Supermicro Advanced I/O Module (AIOM) Quad Port 25Gb Network Adapter

Supermicro® Advanced I/O Modules (AIOM) are the latest form factor designed to provide a wide range of networking options as well as other I/O technologies. The AOC-A25G-i4SM is one of the most feature rich and low power consumption 25GbE controllers in the market. Based on the Intel Columbiaville E810-CAM1 Ethernet controller with features such as VxLAN, NVGRE, RDMA, and others, it provides unparalleled density, performance, and functionality. The Supermicro® AOC-A25G-i4SM is the most versatile 25GbE controller in the market with the best total cost of ownership for 25GbE deployments in cloud, telco, and enterprise data centers.

Key Features
- Advanced I/O Module (AIOM) Form Factor
- Intel Columbiaville E810-CAM1 25GbE controller
- Support for 25GbE and 10GbE Speed
- Quad Port SFP28 connectors
- PCIe Gen 4.0 (backward compatible to PCI-E 3.0)
- Low Latency RDMA over Converged Ethernet (iWARP and RoCE v2)
- Intel® Ethernet Adaptive Virtual Function (Intel® Ethernet AVF)
- Intel® Ethernet Flow Director – Application Device Queues (ADQ)
- Dynamic Device Personalization (DDP)
- Hardware Root of Trust with Firmware Recovery
- VxLAN, NVGRE and Geneve
- Asset Management Features with thermal sensor
- Network Controller Sideband Interface (NC-SI) for Remote Management

Specifications

- General
  - Advanced I/O Module (AIOM) Form Factor
  - Intel E810-CAM1 25GbE controller
  - Quad Port SFP28
  - Advance Device Queues (ADQ)
  - Dynamic Device Personalization (DDP)

- Converged Storage Network
  - iSCSI
  - SMB Direct
  - iSER
  - NVMe over RDMA (iWARP and RoCEv2)
  - Storage Performance Development Kit (SPDK)
  - NVMe over TCP

- RDMA
  - iWARP
  - RoCEv2

- Management and Control
  - NC-SI over MCTP
  - NC-SI over SMBus
  - MCTP over PCIe
  - BMC
  - PLDM and PLDM based firmware update

- Remote Boot
  - Signed UEFI option ROM compatible with HTTPS boot
  - UEFI PXE Boot

- Precision Clocks Synchronization IEEE 802.3ae 10 Gigabit Ethernet
  - IEEE 1588 (also knows as the Precision Time Protocol (PTP))

- Power Consumption:
  - ACPI Compliant power management
  - Pass through Energy Efficient Ethernet (IEEE802.3az-2010)
  - Maximum: 14W

- Operating Conditions:
  - Storage Temperature: -40 °C to 115 °C

- Physical Dimensions:
  - Card PCB dimensions: 76mm x 115mm (W x D)

Please note that this product is sold only as part of an integrated solution with Supermicro server systems.

Available SKUs

<table>
<thead>
<tr>
<th>SKUs</th>
<th>Bracket Included</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOC-A25G-i4SM</td>
<td>BKT-0159L</td>
<td>4-port 25 Gigabit Ethernet Adapter with a 0.5U height bracket.</td>
</tr>
</tbody>
</table>

Please note that this product is sold only as part of an integrated solution with Supermicro server systems.

www.supermicro.com

February 2022