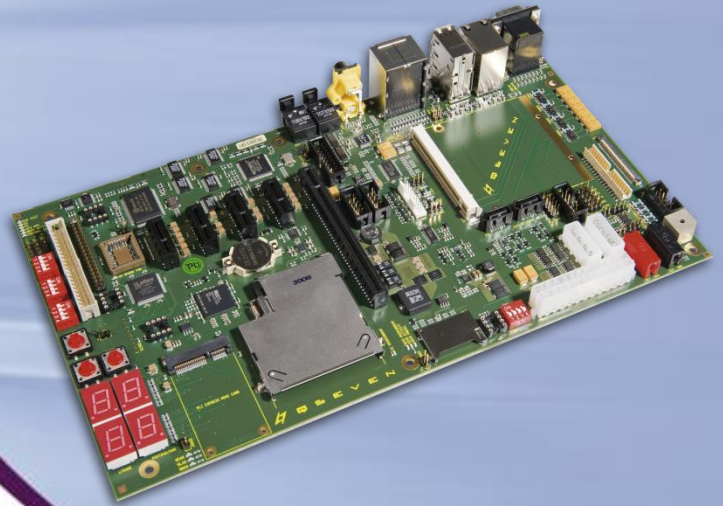


Product Sheet



Qseven™ Family

Qseven Reference Platform

The **Qseven™** open specification (www.qseven-standard.org) is a module concept to bring PCI Express and other latest technologies like SATA, USB 2.0 and LVDS on a small form factor COM (Computer On Module).

Qseven modules are plugged onto an application-specific baseboard. The specification has been created for applications requiring both small form factor and lowest power consumption using latest processor and I/O technology.

The **MSC Q7-MB-RP** is a reference platform provided to test and qualify **Qseven™** modules for compatibility with the specification. The board is shipped with a complete set of design files. An extensive design guide for the **Qseven™** module technology is also provided to allow the motherboard designer to easily implement a custom version of a **Qseven™** carrier.

Features

- Socket for Qseven™ compatible modules
- Four PCI Express x1 slots*
- One ADD2 slot for SDVO/DP/HDMI*
Optional standard converter for VGA or DVI
- MiniPCIexpress slot
- ExpressCard slot
- MMC/SD Card interface
- Two SATA onboard connectors*
- Two Super I/O (Winbond/SMSC)
- COM1/COM2, LPT, fan control and HW monitor
- HD audio codec with surround support (6 channel)
- Up to eight USB interfaces*
- LVDS display connection via Jili30 interface, cable sets available thru MSC display group
- LED and POST code displays as debugging aid
- EEPROM for LPC/I²C/SMBus/EPI/DID
- Buttons for Reset, Power, Lid
- Size (173 x 304 mm)
- ATX power connector (20+4 pin), optional 5VDC

* (depended on modules used)

Product description	Order No.
MSC Q7-MB-RP, Reference Platform for Q7-Modules	32370

Technical Data – MSC Q7-MB-RP

Module Interface

Qseven module connector: Socket for one Qseven module

Storage

SATA: 2 x SATA connectors

MMC/SD Card: Cardholder with 8bit interface

EEPROM: Serial EEPROM for SM Bus, Serial EEPROM for I²C Bus, Serial EEPROM for EPI/DP extensions

BIOS Flash: PLCC32 socket for external BIOS

Standard Interfaces

USB: 8 x USB 2.0

- Five USB-Host (Serie-A Jack)
- One USB-Host or one USB-Client
- One USB at MiniPCIExpress Socket
- One USB at ExpressCard Socket

Serial: 2 x COM on 9 pin Dsub connector driven by the onboard Super I/O, 2x COM port on header with SMSC Super I/O

Bus Interfaces

PCI Express: Four PCI Express x1 slot

Flat Panel/ CRT Interface

Graphics: Standard SDVO/DP/HDMI interface, Digital DVI monitor interface via SDVO/DVI converter, Analog monitor interface via SDVO/DVI converter

LCD Interface: LVDS-Interface on Jili30 connector, EEPROM to store display data, Backlight connector onboard; cable kit and inverter available from MSC

Miscellaneous

Debug Support: POST Display and LED indicators, Beeper

System Control: SMSC 3114 or Winbond W83627DHG for extra COM ports

LAN Interface

Ethernet: One RJ45 connector for LAN on Qseven module

Power Supply

Power: Standard 24pin ATX power connector and additional 2pin 5VDC connector;

