocks, preferred stocks and/or bonds). Examples include the following: ZZZ U is the same as ZZZ/U
VR	Variable Common Rights. Examples include the following: ZZZ VR is the same as ZZZ/VR
WD	When Distributed. Examples include the following: ZZZ WD is the same as ZZZ/WD
WI	When Issued. Examples include the following: ZZZ WI is the same as ZZZw
ws	Warrants. Examples include the following: ZZZ WS is the same as ZZZ/WS
wws	With Warrants. Examples include the following: ZZZ WWS is the same as ZZZ/W/WS
WS <v></v>	Warrants Series <v>; Series A-T & V-Z. Examples include the following: ZZZ WSA is the same as ZZZ/WSA</v>
wswi	Warrants When Issued

Table 9 Suffix Definitions

Suffix	Definition
Called	An issue being redeemed by its issuing corporation under definite conditions before maturity.
Certificate	Refers to a negotiable certificate representing deposit of stock with a pending change in its condition.
Convertible	A preferred share which its owner may convert into common stock or another security, usually in the same company, in accordance with the terms of issue.
Preferred	A class of stock with priority over common stock in regard to earnings and/or liquidations.

Suffix	Definition
Rights	Represent the privilege to subscribe (in proportion to the number of shares owned) to new or additional securities, usually at or below the current market price. Rights ordinarily have market values of their own and are traded actively. In most cases they must be exercised within a relatively short period of time.
Stamped	Indicates rights and privileges different from securities of the same issue, class, or series not stamped.
Warrant	Indicates a certificate giving its holder the right to purchase securities at a stipulated price, either within a specified time limit or in perpetuity.
When Distributed	Signifies a short form of "when, as, and if distributed" (see 'When Issued').
When Issued	Means a short form of "when, as, and if issued"; indicates a transaction in a security authorized for issuance, but not yet issued. All "When Issued" transactions are on an "if" basis, to be settled if and when the actual security is issued.
With Warrants	A security with a warrant attached that entitles the holder to purchase another security at stipulated price(s), either within a specified time or in perpetuity. Warrants may be immediately detachable from their underlying securities or detachable after specified periods.
Without Warrants	A security from which the warrant(s) has been removed.

APPENDIX C NASDAQ STOCK SYMBOL SUFFIXES

Source: Nasdaq web site: http://www.nasdaq.com/reference/glossary.stm

Table 40 NASDAQ Stock Symbol Suffixes

Suffix	Description
Α	Class A
В	Class B
С	Issuer qualification exception – the issuer has been granted a continuance in NASDAQ under an exception to the qualification standards for a limited period.
D	New
Е	Delinquent in required filings with the SEC
F	Foreign
G	First convertible bond
Н	Second convertible bond, same company
1	Third convertible bond, same company
J	Voting
K	Nonvoting
L	Miscellaneous situations, such as depositary receipts, stubs, additional warrants, and units
M	Fourth preferred, same company
N	Third preferred, same company
0	Second preferred, same company
P	First preferred, same company
Q	Bankruptcy - the issuer is involved in bankruptcy proceedings.
R	Rights
S	Shares of beneficial interest
Т	With warrants or with rights
U	Units
V	When-issued and when-distributed
W	Warrants
Υ	ADR (American Depositary Receipt)
Z	Miscellaneous situations, such as depositary receipts, stubs, additional warrants, and units

APPENDIX D NYSE INDUSTRY CODES

Table 5 NYSE Industry Codes

Industry Group	Sector	Division	Code
Industrials			100
	Aerospace		102
		Aircraft	102A
		Parts and Equipment	102B
	Business Supplies and Services		104
		Machines and Equipment (Excl. Computers)	104A
		Supplies	104B
		Services	104C
	Chemicals		106
		Diversified Chemicals	106A
		Specialized	106B
	Computers, Data Processing		108
		Computer Systems	108A
		Data Processing, Software	108B
		Peripheral Devices and Supplies	108C
Construction			110
		Residential	110A
		Industrial	110B
		Cement	110C
		Lumber, Wood	110D
		Other Building Materials and Products	110E
	Electrical Equipment		112
	Electronics		114
		Semi Conductors and Other Components	114A
		Telecommunications Equipment	114B
		Test, Control Instruments and Systems	114C
		Other Systems and Equipment	114D
	Environmental Control		116
	Foods, Beverages		118
		Beverages	118A
		Branded Food Products	118B
		Processing and Production	118C

