



SECURITIES INDUSTRY AUTOMATION CORPORATION

CQS Pillar Snapshot Specification

**May 18, 2026
Version: 3.2**

Table of Contents

1.0	INTRODUCTION	4
1.1	OVERVIEW	4
1.2	DATA SUPPORTED VIA SNAPSHOT	5
1.3	MESSAGE ROUTING.....	5
2.0	TRANSMISSION CHARACTERISTICS	6
2.1	TRANSMISSION BLOCK	6
2.2	DATA TYPES	6
2.3	BLOCK HEADER.....	7
2.4	MESSAGE HEADER	9
3.0	MESSAGE FORMAT	11
3.1	LINE INTEGRITY MESSAGE – CATEGORY R TYPE T	11
3.2	SYMBOL REFERENCE DATA MESSAGE – CATEGORY R TYPE S	12
3.3	MARKET-WIDE CIRCUIT BREAKER DECLINE LEVEL STATUS SNAPSHOT MESSAGE - CATEGORY R TYPE K	13
3.4	CONSOLIDATED SNAPSHOT MESSAGE - CATEGORY R TYPE A	14
3.5	PARTICIPANT SNAPSHOT MESSAGE - CATEGORY R TYPE P	16
3.6	FINRA SNAPSHOT MESSAGE - CATEGORY R TYPE F.....	17
3.7	ODD LOT QUOTE SNAPSHOT MESSAGE - CATEGORY R TYPE O	18
4.0	FIELD DESCRIPTION	19
5.0	DOCUMENT VERSION HISTORY	38

REFERENCE MATERIAL

For CTA Technical Specifications visit www.ctaplan.com - and select Technical tab for the following:

- CQS Multicast Output Specification
- CTS Multicast Output Specification
- Common IP Multicast Distribution Network Specification
- Retransmission and Snapshot User Guide

FURTHER INFORMATION

- For CTA Announcements including feed enhancements, traffic rates, etc. visit www.ctaplan.com

FUTURE ENHANCEMENTS

Future enhancements and/or modifications may require system changes for your firm. Please refer to the CTA Plan website www.ctaplan.com to obtain the latest CTA Notifications and Technical Specification documents. To automatically receive these Notifications and System Alerts, subscribe at: <https://www.ctaplan.com/subscribe>

RELATED RESOURCES

For Data Subscriber selecting to initiate connections through ICE Global Network (IGN) or NMS Network:

- Submit a request at: <https://www.theice.com/contact-us/connectivity>
- Contact IGN Sales at: clientnetworks@theice.com
- For more information on IGN, including documentation such as Customer and Technical guides reach out to an IGN representative at: iceglobalnetwork-info@theice.com

1.0 Introduction

The CQS Snapshot service provides direct data feed subscribers the current state of NYSE, NYSE American, NYSE Arca, NYSE Texas and CBOE BZX listed securities. This will allow the multicast data feed subscriber to quickly recover from a failure scenario as a supplement to using the existing retransmission functionality for all messages in the CQS and CTS multicast feeds. New Consolidated and Participant Snapshot messages will be introduced to provide the current state of the active Security Symbols for the trading day.

1.1 Overview

- The existing CTA Retransmissions facility will be enhanced to support CQS Snapshot message requests
- Data Subscribers can use their existing retransmission input connections for requesting the Snapshot. Refer to the **Retransmission and Snapshot User Guide** for further details on how to Request a Snapshot.
- Snapshot can be requested per Symbol, per CQS Outbound Line or for the full system.
- New Message Formats will be used to provide Snapshot information. Existing CQS real-time output message formats are not used for Snapshot.
- All Snapshot messages will be published over a new set of output multicast lines
- Snapshot messages will be available upon request only (e.g., those will not be disseminated every 30 seconds like the LULD Price Band refreshes)
- Snapshot requests will be available during the operational hours, between 1:30 AM - 8:05 PM, ET.
- Snapshot messages will not be available for retransmission.

1.2 Data Supported via Snapshot

Snapshot messages will contain the following Symbol State and Quote information:

- Currently Halted/ Limit Up-Limit Down (LULD) trading paused securities
- Short Sale Restrictions for eligible securities
- Auction Collar information for securities that are currently in a LULD pause state
- Latest LULD Price Bands for eligible securities
- Market Wide Circuit Breaker (MWCB) Level messages
- Latest Round Lot and Odd Lot Quotes from each Exchange Participant and latest FINRA BBO from FINRA ADF
- National Best Bid and Offer (NBBO)
- Best Odd Lot Order (BOLO)
- Security Symbol information such as Primary Listing Market Participant ID and Financial Status Indicator for eligible securities
- **Last Sale and other trade related information will not be available**

1.3 Message Routing

Snapshot messages will be published over Snapshot output multicast lines. Publication of Snapshot messages will follow the same twenty-four IP multicast line routing which is used for the real-time CQS Production lines. Refer the CQS Multicast Output Binary Specifications for symbol distribution details.

2.0 Transmission Characteristics

2.1 Transmission Block

Encapsulated within each IP packet is a single transmission block. Each Block can have a maximum of 1,000 bytes inclusive of Block Header, Block Data, and Block Pad Byte.

Block Structure	Length
Block Header	24
Block Data	Variable
Block Pad Byte (optional)	1

- Block Header on the Snapshot stream has a different version than the Block Header on the Real-Time Production and Retransmission data. Refer to section 2.3 for Block Header Format
- The Block Data consists of one or more Snapshot messages. Each message consists of a Message Header and Message Data (body) of fixed length and format. Refer section 3.0 for Message Formats
 - Each Block will contain data for only one symbol. Multiple Blocks may be transmitted to provide Snapshot for one symbol, however messages for two distinct symbols will not be included in a same block
- Block Pad Byte is unsigned integer and contains binary zero (Hex 0x00). When the size of a block consists of an odd number of bytes, the Block Pad Byte is added to ensure the Block is an even number of bytes

2.2 Data Types

The following data types are used for Snapshot messages:

Type	Description
NUMERIC – Big-Endian (Network Byte Order)	
byte	Big-Endian Unsigned 1 Byte Integer
short	Big-Endian Unsigned 2 Byte Integer
integer	Big-Endian Unsigned 4 Byte Integer
long	Big-Endian Unsigned 8 Byte Integer
signed long	Big-Endian Signed 8 Byte Integer
ALPHA/ALPHANUMERIC/SPECIAL/PRINTABLE	
char	Single printable ASCII character
char []	Fixed length printable ASCII characters

- All numeric fields will be in Big-Endian (Network Byte Order) format
- Prices represented by long fields have implied 6 decimal places
- Any numeric field that is unused or does not apply to a given message has a value set to 0
- All alpha fields are ASCII fields which are left justified and padded on the right with spaces.

2.3 Block Header

Field	Length	Type
Version	1	Byte
Block Size	2	Short
Block Sequence Number	4	Integer
Messages In Block	1	Byte
DeliveryFlag	1	Byte
LastSeqNum	4	Integer
TotPubSeqRollover	1	Byte
SIP Block Timestamp	8	2 x Integer
Block Checksum	2	Short
Total Length	24	

2.3.1 Version

1 Byte, unsigned integer. Indicates the Snapshot protocol version. Version value is set to 11 for current version on Snapshot messages

Note - Block Header Version on the real-time Production output messages is set to 2

2.3.2 Block Size:

2 Bytes, unsigned integer. Indicates the size in bytes of entire transmission block

2.3.3 Block Sequence Number:

4 Byte, unsigned integer. The Block Sequence Number denotes the sequence number of the first message in the block. Block Sequence Number for the Snapshot stream will start from 1, thereby incrementing for subsequent Snapshot messages. If a Block contains more than one message, any messages following the first message are implicitly numbered sequentially. As such, the Block Sequence Number in the next Block is incremented by the number of messages published in the previous Block.

