Data center networks face changes with hardware and meeting the requirements of the software it hosts. Quanta Cloud Technology provides a series of Bare Metal Switches, the QuantaMesh BMS product line, that addresses these changes in the data center market. The QuantaMesh BMS product lines support speeds up to 100G speeds on their Ethernet Switches. To meet the requirements of high performance, high availability, fast scale out, low latency performance, and continuous serviceability in data center applications, the QuantaMesh BMS product line is the best choice.

BMC (Baseboard Management Controller) embedded on the server as the core of the Intelligent Platform Management Interface (IPMI) architecture can now be implemented in the Ethernet switch. In addition to providing health monitoring of the temperature, power status, and cooling fans; BMC also aids in the deployment and management of software and hardware peripherals.

QuantaMesh T4048-IX2 supports 48 SFP28 and 8 QSFP28 (10/25/40/50/100GbE speed) ports in a compact rack unit size. By leveraging merchant silicon chipsets, the T4048-IX2 is a high-performance, high-density Ethernet switch with an affordable price for the deployment of datacenter infrastructure. With ONIE (Open Network Installation Environment) pre-loaded, the T4048-IX2 can be used with multiple operating system that supports ONIE installers to achieve agile installation and fast response when demand changes.

About QCT
Quanta Cloud Technology (QCT) is a global data center solution provider. We combine the efficiency of hyperscale hardware with infrastructure software from a diversity of industry leaders to solve next-generation data center design and operation challenges. QCT serves cloud service providers, telecoms and enterprises running public, hybrid and private clouds.

Product lines include hyper-converged and software-defined data center solutions as well as servers, storage, switches, integrated racks with a diverse ecosystem of hardware component and software partners. QCT designs, manufactures, integrates and services cutting edge offerings via its own global network. The parent of QCT is Quanta Computer, Inc., a Fortune Global 500 corporation.
Physical ports
- Port configuration: 48 SFP28 (10/25GbE) and 8 QSFP28 ports (10/25/40/50/100GbE)
- Management Port: Out-of-band management port (RJ-45, 10/100/1000Base-T)
- Console Port: 1 (RJ-45)
- USB: USB 2.0

CPU Board 1
- CPU: Intel Atom® Processors
- Memory: 8GB DDR3/ECC
- Storage: 32GB SSD

Performance
- MAC: Unified Forwarding Table to dynamically allocate the L2/ L3 tables
- Switching capacity: 4Tbps
- Maximum forwarding rate: Line Rate Performance
- Latency: <450ns

High Availability
- Redundant power supply: 1+1
- Hot-swappable fan tray: N+1

BMC
- IPMI: v1.5/v2.0 compliance
- Serial over LAN
- SNMP: v1/v2/v3
- SMASH
- HTTPS
  - HTTP/HTTPS: (vHQWORJ3()DQG3(7
  - HTTPS: (YHQWORJ

Mechanical
- Dimension (HxWxD): 44x440x508mm
- Weight: 9.16kg/20.2lbs (NET)

Environmental Specifications
- Operating temperature: 0~45°C
- Operating humidity: 90% maximum relative humidity

Electrical
- Power requirement:
  - 100~240VAC, 50/60Hz
  - Power consumption: 312 watts
- Safety: UL, cUL, CB
- EMC: CE, FCC, VCCI, CCC

RoHS
- Reduction of Hazardous Substances (RoHS) 6

Supported optics and cables
- DAC cable (QSFP+): 1m, 3m, and 5m
- DAC cable (QSFP+, fan-out): 1m, 3m, and 5m
- DAC cable (QSFP28): 1m, 3m, and 5m
- DAC cable (QSFP28, fan-out): 3m
- AOC cable (SFP28, 850nm, MMF): 1m, 3m and 5m
- 25G optic (SFP28, LC, 850nm, MMF): 25GBASE-SR
- 40G optic (QSFP+, MPO, 850nm, MMF): 40GBASE-SR4
- 40G optic (QSFP+, LC, 1310nm, SMF): 40GBASE-LR4
- 100G optic (QSFP28, MPO, 850nm, MMF): 100GBASE-SR4
- 100G optic (QSFP28, MPO, 1310nm, SMF): 100GBASE-PSM4
- 100G optic (QSFP28, LC, 1310nm, SMF): 100GBASE-LR4

Order Information
- T4048-I2X (11XU00Z0STD) Front to Back, with Rail Kit
- T4048-I2X (11XU00Z0STN) Back to Front, with Rail Kit
- T4048-I2X (11XU00Z0STP) Front to Back, with Rail Kit/CL OS pre-loaded, US only
- T4048-I2X (11XU00Z0STQ) Back to Front, with Rail Kit/CL OS pre-loaded, US only
- PSU - Red (1HY9ZZ071Y) (F-2-B, AC, 750W)
- PSU - Blue (1HY9ZZ0720) (B-2-F, AC, 750W)
- FAN Module (1HY9ZZ0721) (F-2-B)
- FAN Module (1HY9ZZ0722) (B-2-F)