# AMD Alveo™ X3 Series

## Empowering Next-Generation Trading with Unmatched Speed and Intelligence

**AMD ALVEO**

## OVERVIEW

Supercharge your trading strategies with the **Accelerated Algorithmic Trading (AAT) Accelerator & System** — a cutting-edge turnkey solution engineered to meet the relentless demands of today's financial markets. Powered by FPGA acceleration and ultra-low-latency IP core technology, the AAT System is the ultimate tool for Brokers, Exchanges, Market Data Vendors, Sell-Side Vendors, and Proprietary Traders seeking a definitive competitive edge.

## HIGHLIGHTS

> **Ultra-Low Latency Performance:** Achieve lightning-fast market access and execution with industry-leading IP cores including LL10GEMAC-IP, UDP10GRx-IP, and TOE10GLL-IP — purpose-built for FinTech and High-Frequency Trading (HFT) applications.
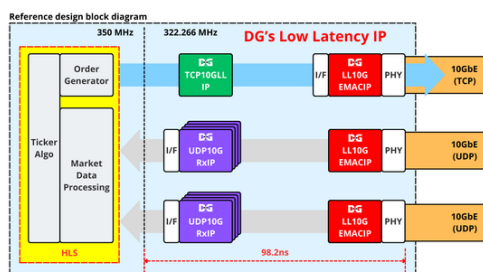


*Figure 1: Accelerated High Frequency Trading (HFT) reference design*

> **Customizable, Future-Proof Architecture:** Built with AMD Alveo X3 Series FPGA accelerator cards, offering unparalleled programmability to adapt your trading algorithms and strategies as markets evolve.

> **Turnkey Solution, Ready to Deploy:** Pre-installed with AAT Demo Applications and validated hardware configurations — dramatically reducing time-to-market and operational complexity.
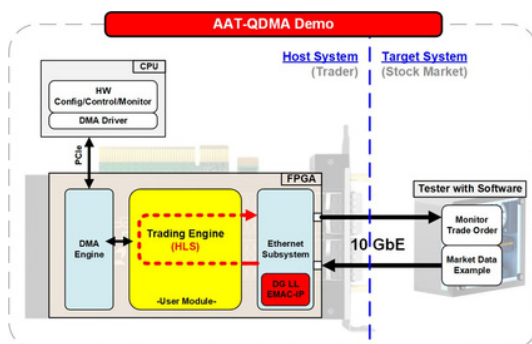


*Figure 2: Overview of Accelerated Algorithmic Trading with QDMA Demo (AAT-QDMA)*

## Turnkey System Specification (TKAS-D2101)

> CPU: Intel® Core™ i7/i5

> RAM: 32GB | SSD: 1TB M.2 PCIe 4.0

> FPGA Accelerator: AMD Alveo X3522PV (or optional U50, U250)

> Form Factor: Tower Case with Advanced Cooling System

> Pre-installed: AAT Demo Design with LL10GEMAC-IP and QDMA

*\*Specifications are subject to change without notice*

## TARGET USERS

> Brokers

> Exchanges

> Market Data Vendors

> Sell Side Vendors

> Proprietary Traders

## USE CASES

> Tick-to-Trade

> Algorithmic Trading

> A/B Line Arbitration

> TCP Offload

> Market Data Accelerators

> Market Data Gateways

> Pre-Trade Risk Analysis

> Smart Order Routing

> FIX Gateway



*Figure 3: Turnkey Accelerator Systems*