In case CTA experiences a failure and recovery, Block Sequence number for messages for a subsequent Snapshot request can start from 1.

2.3.4 Messages In Block:

1-byte, unsigned integer. The number of messages contained in the transmission block

2.3.5 Delivery Flag:

1 Byte, unsigned integer. Delivery Flag field in the Block Header is used to identify all messages associated with a specific Snapshot request. Field can have following values:

- 1 - First Block of Snapshot sequence
- 2 - Intermediate Block of Snapshot sequence
- 3 - Last Block of Snapshot sequence
- 4 - Only one Block in Snapshot sequence

2.3.6 LastSeqNum:

4 Byte, unsigned integer. It indicates the as-of Message Sequence Number for the Symbol published on the Production Output line

- Snapshot messages for each subsequent symbol published as part of same Snapshot request can have higher LastSeqNum number than the LastSeqNum for the previous symbols
- To maintain a real-time feed, Data Subscribers should process real-time CQS messages beginning with the next message sequence number, after the one reflected in the Snapshot message, per symbol

2.3.7 TotPubSeqRollover

1 Byte, unsigned integer. Indicates the number of times the sequence number has previously rolled over for the Real-Time Output line on which the symbol resides

2.3.8 SIP Block Timestamp

2 x Integer (pair of integers). Contains the block timestamp and is the SIP time that processing a block of messages is completed.

2.3.9 Checksum

Short. Lower 2 bytes of the 4-byte sum of all the bytes in the block, excluding this Block Checksum field.

2.4 Message Header

The Message Header uniquely identifies the Category and Type of each message within a Block. Message Header for the Snapshot messages is different from the Message header for the Real-Time Production and Retransmission messages. The Message Header contains the following bytes and conforms in all cases to the following data fields:

Field	Length	Type
Message Length	2	Short
Message Category	1	Char
Message Type	1	Char
Participant ID	1	Char
Total Length	5	

2.4.1 Message Length

Short. The Message Length identifies the total message length inclusive of the Message Header and Message Body.

2.4.2 Message Category and Types Table

2.4.2.1 Message Category

Char. The Message Category represents the message classification.

2.4.2.2 Message Type

Char. The Message Type together with the Message Category identifies the message.

Message Category	Message Type	Value
R	T	Line Integrity Message
R	S	Symbol Reference Data
R	K	Market-Wide Circuit Breaker Decline Level Status Snapshot Message
R	A	Consolidated Snapshot
R	P	Participant Snapshot
R	F	FINRA Snapshot
R	O	Odd Lot Quote Snapshot

2.4.3 Participant ID

Char. Participant ID identifies the Participant or Processor that generated the message.

Code	Value
A	NYSE American, LLC (NYSE American)
B	Nasdaq Texas, LLC. (NTX)
C	NYSE National, Inc. (NYSE National)
D	FINRA Alternative Display Facility (ADF)
F	Texas Stock Exchange LLC (TXSE)
G	24X National Exchange LLC (24X)
H	MIAX Pearl Exchange, LLC (MIAX)
I	International Securities Exchange, LLC (ISE)
J	Cboe EDGA Exchange, Inc. (Cboe EDGA)
K	Cboe EDGX Exchange, Inc. (Cboe EDGX)
L	Long-Term Stock Exchange, Inc. (LTSE)
M	NYSE Texas, Inc. (NYSE Texas)
N	New York Stock Exchange, LLC (NYSE)
P	NYSE Arca, Inc. (NYSE Arca)
S	Consolidated Quotation System
T	NASDAQ Stock Market, LLC (NASDAQ)
U	Members Exchange, LLC (MEMX)
V	Investors' Exchange, LLC. (IEX)
W	CBOE Stock Exchange, Inc. (CBSX)
X	NASDAQ OMX PSX, Inc. (NASDAQ OMX PSX)
Y	Cboe BYX Exchange, Inc. (Cboe BYX)
Z	Cboe BZX Exchange, Inc. (Cboe BZX)

3.0 Message Format

Each message consists of a Message Header and Message Body, or Message Header only. The Message Category and Message Type field in the Message Header identify the Message and determine the format of the body. All Snapshot message formats have fixed fields.

A field description is provided as part of the Block Header format, Message Header format, Message Body or in the Field Description section of this document.

3.1 Line Integrity Message – Category R Type T

The Line Integrity message consists of the Message Header only; and is not blocked with any other Messages. It is transmitted over multicast lines at intervals of ten (10) seconds to verify continued integrity of multicast transmission. Line Integrity message transmission does not interrupt transmission in progress.

The Block Sequence Number is not incremented for Line Integrity messages. The Block Sequence Number field will contain the Sequence Number of the last transmitted message.

In case CTA experiences failure and recovery, the Block Sequence number for subsequent Line Integrity messages can start from 1.

3.2 Symbol Reference Data Message – Category R Type S

Symbol Reference Data message contains the latest symbol configuration details at the time Snapshot is generated.

Some fields on the Symbol Reference Data message overlap with fields available in the Consolidated Snapshot Message. Data recipients can chose to process such information from either message.

Field Name	Length	Type
Security Symbol	11	Char []
Prior Security Symbol	11	Char []
Primary Listing Market Participant ID	1	Char
Primary Listing Market Previous Closing Price	8	Long
Consolidated Closing Price	8	Long
Round Lot Size	2	Short
Minimum Price Increment Indicator	1	Char
LULD Tier	1	Char
LULD Leverage Ratio	4	Integer
Test	1	Char
IPO	1	Char
Financial Status Indicator	1	Char
Short Sale Restriction Indicator	1	Char
Halt Reason	1	Char
Instrument Type	1	Char
ETP Identifier	1	Char
Reserved	1	TBD
Reserved	128	TBD
Total Length	183	

Prior Security Symbol field is populated upon a symbol name change.

3.3 Market-Wide Circuit Breaker Decline Level Status Snapshot Message - Category R Type K

The Market-Wide Circuit Breaker Decline Level Status Snapshot Message is used to report the calculated Level 1, Level 2 and Level 3 threshold values for the current trading day necessary to trigger a circuit breaker. Levels are reset each trading day based on the closing value of the S&P 500 Index.

Note:

- MWCB levels are index values (not prices) and have implied 6 decimal places.
- The Market-Wide Circuit Breaker Decline Level Status Snapshot Message are disseminated by CQS on a daily trading day basis at approximately 7:00 am and at 8:00 am ET. If Snapshot is requested prior to such time, this message will not be available on the Snapshot
- The Market-Wide Circuit Breaker Decline Level Status Snapshot Message will be disseminated in a separate block

Field Name	Length	Type
MWCB Level 1	8	Signed Long
MWCB Level 2	8	Signed Long
MWCB Level 3	8	Signed Long
Reserved	1	TBD
Total Length	25	

3.4 Consolidated Snapshot Message - Category R Type A

Consolidated Snapshot message is used to report the following information for each Symbol:

- Latest LULD Price Bands (fields contain either Extended Trading Hour Overnight Price Bands or Regular Trading Hour LULD Price Bands, depending upon the prevailing Bands at the time Snapshot is requested)
- Auction Information for Securities in LULD Trading Pause
 - Auction collar information is provided only if the security is in a LULD halt at the time Snapshot is requested. Primary Listing Markets may submit multiple Auction Status messages while symbol is in LULD halt (first message upon halt, subsequent ones upon each extension). Snapshot messages will only provide the latest Auction collar details in the related fields
- National Best Bid and Offer (NBBO) and Best Odd Lot Order (BOLO)
 - Note - Field 'National BBO Indicator' and 'BOLO Indicator' are not used to provide NBBO or BOLO information in the Consolidated Snapshot message. Message contains the latest NBBO and BOLO for the symbol at the time of publishing the Snapshot
 - NBBO or BOLO will not be populated for a symbol if eligible quotes do not exist at the time snapshot is requested
- National BBO LULD Indicator
- Short Sale Restriction Indicator if SSR is in-effect
- Halt Reason if Listing Exchange is in a Halt/ LULD trading pause
 - Consolidated Snapshot message is used to report a Halt from Listing Exchange
 - Note - If a security had Halted and Resumed prior to the Snapshot Request, Halt information is not included in the Consolidated Snapshot Message
- Primary Listing Market Participant ID
- Financial Status Indicator

Note: A Consolidated Snapshot Message for each Symbol is published after any Participant Snapshot Messages and FINRA Snapshot Messages for that Symbol. Message is published with Participant ID set to 'S' (CQS) in the message header.

