



About us

Celerix focuses on building trading systems where nanosecond level processing time can make a difference. We leverage FPGA technology for enabling ultra-low latency jitter free processing that are typical to hardware based execution.

We offer Performance Engineering Services that includes,

- ❖ Custom FPGA module/system development based on client needs and feasibility
- ❖ Technology Selection for low latency and high throughput systems
- ❖ Porting of the existing systems (like Market data module, Trading Strategies, Computation engines etc.) to FPGA, based on feasibility
- ❖ Integration of COTS (Commercial Off-The-Shelf) FPGA solutions with legacy systems

Solutions Developed

We have developed trading solutions that can be broadly classified as Offload Engines and Tick-to-trade systems.

Offload Engines

These solutions help offload computationally intensive tasks in the tick to trade path to FPGA for reducing the latency and improving its determinism.

- Order Book does filtering, processing and price level consolidation of ticks
- Order Handler & RMS does processing of order requests as per Exchange's specification, while ensuring compliance with Risk Management System [RMS]

Tick to Trade Systems

These solutions offer complete tick to trade path on FPGA avoiding the host for achieving nanosecond level deterministic pin to pin tick to trade latencies. Host would be used for configuring and monitoring the FPGA execution.

- Impetus would have the complete strategy processing on FPGA, with values for strategy parameters (say the spread and max quantity to be traded) set from software. In the tick to trade path, it would do the order book processing, evaluation of spread, Order Handling and RMS.
- Market Triggers provides complete trade execution processing on FPGA. Trading Strategy residing on software would configure 1) The condition that must be matched by incoming market data 2) Order that must be sent on condition being met.

Markets Supported

- ❖ Chicago Mercantile Exchange
- ❖ National Stock Exchange, India
- ❖ Bombay Stock Exchange, India
- ❖ Osaka Securities Exchange
- ❖ Tokyo Stock Exchange
- ❖ Eurex Exchange
- ❖ B3(Formerly BM&FBOVESPA) , Brazil

As global financial markets become increasingly competitive, electronic trading strategies are only as good as their underlying data and infrastructure.

Reach us at contact@celerixtech.com to know more on how we can help.

