

Broadcom NetXtreme E-Series 10G Base-T Ethernet Adapter

Supermicro AOC-MTG-b2T features latest Broadcom NetXtreme BCM57416 Ethernet controller that is designed for today's rapid growing datacenter and cloud-scale applications. In small form factor SIOM, it features VXLAN, NVGRE and Geneve along with Broadcom TruFlow technology that enable users to reduce CPU loads and increase VM densities. In addition, NPAR (NIC Partitioning) technology provide flexible connectivity for different networking requirements. The Supermicro AOC-MTG-b2T is a truly exceptional 10GbE Ethernet Adapter for your continuously growing cloud applications and datacenters.

Key Features:

- Super I/O Module (SIOM) Form Factor
- Broadcom® BCM57416 10GbE controller
- Dual RJ45 Connectors
- TruFlow
- NPAR (NIC Partitioning)
- VXLAN and NVGRE
- Asset Management Features with thermal sensor
- RoHS compliant 6/6



AOC-MTG-b2T/b2TM

Specifications

- **General**
 - Super I/O Module (SIOM) Form Factor
 - Broadcom BCM57416 dual-port 10Gbps controller
 - Dual RJ45 connectors
 - TruFlow Technology
 - **Host Interface**
 - PCI-E 3.0 (8GT/s)
 - MCTP over SMBus
 - Function level Rest (FLR) support
 - Message Signal Interrupt (MSI-X)
 - **Networking Features**
 - Jumbo Frames (up to 9600-byte)
 - 802.3x flow control
 - Link Aggregation (802.3ad)
 - Virtual LANs 802.1q VLAN tagging
 - Configurable Flow Acceleration
 - IEEE 1588 and Time Sync
 - vSAN/RDMA
 - **Stateless Offload Features**
 - TCP, UDP, IPv4, IPv6 checksum offload
 - Large Send Offload
 - Receive Segment Coalescing
 - TCP segmentation Offload
 - Large Receive Offload
 - Receive Side Scaling (RSS)
 - Transmit Side Scaling (TSS)
 - **NIC partitioning (NPAR)**
 - 16 Physical Functions
 - QoS per partition
 - Partitioning control via sideband communication
 - Up to 64MAC/VLAN filters per partition
 - Stateless offload configuration per partition
 - VEB/VEPA support
 - **Virtualization Features**
 - NetQueue, VMQueue, and Multiqueue
 - Support for 128 Virtual Functions
 - VXLAN
 - NVGRE
 - Geneve
 - Edge Virtual Bridging (EVB)
 - **Flow Processing**
 - Exact/Wildcard Match Flow Lookup
 - VLAN insertion/deletion
 - NAT/NAPT
 - Mirroring
 - **Data Center Bridging**
 - Priority-based flow control (PFC; IEEE 802.1Qbb)
 - Enhanced transmission selection (ETS; IEEE802.1Qau)
 - Quantized congestion Notification (QCN; IEEE802.1Qaz)
 - Data Center Bridging Capability eXchange (DCBX; IEEE802.1Qaz)
 - 8 traffic classes per port; fully DCB compliant per 802.1Qbb
 - **Manageability**
 - Network Controller Sideband Interface (NC-SI)
 - PXE and iSCSI boot
 - Asset Management with Thermal Sensors
 - **Power Savings**
 - ACPI compliant power management
 - PCI Express Active State Power Management (ASPM)
 - Ultra low-power mode
 - Pass-through Energy Efficient Ethernet (IEEE802.3az-2010)
 - **Power Consumption**
 - Maximum power consumption: 11W
 - **Operating Conditions**
 - Operating temperature: 0°C to 55°C (32°F to 131°F)
 - 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: 92mm (3.62in) x 87.1mm (3.43in) (W x D)
 - **Supported Platforms**
 - Supermicro® server systems with Super I/O Module slot
 - AOC-MTG-b2T for Storage Systems. AOC-MTG-b2TM for Twin Systems.
 - Please check SIOM Compatibility Matrix online
 - http://www.supermicro.com/support/resources/AOC/AOC_Compatibility_SIOM.cfm
- Please note that this product is sold only as part of an integrated solution with Supermicro server systems*

Available SKUs

| SKUs | Part Number | Description |
|--------------|--------------|------------------------------------|
| AOC-MTG-b2T | AOC-MTG-b2T | 2-port 10 Gigabit Ethernet Adapter |
| | BKT-0086L | Swappable bracket for 2U+ chassis |
| AOC-MTG-b2TM | AOC-MTG-b2TM | 2-port 10 Gigabit Ethernet Adapter |
| | BKT-0085L | Internal bracket |

Similar Products

| Product Part Number | Form Factor | Protocols | Connector Type | Total Ports | Controllers |
|---------------------|-------------|-----------------------|----------------|-------------|---|
| AOC-MGP-i2 | SIOM | 1GbE | RJ45 | 2 | Intel® i350 |
| AOC-MGP-i4 | SIOM | 1GbE | RJ45 | 4 | Intel® i350 |
| AOC-MTGN-i2S | SIOM | 10GbE | SFP+ | 2 | Intel® 82599 |
| AOC-MTG-i4S | SIOM | 10GbE | SFP+ | 4 | Intel® XL710 |
| AOC-MTG-i2T | SIOM | 10GbE | RJ45 | 2 | Intel® X550 |
| AOC-MTG-i4T | SIOM | 10GbE | RJ45 | 4 | Intel® X550 |
| AOC-MH25G-m2S2T | SIOM | 25GbE 10GbE | SFP28 | 2 | Mellanox® ConnectX-4 Lx EN Intel® X550 |
| | | | RJ45 | 2 | |
| AOC-MH25G-b2S2G | SIOM | 25GbE 1GbE | SFP28 | 2 | Broadcom® BCM57414 Intel® i350 |
| | | | RJ45 | 2 | |
| AOC-MHIBF-m2Q2G | SIOM | InfiniBand FDR GbE | QSFP | 2 | Mellanox® ConnectX-3 Pro Intel® i350 |
| | | | RJ45 | 2 | |
| AOC-MHIBF-m1Q2G | SIOM | InfiniBand FDR GbE | QSFP | 1 | Mellanox® ConnectX-3 Pro Intel® i350 |
| | | | RJ45 | 2 | |
| AOC-MHIBE-m1CG | SIOM | InfiniBand EDR GbE | QSFP28 | 1 | Mellanox® ConnectX-4 VPI Intel® i210 |
| | | | RJ45 | 1 | |
| AOC-MHFI-i1C | SIOM | Omni-Path | QSFP28 | 1 | Intel® OP HFI ASIC |