Consolidated Snapshot Message, *continued*

Field Name	Length	Type
Security Symbol	11	Char []
Instrument Type	1	Char
Lower Limit Price Band	8	Long
Upper Limit Price Band	8	Long
Auction Collar Reference Price	8	Long
Auction Collar Upper Threshold Price	8	Long
Auction Collar Lower Threshold Price	8	Long
Number of Extensions	1	Byte
National Best Bid Participant ID	1	Char
National Best Bid Quote Condition	1	Char
National Best Bid Price	8	Long
National Best Bid Size	4	Integer
FINRA Best Bid Market Maker ID	4	Char []
National Best Offer Participant ID	1	Char
National Best Offer Quote Condition	1	Char
National Best Offer Price	8	Long
National Best Offer Size	4	Integer
FINRA Best Offer Market Maker ID	4	Char []
National BBO LULD Indicator	1	Char
Primary Listing Market Participant ID	1	Char
Financial Status Indicator	1	Char
Short Sale Restriction Indicator	1	Char
Halt Reason	1	Char
Odd Lot Best Bid Participant ID	1	Char
Odd Lot Best Bid Quote Price	8	Long
Odd Lot Best Bid Quote Size	1	Byte
Odd Lot FINRA Best Bid Market Maker ID	4	Char []
Odd Lot Best Offer Participant ID	1	Char
Odd Lot Best Offer Quote Price	8	Long
Odd Lot Best Offer Quote Size	1	Byte
Odd Lot FINRA Best Offer Market Maker ID	4	Char []
Total Length	122	

3.5 Participant Snapshot Message - Category R Type P

The Participant Snapshot message is a SIP Generated Message used to report the following information for each Security Symbol:

- Latest Participant Round Lot quote per symbol
 - Note - National Best Bid and Offer (NBBO), Odd Lot quotes and Best Odd Lot Order (BOLO) information is not included in the Participant Snapshot Message. Odd Lot quotes are provided via the Odd Lot Quote Snapshot message and the latest NBBO and BOLO are provided via the Consolidated Snapshot message
- Limit Up-Limit Down (LULD) Indicator for the quotes
- Price and Trading Range Indications, as applicable
 - Note - When the field 'Halt Reason' is populated, High/Low Indication Price fields represent a Price Indication, otherwise High/Low Indication Price fields represent a Trading Range Indication
- Halt Reason per Participant, if any Exchange is currently in a Halt state
 - Participant Snapshot message is used to report per Participant Halt Reason Code (non-Listing exchanges can submit a non-Regulatory Halt)
 - Note - If a Symbol had Halted and Resumed prior to the Snapshot Request, Halt information is not included in the Consolidated Snapshot Message

Field Name	Length	Type
Security Symbol	11	Char []
Quote Condition	1	Char
Round Lot Bid Price	8	Long
Round Lot Bid Size	4	Integer
Round Lot Offer Price	8	Long
Round Lot Offer Size	4	Integer
Retail Interest Indicator	1	Char
Settlement Condition	1	Char
Market Condition	1	Char
Limit Up-Limit Down (LULD) Indicator	1	Char
High Indication Price	8	Long
Low Indication Price	8	Long
Halt Reason	1	Char
Total Length	57	

Note - Participant ID in the message header identifies the Participant for each Message. If there is no Snapshot information available for any individual Participant, the Participant Snapshot Message may not be published for the security symbol for that Participant

3.6 FINRA Snapshot Message - Category R Type F

The FINRA Snapshot message is used to report FINRA Best Bid and Offer (FBBO). If FINRA BBO is not available, FINRA BBO Snapshot message may not be published.

Field Name	Length	Type
Security Symbol	11	Char []
FINRA Best Bid Quote Condition	1	Char
FINRA Best Bid Price	8	Long
FINRA Best Bid Size	4	Integer
FINRA Best Bid Market Maker ID	4	Char []
FINRA Best Offer Quote Condition	1	Char
FINRA Best Offer Price	8	Long
FINRA Best Offer Size	4	Integer
FINRA Best Offer Market Maker ID	4	Char []
FINRA BBO LULD Indicator	1	Char
High Indication Price	8	Long
Low Indication Price	8	Long
Halt Reason	1	Char
Total Length	63	

3.7 Odd Lot Quote Snapshot Message - Category R Type O

The Odd Lot Quote Snapshot message is used to report Odd Lot quotes for each Participant. If no Odd Lot quotes are available for a symbol, this message is not published.

- Odd Lot quotes for multiple Participants are included in the same message via the repeating Odd Lot Quote Appendages
- Messages are published with Participant ID as ‘S’ (CQS) in the message header. Participant ID for each odd lot quote is provided in the respective Appendage.
- All Odd Lot Bids across all Participants are provided first in the message followed by all Odd Lot Offers
- Odd Lot Quote Snapshot messages for a Symbol are published after any Participant Snapshot Messages, FINRA Snapshot Messages and Consolidated Snapshot Message for that Symbol
- Best Odd Lot Order (BOLO) information is not included in the Odd Lot Quote Snapshot message. The latest BOLO is provided via the Consolidated Snapshot message

Field Name	Length	Type
Security Symbol	11	Char []
Count of Odd Lot Bid appendages	1	Byte
Count of Odd Lot Offer appendages	1	Byte
<< Odd Lot Quote Appendages (Repeatable) >>		
Total	Variable*	

* Total length depend any of the number of Odd Lot Extended Quote Appendages

3.7.1 Odd Lot Quote Appendages

Field Name	Length	Type
Odd lot Quote Participant ID	1	Char
Odd Lot Quote Price	8	Long
Odd Lot Quote Size	1	Byte
Odd Lot FINRA Market Maker ID	4	Char []
Total	14	

4.0 Field Description

Field Name	Length	Description						
Auction Collar Reference Price	8	<p>Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Optionally set to zero.</p> <p>The Auction Collar Reference Price represents the price used by the exchange to establish the Auction Collar.</p>						
Auction Collar Lower Threshold Price	8	<p>Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Optionally set to zero.</p> <p>Represents the latest lower threshold price of the Auction Collar. The lower threshold price of the Auction Collar is the lowest price of the auction collar, if any.</p>						
Auction Collar Upper Threshold Price	8	<p>Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Optionally set to zero.</p> <p>Represents the latest upper threshold price of the Auction Collar. The upper threshold price of the Auction Collar is the highest price of the auction collar, if any.</p>						
Count of Odd Lot Bid Appendages	1	<p>Byte. Optional set to zero (0 - 255).</p> <p>Identifies the number of odd lot bid appendages on a quote message. When a quote message has multiple odd lot bid appendages, those are grouped together and populated before any odd lot offer appendage.</p>						
Count of Odd Lot Offer Appendages	1	<p>Byte. Optional set to zero (0 - 255).</p> <p>Identifies the number of odd lot offer appendages on a quote message. When a quote message has multiple odd lot offer appendages, those are grouped together and populated after any offer odd lot bid appendages.</p>						
ETP Identifier	1	<p>Char. Identifies whether the symbol is an ETP</p> <table border="1" data-bbox="837 1677 1393 1801"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Symbol is not an ETP</td> </tr> <tr> <td>1</td> <td>Symbol is an ETP</td> </tr> </tbody> </table>	Code	Value	0	Symbol is not an ETP	1	Symbol is an ETP
Code	Value							
0	Symbol is not an ETP							
1	Symbol is an ETP							

