/\VNET embedded

MSC C6-MB-EV4

COM Express[™] Type 6 Carrier Board



S	305 x 244
<u></u>	N.A.
(10)	





Description

COM ExpressTM, an open specification of the PICMG (PCI Industrial Computer Manufacturer Group), is a module concept to bring PCI Express and other high speed serial technologies like SATA, USB and digital display interfaces on a COM (Computer On Module).

The MSC C6-MB-EV4 is a versatile carrier board designed to evaluate and prototype system electronics and software before an application specific baseboard is available. It provides the interface infrastructure for the COM Express Type 6 modules and offers a variety of IO connectors for external access. The carrier board supports PCI Express® Gen 4 and 2.5Gb Ethernet available with latest module generations.

This universal platform allows you to quickly test and choose the right product from the Avnet Embedded COM Express portfolio.

Highlights

- Three PCI Express® x1 slots shared with PCle x4 slot
- One PCI Express® x16 PEG slot
- One M.2 Key-M Slot
- Four SATA connectors
- Four USB 3.0/2.0 connectors
- Four USB 2.0 pin header
- Three DisplayPort connectors
- LVDS interface on JILI30 connector
- Embedded DisplayPort connector
- VGA pin header
- Audio codec; three audio jacks and SPDIF
- LAN interface
- SD Memory Card Socket
- Power supply via ATX connector or wide input
- Extension connector for eSPI and LPC

- POST code display and dual RS232 on optional module
- ATX form factor



Technical Data - MSC C6-MB-EV4

Technology	COM Express Type 6 Carrier
Formfactor	ATX
Storage Interfaces	4x SATA connector
	SD card socket
	1x M.2-Slot (Key ID M), type 2242/2280/22110, PCIe x4 Gen 3/4
	Feature availability depending on installed module type. Please consult the product documentation for details.
USB	4x USB 3.0/2.0 on I/O shield 4x USB 2.0 on pin headers
	Feature availability depending on installed module type. Please consult the product documentation for details.
Serial Interfaces	2x serial port on pin header
	Feature availability depending on installed module type. Please consult the product documentation for details.
Bus Interfaces	1x PCI Express x4 slots
	3x PCI Express x1 slots shared with the PCIe x4 slot
	1x PCI Express x16 (PEG) slot
	Feature availability depending on installed module type. Please consult the product documentation for details.
Display Interfaces	VGA interface (Pin Header)
	LVDS interface (JILI30)
	eDP connector (40pin)
	3x DisplayPort receptacle, DP++ capable
	Feature availability depending on installed module type. Please consult the product documentation for details.
Network Interface	1x 1GbE / 2.5GbE from COM Express module
	Feature availability depending on installed module type. Please consult the product documentation for details.
Audio Interface	High-definition digital audio codec
	Line In / Line Out / Mic
	S/PDIF on pin header
Miscellaneous	Pin header for GPIOs shared with SD/Card
	eSPI/LPC pin header
	Optional POST code display on module
	Feature connector
	4-pin fan connector PWM controlled RTC battery, CR2032
Feature Highlights	Versatile carrier board for evaluation and prototyping



OS Support	BSP (for onboard devices) for Windows and Linux	
	Feature availability depending on installed module type. Please consult the product documentation for details.	
Power Requirement	Standard 24 pin ATX power and additional ATX 12V connector (wide input 8.5V to 20V)	
Environment	Ambient Temperature 0° +60°C (operating), -25° 85°C (storage) Humidity 20 80% (operating, non-condensing), 5 95% (storage, non-condensing)	
Dimensions	305 x 244	
Certificates	UL/CE	



Order Reference - MSC C6-MB-EV4

Order Number	Description	Reference	Cat*
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	PV
111163	Extension module for MSC C6-MB-EV4, with LPC interface, dual RS232, POST code display; Nuovoton Super I/O.	MSC C6-MB-EV-LPC-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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