

Algo-Logic Systems Launches Fourth Generation FPGA Accelerated CME Tick-To-Trade System at the FIA Expo 2017

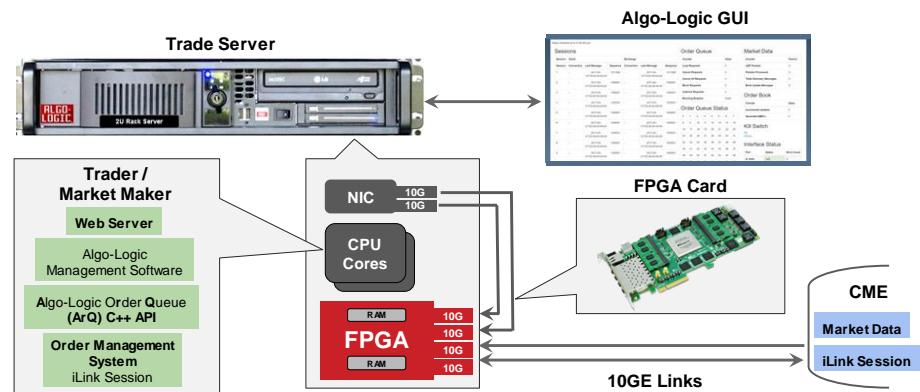
The sub-microsecond latency CME Tick-To-Trade system includes new triggers and features

San Jose, California, October 11, 2017 – Algo-Logic Systems will announce the release of their fourth generation Field Programmable Gate Array (FPGA) accelerated CME Group (CME, CBOT, COMEX, and NYMEX) Tick-To-Trade (T2T) System at the FIA Expo October 17th through the 19th, 2017 in Chicago, Illinois. The sub-microsecond trading solution is ideal for latency sensitive trading firms that need deterministic response times to market opportunities. The CME T2T System is built using Algo-Logic’s internally developed, pre-built FPGA IP cores that significantly reduce time-to-market. Unlike other FPGA accelerated trading systems, Algo-Logic’s 4th gen T2T System supports multiple new pre-built triggers for mass quote cancel, mass action request, and hedging as well as the ability to modify order fields in FPGA Logic. At the FIA Expo, software partner Rival Systems will demonstrate the Rival Electronic Eye, Auto-Quoter, and Rival API that leverage Algo-Logic’s accelerated mass-quote cancel trigger.

The breakthrough system can be used by traders and market makers to instantly react to changing market conditions by updating or cancelling quotes based on latency sensitive market data. The system can also be used to quickly modify legs of a spread and supplement existing complex trade strategies in software with logic in FPGA hardware.

Deep sub-microsecond wire-to-wire latency is achieved by processing CME MDP 3.0 tick data on a 10 Gigabit/second (10G) Ethernet link by the integrated feed handler, building the CME Futures & Options (F&O) Order Book from incremental tick data, detecting trading opportunities, and placing trades in the form of FIX orders over the 10G TCP Endpoint in FPGA Logic. The system is implemented on a standard FPGA card that fits into a 1U rackmount server.

The CME T2T System is seamlessly managed through a software Application Programming Interface (API). A low latency C++ software API allows traders and market makers to specify trigger conditions and preload orders into the FPGA. Device parameters, system status, log messages, and event notifications can be monitored from a Graphical User Interface (GUI) or RESTful APIs. Algo-Logic CME T2T system API has been integrated with the pre-built Order Management System (OMS) from Rival Systems or can be used with a client’s existing OMS.



Components of Algo-Logic’s CME T2T System include:

Pre-Built IP Cores in FPGA Logic:

- **Ultra Low Latency 10G Ethernet PHY+MAC:** *Lowest full round trip latency of 89.6 nanoseconds*
- **CME Feed Handler:** *Processes MDP3.0 market data with A/B faster feed arbitration*
- **CME Futures & Options Order Book:** *Provides L2 snapshots containing Best Bid Offer (BBO)*
- **FIX Message Processing:** *Modifies and delivers FIX messages directly to CME iLink sessions*
- **10G TCP Endpoint:** *Fully offloads Transmission Control Protocol (TCP) to FPGA logic*
- **Parametrized Triggers:** *Mass quote cancel, mass action request, and hedging*

Customizable Cores in FPGA Logic:

- **Pre-Trade Risk Checks:** *Supports implementation of client provided pre-trade risk checks*
- **Customizable Triggers:** *Built to user provided specs*

Software APIs:

- **C++ API:** *Pre-load trigger parameters and orders*
- **GUI and RESTful Control Software:** *Parameters for configuration, status monitoring, and event logging*

All of the above components are available in a turn-key server that includes Intel® Xeon CPU, FPGA Card, and 10GE NIC. Algo-Logic can drop ship the CME T2T System(s) to co-location in Aurora, IL.

About Algo-Logic Systems:

Algo-Logic Systems Inc., is a recognized leader that provides Gateway Defined Networking® products and solutions running on FPGA devices complemented with open APIs that lower latency in financial trading systems.

Price and availability:

Email sales@algo-logic.com, call (408) 707-3747 or visit www.algo-logic.com