TCA 6710 (ODM Only)

1U Rackmount w/ Marvell® OCTEON 10 COM-HPC Module,
8 x 1GbE and 4 x 2.5GbE Copper,
2 x 10GbE Copper/Fiber Combo, 2 x 25GbE Fiber Port

Main Features

COM-HPC Module
- Marvell® OCTEON 10 CN10308 8-core, ARMv9 N2 2.5GHz
- 95 x 120mm size A
- 1 x DDR5 4800 ECC SO-DIMM, up to 32GB
- 1 x 32GB eMMC
- 2 x 512MB SPI Flash

Carrier Board
- 2 x 25GbE SFP28 port
- 2 x 10GbE RJ45/SFP+ combo port
- 4 x 2.5GbE RJ45 port
- 8 x 1GbE RJ45 port
- 1 x PCIe 5.0 x4 socket for SSD/FPGA/AI card
- Support 4G LTE/5G (optional)

Product Overview

TCA 6710, a versatile 1U rackmount appliance, is driven by the cutting-edge Marvell® OCTEON 10 8-core processor, leveraging the latest ARMv9 Neoverse N2 architecture for nearly three times the performance of its predecessor. Equipped with DDR5 and PCIe 5.0 support, this platform can offer the most powerful performance on the market.

TCA 6710 features a range of Ethernet I/O ports with varying speeds—1GbE, 2.5GbE, 10GbE, and 25GbE—all housed in a compact 1U rackmount form factor. This diversity in I/O ports makes the TCA 6710 suitable for a diverse applications.

The COM-HPC modular design of the TCA 6710 allows for the adoption of carrier boards serving various purposes, facilitating easy customization. To switch to another carrier board just a minor software tuning on the COM-HPC module is required. The TCA 6710 is designed for flexibility and performance, offering advantages such as time and cost savings in adapting to various applications.

Specifications

Processor
- Marvell® OCTEON 10 CN10308 8-core, ARMv9 Neoverse N2, up to 2.5GHz

Main Memory
- 1 x DDR5 4800 SO-DIMM, ECC, up to 32GB

Storage Device
- 1 x 32GB TLC eMMC
- 2 x 512MB SPI Flash
- 1 x M.2 Key M 2232/2242/2260/2280/22110, support PCIe 5.0 x4

Interface-External

Front I/O
- 6 x LED: SYS, PWR, FAN, SSD, WiFi, LTE/5G
- 2 x Button: POWER, RESET
- 2 x 25GbE SFP28 port
- 2 x 10GbE RJ45/SFP+ combo port
- 4 x 2.5GbE RJ45 port
- 8 x 1GbE RJ45 port
- 2 x nano-SIM slot
- 1 x USB 3.2 Gen 1 host, Type-A
- 1 x USB console, Type-C

Rear I/O
- 2 x Power inlet
- 3 x Fixed smart fan
- 1 x Ground screw
- 2 x RP-SMA connector (2.4/5/6GHz)
- 4 x SMA connector for LTE/5G

Interface-Internal
- 1 x Mini PCIe (PCIe 3.0 x1)
- 1 x M.2 Key B 3042/3052 for LTE/5G module (USB signal)
- 1 x PCIe 5.0 x4 for M.2 SSD (via riser card and M.2 adapter) or FPGA/GPU/AI card (FH3/4L)
- 1 x Socket for NEXCOM TPM 2.0 module

Power
- 550W 1+1 CRPS redundant power supply

Dimensions and Weight
- Chassis dimension: 430 mm (W) x 299.8 mm (D) x 44 mm (H)
- Package dimension: 539 mm (W) x 500 mm (D) x 194 mm (H)
- Net weight: TBC
- Gross weight: TBC

NEXCOM

Environment
- Operating temperature: 0°C~40°C
- Storage temperature: -20°C~80°C
- Relative humidity: 10%~90% non-condensing

Certifications
- TBD

Ordering Information

- **TCA 6710 (ODM only) (P/N: TBD)**