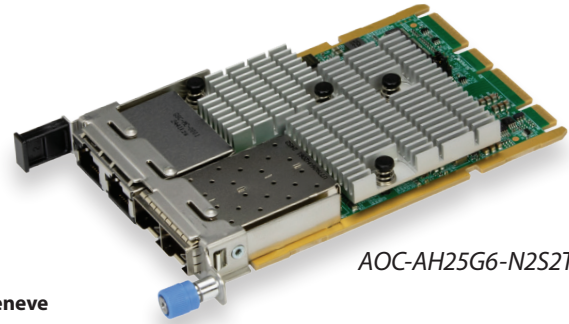


Supermicro® Advanced I/O Modules (AIOM) are designed to deliver a versatile range of networking options. The AOC-AH25G6-N2S2TM is a high-performance hybrid card powered by the NVIDIA CX6-LX controller, offering two 25GbE ports with advanced features such as VXLAN, NVGRE, RDMA, and more ensuring exceptional density, performance, and functionality.

Additionally, this card integrates the Intel E610-XT2 controller, providing two 10GBASE-T ports for enhanced connectivity. With advanced security features, including standards-based cryptographic security, hardware Root of Trust (RoT), and secure communication with management controllers, it strengthens Ethernet security while maintaining high-speed, reliable networking.

## Key Features

- **Form Factor:** Advanced I/O Module (AIOM)
- **Dual Controller:** NVIDIA ConnectX-6 Lx 25GbE / Intel E610-XT2 10GbE
- **Speed Support:** 25GbE and 10GbE
- **Connectors:** Dual SFP28 and 10GBASE-T
- **Host Interface:** PCIe Gen4 x16
- **Networking Capabilities:** RDMA over Converged Ethernet, VXLAN, NVGRE, Geneve
- **Asset Management:** Thermal sensor for monitoring
- **Remote Management:** Network Controller Sideband Interface (NC-SI) for remote management (disabled by default in standby mode)



AOC-AH25G6-N2S2TM

## Specifications

- **General**
  - NVIDIA ConnectX-6 Lx 25GbE controller with dual SFP28 ports
  - Backward compatibility: 10GbE support
  - Intel E610-XAT2 10GbE Controller with dual RJ45 ports
  - Multi-speed support: 5/2.5/1GbE, 10GBASE-T, 100BASE-TX
- **Storage Acceleration (CX6-LX Controller):**
  - NVMe over Fabric offloads for target
  - Storage protocols: iSER, RDMA
  - Support for SMB Direct, NVMe-oF, and more
- **RDMA over Converged Ethernet (CX6-LX Controller):**
  - RoCE v1/v2
  - Zero-Touch RoCE (no ECN, no PFC)
  - RoCE over overlay networks
  - IPsec over RoCE
  - Selective repeat
  - GPUDirect®
  - Dynamically Connected Transport (DCT)
  - Burst buffer offload
- **Management and Control:**
  - SMBus 2.0
  - NC-SI (disabled by default in standby mode)
  - NC-SI, MCTP over SMBus and PCIe - Baseboard Management Controller interface
  - PLDM for Monitor and Control DSP0248
  - PLDM for Firmware Update DSP026
- **Remote Boot:**
  - Remote boot over Ethernet
  - Remote boot over iSCSI
  - UEFI support for x86 and ARM servers environments
  - PXE boot
- **Standards Compliance:**
  - IEEE 802.3ae (10 Gigabit Ethernet)
  - IEEE 802.3by (25G with all FEC modes)
  - IEEE 802.3ad, 802.1AX (Link Aggregation)
  - IEEE 802.3az (Energy Efficient Ethernet, Fast-Wake mode)
  - IEEE 802.3ap (Auto-negotiation and KR startup)
  - IEEE 802.1Q, 802.1P (VLAN tags and priority)
  - IEEE 802.1Qaz (ETS)
  - IEEE 802.1Qbb (PFC)
  - IEEE 802.1Qbg
  - IEEE 1588v2
  - IEEE 1149.1 and IEEE 1149.6 (JTAG)
  - PCI Express Gen 3.0 and 4.0
- **Power Consumption:**
  - Maximum Power: 17W
- **Operating Conditions:**
  - Storage Temperature: -40°C to 70°C (-40°F to 158°F)
  - Storage Humidity: 90% non-condensing relative humidity at 35°C
- **Physical Dimensions:**
  - Card PCB Dimensions: 76mm x 115mm (W x D)

## Availability & Ordering Information:

This product is sold only as part of an integrated solution with Supermicro server systems.

Product Part Number	Bracket Included	Description
AOC-AH25G6-N2S2TM	BKT-0176L	2-port 25 Gigabit and 2-port 10 Gigabit Ethernet Adapter with a 0.5U height bracket