

**NYSE AMEX OPTIONS / NYSE ARCA OPTIONS
GEMS BATCH / ONLINE EXTRACT LAYOUT (700 BYTES)**

Field#	Field Name	Length	Position	Type	OCC field (if available)	Field Description
1	Extract Number	10	1	N*	NA	Transmission Sequence Number
2	OCC Sequence Number	10	11	N*	Exchange Matched Trade Clearing Sequence Number	Uniquely identifies the trade in OCC; it is assigned by the Exchange.
3	Event ID	32	21	A/N	NA	Uniquely identifies an executed order. It is assigned by the Exchange.
4	Execution ID	20	53	A/N	NA	Uniquely identifies a trade (execution of buy and sell orders). It is assigned by the Exchange.
5	Original Execution ID	20	73	A/N	NA	Allows multiple adjustments on 1 trade or re-allocation to be grouped.
6	Exchange Code	2	93	A/N	NA	Exchange identifier. 02 = AMEX; 04 = ARCA
7	Entry Date	26	95	N	Activity date (MMDDYYYY only)	The date the trade was entered or adjusted in GEMS. Format: YYYY-MM-DD HH:MM:SS.SSS SSS** (See note below relative to PTAs ***)
8	Trade Date	26	121	N	As Of Date + Execution Time	The as-of date in which the trade is assumed to be in effect. Format: YYYY-MM-DD HH:MM:SS.SSS SSS** (See note below relative to PTAs ***)
9	Action Type	1	147	A	NA	Status of the trade: A = Added Clearing Record D = Deleted Clearing Record (only available for Online Extract and not Batch Extract).
10	Security Symbol	15	148	A/N	Symbol (6 chars only)	Underlying Security.
11	Expiration Date	8	163	N	Expiration Year, Expiration Month, Expiration Day	The date when the Option expires. Format: YYYYMMDD
12	Call Put	1	171	A	Call/Put Code	An alphabetic field that identifies the type of transaction. C = Call P = Put

Field#	Field Name	Length	Position	Type	OCC field (if available)	Field Description
13	Strike Price	9	172	N*	Strike Price Dollar, Strike Price Decimal	The strike price of the option. The dollar amount occupies the first five positions and the decimal amount the next 4 positions. Format: \$\$\$\$\$ddd
14	Buy/Sell Indicator	1	181	N	NA	The side of the trade. 1 = Buy 2 = Sell Fix Tag 54
15	Original Amount	10	182	N*	NA	Number of contracts ordered.
16	Trade Volume	10	192	N*	Trade Quantity	Number of contracts traded.
17	Premium	18	202	N*	Trade Price Dollar, Trade Price Decimal	Price of the option traded. Format: \$\$\$\$\$\$\$\$\$ddddd
18	Open Close	1	220	A	Open/Close Code	Position as either open or closed. C = Close O = Open
19	Executing TPID	8	221	A/N	NA	The firm acronym assigned by the Exchange.
20	Clearing TPID	8	229	A/N	NA	The clearing firm acronym assigned by the Exchange.
21	Executing Firm Symbol	6	237	A/N	NA	Firm's billing symbol
22	Clearing Firm Symbol	6	243	A/N	NA	Clearing firm's billing symbol
23	OCC Clearing Number	5	249	N*	Sell or Buy Side Clearing Member	OCC clearing number for the firm through which the trade clears.
24	Executing Domain	32	254	A/N	NA	Firm buying or selling the option.
25	MM Account ID	4	286	A/N	Sell or Buy Side Account Number	The local or away exchange market maker/specialist or provided by the firms.
26	Floor Broker	10	290	A/N	Sell or Buy Side Executing Broker	Individual (Floor broker) who executes the trade on the trading floor.
She27	CMTA	5	300	A/N	Sell or Buy Side CMTA Give-up Clearing Member	OCC clearing number on whose behalf the trade was executed.
28	Optional Data	32	305	A/N	Sell or Buy side Optional Data (16 chars only)	Information provided by the firm and passed to the OCC. Fix Tag 526.