FIELD DESCRIPTIONS

Field Name	Length	Description																								
Financial Status Indicator	1	<p>Char.</p> <p>Identifies the financial status of the security.</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Financial Status Not Applicable</td> </tr> <tr> <td>1</td> <td>Bankrupt</td> </tr> <tr> <td>2</td> <td>Below Continuing Listing Standards</td> </tr> <tr> <td>3</td> <td>Bankrupt & Below Continuing Listing Standards</td> </tr> <tr> <td>4</td> <td>Late Filing</td> </tr> <tr> <td>5</td> <td>Bankrupt & Late Filing</td> </tr> <tr> <td>6</td> <td>Below Continuing Listing Standards & Late Filing</td> </tr> <tr> <td>7</td> <td>Bankrupt, Below Continuing Listing Standards & Late Filing</td> </tr> <tr> <td>8</td> <td>Creations Suspended (for Exchange Traded Products)</td> </tr> <tr> <td>9</td> <td>Redemptions Suspended (for Exchange Traded Products)</td> </tr> <tr> <td>A</td> <td>Liquidation (for Exchange Traded Products)</td> </tr> </tbody> </table>	Code	Value	0	Financial Status Not Applicable	1	Bankrupt	2	Below Continuing Listing Standards	3	Bankrupt & Below Continuing Listing Standards	4	Late Filing	5	Bankrupt & Late Filing	6	Below Continuing Listing Standards & Late Filing	7	Bankrupt, Below Continuing Listing Standards & Late Filing	8	Creations Suspended (for Exchange Traded Products)	9	Redemptions Suspended (for Exchange Traded Products)	A	Liquidation (for Exchange Traded Products)
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A	Liquidation (for Exchange Traded Products)																									
FINRA BBO LULD Indicator	1	<p>Char.</p> <p>Indicates the effect that the Regular Trading Hour Limit Up-Limit Down Price Bands have on the FINRA Best Bid and FINRA Best Offer (FBBO).</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Limit Up-Limit Down Not Applicable</td> </tr> <tr> <td>A</td> <td>FINRA Best Bid and/or FINRA Best Offer are Executable</td> </tr> <tr> <td>B</td> <td>FINRA Best Bid outside Price Band – FINRA Best Bid is Non-Executable</td> </tr> <tr> <td>C</td> <td>FINRA Best Offer outside Price Band – FINRA Best Offer is Non-Executable</td> </tr> <tr> <td>D</td> <td>FINRA Best Bid and FINRA Best Offer outside Price Band – FINRA Best Bid and FINRA Best Offer are Non-Executable</td> </tr> </tbody> </table>	Code	Value	Space	Limit Up-Limit Down Not Applicable	A	FINRA Best Bid and/or FINRA Best Offer are Executable	B	FINRA Best Bid outside Price Band – FINRA Best Bid is Non-Executable	C	FINRA Best Offer outside Price Band – FINRA Best Offer is Non-Executable	D	FINRA Best Bid and FINRA Best Offer outside Price Band – FINRA Best Bid and FINRA Best Offer are Non-Executable												
Code	Value																									
Space	Limit Up-Limit Down Not Applicable																									
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C	FINRA Best Offer outside Price Band – FINRA Best Offer is Non-Executable																									
D	FINRA Best Bid and FINRA Best Offer outside Price Band – FINRA Best Bid and FINRA Best Offer are Non-Executable																									
FINRA Best Bid Market Maker ID	4	<p>Char [4]. Left justified, space filled.</p> <p>Contains the FINRA ADF provided FINRA Best Bid Market Maker identifier of the Market Maker that had the FINRA Best Bid (FBBO).</p>																								

FIELD DESCRIPTIONS

Field Name	Length	Description
FINRA Best Bid Price	8	8 Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Optionally set to zero. Contains the FINRA ADF provided FINRA Best Bid Price that is the FINRA Best Bid (FBBO).
FINRA Best Bid Quote Condition	1	Char. Space-filled. Contains the FINRA ADF provided FINRA Best Bid Quote Condition associated with the FINRA Best Bid Price that had the FINRA Best Bid (FBBO).
FINRA Best Bid Size	4	4 Integer. Integer has a maximum size of 4,294,967,295 Optionally set to zero. Contains the FINRA ADF provided FINRA Best Bid Size associated with the FINRA Best Bid Price that had the FINRA Best Bid (FBBO). It is the number of shares for a symbol rounded down to the nearest multiple of its Round Lot Size.
FINRA Best Offer Price	8	8 Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Optionally set to zero. Contains the FINRAADF provided Best FINRA Offer Price that is the FINRA Best Offer (FBBO).
FINRA Best Offer Size	4	Integer. Integer has a maximum size of 4,294,967,295 Optionally set to zero. Contains the FINRA ADF provided FINRA Best Offer Size associated with the FINRA Best Offer Price that had the FINRA Best Offer (FBBO). It is the number of shares for a symbol rounded down to the nearest multiple of its Round Lot Size.
FINRA Best Offer Market Maker ID	4	Char [4]. Left justified, space filled. Contains the FINRA ADF provided FINRA Best Offer Market Maker identifier of the Market Maker that had the FINRA Best Offer (FBBO).
FINRA Best Offer Quote Condition	1	Char. Space-filled. Contains the FINRA ADF provided FINRA Best Offer Quote Condition associated with the Best FINRA Offer Price that had the FINRA Best Offer (FBBO).

FIELD DESCRIPTIONS

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Halt Reason	1	<p>Char.</p> <p>Denotes the reason for the Trading Halt.</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> <th>Regulatory</th> <th>Non-Regulatory</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Halt Reason Not Applicable</td> <td></td> <td></td> </tr> <tr> <td>A</td> <td>SIP Outage, Material SIP Latency, or Extraordinary Market Activity</td> <td>X</td> <td></td> </tr> <tr> <td>C</td> <td>Regulatory Concern</td> <td>X</td> <td></td> </tr> <tr> <td>D</td> <td>News Released (formerly News Dissemination)</td> <td>X</td> <td></td> </tr> <tr> <td>E</td> <td>Merger Effective</td> <td>X</td> <td></td> </tr> <tr> <td>F</td> <td>ETF Component Prices Not Available</td> <td>X</td> <td></td> </tr> <tr> <td>I</td> <td>Order Imbalance</td> <td></td> <td>X</td> </tr> <tr> <td>M</td> <td>Limit Up-Limit Down (LULD) Trading Pause</td> <td>X</td> <td></td> </tr> <tr> <td>N</td> <td>Corporate Action</td> <td>X</td> <td></td> </tr> <tr> <td>O</td> <td>New Security Offering</td> <td>X</td> <td></td> </tr> <tr> <td>P</td> <td>News Pending</td> <td>X</td> <td></td> </tr> <tr> <td>V</td> <td>Intraday Indicative Value Not Available</td> <td>X</td> <td></td> </tr> <tr> <td>X</td> <td>Operational</td> <td></td> <td>X</td> </tr> <tr> <td>Y</td> <td>Sub-Penny Trading</td> <td></td> <td>X</td> </tr> <tr> <td>1</td> <td>Market-Wide Circuit Breaker Level 1 – Breached</td> <td>X</td> <td></td> </tr> <tr> <td>2</td> <td>Market-Wide Circuit Breaker Level 2 – Breached</td> <td>X</td> <td></td> </tr> <tr> <td>3</td> <td>Market-Wide Circuit Breaker Level 3 – Breached</td> <td>X</td> <td></td> </tr> </tbody> </table>	Code	Value	Regulatory	Non-Regulatory	Space	Halt Reason Not Applicable			A	SIP Outage, Material SIP Latency, or Extraordinary Market Activity	X		C	Regulatory Concern	X		D	News Released (formerly News Dissemination)	X		E	Merger Effective	X		F	ETF Component Prices Not Available	X		I	Order Imbalance		X	M	Limit Up-Limit Down (LULD) Trading Pause	X		N	Corporate Action	X		O	New Security Offering	X		P	News Pending	X		V	Intraday Indicative Value Not Available	X		X	Operational		X	Y	Sub-Penny Trading		X	1	Market-Wide Circuit Breaker Level 1 – Breached	X		2	Market-Wide Circuit Breaker Level 2 – Breached	X		3	Market-Wide Circuit Breaker Level 3 – Breached	X	
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High Indication Price	8	<p>Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Optionally set to zero.</p> <p>The High Indication Price represents an approximation of what the high end ‘Offer’ price of a security's trading range may be. It is used for a security that is not Trading Halted, i.e., Trading Range Indication or following a Trading Halt, i.e., Price Indication.</p>																																																																								

