



# US Equity/Options Symbology Reference

Version 1.4.0

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## **1 Introduction**

### **1.1 Overview**

The BATS US Equity/Options Symbology Reference describes BATS support of various symbology formats for both equity and options markets.

## 2 US Equity Symbology

### 2.1 Symbology for CQS Symbols

Type	SIAC/CQS Suffix	Exchange/CMS Suffix	BATS Suffix
Preferred	p	PR	-
Preferred Class "A" †	p <b>A</b>	P <b>RA</b>	- <b>A</b>
Class "A" †	/ <b>A</b>	<b>A</b>	. <b>A</b>
Warrants	/WS	WS	+
Warrants Class "A" †	/WS/ <b>A</b>	WS <b>A</b>	+ <b>A</b>
When Distributed	/WD	WD	\$
Preferred When Distributed	p/WD	PRWD	-\$
Preferred Class "A" When Distributed †	p <b>A</b> /WD	P <b>RA</b> WD	- <b>A</b> \$
Called	/CL	CL	*
Class "A" Called †	/ <b>A</b> /CL	<b>A</b> CL	. <b>A</b> *
Preferred Called	p/CL	PRCL	-*
Preferred "A" Called †	p <b>A</b> /CL	P <b>RA</b> CL	- <b>A</b> *
Emerging Company Marketplace	/EC	EC	!
Partial Paid	/PP	PP	@
Convertible	/CV	CV	%
Convertible Called	/CV/CL	CVCL	%*
Class "A" Convertible	/ <b>A</b> /CV	<b>A</b> CV	. <b>A</b> %
Preferred Class "A" Convertible	p <b>A</b> /CV	P <b>RA</b> CV	- <b>A</b> %
Rights	r	RT	^
Units	/U	U	=
When Issued	w	WI	#
Rights When Issued	rw	RTWI	^#
Preferred When Issued	pw	PRWI	-#
Preferred "A" When Issued †	p <b>A</b> w	P <b>RA</b> WI	- <b>A</b> #
Class "A" When Issued †	/ <b>A</b> w	<b>A</b> WI	. <b>A</b> #
Warrant When Issued	/WSw	WSWI	+#
Test	/TEST	TEST	~

† While Class examples in table are represented by Class "A" subordinate issues, any Class in the range of A-Z (Class "U" is generally avoided due to conflicts with the Unit Symbology Suffix) will be allowed. Replace all "A" references with appropriate Class type for the appropriate Symbology.

## 2.2 Market Data Symbology

The symbology for PITCH and TOP use different message structure formats (e.g. short vs. long) to provide support symbols of varying lengths. Refer to the appropriate technical specification for full details.

Subordinate issues will be represented on all BATS proprietary market data feeds using BATS Suffix Symbology.

## 2.3 Order Entry Symbology

For both BOE and FIX order entry, you may send the entire BATS formatted symbol including BATS suffix in *Symbol* (tag 55 in FIX)

-OR-

Send the root prefix in *Symbol* and either the CQS or CMS suffix in *Symbol/Sfx* (tag 65 in FIX).

BATS does not require conversion of NASDAQ-listed securities as they are limited to 5 characters.

### 3 US Options Symbology

BATS Options uses an OSI compliant symbology. Order entry is available in BOE or FIX. Market data is available only via Multicast PITCH. Multicast PITCH uses a 6 character base 62 compressed ID which maps to the OSI symbol. More information on BATS Multicast Pitch is available at:

[http://www.batstrading.com/resources/membership/BATS\\_MC\\_PITCH\\_Specification.pdf](http://www.batstrading.com/resources/membership/BATS_MC_PITCH_Specification.pdf).

#### 3.1 BOE/FIX <> OSI Map

OSI Data Element	Options Root	Yr.	Mo.	Day	C/P	Dollar Strike	Decimal Strike
[OSI Size]	[6]	[2]	[2]	[2]	[1]	[5]	[3]
FIX Tag	55	200		205	201		202
FIX Format	[A] – [ZZZZZZ]	[YYYYMM]		[DD]	[0/1]		0-99999.999
BOE Field	Symbol	MaturityDate			PutOrCall		StrikePrice
BOE Format	[A] – [ZZZZZZ]	[YYYYMMDD]			[0/1]		0-99999.999

The options root *typically* uses equity root symbol as discussed above. In cases of where the OCC provides an underlying ID map, BATS will support the OCC mapped ID.

### 4 Support

Please e-mail questions or comments regarding this reference to [tradedesk@batstrading.com](mailto:tradedesk@batstrading.com).

BATS US Equity/Options  
Symbology Reference (Version 1.4.0)

## Revision History

Document Version	Date	Description
1.0.0	12/03/08	Reference table located in multiple specs consolidated to a single document.
1.1.0	10/05/09	Addition for BATS Options
1.2.0	12/02/09	Converted to new specification template. Corrected Rights, When Issued, Rights When Issued and Preferred When Issues CQS symbology. First character was incorrectly referenced as upper case.
1.3.0	02/09/10	Corrected type in Section 3.1.
1.4.0	11/29/11	Updated CQS Symbology table and noted Class types for any given subordinate issue may be in the range of A-Z. Updated Market Data Symbology section. Added references to BOE (Binary Order Entry).