TCA 6710

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 slot, up to 32GB
- 1 x 32GB eMMC
- 2 x 512MB SPI Flash

Carrier Board

- 2 x 25GbE SFP28 ports
- 2 x 10GbE RJ45/SFP+ combo ports
- 4 x 2.5GbE RJ45 ports
- 8 x 1GbE RJ45 ports
- 1 x PCIe Gen5 x4 socket for SSD/FPGA/AI card
- Supports 4G LTE/5G and Wi-Fi (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 Gen5 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 ECC SO-DIMM slot, up to 32GB

Storage Device

- 1 x 32GB TLC eMMC
- 2 x 512MB SPI Flash
- 1 x M.2 2232/2242/2260/2280/22110 Key M socket, supports PCIe Gen5 x4

Interface-External

Front I/O

- 6 x LEDs: SYS, PWR, FAN, SSD, WiFi, LTE/5G
- 2 x Buttons: POWER, RESET
- 2 x 25GbE SFP28 ports
- 2 x 10GbE RJ45/SFP+ combo ports
- 4 x 2.5GbE RJ45 ports
- 8 x 1GbE RJ45 ports
- 2 x NANO SIM slots

- 1 x USB3.2 Gen1 Host (Type-A)
- 2 x USB2.0 Host (Type A)
- 1 x USB Console (Type C)
- 1 x RJ45 management port for RunBMC

Rear I/O

- 2 x Power inlets
- 3 x Fixed smart FANs
- 1 x Ground screw
- 2 x RP-SMA connectors for Wi-Fi (2.4/5/6GHz)
- 4 x SMA connectors for LTE/5G

Interface-Internal

- 1 x mini-PCIe socket for Wi-Fi module (PCIe Gen3 x1)
- 1 x M.2 3042/3052 Key B socket for LTE/5G module (USB signal)
- 1 x PCIe Gen5 x4 slot 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
- 1 x SO-DIMM socket for RunBMC module

Power

- 550W 1+1 CRPS redundant power supply

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Dimensions and Weight
- Chassis dimension (mm): 430 x 299.8 x 44
- Package dimension(mm): 539 x 500 x 194
- Without packing: TBC
- With packing: TBC

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

Certifications
- TBD

Ordering Information
- **TCA 6710 (P/N: TBD)**

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Mainstream Platform

We reserve the right to change specifications and product descriptions at any time without prior notice.

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