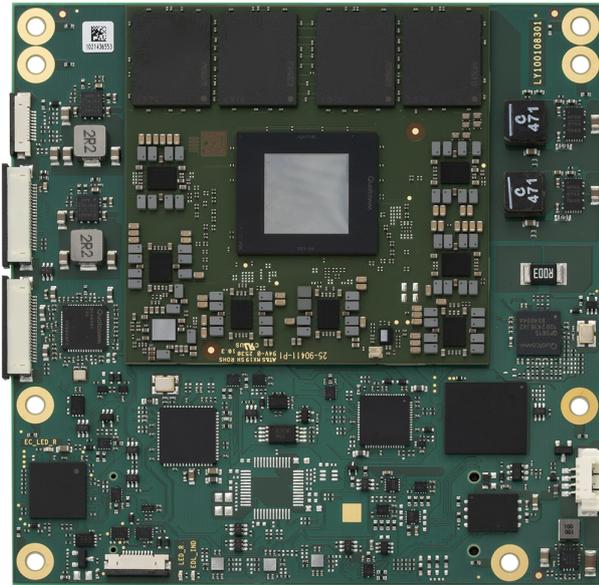


COM Express Type 6



TRIA C6C-IQX

Qualcomm Dragonwing™ IQ-X Series



95 x 95

tbd

-40 - +85°C



Highlights

- Dragonwing IQ-X Series
- Qualcomm Oryon™ CPU, up to twelve cores, scalable performance
- Powerful Qualcomm® Adreno™ GPU
- Qualcomm® Hexagon™ NPU with 45 TOPS of AI performance
- LPDDR5X main memory, memory-down, up to 64GB
- Three DisplayPort interfaces
- LVDS / Embedded DisplayPort interface
- PCI Express® Gen 4, up to 1x8 + 1x4/2x2
- PCI Express® Gen 3, 2x1 + 1x2/1x1
- Up to two USB4, four USB 3.1/3.0 and eight USB 2.0 ports
- Two UARTs
- Up to 1TB on-board UFS Flash
- 1 / 2.5 Gb Ethernet port, TSN support
- Trusted Platform Module TPM 2.0
- COM Express Type 6, Compact
- Industrial temperature range, long-term product availability

COM Express Type 6



Technical Data

Technology	Arm
Formfactor / Interface	COM Express Compact Type 6
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 2x USB4 Gen 2, mutually exclusive with DDI 1, 2 3x USB 3.0 & 1x USB 3.2 Gen 1 or 2x USB 3.2 Gen 1 (assembly option) 8x USB 2.0 Note: capabilities depending on carrier design
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	Up to 3x Digital Display Interface (DP 1.4b), DDI 1, 2 mutually exclusive with USB4 Up to two USB4/USB-C ports (DP tunneling) 1x Embedded DisplayPort 1.4b, mutually exclusive with LVDS 1x LVDS 24bit, dual-channel, mutually exclusive with eDP
Network Interface	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

COM Express Type 6



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 95mm

Technical Data for TRIA C6C-IQX

COM Express Type 6



Order Reference

Order No.	Description	Reference	
tbd	Contact Tria for ordering information	MSC C6C-IQX-xxxxx	OR

Ordering Information for TRIA C6C-IQX *PV = Preferred variant; OR = on Request (in OEM quantities only)

COM Express Type 6



Accessories

Carrier Boards

Order No.	Description	Reference
111650	COM Express Type 6 Evaluation Carrier Board with various PCI Express x1, x4 and x16 slots, USB 3.0/2.0, GbE, M.2, SD card socket, SATA, DisplayPort, LVDS, eDP, VGA, HD audio interfaces; ATX power connector. Dimensions: 305 x 244 mm (ATX form factor)	MSC C6-MB-EV4 PCBFTX
119830	COM Express Type 6 Evaluation Carrier Board with PCI Express x4 and x16 slots, USB 3.0/2.0, USB4 Type-C, GbE, M.2, SATA, DisplayPort, LVDS, eDP; ATX power connector. Dimensions: 170 x 170 mm (Mini-ITX form factor)	MSC C6-MB-EV4M BRDFTX

Carrier Boards TRIA C6-MB-EV4/EV4M

Cooling Solutions

Order No.	Description	Reference
tdb	Contact Tria for ordering information	MSC C6C-IQX-Hxxxx

Cooling Devices for TRIA C6C-IQX

Order No.	Description	Reference
79809	Fan kit for Heatsink MSC HCA-ALP/RLP/MLH-0x HSI-xxx, MSC C6B-ALP/RLP/MLH-0x HSI-xxx, MSC C6B-TLH-0x HSI-xxx, MSC C6C-ALP/RLP-0x HSI-xxx, MSC C6C-TLU-0x HSI-xxx, MSC C6C-WLU-0x HSI-xxx, MSC C6C-ALN/ASL-0x HSI-xxx, MSC C6C-EL-0x HSI-xxx, MSC C6C-RYZx-0x HSI-xxx, PWM fan 80x80x15mm.	MSC C6C-FANKIT-01-HSF-001

Fan Kit for COM Express Heatsinks

COM Express Type 6



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