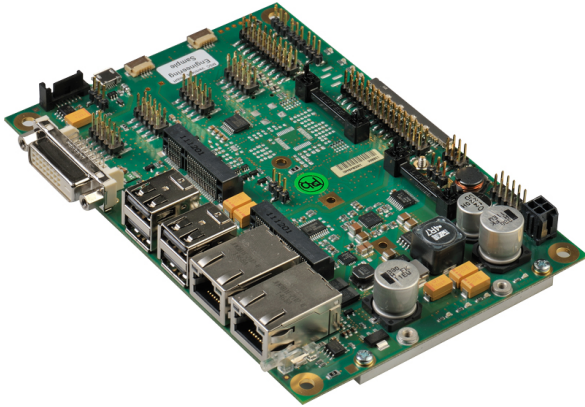




MSC Q7-MB-EP4

Qseven™ 2.0 Carrier Board



 148x102

 N.A.

 0 +70

Description

The Qseven™ 2.0 embedded platform MSC Q7-MB-EP4 offers a variety of interfaces commonly used in embedded applications such as Gigabit LAN, USB 2.0, RS232 and LVDS / DVI to connect displays.

In addition a mini PCI Express™, an mSATA and an SD-Card socket are supported to extend the functions of the baseboard. The DVI Signal is directly routed to the respective signal on the Qseven modules with a direct Digital Display Interface found typically on ARM or AMD x86.

The Qseven slot of the EP4 platform is placed on the solder side of the baseboard, making it easy to thermally connect the Qseven heat spreader to a metal enclosure and provide fanless heat dissipation.

Highlights

- DVI connector for Qseven DDI outputs
- Dual Gigabit Ethernet
- Mini PCI Express slot
- MMC/SD Card & mSATA socket
- One SATA connector
- One RS-232 pin header
- ARM RS-232 debug port
- CAN bus
- Five USB 2.0 host, four external
- One USB 2.0, client connector
- Touch screen controller
- LVDS display via Jili30
- Backlight interface 3.3 / 5 / 12VDC
- Wide input range from 10 - 28VDC
- Size 148 x 102 mm

Technical Data - MSC Q7-MB-EP4

| | |
|---------------------------|--|
| Technology | Carrier |
| Formfactor | 3.5" Carrier |
| Storage Interfaces | 1x mSATA socket; 1x MMC/SD Card socket (4bit) |
| USB | 4 x USB header on front; 1 x USB internal; 1 x USB on mPCIe socket |
| Serial Interfaces | 1 x CAN internal; 1 x RS-232C internal 1 x ARM debug port internal |
| Bus Interfaces | 1 x mPCI Express socket |
| Display Interfaces | DVI connector on front; LVDS on Jili30 with EEPROM for display data and backlight connector |
| Network Interface | 1 x GbE from Qseven module on front; 1 x GbE (82574L) on front |
| Audio Interface | AC97 or HD Audio codec, depends on model ordered |
| Miscellaneous | Resistive touch controller for 4/5 wire touch screens on pinrow: depends on model ordered internal |
| Feature Highlights | Fits in to MSC Q7-MB-BOX enclosure; Qseven heatrail installed |
| OS Support | BSP (for onboard devices) for Windows and Linux |
| Power Requirement | +5V DC +/-5% (Power Brick or USB) |
| Environment | Ambient Temperature 0° ... +70°C (operating), -40° ... 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-EP4

| Order Number | Description | Reference | Cat |
|--------------|---|-----------------------------|-----|
| 40824 | Qseven embedded platform (148 x 102 mm), 10-28V input voltage, 1x RS232 on pin row, 1x RS232 debug port, dual RJ45 LAN connector with LED, 1x SATA, 1x mSATA con., SD card holder, 2x external USB, 1x USB Host/Client, 1 intern USB, DVI + LVDS, touch screen support, regulated backlight supply, mini PCI Express socket, AC97 Audio codec, Audio on pin row, CMOS battery, system fan support. | MSC Q7-MB-EP4-001 PCBFTX | PV |
| 40826 | Qseven embedded platform (148 x 102 mm), 10-28V input voltage, 1x RS232 on pin row, 1x RS232 debug port, Dual RJ45 connector with LED for LAN, 1x SATA, 1x mSATA con., SD card holder, 2x external USB, 1x USB Host/Client, 1 intern USB, DVI + LVDS, regulated backlight supply, mini PCI Express socket, HD Audio codec, Audio on pin row, battery, system fan support. | MSC Q7-MB-EP4-002 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 |
| Carrier Options | | |
| 39698 | Power supply Unit with connector for Q7-MB-EPx baseboards. Provides 12V and 5V power. Does not include power cable from wall to PSU, please order optionally 40188 (US) or 35512 (EU). Optionally 35513 is a suitable combined SATA data and power cable. | MSC Q7-MB-EP-PSU1 |

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