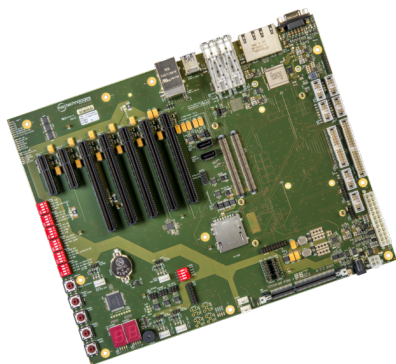


MSC C7-MB-EV

COM Express Type 7 Evaluation Board



305 x 244



0 +85

COM  **Express**

Description

The MSC C7-MB-EV is a full featured platform for developing and prototyping system electronics and software before a specific baseboard becomes available.

It provides the interface infrastructure for the COM Express Type 7 modules and offers connectivity for all Type 7 specific interfaces.

With this universal platform a tool is offered to test quickly what's needed in customer's specific design and to choose the right product out of MSC's COM Express portfolio.

This development tool also helps to develop software in parallel with the hardware to speed up the integration process.

Highlights

- Socket for COM Express™ Type 7 modules (Basic or Compact form factor)
- Seven PCI Express slots x4 and x8
- Two SATA connectors
- Four USB 2.0/3.0 connectors
- RJ45 LAN connector GbE
- Two RJ45 LAN connectors 10GbE
- Two SFP+ Slots 10GbE
- SD Card socket
- Super IO controller
- Slot for optional BMC add-on card
- POST code LED display
- Various additional COM Express™ specific interfaces
- ATX-style power connector / 12V-only jack
- Size 305mm x 244mm

Technical Data - MSC C7-MB-EV

Technology	Carrier COM Express Type 7
Formfactor	ATX
Flash	Socket for external BIOS Flash
Storage Interfaces	2x SATA 6Gb/s; SD Card socket
USB	4x USB 3.0 (USB 2.0 compliant)
Serial Interfaces	2x serial RS232 ports from COM Express module on pin-headers 2x serial RS232 legacy ports from Super I/O on pin-headers
Bus Interfaces	PCI Express™ One PCI Express x8 (on PCI Express x16 socket), six PCI Express x4 (on PCI Express x4 or x16 sockets); LPC/eSPI LPC/eSPI on 10-pin header;
Display Interfaces	via optional BMC add-on card
Network Interface	2x RJ45 connectors for 10Gb LAN from COM Express module, 1Gb/s, 10Gb/s supported, 2x SFP+ connectors for 10Gb LAN from COM Express module, 1Gb/s, 10Gb/s supported, 1x RJ45 connector for 1Gb LAN from COM Express module, 10/100/1000 Mb/s supported

Miscellaneous

Feature connector

Carrying SMBus, I²C bus, power button, reset button, beeper, HD LED and other system signals

GPIO

Four input, four output signals on a pin header; partially shared with SD Card socket

Super I/O

LPC/eSPI based Super I/O with 2x COM, LPT

Fan

1x 4 pin fan connector; PWM controlled by COM Express module;

EEPROM

One serial EEPROM on SMB bus

Two serial EEPROMs on I²C bus

Battery

CR 2032 type RTC battery (3V, socketed)

POST code display

7-segment displays

Buttons

Power button

Reset button

Sleep button

Feature Highlights

Full featured carrier board for COM Express Type 7 pin-out

Power Requirement

Standard 20pin ATX power connector and additional ATX12V connector

Additional power jack for single voltage supply (wide input range 12V to 20V)

Environment

Ambient Temperature:

0° ... 85°C (operating),

-25° ... 85°C (storage)

Humidity:

5 ... 95% (operating, non-condensing),

5 ... 95% (storage, non-condensing)

Dimensions

305mm x 244mm

Order Reference - MSC C7-MB-EV

Order Number	Description	Reference	Cat
73278	COM Express Type 7 Evaluation Carrier Board with 7x PCI Express slot (x4/x8); 2x 10GbE (SFP+), 2x 10GbE (RJ45), 1x GbE; 2x SATA, four USB, SD Card, Super IO; slot for optional BMC card; POST code display; ATX power connector and single power jack. Dimensions: 305mm x 244mm (ATX form factor) 0° ... 70°C	MSC C7-MB-EV-001 PCBFTX	PV

Accessories

Order Number	Description	Reference
10.1" Displaykit		
78879	Displaykit suitable for all COM Carrier Boards and all COM Starterkits. Comprises 10.1" WXGA LCD with PCAP Touch Sensor and Touch Controller. Includes all cables required to connect to COM Carrier Boards (LVDS, B/L & Touch).	MSC DIS-AM1280800-101-KIT SETPAC
12.1" Displaykit		
78880	Displaykit suitable for all COM Carrier Boards and all COM Starterkits. Comprises 12.1" WXGA LCD with PCAP Touch Sensor and Touch Controller. Includes all cables required to connect to COM Carrier Boards (LVDS, B/L & Touch)	MSC DIS-AM1280800-121-KIT SETPAC
5.0" Displaykit		
81871	Displaykit suitable for all COM Carrier Boards and all COM Starterkits. Comprises 5.0" WVGA LCD with PCAP Touch Sensor and Touch Controller. Includes all cables required to connect to COM Carrier Boards (LVDS, B/L & Touch)	MSC DIS-AM800480-050-KIT SETPAC
7" Displaykit		
78911	Displaykit suitable for all COM Carrier Boards and all COM Starterkits. Comprises 7.0" WVGA LCD with PCAP Touch Sensor and Touch Controller. Includes all cables required to connect to COM Carrier Boards (LVDS, B/L & Touch)	MSC DIS-AM800480-070-KIT SETPAC

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