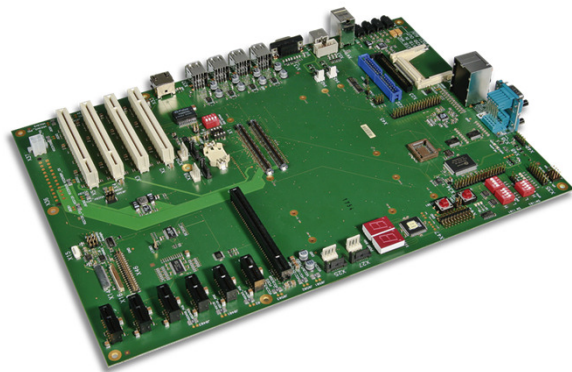


MSC CX-MB-EVA2

Evaluation Board



Description

COM Express™, an open specification of the PICMG (PCI Industrial Computer Manufacturer Group), is a module concept to bring PCI Express and other high speed serial technologies like SATA, USB 2.0 and LVDS on a COM (Computer On Module).

The MSC CX-MB-EVA2 is an ideal platform to develop and prototype system electronics before a customer specific baseboard is available.

It provides the interface infrastructure for the COM Express modules and offers PC type connectors for external access.

Rapid prototyping to assess the fit of a specific CPU technology is a key instrument to shorten design cycles and to improve time to market of new systems.

With this universal platform we offer the tool to test quickly what's needed to choose the right product out of our COM Express portfolio.

This development tool also helps to develop software in parallel with the hardware to speed up the integration process.

Special Starter Kits for Linux are available upon request.

368x255 

Highlights

- Socket for COM Express™ Type 2 modules
- Additional support logic (e.g. Super I / O)
- Four PCI slots
- Six PCI Express x1 slots
- Four SATA connectors
- IDE (40 / 44pin) header
- CompactFlash socket
- COM Express™ specific interfaces on PC style connectors
- Eight USB interfaces
- AC'97 and HD audio codec on board
- Post code LED display
- Different LVDS display connectors

Technical Data – MSC CX-MB-EVA2

Module Interface

COM Express module connector

Socket for COM Express module type 2 supports all module sizes (small, basic, extended)

Bus Interfaces

PCI Express™

Six PCI Express x1 slots

PCI

Four PCI slots 32-bit V2.1

LPC

LPC bus on 36 pin header

PCI Express Graphics

One PCI Express x16 Graphics slot alternatively two SDVO channels

Storage Interfaces

SATA

4 x SATA (150MB/s)

IDE

Primary Channel on 44 pin and 40 Pin connector for Ultra ATA-100/66/33

CompactFlash

Socket for True IDE devices using primary IDE channel

Standard Interfaces

USB

8 x USB 2.0 supported

Serial

2 x COM on 9 pin Dsub connector

IrDA

1 x IrDA using one COM port

Keyboard

PS/2 (from Super I/O W83627THF) or USB keyboard

Mouse

PS/2 (from Super I/O W83627THF) or USB mouse

Display Interface

Graphics

Standard VGA monitor interface (Dsub 15pin)

LCD Interface

LVDS-Interface

TV Out

Composite Video, S-Video

Miscellaneous

GPIO

3 4 x GPO driving 4 LEDs in parallel, 4 x GPI connected to DIP switches in parallel

Post Code Port

80 display for boot information

Super I/O

Winbond W83627THF driving 2x RS232, 1 x IrDA, PS/2 Mouse/Keyboard, system monitoring and fan control

Network Interface

Ethernet

RJ45 connector for LAN on COMe module, 10/100/1000 Mb/s supported, depending on COM Express module used, two status LED's integrated

Audio Interface

AC'97 codec for MIC, Line-In, Line-Out and headphone on external connector, high definition audio codex supports 8 channels

Power Supply

Power

Standard 24pin ATX power connector and additional ATX12V connector; power requirement depending on COMe Express module used

Environment

Ambient Temperature

0° ... 55°C (operating)
-25° ... 85°C (storage)

Humidity

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

Mechanical

Dimensions

368mm x 255mm (LxW)

Order Reference – MSC CX-MB-EVA2

Order Number	Description	Reference
32273	COM Express Motherboard for evaluation and development including Super I/O controller and POST code display	MSC CX-MB-EVA

Corporate Offices

MSC Vertriebs GmbH, Industriestraße 16, 76297 Stutensee, Tel. +49 7249 910 – 0, Fax +49 7249 7993 0
MSC Vertriebs GmbH, Design Center München-Neufahrn, Zeppelinstr. 1A, 85375 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, Internet: www.msc-ge.com/support-boards

Sales Offices Germany

München-Dornach · Tel. +49 89 945532 – 0 · **Berlin** · Tel. +49 30 720089-0 · **Hamburg** · Tel. +49 4106 7764-0 · **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 ·
Rodgau · Tel. +49 6106 26769 – 0 · **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 3641 6825-0 · **Stutensee** · Tel. +49 7249 910-173

Sales Offices Europe

MSC Vertriebs GmbH · Leobersdorf · 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 · **Volketswil** · Tel. +41 43 355 33 66 ·
MSC Iberia S.L. · Barcelona · Tel. +34 931 505 505 · **Madrid** · Tel. +34 91 72169-51 ·
MSC France · Paris · Tel. +33 1 45128230 · **Strasbourg** · Tel. +33 3 88 651843 · **Lyon** · Tel. +33 4 72 756020 ·
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, **Weybridge** · Tel. +44 1932 268990 · **Milton Keynes** · Tel. +44 1908 263999 ·
MSC (Scotland) LTD. · Tel. +44 1506 460555 · **MSC Representative (DK) MK Nordic ApS** · Tel. +45 24 252745 ·
MSC-Vertriebs-CZ s.r.o. · Blansko · Tel. +420 516 411494-15, **Prague** · Tel. +420 251 261 130 ·
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

