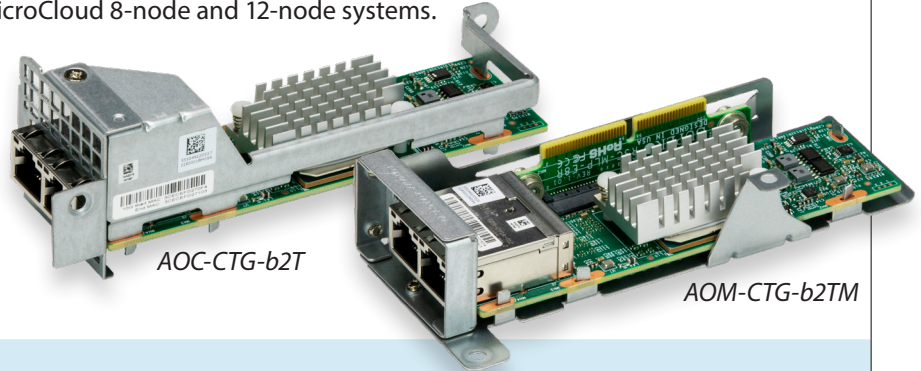# AOC-CTG-b2T & AOM-CTG-b2TM

Compact and Powerful dual-port 10 Gigabit Ethernet Adapter

The AOC-CTG-b2T and AOM-CTG-b2TM 10 Gigabit Ethernet Adapters are the most compact and scalable 10GBase-T adapters for today's demanding data center environments. Based on Broadcom® network controller BCM57416, it addresses the demanding needs of the next-generation data center. The AOC-CTG-b2T and AOM-CTG-b2TM are designed in a proprietary and small MicroLP formfactor to fit Supermicro MicroCloud 8-node and 12-node systems.

Key Features

- **Dual 10GbE RJ45 Connectors**
- **MicroLP Form Factor**
- **Broadcom BCM57416 Ethernet Controller**
- **PCI-E 3.0 x4 interface**
- **Asset Management feature with thermal sensor**
- **NC-SI for remote management**

AOC-CTG-b2T

AOM-CTG-b2TM

Specifications

- **General**
  - MicroLP Form Factor for Supermicro Micro Cloud systems
  - Broadcom BCM57416 dual-port 10Gbps controller
  - PCI-E 3.0 x4 (8GT/s) interface
  - Dual RJ45 connectors
- **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
  - TruFlow Technology
- **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 filter per partition
  - Stateless offload configuration per partition
  - VEB/VEPA support
- **Flow Processing**
  - Exact/Wildcard Match Flow Lookup
  - VLAN insertion/deletion
  - NAT/NAPT
  - Mirroring

- **Virtualization Features**
  - NetQueue, VMQueue, and Multiqueue
  - Support for 128 Virtual Functions
  - VXLAN
  - NVGRE
  - Geneve
  - Edge Virtual Bridging (EVB)
- **Data Center Bridging**
  - Priority-based flow control (PFC; IEEE 802.1Qbb)
  - Enhanced transmission selection (ETS; IEEE802.1Qau)
  - Quantized congestion Notification (QCN; IEEE802.1Qau)
  - 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 boot
  - Asset Management with Thermal Sensors
- **Power Savings**
  - ACPI compliant power management
  - Ultra low-power mode
  - Pass-through Energy Efficient Ethernet (IEEE802.3az-2010)
- **Operating Conditions**
  - Storage temperature: -40℃ to 70℃ (-40°F to 158°F)
  - Storage humidity: 90% non-condensing relative humidity at 35℃
- **Physical Dimensions**
  - PCB dimensions: 11.3cm (4.46") x 3.9cm (1.54")
- **Supported Platforms**
  - AOC-CTG-b2T on MicroCloud 8-node systems
  - AOM-CTG-b2TM on MicroCloud 12-node systems

Available SKUs

SKU	Bracket/Riser included	Description
AOC-CTG-b2T	BKT-0051L & BKT-0054L	MicroLP 2-Port 10GbE RJ45 adapter for MicroCloud 8-node systems.
AOM-CTG-b2TM	MCP-240-93907-0N & RSC-MLP-E8R	MicroLP 2-Port 10GbE RJ45 adapter for MicroCloud 12-node systems.

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