Field#	Field Name	Length	Position	Type	OCC field (if available)	Field Description
29	Customer/Firm Capacity	1	337	A	NA	The trading capacity provided: 0 = Customer 1 = Firm 2 = Broker Dealer (BD) 3 = Market Maker (MM) 8 = Professional customer Fix Tag 204
30	Execution Type	1	338	A	NA	How the trade was executed: B = Liquidity Adding Trade (Resting Order) C = Manual Trade Add - GEMS F = Liquidity Removing Trade (Non-resting Order) H = MM Side of Open Outcry Trade S = Floor Broker – Single Leg Trade Y = Floor Broker – Multi-Leg Trade X = OX Crossing Trade M = Complex Orders Stock + Options O = Opening Auction Trade T = Complex Orders Options Only
31	Cross Type	1	339	A	NA	F = Facilitation S = Sollicitation P = PI Auction Q = QCC
32	Exposed/Covered	1	340	A	NA	E = Exposed C = Covered
33	Account Type	1	341	A	Sell or Buy Side Account Type	Clearing account type. C = Cust F = Firm M = MM
34	Client Order ID	50	342	A/N	Sell or Buy Side Branch Sequence (20 chars only)	Order ID assigned by the firm and sent to the Exchange for execution. Fix Tag 11
35	Customer ID	50	392	A/N	Sell or Buy Side – Account Number (10 chars only)	Customer data that is a pass-through to the exchange. Customers pass it via Fix Tag 1.
36	Related TPID	8	442	A/N	NA	TPID of the representing firm. For a Floor Broker trade, this will be the TPID of the Floor Broker firm.
37	Non-ATP/OTP Market Maker Indicator	1	450	A/N	NA	Space = Cust/Firm (not Market Maker) A = Away MM (non-ATP/OTP MM Symbol) L = Local MM (ATP/OTP MM Symbol)
37A	Liquidity Flag	1	451	A	NA	A = Add Liquidity; R = Remove Liquidity. O = Opening Auction, X = Routed Order, Blank = Floor Trade

Field#	Field Name	Length	Position	Type	OCC field (if available)	Field Description
37B	Time in Force	1	452	A/N	NA	0 = Day; 1 = GTC; 3 = IOC
37C	Complex Trade ID	20	453	N	NA	Complex Trade Id that can be used to group all legs of the single complex order execution.
37D	Filler	77	473	A	NA	filler
38	Contra Clearing TPID	8	550	A/N	NA	The contra clearing firm acronym assigned by the Exchange.
39	Contra OCC Number	5	558	N*	Sell or Buy Side Clearing Member	The Contra clearing firm OCC number.
40	Contra MM Account ID	4	563	A/N	Sell or Buy Side Account Id	The local or away exchange market maker/specialist on the contra side
41	Contra Floor Broker	10	567	A/N	Sell or Buy Side Executing Broker	The individual buying or selling the trade.
42	Contra Executing TPID	8	577	A	NA	The contra firm acronym assigned by the Exchange.
43	Contra Executing Domain	32	585	A/N	NA	The firm buying/selling a trade.
44	Contra Execution Type	1	617	A	44	How the trade was executed: B = Liquidity Adding Trade (Resting Order) C = Manual Trade Add - GEMS F = Liquidity Removing Trade (Non-resting Order) H = MM Side of Open Outcry Trade S = Floor Broker – Single Leg Trade Y = Floor Broker – Multi-Leg Trade X = OX Crossing Trade M = Complex Orders Stock + Options O = Opening Auction Trade T = Complex Orders Options Only
45	Contra Customer/Firm Capacity	1	618	A	NA	The trading capacity provided: 0 = Customer 1 = Firm 2 = Broker Dealer (BD) 3 = Market Maker (MM) 8 = Professional customer Fix Tag 204
46	Contra Open/Close	1	619	A	Open/Close	Position as either open or closed. C = Close O = Open

Field#	Field Name	Length	Position	Type	OCC field (if available)	Field Description
47	Contra Account Type	1	620	A	Sell or Buy Side Account Type	Clearing account type. C = Customer F = Firm M = MM
48	Contra Routed Exchange Code	1	621	A	NA	A = AMEX B = BOX C = CBOE E = EDGX H = ISE2 I = ISE J = MERCURY M = MIAX Q = NDQ T = NASD P = ARCA W = C2 X = PHLX Z = BATS
49	Contra Liquidity Flag	1	622	A	NA	A = Add Liquidity; R = Remove Liquidity O = Opening Auction, X = Routed Order, Blank = Floor Trade
49A	Contra Time In Force	1	623	A/N	NA	0 = Day; 1 = GTC; 3 = IOC
49B	Contra Cross Type	1	624	A	NA	F = Facilitation S = Solicitation P = PI Auction Q = QCC
49C	Contra Covered/Exposed	1	625	A	NA	C = Covered; E = Exposed
49D	Filler	75	626	A	NA	

* **Note that where applicable, numeric fields will be padded with zeroes**

** **GEMS will ultimately carry microseconds following planned upgrades to upstream systems – until then these will be padded with zeroes.**

*****Note that trades resulting from Post Trade Allocation messages (PTAs) via FIX for CUBE orders will reflect the time of the Post Trade Allocation not the original execution time. Firms needing to match off the PTAs with their original executions can utilize the Original Execution ID (Field #5) for that purpose.**