


MSC Q7-MB-EP6

Qseven™ 2.0 Carrier Board



 148x102

 N.A.

 -40 +85



Description

The Qseven™ Rev. 2.0 embedded platform MSC Q7-MB-EP6 offers a variety of interfaces commonly used in embedded applications such as Gigabit LAN, USB 3.0, USB 2.0 Host, USB 2.0 Client, RS232/485 and CAN as well as DisplayPort and LVDS display interfaces.

In addition a mini PCI Express™, an mSATA and an SD Card socket are supported to extend the functionality of the baseboard. The DisplayPort Signals are routed to the respective signals on the Qseven module connector via a TMDs translator which optionally corrects DisplayPort++ signaling for DP.

The Qseven slot of the EP6 platform is placed on the lower side of the baseboard, making it easy to thermally connect the Qseven heat spreader to a metal enclosure and provide fanless heat dissipation.

Highlights

- DisplayPort connector for direct output of DII (TMDs) signals from Qseven module
- Dual Gigabit Ethernet
- Mini PCI Express card slot
- MMC/SD card & mSATA card socket
- 1x SATA-II connector
- RS-232 on DB9 connector
- RS-485 and RS-232 on pin header
- CAN bus
- LPC / GPIO on pin header
- USB 3.0 host connector
- 2x USB 2.0 host connector
- 1x USB 2.0 on pin header
- 1x microUSB 2.0 Host/Client connector
- LVDS / eDP via Jili30 connector
- Backlight interface 3.3 / 5 / 12VDC
- SPI / I2C / SMBus
- HDA or I2S Audio
- Wide input range from 10 - 28VDC
- Size 148 x 102 mm

Technical Data - MSC Q7-MB-EP6

Technology	Carrier
Formfactor	3.5" Carrier
Storage Interfaces	1x mSATA socket; 1x MMC/SD Card socket (4bit)
USB	1x USB 3.0 host on front 2 x USB 2.0 host on front 1x microUSB 2.0 Host/Client on front 1 x USB 2.0 host internal 1 x USB on mPCIe socket
Serial Interfaces	1 x CAN internal; 1 x RS-232 and RS-485 (UART0 from module) 1 x RS-232 no handshake (UART2 from module)
Bus Interfaces	1 x mPCI Express socket
Display Interfaces	DisplayPort connector on front LVDS / eDP on Jili30 with EEPROM for display data and backlight connector
Network Interface	1 x GbE from Qseven module on front; 1 x GbE (i210) on front
Audio Interface	HD Audio codec
Feature Highlights	Qseven heatrail installed
Power Requirement	+5V DC +/-5%
Environment	Operating Temperature 0° ... +70°C (operating) -20° ... +85°C (storage) Humidity 5 ... 90% (operating, non-condensing), 5 ... 95% (storage, non-condensing)
Dimensions	148 x 102 mm
Certificates	UL / CE

Order Reference - MSC Q7-MB-EP6

Order Number	Description	Reference	Cat
67690	Qseven Rev. 2.0 compatible embedded platform (148 x 102mm), 10-28V input voltage, 1x RS232 on DB9 connector, 1x RS485 on pin header, 1x RS232 no handshake on pin header, dual RJ45 LAN connector with LED, 1x SATA, 1x mSATA slot, SD card holder, 1x USB 3.0 connector, 2x USB 2.0 connector, 1x USB 2.0 on pin row, 1x microUSB 2.0 OTG, CAN, I2C, LPC/GPIO on pin header, I2C/SMBus, SPI, DisplayPort connector, LVDS/eDP on JLI30 connector, regulated backlight supply, mini PCI Express slot, HD Audio, CMOS battery. Commercial temperature range 0..+70°C (because of HD Audio Codec, all other functions are industrial temp.)	MSC Q7-MB-EP6-601 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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