FIELD DESCRIPTIONS

Field Name	Length	Description										
Instrument Type	1	Char. Identifies the instrument type relevant to the quote. <table border="1" data-bbox="771 466 1344 705" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>CTA Eligible Equity</td> </tr> <tr> <td>1</td> <td>Local Issue</td> </tr> <tr> <td>2</td> <td>Corporate Bond</td> </tr> <tr> <td>3</td> <td>Government Bond</td> </tr> </tbody> </table>	Code	Value	0	CTA Eligible Equity	1	Local Issue	2	Corporate Bond	3	Government Bond
Code	Value											
0	CTA Eligible Equity											
1	Local Issue											
2	Corporate Bond											
3	Government Bond											
IPO	1	Char. Identifies whether the security symbol is an IPO <table border="1" data-bbox="719 831 1198 957" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Not an IPO symbol</td> </tr> <tr> <td>1</td> <td>IPO symbol</td> </tr> </tbody> </table>	Code	Value	0	Not an IPO symbol	1	IPO symbol				
Code	Value											
0	Not an IPO symbol											
1	IPO symbol											

FIELD DESCRIPTIONS

Field Name	Length	Description								
Limit Up-Limit Down (LULD) Indicator	1	<p>Char.</p> <p>Indicates the affect the Quote has on the Regular Trading Hour Limit Up-Limit Down Price Band range. An Offer Price that is below the Lower Limit Price Band, or a Bid Price that is above the Upper Limit Price Band is identified as follows:</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Limit Up-Limit Down Not Applicable</td> </tr> <tr> <td>A</td> <td>Bid Price above Upper Limit Price Band – Bid is Non-Executable</td> </tr> <tr> <td>B</td> <td>Offer Price below Lower Limit Price Band Offer is Non-Executable</td> </tr> </tbody> </table> <p>Note 1: If a Bid or an Offer is marked as Non-Executable, it will not qualify for inclusion in the BBO calculations. Note 2: Limit Up-Limit Down' is not applicable to Local Issues or Bonds.</p>	Code	Value	Space	Limit Up-Limit Down Not Applicable	A	Bid Price above Upper Limit Price Band – Bid is Non-Executable	B	Offer Price below Lower Limit Price Band Offer is Non-Executable
Code	Value									
Space	Limit Up-Limit Down Not Applicable									
A	Bid Price above Upper Limit Price Band – Bid is Non-Executable									
B	Offer Price below Lower Limit Price Band Offer is Non-Executable									
Lower Limit Price Band	8	<p>Long. Implied 6 decimal places and a maximum price of \$92,233,720,368.547758.</p> <p>It represents the lower price band value for a security. When the Lower Limit Price Band field is set to zero, it identifies that the Price Bands are not in effect for a security.</p>								
Low Indication Price	8	<p>Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Optionally set to zero.</p> <p>The Low Indication Price represents an approximation of what the low end "Bid" price of a security's trading range may be. It is used for a security that is not Trading Halted, i.e., Trading Range Indication or following a Trading Halt, i.e., Price Indication.</p>								

FIELD DESCRIPTIONS

Field Name	Length	Description								
LULD Tier	1	<p>Char. Identifies the Limit Up Limit Down tier of the security symbol</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>LULD not applicable</td> </tr> <tr> <td>1</td> <td>LULD Tier 1 Security</td> </tr> <tr> <td>2</td> <td>LULD Tier 2 Security</td> </tr> </tbody> </table>	Code	Value	0	LULD not applicable	1	LULD Tier 1 Security	2	LULD Tier 2 Security
Code	Value									
0	LULD not applicable									
1	LULD Tier 1 Security									
2	LULD Tier 2 Security									
LULD Leverage Ratio	4	<p>Integer. Fields has implied 6 decimal places and a maximum value of 4294.967295</p> <p>Represents the Leverage ratio associated with the LULD Tier of the security symbol. Currently CTA symbols have LULD Leverage Ratio values of 1, 2, 3 or 4.</p>								
Market Condition	1	<p>Char.</p> <p>Identifies the market condition of a quote for a security. Crossed Market and Locked Market are only applicable to Government Bonds. In cases of a Normal Auction Market, the Round Lot Bid Price must be less than the Round Lot Offer Price. In cases of a Crossed Market, the Round Lot Bid Price must be greater than the Round Lot Offer Price. In cases of a Locked Market, the Round Lot Bid Price must be equal to the Round Lot Offer Price.</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Normal Auction Market</td> </tr> <tr> <td>A</td> <td>Crossed Market</td> </tr> <tr> <td>B</td> <td>Locked Market</td> </tr> </tbody> </table>	Code	Value	Space	Normal Auction Market	A	Crossed Market	B	Locked Market
Code	Value									
Space	Normal Auction Market									
A	Crossed Market									
B	Locked Market									
Minimum Price Increment Indicator	1	<p>Char. Identifies the applicable tick size for a symbol</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Penny MPI (0.01)</td> </tr> <tr> <td>2</td> <td>Half-Penny MPI (0.005)</td> </tr> </tbody> </table>	Code	Value	1	Penny MPI (0.01)	2	Half-Penny MPI (0.005)		
Code	Value									
1	Penny MPI (0.01)									
2	Half-Penny MPI (0.005)									

FIELD DESCRIPTIONS

Field Name	Length	Description
MWCB Level 1	8	<p>Signed Long. MWCB Level 1 value represents an <u>index value (i.e., not a price) and has implied 6 decimal places</u> and a maximum value of -9,223,372,036,854.775808 to +9,223,372,036,854.775807.</p> <p>Identifies the daily established drop level value (trigger value) associated with each Decline Level:</p> <p>Level 1 = 7% of Previous Close S&P 500 Value</p>
MWCB Level 2	8	<p>Signed Long. MWCB Level 2 value represents an <u>index value (i.e., not a price) and has implied 6 decimal places</u> and a maximum value of -9,223,372,036,854.775808 to +9,223,372,036,854.775807.</p> <p>Identifies the daily established drop level value (trigger value) associated with each Decline Level:</p> <p>Level 2 = 13% of Previous Close S&P 500 Value</p>
MWCB Level 3	8	<p>Signed Long. MWCB Level 3 value represents an <u>index value (i.e., not a price) and has implied 6 decimal places</u> and a maximum value of -9,223,372,036,854.775808 to +9,223,372,036,854.775807.</p> <p>Identifies the daily established drop level value (trigger value) associated with each Decline Level:</p> <p>Level 3 = 20% of Previous Close S&P 500 Value</p>

