



TRIA HMM-QCSX

Qualcomm Snapdragon® X Elite



 95 x 70

 tbd

 0 - +60°C



Highlights

- Qualcomm Snapdragon® X Elite processor
- Scalable CPU performance, up to twelve cores
- Powerful Qualcomm® Adreno™ GPU
- Qualcomm® Hexagon™ NPU with 45 TOPS of AI performance
- LPDDR5X main memory, memory-down, up to 64GB
- Embedded DisplayPort interface
- Up to two DisplayPort interfaces (DDI or USB4)
- PCI Express® Gen 4, up to 1x8 + 1x4/2x2
- PCI Express® Gen 3, 2x1 + 1x2/1x1
- Up to two USB4, four USB 3.2 Gen1/2 and eight USB 2.0 ports
- Two UARTs
- Up to 1TB on-board UFS Flash
- Two 1 / 2.5 Gb Ethernet port, TSN support
- Trusted Platform Module TPM 2.0
- Space saving COM-HPC Mini
- Long-term product availability

Technical Data

Technology	Arm
Formfactor / Interface	COM-HPC Mini
CPU	<p>Qualcomm Snapdragon® X Elite X1E-84-100, 12C, 4.2GHz X1E-80-100, 12C, 4.0GHz X1E-78-100, 12C, 3.4GHz</p> <p>Qualcomm Snapdragon® X Plus X1P-66-100, 10C, 4.0GHz X1P-64-100, 10C, 3.4GHz X1P-46-100, 8C, 4.0GHz X1P-42-100, 8C, 3.4GHz</p> <p>Qualcomm Snapdragon® X X1-26-100, 8C, 2.7GHz</p>
Chipset	Integrated into SoC
RAM	LPDDR5X memory, memory-down Capacity options: 8GB, 16GB, 32GB, 64GB
Flash	Up to 1TB UFS, soldered (optional)
Storage Interfaces	UFS (onboard) NVME at PCI Express (carrier design dependent)
USB	<p>Up to two USB4 on COM-HPC SS Lane 2, 3 (mutually exclusive with DD1) and Lane 4, 5 (mutually exclusive with USB3 #2, #3) Two USB 3.2 Gen 2x1 on COM-HPC SS Lane 6, 7 (USB3 #0, #1) Up to two USB 3.2 Gen 2x1 on COM-HPC SS Lane 4, 5 (mutually exclusive with USB4 #1) 8x USB 2.0 on COM-HPC USB[0:7] Note: supported interfaces depending on COM-HPC carrier design. Config 3 on request</p>
Serial Interfaces	2x UART
Bus Interfaces	<p>PCI Express® Gen 4, up to 1x8/(1x4)¹ + 1x4/2x2 PCI Express® Gen 3, 2x1 + 1x2/1x1 ¹ SKU dependent</p>
Display Controller	Adreno™ GPU, up to 1.5GHz
Display Interfaces	<p>Supports COM-HPC Mini Config 1, 2 Up to two DisplayPort interfaces (DDI), DP 1.4b, Config 1 Up to two USB4/USB-C ports (DP tunneling), 1x USB4 with Config 2 1x Embedded DisplayPort 1.4b Note: supported interfaces depending on COM-HPC carrier design. Config 3 on request</p>
Network Interface	<p>2x 10/100/1000Base-TX, 2.5G² based on Qualcomm QPS615, with TSN support ² Available bandwidths depending on carrier design</p>
Audio Interface	SoundWire
Security Device	TPM 2.0
Miscellaneous	<p>Watchdog Timer: Initiates system reset, programmable</p> <p>Fan Supply: 4-pin header for CPU fan, PWM speed controlled and PWM speed control for system fan supported</p> <p>RTC battery: external</p> <p>System Monitoring: voltage, temperature, CPU fan, system fan</p>
Firmware	UEFI boot

COM-HPC Mini



OS Support	Windows 11 IoT Yocto Linux Ubuntu Linux (on request) Android (on request)
Power Requirement	Voltage: +8.5V to +18V, +5V Stby optional Power Consumption: tbd
Environment	Ambient Temperature: 0° ... 60°C (operating) -25° ... 85°C (storage) Humidity: 5 ... 95% (operating, non-condensing), 5 ... 95% (storage, non-condensing)
Dimensions	95mm x 70mm
Certificates	UL / CE

Technical Data for TRIA HMM-QCSX

Order Reference

Order No.	Description	Reference	
tbd	Contact Tria for ordering information	MSC HMM-QCSX-XXXXX	OR

Ordering Information for TRIA HMM-QCSX *PV = Preferred variant; OR = on Request (in OEM quantities only)

Accessories

Carrier Boards

Order No.	Description	Reference
tdb	COM-HPC Mini Carrier Board	MSC HM-MB-EV BRDFTX

Carrier Options for TRIA COM-HPC Mini modules

Cooling Solutions

Order No.	Description	Reference
tdb	Contact Tria for ordering information	MSC HMM-QCSX-Hxxxx

Cooling Options for TRIA HMM-QCSX

COM-HPC Mini



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