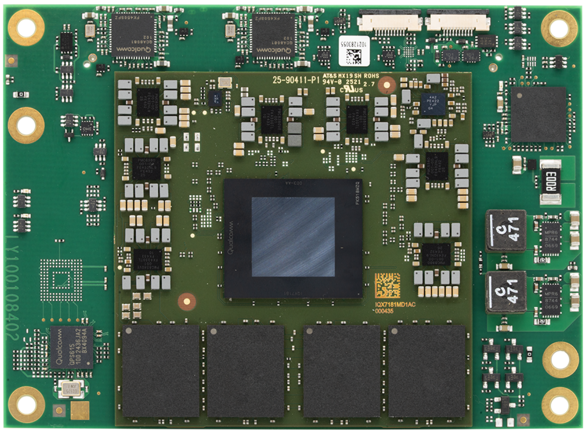
TRIA HMM-IQX

Qualcomm Dragonwing™ IQ-X Series



95 x 70

tbd

-40 - +85°C

Highlights

- Dragonwing IQ-X Series
- Qualcomm Oryon™ CPU, up to twelve cores, scaleable performance
- 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 three USB4, four USB 3.1/3.0 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
- Industrial temperature range, long-term product availability

Technical Data

Technology	Arm
Formfactor / Interface	COM-HPC Mini
CPU	Dragonwing IQ-X Series IQX7181MD 12 core, 3.4GHz IQX5121MD 8 core, 3.4GHz Note: maximum core frequency shown
Chipset	Integrated into SoC
RAM	LPDDR5X memory, memory-down Capacity options: 16GB, 32GB, 64GB
Flash	Up to 1TB UFS, soldered (optional)
Storage Interfaces	UFS (onboard) NVME at PCI Express (carrier design dependent)
USB	Up to three USB4 on COM-HPC SS Lanes 0, 1, 2, 3 (mutually exclusive with DD0/1) and Lanes 4, 5 (mutually exclusive with USB3 #2, #3) Two USB 3.1 Gen 2x1 on COM-HPC SS Lane 6, 7 (USB3 #0, #1) Up to two USB 3.1 Gen 2x1 on COM-HPC SS Lane 4, 5 (mutually exclusive with USB4 #1 and USB3.0, configuration/assembly options) 8x USB 2.0 on COM-HPC USB[0:7] Note: supported interfaces depending on COM-HPC carrier design. Config 2 by default, other configurations on request.
Serial Interfaces	2x UART
Bus Interfaces	PCI Express® Gen 4, up to 1x8/(1x4) [1] + 1x4/2x2 PCI Express® Gen 3, 2x1 + 1x2/1x1 [1] SKU dependent
Display Controller	Adreno GPU, up to 1.5GHz
Display Interfaces	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
Network Interface	2x 10/100/1000Base-TX, 2.5G[2] based on Qualcomm QPS615, with TSN support [2] Available bandwidths depending on carrier design
Audio Interface	SoundWire
Security Device	TPM 2.0
Miscellaneous	Watchdog Timer: Initiates system reset, programmable Fan Supply: 4-pin header for CPU fan, PWM speed controlled and PWM speed control for system fan supported RTC battery: external System Monitoring: voltage, temperature, CPU fan, system fan
Firmware	UEFI boot
OS Support	Windows 11 IoT Enterprise LTSC

Power Requirement	Voltage: +8.5V to +18V, +5V Stby optional Power Consumption: tbd
Environment	Ambient Temperature: -40° ... 85°C (operating) -25° ... 85°C (storage) Humidity: 5 ... 95% (operating, non-condensing), 5 ... 95% (storage, non-condensing)
Dimensions	95mm x 70mm

Technical Data for TRIA HMM-IQX

Order Reference

Order No.	Description	Reference	
tbd	Contact Tria for ordering information	MSC HMM-IQX-xxxxx	OR

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

Accessories

Carrier Boards

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

Carrier Options for TRIA COM-HPC Mini modules

Cooling Solutions

Order No.	Description	Reference
tbd	Contact Tria for ordering information	MSC HMM-IQX-Hxxxx

Cooling Options for TRIA HMM-IQX

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