FIELD DESCRIPTIONS

Field Name	Length	Description
National Best Bid Participant ID	1	Char. Space-filled. Identifies the Participant that submitted the Best Round Lot Bid on a consolidated basis. Refer to Participant ID field description for Participant codes.
National Best Bid Price	8	8 Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Optionally set to zero. Represents the Best Round Lot Bid Price on a consolidated basis.
National Best Bid Quote Condition	1	Char. Space-filled. Identifies the Quote Condition associated with the Best Bid Price on a consolidated basis.
National Best Bid Size	4	4 Integer. Integer has a maximum size of 4,294,967,295. Optionally set to zero. Represents the Size associated with the Best Bid Price on a consolidated basis. National Best Bid Size is the number of shares for a symbol rounded down to the nearest multiple of its Round Lot Size. As an example, for a symbol with round-lot size of 40, Best Bid Size can be in multiples of 40 i.e. 40, 80, 120 and so on.
National Best Offer Participant ID	1	Char. Space-filled. Identifies the Participant that submitted the Best Round Lot Offer on a consolidated basis. Refer to Participant ID field description for Participant codes.

FIELD DESCRIPTIONS

Field Name	Length	Description
National Best Offer Price	8	<p>8 Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Optionally set to zero.</p> <p>Represents the Best Round Lot Offer Price on a consolidated basis.</p>
National Best Offer Quote Condition	1	<p>Char. Space-filled.</p> <p>Identifies the Quote Condition associated with the Best Offer Price on a consolidated basis.</p>
National Best Offer Size	4	<p>4 Integer. Integer has a maximum size of 4,294,967,295 Optionally set to zero.</p> <p>Represents the Size associated with the Best Bid Price on a consolidated basis.</p> <p>National Best Offer size is the number of shares for a symbol rounded down to the nearest multiple of its Round Lot Size. As an example, for a symbol with round-lot size of 40, Best Offer Size can be in multiples of 40 i.e. 40, 80, 120 and so on.</p>

FIELD DESCRIPTIONS

Field Name	Length	Description																						
National BBO LULD Indicator	1	<p>Char.</p> <p>Indicates the effect that the Limit Up-Limit Down Price Band changes have on the National Best Bid and National Best Offer.</p> <table border="1" data-bbox="690 499 1463 1709"> <thead> <tr> <th data-bbox="690 499 803 548">Code</th> <th data-bbox="803 499 1463 548">Value</th> </tr> </thead> <tbody> <tr> <td data-bbox="690 548 803 604">Space</td> <td data-bbox="803 548 1463 604">Limit Up-Limit Down Not Applicable</td> </tr> <tr> <td data-bbox="690 604 803 688">A</td> <td data-bbox="803 604 1463 688">National Best Bid and / or National Best Offer are Executable</td> </tr> <tr> <td data-bbox="690 688 803 779">B</td> <td data-bbox="803 688 1463 779">National Best Bid below Lower Limit Price Band – National Best Bid is Non-Executable</td> </tr> <tr> <td data-bbox="690 779 803 863">C</td> <td data-bbox="803 779 1463 863">National Best Offer above Upper Limit Price Band – National Best Offer is Non-Executable</td> </tr> <tr> <td data-bbox="690 863 803 1024">D</td> <td data-bbox="803 863 1463 1024">National Best Bid below Lower Limit Price Band and National Best Offer above Upper Limit Price Band – National Best Bid and National Best Offer are Non-Executable</td> </tr> <tr> <td data-bbox="690 1024 803 1108">E</td> <td data-bbox="803 1024 1463 1108">National Best Bid equals Upper Limit Price Band – National Best Bid is in Limit State</td> </tr> <tr> <td data-bbox="690 1108 803 1192">F</td> <td data-bbox="803 1108 1463 1192">National Best Offer equals Lower Limit Price Band – National Best Offer is in Limit State</td> </tr> <tr> <td data-bbox="690 1192 803 1367">G</td> <td data-bbox="803 1192 1463 1367">National Best Bid equals Upper Limit Price Band – National Best Bid is in Limit State and National Best Offer above Upper Limit Price Band – National Best Offer is Non-Executable</td> </tr> <tr> <td data-bbox="690 1367 803 1535">H</td> <td data-bbox="803 1367 1463 1535">National Best Bid below Lower Limit Price Band – National Best Bid is Non-Executable and National Best Offer equals Lower Limit Price Band – National Best Offer is in Limit State</td> </tr> <tr> <td data-bbox="690 1535 803 1709">I</td> <td data-bbox="803 1535 1463 1709">National Best Bid equals Upper Limit Price Band and National Best Offer equals Lower Limit Price Band (Crossed - <i>NOT in Limit State</i>)</td> </tr> </tbody> </table>	Code	Value	Space	Limit Up-Limit Down Not Applicable	A	National Best Bid and / or National Best Offer are Executable	B	National Best Bid below Lower Limit Price Band – National Best Bid is Non-Executable	C	National Best Offer above Upper Limit Price Band – National Best Offer is Non-Executable	D	National Best Bid below Lower Limit Price Band and National Best Offer above Upper Limit Price Band – National Best Bid and National Best Offer are Non-Executable	E	National Best Bid equals Upper Limit Price Band – National Best Bid is in Limit State	F	National Best Offer equals Lower Limit Price Band – National Best Offer is in Limit State	G	National Best Bid equals Upper Limit Price Band – National Best Bid is in Limit State and National Best Offer above Upper Limit Price Band – National Best Offer is Non-Executable	H	National Best Bid below Lower Limit Price Band – National Best Bid is Non-Executable and National Best Offer equals Lower Limit Price Band – National Best Offer is in Limit State	I	National Best Bid equals Upper Limit Price Band and National Best Offer equals Lower Limit Price Band (Crossed - <i>NOT in Limit State</i>)
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FIELD DESCRIPTIONS

Field Name	Length	Description
National BBO LULD Indicator, <i>continued</i>	1	<p>Note 1: ‘National BBO LULD Indicator’ field is not applicable for Overnight Price Bands</p> <p>Note 2: During Regular Trading Hours, ‘National BBO LULD Indicator’ field will be populated with a ‘Space’ as follows:</p> <ul style="list-style-type: none"> a. Prior to regular trading hours and after regular trading hours. b. When Price Bands are not in effect (e.g., Price Bands with zero values prevailing). c. Until the regular hour Price Band for a symbol is published. d. If no eligible quotes have taken place.
Number of Extensions	1	<p>Byte. Optionally set to zero.</p> <p>Identifies the number of manual or automatic extensions the applicable auction has received. The first Auction Collar extension, at the time of the LULD Trading Pause, will be set to zero (0) indicating the first Auction Status message and will increment by one (1) for each new Auction Status message sent during the LULD Trading Pause event.</p>

FIELD DESCRIPTIONS

Field Name	Length	Description
Odd Lot Best Bid Participant ID	1	Char. Identifies the Participant that submitted the Best Odd Lot Bid on a consolidated basis. Refer to Participant ID field description for Participant codes.
Odd Lot Best Bid Quote Price	8	8 Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Represents the Best Odd Lot Bid Price on a consolidated basis.
Odd Lot Best Bid Quote Size	1	Byte. Optional set to zero. Represents the Best Odd Lot Bid Size associated with the Best Bid Price on a consolidated basis.
Odd Lot FINRA Best Bid Market Maker ID	4	Char [4]. Left justified, space-filled. Contains the identifier of the FINRA ADF Market Maker that had the FINRA Best Odd Lot Bid.
Odd Lot Best Offer Participant ID	1	Char. Identifies the Participant that submitted the Best Odd Lot Offer on a consolidated basis. Refer to Participant ID field description for Participant codes.
Odd Lot Best Offer Quote Price	8	8 Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Represents the Best Odd Lot Offer Price on a consolidated basis.
Odd Lot Best Offer Quote Size	1	Byte. Optional set to zero. Represents the Best Odd Lot Offer Size associated with the Best Offer Price on a consolidated basis.
Odd Lot FINRA Best Offer Market Maker ID	4	Char [4]. Left justified, space-filled. Contains the identifier of the FINRA ADF Market Maker that had the FINRA Best Odd Lot Offer.

