

The Ultimate Trading Machine

World Record 98ns Tick-to-Trade Latency Based on STAC-T0™ Benchmark *



STAC-T0 measures the time between transmission of simulated UDP market data to the system and receipt of simulated TCP orders from it, without the system performing any trading logic or market-specific protocol handling.

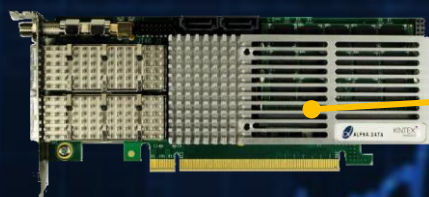
Intel® Xeon® Scalable (Skylake) Processors

Intel Xeon Gold processors offer monumental leaps in I/O, memory, storage, and network technologies.



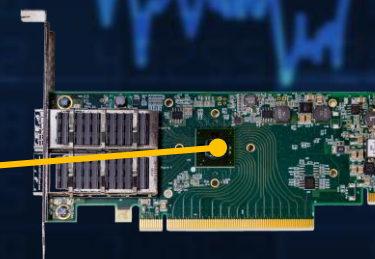
LDA Technologies LightSpeed TCP™ Cores

An ultra-light, ultra-high-speed, and ultra-low-latency FPGA-based distributed TCP offload with processing latencies under 20ns and thousands of TCP connections.



Solarflare XtremeScale™ Software Defined NIC

Leverages the Delegated Send™ capability of the Onload™ kernel bypass-enabled NIC--and Solarflare Application Nanosecond TCP Send (ANTS) technology--to maintain TCP connections that delivery blazingly fast network performance.



Xilinx Kintex® UltraScale™ FPGAs

Kintex UltraScale FPGAs are optimized for best-in-class performance per watt fabric in 10G to 100G networking applications.

Penguin Computing Relion® Server

Optimal performance through carefully selected and vetted processors, memory, bus, storage, and other options, architected into a 1U 19" EIA traditional form-factor.

Improving tick-to-trade latency is critically important in electronic trading because it means improving the queue position of trades, which increases the probability that trades will be executed. The Ultimate Trading Machine server configured by Penguin Computing, Solarflare, LDA and XILINX achieved 98-nanosecond tick-to-trade networking latency in STAC-T0 benchmark testing.



* Maximum value reported for STAC-T0.β1.MEDRATE.A.ACTIONABLE. See the full STAC Report™ at www.STACresearch.com/news/2017/10/13/SFC170831.