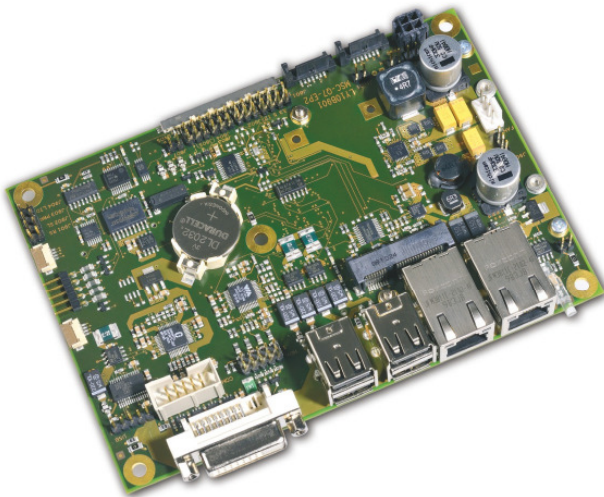


## MSC Q7-MB-EP2

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.

The DVI signal is generated from the SDVO signal provided by Qseven modules with Intel CPU's. 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).

148x102 

### Highlights

- One DVI port up to 1920 x 1080 for Qseven modules with SDVO
- 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
38638	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
40533	"Box/Enclosure for Q7-MB-EP2/4. Extra cut-out for 2x Dsub 9 connectors, Requires additional power supply in the range specified by the used carrier board. 2.5mm power outlet cable included. Material 1.5mm sheet metal, RAL7032"	MSC Q7-MB-EP-02 BOX-001

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