FIELD DESCRIPTIONS

Field Name	Length	Description
Odd lot Quote Participant ID	1	Char. Identifies the Participant that generated the odd lot quote. Refer to Participant ID field description for Participant codes.
Odd Lot Quote Price	2 or 8	2 Short. Short have implied 2 decimal places and a maximum price of \$655.35. 8 Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Represents the price associated with an odd lot bid or offer.
Odd Lot Quote Size	1	Byte. Optional set to zero. Represents the size associated with an odd lot bid or offer. It is represented in number of shares and is always less than the Round lot size of a symbol. E.g., for a symbol with Round Lot Size of 100, Odd Lot Quote Size can be up to 99 shares. When Odd Lot Quote Size is set to zero, it indicates that a previously reported odd lot bid or offer at the respective Odd Lot Quote Price is being removed.
Odd Lot FINRA Market Maker ID	4	Char [4]. Left justified, space-filled. Contains the identifier of the FINRA ADF Market Maker associated with the respective FINRA Odd Lot Bid or Offer.

FIELD DESCRIPTIONS

Field Name	Length	Description																																														
Primary Listing Market Participant ID	1	<p>Char. Identifies the Primary Listing Market for a security.</p> <table border="1" data-bbox="750 443 1419 1482"> <thead> <tr> <th data-bbox="750 443 907 489">Code</th> <th data-bbox="907 443 1419 489">Value</th> </tr> </thead> <tbody> <tr> <td data-bbox="750 489 907 562">Space</td> <td data-bbox="907 489 1419 562">Primary Listing Market Participant ID Not Applicable</td> </tr> <tr> <td data-bbox="750 562 907 604">A</td> <td data-bbox="907 562 1419 604">NYSE American</td> </tr> <tr> <td data-bbox="750 604 907 646">B</td> <td data-bbox="907 604 1419 646">Nasdaq Texas</td> </tr> <tr> <td data-bbox="750 646 907 688">C</td> <td data-bbox="907 646 1419 688">NYSE National</td> </tr> <tr> <td data-bbox="750 688 907 730">D</td> <td data-bbox="907 688 1419 730">FINRA ADF</td> </tr> <tr> <td data-bbox="750 730 907 772">F</td> <td data-bbox="907 730 1419 772">Texas Stock Exchange</td> </tr> <tr> <td data-bbox="750 772 907 814">G</td> <td data-bbox="907 772 1419 814">24X</td> </tr> <tr> <td data-bbox="750 814 907 856">H</td> <td data-bbox="907 814 1419 856">MIAX Pearl</td> </tr> <tr> <td data-bbox="750 856 907 898">I</td> <td data-bbox="907 856 1419 898">ISE</td> </tr> <tr> <td data-bbox="750 898 907 940">J</td> <td data-bbox="907 898 1419 940">Cboe EDGA</td> </tr> <tr> <td data-bbox="750 940 907 982">K</td> <td data-bbox="907 940 1419 982">Cboe EDGX</td> </tr> <tr> <td data-bbox="750 982 907 1024">L</td> <td data-bbox="907 982 1419 1024">LTSE</td> </tr> <tr> <td data-bbox="750 1024 907 1066">M</td> <td data-bbox="907 1024 1419 1066">NYSE Texas</td> </tr> <tr> <td data-bbox="750 1066 907 1108">N</td> <td data-bbox="907 1066 1419 1108">NYSE</td> </tr> <tr> <td data-bbox="750 1108 907 1150">P</td> <td data-bbox="907 1108 1419 1150">NYSE Arca</td> </tr> <tr> <td data-bbox="750 1150 907 1192">T</td> <td data-bbox="907 1150 1419 1192">NASDAQ</td> </tr> <tr> <td data-bbox="750 1192 907 1234">U</td> <td data-bbox="907 1192 1419 1234">Members Exchange</td> </tr> <tr> <td data-bbox="750 1234 907 1276">V</td> <td data-bbox="907 1234 1419 1276">IEX</td> </tr> <tr> <td data-bbox="750 1276 907 1318">W</td> <td data-bbox="907 1276 1419 1318">CBSX</td> </tr> <tr> <td data-bbox="750 1318 907 1360">X</td> <td data-bbox="907 1318 1419 1360">NASDAQ OMX PSX</td> </tr> <tr> <td data-bbox="750 1360 907 1402">Y</td> <td data-bbox="907 1360 1419 1402">Cboe BYX</td> </tr> <tr> <td data-bbox="750 1402 907 1444">Z</td> <td data-bbox="907 1402 1419 1444">Cboe BZX</td> </tr> </tbody> </table>	Code	Value	Space	Primary Listing Market Participant ID Not Applicable	A	NYSE American	B	Nasdaq Texas	C	NYSE National	D	FINRA ADF	F	Texas Stock Exchange	G	24X	H	MIAX Pearl	I	ISE	J	Cboe EDGA	K	Cboe EDGX	L	LTSE	M	NYSE Texas	N	NYSE	P	NYSE Arca	T	NASDAQ	U	Members Exchange	V	IEX	W	CBSX	X	NASDAQ OMX PSX	Y	Cboe BYX	Z	Cboe BZX
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FIELD DESCRIPTIONS

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Quote Condition	1	<p>Char. Denotes a particular condition applicable to the quote. The Quote Condition is used to determine whether a quote qualifies for the Best Bid and Best Offer calculation.</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Quote Condition Not Applicable</td> </tr> <tr> <td>A</td> <td>Slow Quote on Offer Side (Eligible for BBO)</td> </tr> <tr> <td>B</td> <td>Slow Quote on Bid Side (Eligible for BBO)</td> </tr> <tr> <td>C</td> <td>Closing (Not eligible for BBO)</td> </tr> <tr> <td>E</td> <td>Slow Quote Due to LRP or Gap Quote on the Bid Side (ONLY OFFER SIDE is eligible for BBO)</td> </tr> <tr> <td>F</td> <td>Slow Quote Due to LRP or Gap Quote on the Offer Side (ONLY BID SIDE is eligible for BBO)</td> </tr> <tr> <td>H</td> <td>Slow Quote on the Bid and Offer Sides (Eligible for BBO)</td> </tr> <tr> <td>L</td> <td>Closed Market Maker (FINRA) (Not eligible for BBO)</td> </tr> <tr> <td>N</td> <td>Non-Firm Quote (Not eligible for BBO)</td> </tr> <tr> <td>O</td> <td>Opening Quote (Eligible for BBO)</td> </tr> <tr> <td>R</td> <td>Regular (FINRA Open) (Eligible for BBO)</td> </tr> <tr> <td>U</td> <td>Slow Quote Due to Liquidity Replenishment Point (LRP), or Gap Quote on Both the Bid and Offer Sides (Not eligible for BBO)</td> </tr> <tr> <td>W</td> <td>Slow Quote Due to Set Slow List on Both the Bid and Offer Sides (Eligible for BBO)</td> </tr> <tr> <td>4</td> <td>On Demand Intra-Day Auction (Not eligible for BBO)</td> </tr> </tbody> </table> <p>Note: If a BBO qualifying Bid or Offer is marked as Non-Executable in the 'Limit Up-Limit Down (LULD) Indicator' field, the Non-Executable Bid or Offer side will <u>not qualify</u> for inclusion in the BBO calculations.</p>	Code	Value	Space	Quote Condition Not Applicable	A	Slow Quote on Offer Side (Eligible for BBO)	B	Slow Quote on Bid Side (Eligible for BBO)	C	Closing (Not eligible for BBO)	E	Slow Quote Due to LRP or Gap Quote on the Bid Side (ONLY OFFER SIDE is eligible for BBO)	F	Slow Quote Due to LRP or Gap Quote on the Offer Side (ONLY BID SIDE is eligible for BBO)	H	Slow Quote on the Bid and Offer Sides (Eligible for BBO)	L	Closed Market Maker (FINRA) (Not eligible for BBO)	N	Non-Firm Quote (Not eligible for BBO)	O	Opening Quote (Eligible for BBO)	R	Regular (FINRA Open) (Eligible for BBO)	U	Slow Quote Due to Liquidity Replenishment Point (LRP), or Gap Quote on Both the Bid and Offer Sides (Not eligible for BBO)	W	Slow Quote Due to Set Slow List on Both the Bid and Offer Sides (Eligible for BBO)	4	On Demand Intra-Day Auction (Not eligible for BBO)
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FIELD DESCRIPTIONS

