

## MSC Q7-MB-EP2

Embedded Platform DVI



### Description

The Qseven™ open specification ([www.qseven-standard.org](http://www.qseven-standard.org)) is a module concept to bring PCI Express and other high speed serial technologies like SATA, USB 2.0 and LVDS on a small form factor COM (Computer On Module).

The EP2 platform mounts the Qseven module on the solder side to easily attach the CPU to a metal enclosure for a proper fan less heat dissipation.

A board support package for Microsoft Windows XP and Linux is available for download from our COM support web site at [www.msc-ge.com](http://www.msc-ge.com).

70x70 



### Highlights

- One DVI port up to 1920 x 1080
- Dual Gigabit Ethernet
- Mini PCI Express slot
- MMC/SD Card socket
- Two SATA onboard connectors
- One RS-232 onboard pin header
- Six USB 2.0 interfaces, four external
- Touch screen controller onboard
- LVDS display connection via Jili30
- Backlight interface 3.3 / 5 / 12VDC
- Size 148 x 102 mm
- Wide input range from 10 - 28VDC

## Technical Data – MSC Q7-MB-EP2

### Module Standard

**Qseven™ Standard**  
Rev 1.11 compliant interface

**Qseven module connector**  
Socket for one Qseven module

### Storage Interfaces

**SATA**  
2 x SATA connectors routed to Qseven module

**MMC/SD Card**  
Cardholder with 4 bit interface

**EEPROM**  
Serial EEPROM for EPI/DP extensions

### Standard Interfaces

**USB**  
6 x USB 2.0  
- Four USB-Host (Serie-A Jack)  
- One USB-Host internal pin header  
- One USB at Mini PCI Express socket

**Serial**  
RS-232C on pin header driven by the onboard USB-to-RS232 converter (FT232RL)

**Mini PCI express**  
Socket for one mini PCI Express module with USB support

### Display Interface

**Graphics**  
DVI connector via onboard SDVO/DVI converter, max. 1980x1080

**LCD Interface**  
LVDS interface on Jili30 connector, EEPROM to store display data,  
Backlight connector onboard (3.3/5/12V)  
Cable kits and inverters available from MSC

### Miscellaneous

**Onboard system signals**  
Power Button, Reset, Beeper (optional)

### Network Interface

**Ethernet**  
Two RJ45 connectors with LED for LAN on Qseven module  
-One channel on Qseven module  
-One channel via Intel 82583V GbE PCIe controller on board

### Audio Interface

HD Audio codec VT1708, Audio out via pin header

### Touch Controller (optional)

Controller (HS12-100S00 for 4/5 wire touch screens on internal pin header)

### Power Supply

**Power**  
4pin power connector for 10-28VDC

### Environment

**Ambient Temperature**  
0° ... 60° C (operating)  
-25° ... 85° C (storage)

**Humidity**  
20 ... 80% (operating, non-condensing)  
5 ... 95% (storage, non-condensing)

### Mechanical

**Dimensions**  
148 mm x 102mm

Heat rail to connect Qseven module mounted on motherboard

## Order Reference – MSC Q7-MB-EP2

Order Number	Description	Reference
Please call	Qseven embedded platform, 10-28V input voltage, two RJ45 connectors with LEDs for LAN, Dual SATA, SD card holder, 6 x USB 2.0, DVI output, mini PCI Express socket, battery, system fan support.	MSC Q7-MB-EP2-001
Please call	Qseven embedded platform, 10-28V input voltage, two RJ45 connectors with LEDs for LAN, Dual SATA, SD card holder, 6 x USB 2.0, 1 x RS232, DVI output, LVDS and touch screen support, backlight, mini PCI Express socket, battery, system fan support.	MSC Q7-MB-EP2-002

## Accessories

Order Number	Description	Accessories
	<b>Power Supply</b>	
39698	Power supply Unit with connector for Q7-MB-EPx baseboards	MSC Q7-MB-EP-PSU1

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