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 QCT BMS product line, that addresses these changes in the data center market. The QCT BMS product lines support speeds up to 100G speeds on its 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 QCT 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.

QCT BMS T4048-IX8 supports 48 SFP28 and 8 QSFP28 (10/25/40/50/100 GbE speed) ports and is equipped with BMC in a compact rack unit size. By leveraging merchant silicon chip, T4048-IX8 is fully compliant with IEEE 802.3by and is a high performance high density Ethernet switch with advanced features such as smart table, dynamic load balancing, and VxLAN/RIOT support. T4048-IX8 also improves the performance for larger packet buffers and reduced latency. With ONIE (Open Network Installation Environment) pre-loaded T4048-IX8 can be used for multiple network operating system which supports ONIE installer to achieve agile installation and fast response for the changing demand.

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 (10/40 or 25/50/100GbE)
- **Management Port:** Out-of-band management port (RJ-45, 10/100/1000Base-T)
- **Console Port:** 1 RJ-45 console port
- **USB:** 1 USB 2.0 port

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

**Performance**
- **Switching capacity:** 4Tbps
- **Maximum forwarding rate:** 2Bpps
- **Latency:** Ultra-low latency
- **MAC:** BRCM TD3 BCM56873

**BMC**
- **IPMI:** v1.5/v2.0 compliance
- **Serial over LAN**
- **SNMP:** v1/v2/v3
- **SMASH**
- **HTTPS**

**Health status and hardware monitoring**
- **Event log**
- **PEF and PET**
- **Chassis management**
- **Watchdog and system re-start**

**High Availability**
- **Redundant power supply:** 1+1
- **Hot-swappable fan tray:** N+2

**Mechanical**
- **Dimension (HxWxD):** 43.2x440x508mm
- **Weight:** 9.71kg (NET)

**Environmental Specifications**
- **Operating temperature:** 0~45°C
- **Operating humidity:** 90% maximum relative humidity
- **Operating Altitude:** 0 to 2952 ft, (0-900m)

**Electrical**
- **Power requirement:** 100~240VAC, 50/60Hz

**Safety**
- **UL, cUL, CB, CCC**

**EMC**
- **CE, FCC, 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):** 1m, 3m, and 5m
- **DAC cable (SFP28):** 1m, 3m, and 5m
- **AOC cable (QSFP+, 850mm, MMF):** 7m and 10m
- **AOC cable (QSFP28, 850mm, MMF):** 1m, 3m, 5m, and 10m
- **AOC cable (SFP28, 850mm, MMF):** 1m, 3m, and 5m
- **25G optic (SFP28, LC, 850nm, MMF):** 25GBASE-SR
- **40G optic (QSFP+, MPO, 850mm, MMF):** 10GBASE-SR4
- **40G optic (QSFP+, LC, 1310nm, SMF):** 10GBASE-LR4
- **100G optic (QSFP28, MPO, 850mm, MMF):** 100GBASE-SR4
- **100G optic (QSFP28, MPO, 1310nm, SMF):** 100GBASE-PSM4
- **100G optic (QSFP28, LC, 1310nm, SMF):** 100GBASE-LR4

**Order Information**
- T4048-IX8 (1IX8UZZ0000) Front to Back, with Rail Kit
- T4048-IX8 (1IX8UZZ0001) Back to Front, with Rail Kit
- PSU - Red (1HY9ZZZ071Y) (F-2-B, AC, 750W)
- PSU - Blue (1HY9ZZZ0720) (B-2-F, AC, 750W)
- FAN Module (1HYQZ2Z0165) (F-2-B)
- FAN Module (1HYQZZZ0166) (B-2-F)