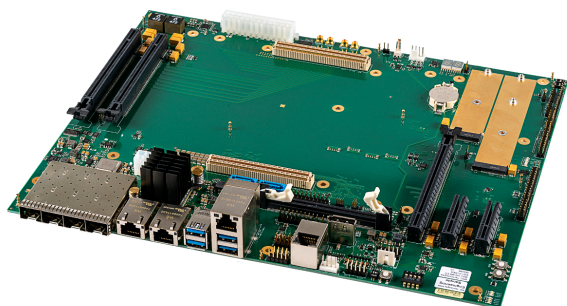


MSC HS-MB-EV

COM-HPC[®] Server Carrier Board



✖ 305 x 244

⋈ N.A.

🔌 0 +60

COM+HPC™



Description

The MSC HS-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 carrier provides a COM-HPC Server interface with a rich set of I/O routed to the module socket including high-speed PCIe, multiple Ethernet ports, USB and SATA. COM-HPC Server modules of either Size D or E can be installed on the carrier. Combined with a COM-HPC Server module such as the versatile MSC HSD-ILDL, many of the CPU's high-speed I/O signals are available on break-out connectors located on the face plate and on-board, including 25G / 10G Ethernet ports and PCIe sockets.

Highlights

- COM-HPC[®] Server Carrier
- Socket for COM-HPC[®] Server module with size D or E
- One PCI Express x16 slots
- Two PCI Express x8 slots
- Two PCI Express x4 slots
- Two M.2 slots with PCIe x4
- All PCIe slots support up to Gen 4
- Four SFP28 card cages for up to 25G Ethernet per port
- Two 10GBASE-T connectors
- One 1000BASE-T / 2.5GBASE-T connector
- Two SATA connectors, up to 6Gbps
- Four USB 3.2 Gen 1 (5Gbps)
- 2x UART ports
- Connector with 12 GPIO ports
- Connectors for optional BMC module and I/O break-out
- Fan connector
- ATX-style power connector and 12V single supply
- POST code LED display
- Size 305 mm x 244 mm (ATX form factor)

Technical Data - MSC HS-MB-EV

Technology	COM-HPC Server carrier
Formfactor	ATX
Storage Interfaces	<p>2x SATA connectors, up to 6Gbps, available on board connector</p> <p>1x M.2-Slot (Key ID M), type 2242/2280, PCIe x4 Gen 3/4, associated with COM-HPC PCIe[4:7]</p> <p>1x M.2-Slot (Key ID M), type 2242/2280/22110, PCIe x4 Gen 3/4, associated with COM-HPC PCIe[8:11]</p> <p>Feature availability depending on installed module type. Please consult the product documentation for details.</p>
USB	<p>4x USB 3.2 Gen 1 (5Gbps), on I/O shield, associated with COM-HPC USB[0:3] & USB[0:3]_SSTX/RX</p> <p>4x USB 2.0 associated with COM-HPC USB[4:7] available on pin-header</p> <p>Feature availability depending on installed module type. Please consult the product documentation for details.</p>
Serial Interfaces	<p>2x serial port on pin header</p> <p>Feature availability depending on installed module type. Please consult the product documentation for details.</p>
Bus Interfaces	<p>1x PCI Express x4 slot, Gen 3/4, associated with COM-HPC PCIe[0:3]</p> <p>1x PCI Express x4 slot, Gen 3/4, associated with COM-HPC PCIe[12:15]</p> <p>1x PCI Express x8 on x16 slot, Gen 3/4, associated with COM-HPC PCIe[16:23]</p> <p>1x PCI Express x8 on x16 slot, Gen 3/4, associated with COM-HPC PCIe[24:31]</p> <p>1x PCI Express x16 slot, Gen 3/4, associated with COM-HPC PCIe[32:47]</p> <p>Feature availability depending on installed module type. Please consult the product documentation for details.</p>
Network Interface	<p>4x SFP28 cages for up to 25G Ethernet per port, from on-board Intel® Ethernet Connection C827-IM1, associated with COM-HPC ETH[0:3]</p> <p>2x 10GBASE-T connectors, from on-board Intel® Ethernet Connection X557-AT4, associated with COM-HPC ETH[4:5]</p> <p>1x 1000BASE-T / 2.5GBASE-T connector, from module, associated with COM-HPC NBASET0</p> <p>Feature availability depending on installed module type. Please consult the product documentation for details.</p>

Miscellaneous	POST code display COM-HPC GPIO_[00:11] on pin header 4-pin fan connector PWM controlled RTC battery, CR2032
Feature Highlights	Versatile COM-HPC Server carrier board for evaluation, prototyping and application development
OS Support	BSP (for onboard devices) for Windows and Linux Feature availability depending on installed module type. Please consult the product documentation for details.
Environment	Ambient Temperature: 0° ... +60°C (operating), -25° ... 85°C (storage) Humidity: 5 ... 95% (operating, non-condensing) 5 ... 95% (storage, non-condensing)
Dimensions	305 x 244
Certificates	UL / CE

Order Reference - MSC HS-MB-EV

Order Number	Description	Reference	Cat
96405	COM-HPC Server Evaluation Carrier Board PCI Express 2x x4, 2x x8 and 1x x16 slots; 2x M.2 PCIe x4, 4x USB 3/2, 2x SATA; 4x 25/10G ETH, 2x 10G ETH, 1x 1/2.5G ETH; POST code display, ATX power connector; Dimensions: 305 x 244 mm (ATX form factor)	MSC HS-MB-EV-001 BRDFTX	PV

Avnet Embedded GmbH
Industriestr. 16
76297 Stutensee

AvnetEmbedded@avnet.com
[avnet.com/embedded](https://www.avnet.com/embedded)

Copyright © 2023 Avnet. All data is for information purposes only and is subject to change without notice. No guarantee for legal purposes is implied. Information in this document has been carefully checked, however, no responsibility for inaccuracies has to be assumed. All brand or product names may be trademarks and property of their respective owners.