

PRODUCT BRIEF

AMD SOLARFLARE™ X4 SERIES LOW-LATENCY ETHERNET ADAPTERS



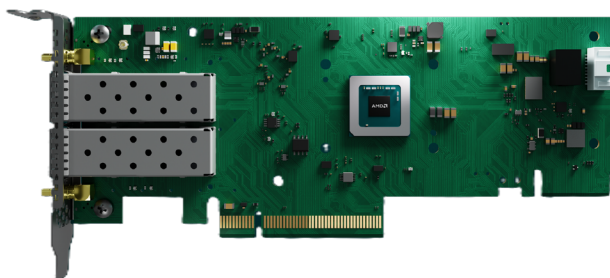
OVERVIEW

For 15+ years, the combination of AMD Solarflare low-latency Ethernet adapters and Onload™ family software have been used in virtually all facets of Capital markets such as leading-edge exchange systems, deterministic brokerage services, and sophisticated algorithmic trading applications.

The two X4 variants, supported by the Onload product family, provide exceptional performance, accelerated speed, backward compatibility, and feature enhancements.

AMD SOLARFLARE™ X4522

- Dual SFP56
- 2x 1/10/15/50GE



AMD SOLARFLARE™ X4542

- Dual QSFP56
- 4x 1/10/25GE
- 2x 40/50/100GE



KEY FEATURES

- PCIe® Gen5 x8 NIC
- Supports 1/10/25/40/50/100G Ethernet
- Support for FEC and non-FEC interfaces
- <25W, passively cooled
- HHHL form factor
- Time synchronization and PTP
- Backward compatible with Onload™
- NIC sideband management
- Programmable packet processing
- OpenOnload™ and EnterpriseOnload™

CUSTOM DESIGNED LOW-LATENCY ASIC

- PCIe® Gen5 x8 | CXL
- Up to 53G PAM4 support
- Express data path for low-latency applications
- Enterprise data path for full-featured applications
- 8K queues & Filters
- 32K RX Descriptors per Queue
- TCAM-based flow classifier
- Secured NIC



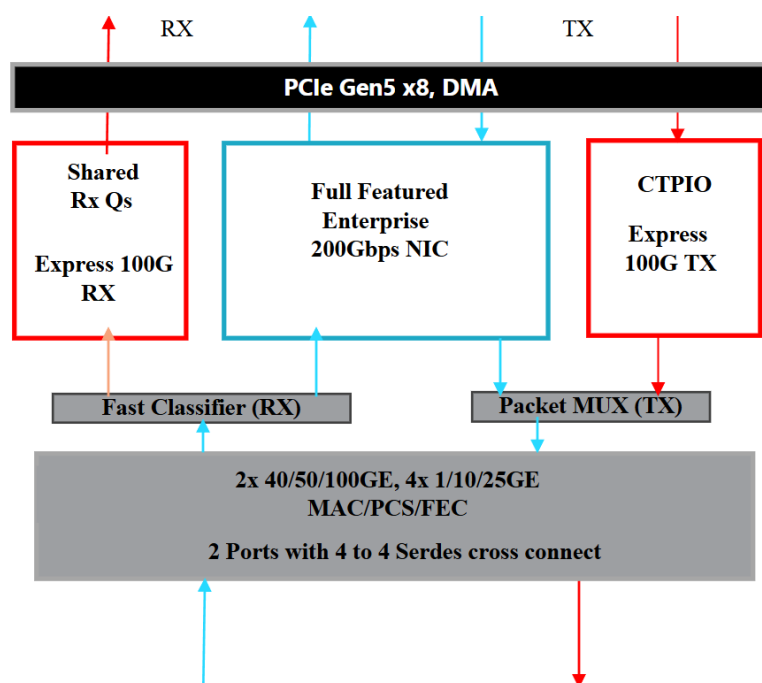
TWO DATA PATHS FOR FLEXIBILITY

Enterprise Data Path

- Low-latency full-featured datapath
- Stateless & Stateful offloads
- Multicast packet replication
- Jumbo frame support

Express Data Path

- Lowest latency datapath with CTPIO
- Up to 128 active CTPIO senders
- Out-of-order delivery without DMA fallback
- Shared receive queues



ORDERING INFORMATION

- X4542-PLUS
- X4522-PLUS

TAKE THE NEXT STEP

Contact your local sales representative or visit us online at [AMD Solarflare™ Ethernet Adapter](#).

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