Field Name	Length	Description
Round Lot Bid Price	8	<p>8 Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Optionally set to zero.</p> <p>Represents the highest protected bid price for a Participant at a particular time for a security.</p>
Round Lot Bid Size	4	<p>4 Integer. Integer has a maximum size of 4,294,967,295 Optionally set to zero.</p> <p>Identifies the number of shares for a symbol rounded down to the nearest multiple of its Round Lot Size. As an example, for a symbol with round-lot size of 40, Round Lot Bid Size can be in multiples of 40 i.e. 40, 80, 120 and so on.</p>
Round Lot Offer Price	8	<p>8 Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758. Optionally set to zero.</p> <p>Represents the lowest protected offer price for a Participant at a particular time for a security.</p>
Round Lot Offer Size	4	<p>4 Integer. Integer has a maximum size of 4,294,967,295 Optionally set to zero.</p> <p>Identifies the number of shares for a symbol rounded down to the nearest multiple of its Round Lot Size. As an example, for a symbol with round-lot size of 40, Round Lot Offer Size can be in multiples of 40 i.e. 40, 80, 120 and so on.</p>

FIELD DESCRIPTIONS

Field Name	Length	Description										
Reserved	1	Space-filled. Field is reserved for future use.										
Retail Interest Indicator	1	<p>Char.</p> <p>When Retail Price Improvement (RPI) interest is priced better than the Protected Best Bid or Offer (PBBO) by a minimum of \$0.001, an indication of interest on the Bid, Offer, or both the Bid and Offer will identify that interest will be eligible to interact with incoming Retail Order interest.</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Retail Interest Indicator Not Applicable</td> </tr> <tr> <td>A</td> <td>Retail Interest on Bid Quote</td> </tr> <tr> <td>B</td> <td>Retail Interest on Offer Quote</td> </tr> <tr> <td>C</td> <td>Retail Interest on both the Bid and Offer Quotes</td> </tr> </tbody> </table>	Code	Value	Space	Retail Interest Indicator Not Applicable	A	Retail Interest on Bid Quote	B	Retail Interest on Offer Quote	C	Retail Interest on both the Bid and Offer Quotes
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Round Lot Size	2	Short. Round-lot size for a symbol can consist of 1, 10, 40 or 100 shares.										
Security Symbol	11	<p>Char [11]. Left justified, space filled.</p> <p>Contains the security symbol. Suffixes start with one of the following characters with no embedded spaces: (1) ASCII Period (.), (2) lower case p, (3) lower case r, or (4) lower case w.</p> <p>Note: CQS will allow for a base or root symbol to consist of from one (1) up to six (6) characters with the remaining characters in the security symbol field available for possible suffixes.</p>										
Settlement Condition	1	<p>Char.</p> <p>Identifies the settlement condition for a security.</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Regular Way Settlement</td> </tr> <tr> <td>A</td> <td>Cash (only) Settlement</td> </tr> <tr> <td>B</td> <td>Next Day (only) Settlement</td> </tr> </tbody> </table>	Code	Value	Space	Regular Way Settlement	A	Cash (only) Settlement	B	Next Day (only) Settlement		
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FIELD DESCRIPTIONS

Field Name	Length	Description								
Short Sale Restriction Indicator	1	<p>Char.</p> <p>Identifies whether a Short Sale Restriction is in effect. A Short Sale Restriction is to be in effect if a security's price decreases by 10% or more from the previous day's closing price. Once activated, the Short Sale Restriction will remain in effect for the remainder of the day as well as the following day, unless deactivated.</p> <table border="1" data-bbox="768 632 1404 823"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Space</td> <td>Short Sale Restriction Not in Effect</td> </tr> <tr> <td>A</td> <td>Short Sale Restriction Activated</td> </tr> <tr> <td>C</td> <td>Short Sale Restriction Continued</td> </tr> </tbody> </table> <p>Note: Short Sale Restriction Indicator values of A and C are provided on the Snapshot when Short Sale Restriction is in effect for a security.</p>	Code	Value	Space	Short Sale Restriction Not in Effect	A	Short Sale Restriction Activated	C	Short Sale Restriction Continued
Code	Value									
Space	Short Sale Restriction Not in Effect									
A	Short Sale Restriction Activated									
C	Short Sale Restriction Continued									
Test	1	<p>Char.</p> <p>Identifies whether the security symbol is a test symbol</p> <table border="1" data-bbox="774 1066 1252 1192"> <thead> <tr> <th>Code</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Not a test symbol</td> </tr> <tr> <td>1</td> <td>Test symbol</td> </tr> </tbody> </table>	Code	Value	0	Not a test symbol	1	Test symbol		
Code	Value									
0	Not a test symbol									
1	Test symbol									
Upper Limit Price Band	8	<p>Long. Long have implied 6 decimal places and a maximum price of \$92,233,720,368.547758.</p> <p>It represents the upper price band value for a security.</p> <p>When the Upper Limit Price Band field is set to zero, it identifies that the Price Bands are not in effect for a security.</p>								

5.0 Document Version History

Version	Date	Description
3.2	05/18/2026	<ul style="list-style-type: none"> Updated the Symbol Reference Data Message to include ETP Field Updated Consolidated Snapshot Message to include Overnight Price Band values in the existing fields during Extended Trading Hours Updated Halt Reason Code 'A' description under Field Descriptions Renamed Nasdaq BX to Nasdaq Texas
3.1	01/29/2026	<ul style="list-style-type: none"> Updated Symbol reference Data Message to populate symbol MPI value Added Participant Code for Texas Stock Exchange
3.0	08/06/2025	<ul style="list-style-type: none"> Added new Odd Lot Quote Snapshot Message (Category R Type O) Added new Consolidated Snapshot Message (Category R Type A) Discontinued current Consolidated Snapshot Message (Category R Type C) which is being replaced by the new Category R Type A message Updated Short Sale Restriction field to provide states of A (Activated) and C (Continued) when SSR is in-effect
2.1	06/06/2025	<ul style="list-style-type: none"> Added Participant ID 'G' for 24X National Exchange LLC
2.0	05/02/2025	<ul style="list-style-type: none"> Added Symbol Reference Data Message Updated Bid and Offer size fields across messages to represent value in shares instead of lots Renamed NYSE Chicago to NYSE Texas
1.0	01/21/2022	Initial Document Version