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### MSC C6-MB-EV

Mini-ITX Evaluation Board



#### Description

The MSC C6-MB-EV is a compact 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 6 modules and offers various PC type connectors for external access.

With this universal platform a tool is offered to test quickly what's needed 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<sup>™</sup> Type 6 modules
- PCI Express x16 slot (useable as PEG or x4)
- PCI Express Mini Card slot
- Four SATA connectors
- Four USB 3.0 interfaces
- Up to four USB 2.0 ports
- Three DisplayPort connectors
- LVDS and eDP connectors
- VGA connector
- GbE interface
- SD Card slot
- HD audio codec
- Super I/O
- Various additional COM Express<sup>™</sup> specific interfaces
- Power supply via ATX-style power connector or 12V-only power jack

- Wide power input range
- Size 170mm x 170mm

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### **Technical Data - MSC C6-MB-EV**

Formfactor	Mini-ITX	
Flash	SD Card socket	
Storage Interfaces	4x SATA up to 6Gb/s	
USB	4x USB 3.0 (USB 2.0 compliant), 4x USB 2.0	
Bus Interfaces	PCI Express™ One PCI Express x4 interface (on PCI Express x16 socket); also usable as PEG slot	
	LPC LPC bus on 10-pin header; usable for optional POST code display	
Display Interfaces	DisplayPort Three DisplayPort connectors	
	Embedded DisplayPort One 40-pin eDP connector	
	LVDS One 30-pin Jili connector	
Network Interface	RJ45 connector for LAN on COMe module, 10/100/1000 Mb/s supported, depending on COM Express module used, two status LED's integrated	
Audio Interface	HD audio codec (Realtek ALC888) routed to 3x audio jacks and SPDIF on 5-pin header	
Miscellaneous	Feature connector Carrying SMBus, I <sup>2</sup> C bus, power button, reset button, beeper, HD LED and other system signals	
	Fan	
	4 pin fan connector; PWM controlled by COM Express module	
	EEPROM One serial EEPROMs on I <sup>2</sup> C bus	
	One serial EEPROM for LVDS configuration data	
	Battery CR 2032 type RTC battery (3V, socketed)	
Feature Highlights	Carrier board for COM Express Type 6 pin-out	
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)	



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Dimensions

170mm x 170mm

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### **Order Reference - MSC C6-MB-EV**

Order Number	Description	Reference	Cat
67295	COM Express Type 6 Evaluation Carrier Board with PCI Express x16 slot, USB 3.0/2.0, GbE, SATA, DisplayPort, eDP/LVDS and HD audio interfaces; Mini PCI Express socket, SD card slot, ATX power connector and single 12V power jack. Dimensions: 170mm x 170mm (Mini-ITX form factor)	MSC C6-MB-EV-001 PCBFTX	PV
1127125	IO Shield for C6-MB-EV	MSC C6-MB-EV-01 IOS-001	PV

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### 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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