Environment

Ambient Temperature: 0° ... +60° C operating, -25° ... 85° C storage

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

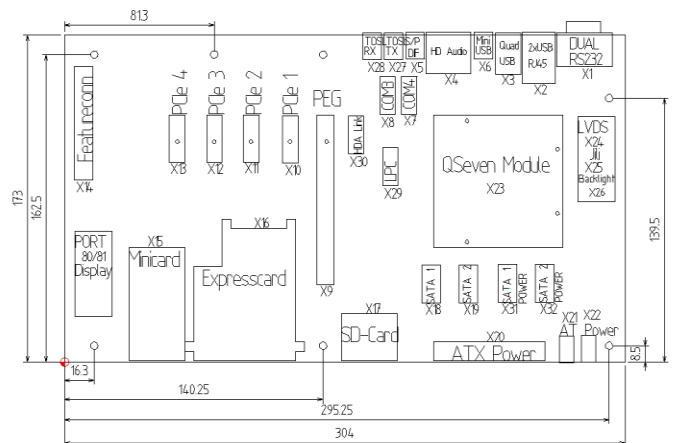
Mechanical

Dimensions: 305mm x 173mm

Accessoires

VGA out: ADD2 VGA CARD

DVI out: ADD2 DVI CARD



Sales Offices Germany
 München · Neufahrn · Tel. +49 8165 906 – 100 · e-mail: boards@msc-ge.com · **Technical Support COM:** Tel. +49 8165 906 – 200 · e-mail: support.boards@msc-ge.com; www.msc-ge/support-boards
 Dornach · Tel. +49 89 945532 – 0 · Eching · Tel. +49 8165 9995 – 300 · Berlin · Tel. +49 30 720089 – 0 · Hamburg · Tel. +49 4106 7766 – 0 · Hannover · Tel. +49 511 616847 – 0 ·
 Braunschweig · Tel. +49 5341 2999 – 0 · Düsseldorf · Tel. +49 211 92593 – 0 · Aachen · Tel. +49 2408 709 – 0 · Koblenz · Tel. +49 2630 96239 – 11 · Wiesbaden · Tel. +49 611 97320 – 0 ·
 Frankenthal · Tel. +49 6233 344 – 0 · Stuttgart · Tel. +49 711 78336 – 0 · Freiburg · Tel. +49 761 8819 – 819 · Nürnberg · Tel. +49 911 43970 – 0 · Jena · Tel. +49 3661 6825 – 0 · Stutensee · Tel. +49 7249 910 – 0

Sales Offices Europe
 MSC Vertriebs GmbH · Wiener Neudorf · Tel. +43 2236 205066 – 0 · Velden · Tel. +43 4274 23222 – 17 · **MSC Schweiz AG · Biel/Bienne** · Tel. +41 32 366 8565 · **Montreux** · Tel. +41 21 965 3500 ·
 Rotkreuz · Tel. +41 41 785 8200 · **MSC Iberia S.L. · Barcelona** · Tel. +34 931 505 505 · **Madrid** · Tel. +34 91 72169 – 51 · **MSC France · Paris** · Tel. +33 1 45128230 · **MSC Italia Srl** · Tel. +39 039 63089 – 1 ·
 MSC Nederland BV · Tel. +31 78 6920 – 150 · **MSC Belgium Office** · Tel. +32 2 452 6451 · **MSC (UK) LTD. · Brighton** · Tel. +44 1273 622446 · **Chertsey** · Tel. +44 1932 796335 ·
 MSC (Scotland) LTD · Tel. +44 1506 460555 · **MSC Representative (DK) Emcomp Nordic Area** · Tel. +45 49193854 · **MSC-Vertriebs-CZ s.r.o. · Blansko** · Tel. +420 516 411494 – 15 ·
 Prague · Tel. +420 296 580260 · **MSC-Vertriebs-SK s.r.o. · Zilina** · Tel. +421 41 5001243 · **MSC Budapest Kft.** · Tel. +36 1250 90 – 40 · **MSC Polska Sp. z o.o.** · Tel. +48 323 3054 – 50 ·
 MSC-Mibatron s.r.l. · Bucharest · Tel. +40 31 1023466 · Tel. +40 21 2302530 · **MSC Vertriebs GmbH · Istanbul** · Tel. +90 216 411 2333

Head Office Stutensee
 MSC Vertriebs GmbH · Industriestraße 16 · 76297 Stutensee · Tel. +49 7249 910 – 0 · Fax +49 7249 7993 0 · Stutensee@msc-ge.com



**MICROCOMPUTERS
 SYSTEMS
 COMPONENTS
 VERTRIEBS GMBH**

www.msc-ge.com/boards

© MSC. All rights reserved. Although great care has been taken in preparing this printed matter, MSC can not be held responsible for any errors or omissions. All information in here is subject to change without notice. All hardware and software names used are trade names and/or trademarks of the respective manufacturer.