Industry Group	Sector	Division	Code
		Wholesalers	118D
	Health and Beauty Products		120
		Personal Health Products	120A
		Toiletries, Cosmetics, Perfumes	120B
	Health Care Services		122
		Equipment and Supplies	122A
		Health Care Facilities	122B
	Household Goods		124
		Appliances	124A
		Furnishings and Fixtures	124B
		Housekeeping Products	124C
		House-wares	124D
	Industrial Machinery and Equipmen	t	126
		Heavy Machinery	126A
		Machine Tools	126B
		Measuring and Control Devices	126C
		Transmissions and Engines	126D
		Other Industrial Equipment	126E
	Lodging, Restaurants		128
		Hotels, Motels	128A
		Restaurants	128B
	Mining, Refining, Fabricating		130
		Aluminum	130A
		Coal	130B
		Gold, Silver	130C
		Steel, Iron	130D
		Other Non-Ferrous Metals	130E
	Motor Vehicles		132
		Auto and Truck	132A
		Parts and Equipment	132B
	Oil and Gas		134
		Crude Production	134A
		Contract Drilling, Exploration	134B
		Integrated Domestic Refiners	134C
		Integrated International Refiners	134D
		Non-Integrated Refiners	134E

ry Group	Sector	Division	Code
		Services and Equipment	134F
	Packaging		136
		Glass	136A
		Metal	136B
		Paper	136C
		Other	136D
	Paper Production		138
	Pharmaceuticals		140
	Publishing		142
		Newspaper Chains	142A
		Magazines	142B
		Books	142C
	Recreation Services and Products		144
		Broadcasting	144A
		Gaming Operations and Services	144B
		Leisure Time Products	144C
		Motion Pictures, Entertainment Services	144D
		Outdoor Recreational Vehicles and Equipment	144E
	Retail Trade		146
		Department Store Chains	146A
		Discount Variety Chains	146B
		Drug Store Chains	146C
		Supermarkets, Food Stores	146D
		Hardware, Furniture Stores	146E
		Specialty Apparel Ships	146F
		Other Retail Operations	146G
	Textiles, Apparel		148
		Textile and Mill Products	148A
		Clothing Companies	148B
		Shoes	148C
	Tires, Rubber		150
	Tobacco		152
	Wholesalers, Distributors		154
		Consumer Products (Non-Food)	154A
		Industrial Products	154B

Industry Group	Sector	Division	Code
	Multi-Industry		170
	Other		180
		Manufacturing	180A
		Services	180B
Transportation			200
	Air		202
		Passenger Airlines	202A
		Freight Airlines	202B
	Rail		204
	Trucking		206
	Other Transportation Services		208
Utilities			300
	Electric Services		302
	Gas Services		304
		5.1.2 Distribution and Integrated Natural Gas Cos.	5.1.3
		5.1.4 Natural Gas Transmission Companies	5.1.5
		5.1.6 Other Gas Services	5.1.7
	Telecommunications	ļ	306
	Water Supply Companies		308
	Multi-Service Companies		310
Finance, Real Estate			400
	Banks		402
		Multinational	402A
		Regional	402B
		Savings and Loan Associations	402C
	Brokerage Services	!	404
	Closed-End Investment Companies		406
		Bond Funds	406A
		Stock Funds	406B
		Specialty Funds	406C
	Finance Companies		408

Industry Group	Sector	Division	Code
	Insurance		410
		Brokers, Agents	410A
		Carriers	410B
	Trusts		412
		Real Estate Investment Trusts (REITS)	412A
		Oil Royalty Trust	412B
		Other Trusts	412C
	Real Estate		414
	Diversified Financial Services		416