

FPGA Accelerated CME Tick-to-Trade

Powered by Xilinx Alveo U50 with HLS



INTRODUCTION

Algo-Logic Systems' 5th generation FPGA accelerated Gateway Defined Networking® (GDN) CME Tick-To-Trade (T2T) System is a sub-500 nanosecond trading solution. It supports all CME Group exchanges including CBOT, COMEX, and NYMEX. The solution is built using Algo-Logic Systems' internally developed, pre-built IP cores that significantly reduce time-to-market and provide flexibility for customizations.

KEY BENEFITS

- Ultra Low Tick-to-Trade Latency of <500nsec
- Quote Cancellation
- On Fill Triggers
- Turbo Spreading
- Supports customized Triggers through HLS utilization
- Fast Time to Market
- C++ API and control software

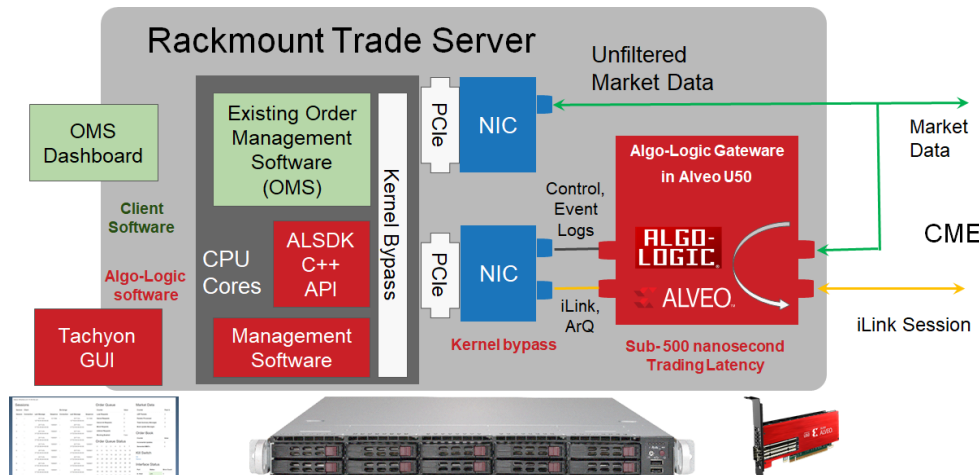
SOLUTION OVERVIEW

The Algo-Logic's CME Tick-to-Trade System built on the Alveo U50

SOLUTION BRIEF



- Industry Leading Low Latency
- Fast Time to Deployment
- Augments existing Order Management System
- High Level Synthesis (HLS) enables customize Triggers



Adaptable. Intelligent.

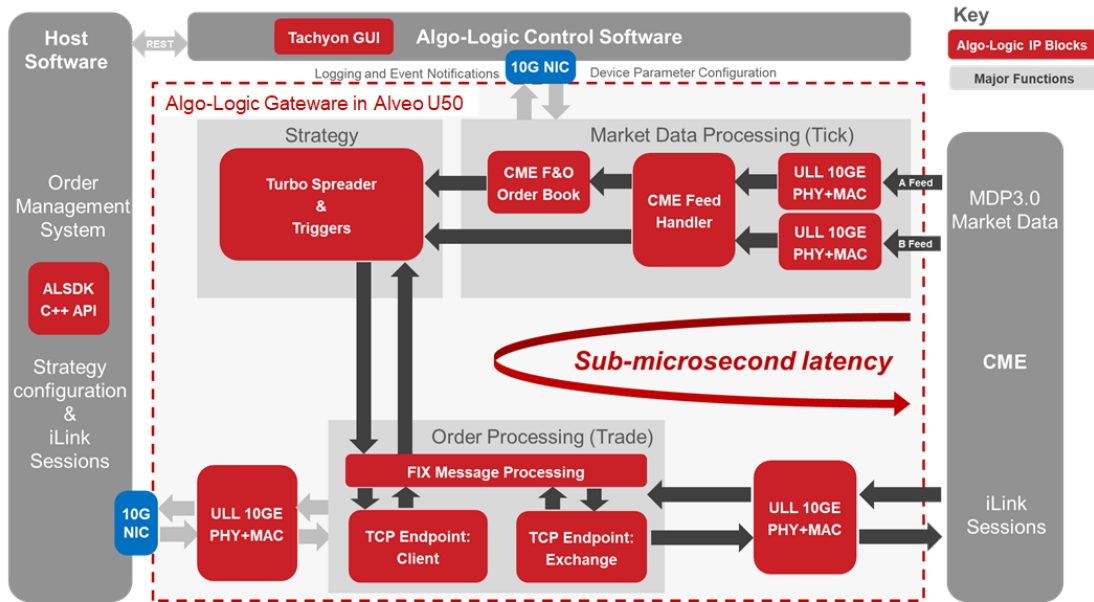
FPGA Accelerated CME Tick-to-Trade

Powered by Xilinx Alveo U50 with HLS



CME Tick-To-Trade System Features and Base Specifications

FPGA Accelerated Trading	Multi-leg turbo spreading, quote cancel, and on fill triggers
Pre-Built IP Cores	CME Feed Handler, CME Futures & Options Order Book, 10G TCP Endpoint, ULL 10GE PHY+MAC
Multicast Channels for Market Data	Up to 16
Order Book Configuration	20 security IDs with L2 snapshots containing BBO, all 10 book levels
FIX Sessions and Order Queues	32 and 64 respectively, with 2 Kbyte per queue message size limit
Turbo Spreading in Logic	Fast arbitrage across multiple legs
Configurable Number of lean Legs	2 with full support for quoting one or two legs of a spread or strategy
Logging and Event Notifications	FIX logs, Raw Market Data logs, CME Order Book BBO, Trigger events
FPGA Device and Platform	Xilinx UltraScale+ with 10 Gbps Ethernet on Alveo U50



TAKE THE NEXT STEP

Learn more about [Alveo Accelerators](#)

Learn more about – www.algo-logic.com

Reach out to Algo-Logic Sales – sales@algo-logic.com



Adaptable. Intelligent.