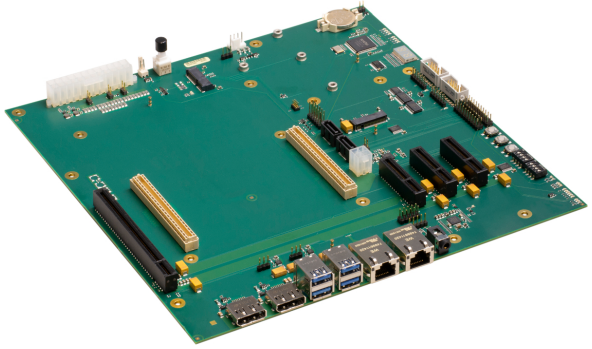
MSC HC-MB-EV

COM-HPC Client Carrier



	244 x 244
	tpd W
	0 +60

COM-HPC™

Description

The MSC HC-MB-EV is intended for design teams that require an easy and fast enablement of COM-HPC based solutions for lab evaluation, rapid prototyping and application development. Engineers can use it as a reference design for developing their own COM-HPC platform. The COM-HPC Client carrier provides a rich set of COM-HPC Client interfaces routed to the module socket including PCIe and PEG ports, DDI and eDP graphics interfaces, and high speed I/O like USB and SATA. COM-HPC Client modules of either Size A, B and C can be installed on the carrier.

Highlights

- Socket for COM-HPC™ Carrier supporting Client Size A, B, C modules
- PCI Express x16 slot (PEG)
- PCI Express x16 slot (general PCIe)
- Three PCI Express slots 1x4
- Support for PCIe Gen 3 and 4
- Two SATA connectors
- M.2 socket for mass storage and AI modules
- M.2 socket for I/O purposes (3rd party modules e.g. Wi-Fi, Bluetooth)
- Two USB 3.1 Gen 1, Gen 2 connectors
- Two 1G/2.5G/10GBASE-T connectors (RJ45)
- Two DisplayPort connectors
- One eDP connector
- HD audio codec
- Various additional COM-HPC™ specific interfaces
- Power supply via ATX-style power connector or 12V-only power jack
- Wide power input range
- Size 244mm x 244mm (microATX)

Technical Data - MSC HC-MB-EV

Formfactor	microATX
Flash	M.2 socket for mass storage and AI modules: PCIe x4 Card lengths 42/80/110 mm, M-key, max. 15W M.2 socket for I/O purposes (Wi-Fi, Bluetooth, AI): PCIe x1, USB 2.0 Card length 30 mm, E key, max. 6.6W
Storage Interfaces	2x SATA up to 6Gb/s
USB	2x USB 3.1 (USB 2.0 compliant) on faceplate 1x USB 2.0 on-board
Bus Interfaces	PCI Express™ Gen 3 and 4 One PEG port x16 on PCI Express x16 socket; max. 75W One PCI Express slots 1x16; Three PCI Express slots 1x4; one slot max. 25W, two slots max. 10W Maximum connectivity and bandwidth is determined by installed COM-HPC module and PCIe cards
Display Interfaces	DisplayPort: Two DisplayPort connectors on faceplate Embedded DisplayPort: One 40-pin eDP on-board connector MIPI-CSI: Two MIPI-CSI connectors on-board Shared with eDP
Network Interface	Two RJ45 LAN connectors on faceplate Routed to COM-HPC module socket Support up 10/100/1000, 2.5GBASE-T or 10GBASE-T depending on COM-HPC module capabilities Two status LED's integrated per connector
Audio Interface	SoundWire audio codec Audio available at 4 pole audio jack on faceplate

Miscellaneous	Feature connector: Carrying GPIO, SMBus, I²C bus, SPI, power button, reset button, and other system signals PORT 80 display Serial high speed port: Two ports routed from module socket to on-board pin headers BIOS Flash Pin-header for external BIOS Flash, selectable either on-board or on the module Fan: 4 pin fan connector; PWM controlled by COM Express module EEPROM One serial EEPROMs on I²C bus Battery: CR 2032 type RTC battery (3V, socketed)
Feature Highlights	Carrier board for COM-HPCTM Client pin-out Note: availability and capabilities of interfaces determined by installed COM-HPC Client module and I/O cards.
Power Requirement	Standard 20pin ATX power connector and additional ATX12V connector Additional power jack for single voltage supply (wide input range 5V to 20V)
Environment	Ambient Temperature: 0° … 60°C (operating), -25° … 85°C (storage) Humidity: 5 … 95% (operating, non-condensing), 5 … 95% (storage, non-condensing)
Dimensions	244mm x 244mm

Order Reference - MSC HC-MB-EV

Order Number	Description	Reference	Cat
tbd	COM-HPC Client Carrier Board with 1x PEG x16, 1x PCIe x16, 3x PCIe x4 slots; USB 3.1 Gen 1/2, 2x 1G/2.5G/10GBASE-T, 2x SATA; 2x DisplayPort, 1x eDP, HD audio; 2x M.2 socket; ATX power connector and single 12V power jack; Dimensions: 244mm x 244mm (microATX form factor);	MSC HC-MB-EV	OR

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