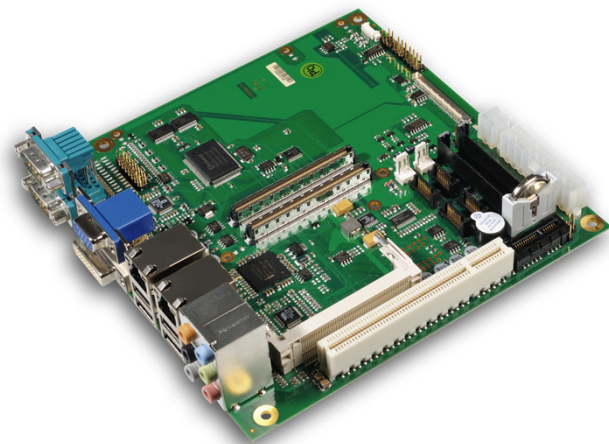


MSC CX-MB-IP1

Industrial Platform




Description

The MSC CX-MB-IP1 is an ideal base board platform to integrate any COM Express compliant module in basic or compact format supporting type 2 of the specification.

Our industrial platform MSC CX-MB-IP1 offers a large variety of interfaces commonly used in industrial applications such as dual Gigabit LAN, USB 2.0, serial, LVDS and VGA/DVI for display support and even USB NAND storage. 32bit PCI and PCI Express are supported with slots and riser cards.

This platform can be used for rapid prototyping to assess the suitability of a specific CPU technology or alternatively for low volume production runs as an off-the-shelf solution.

Using the CX-MB-IP1 base-board in combination with a COM express module from our extensive portfolio enables you to quickly achieve a turn-key solution for your industrial platform.

170x170 

Highlights

- Socket for COM Express™ Type 2 modules (Basic and Compact)
- Mini-ITX format
- One PCI slot, one PCI Express x1 slot via riser card
- One MiniPCI slot, USB NAND storage optional
- Four SATA onboard connectors
- Two CompactFlash sockets
- COM1 / 2, LPT
- Fan control, HW monitor and GPIOs
- HD audio codec with surround support
- Up to eight USB interfaces
- Additional onboard GbE controller (Intel 82573)
- VGA, DVI and LVDS (Jili20) connectors
- ATX power connector (20 + 4 pin)

Technical Data – MSC CX-MB-IP1

Module Interface

COM Express module connector

Socket for COM Express module type 2 supports module size 125x95 mm and 95 x 95 mm

Bus Interfaces

PCI Express™

One PCI Express x1 slot, connector accessible via CX-MB-IP-RC1 adapter

PCI

One PCI slot 32-bit V2.1, PCI master, One connector for mini-PCI module

Storage Interface

SATA

4 x SATA connectors (depends on module if all 4 available)

CompactFlash

Socket for True IDE devices using Master and Slave IDE channels

Standard Interfaces

USB

8 x USB 2.0 (depends on module used), 4 USB connectors on rear panel, USB NAND storage connector (optional)

Serial

2 x COM on 9 pin D-Sub connector

LPT

Parallel Port on 2mm pin row available

Display Interface

Graphics

Standard VGA monitor interface (15 pin D-Sub) and Digital DVI monitor interface via Chrontel 7307 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 (visit our web site at www.msc-ge.com).

Miscellaneous

GPIO

4 x GPO , 4 x GPI, TTL

System Control

Winbond W83627THF system monitoring and control (2 fans)

System Monitoring

Voltage

Monitoring VBAT, 3.3V, 12V, 5V

Temperature

Monitoring thermistor on motherboard

Fan

2 x PWM controlled fan connectors

LAN Interface

Ethernet

One RJ45 connector for LAN on COMe module, One RJ45 connector for onboard LAN (i82573), 10/100/1000 Mb/s, link and speed indicator LEDs

Sound Interface

Audio

High Definition Audio (HDA) codec for MIC, Line-In, Line-Out, Centre/LFE Surround Side, (VT1708A) requires module to support HAD

Power Supply

Power

Standard 20pin ATX power connector and additional 4pin ATX12V connector; power requirement is module dependant

Environment

Ambient

0° ... +70° C operating

Temperature

-25° ... 85° C storage

Humidity

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

Mechanical

Dimensions

170mm x 170mm, (LxW)

Order Reference – MSC CX-MB-IP1

Order Number	Description	Reference
32367	COM Express Industrial Motherboard in Mini-ITX format, second GbE controller, PCI and PCI Express x1 slot	MSC CX-MB-IP1

Accessories

Order Number	Description	Reference
	Cooling	
1051201	Riser card for one PCI and one PCI Express x1 slot	MSC CX-MB-IP-RC1

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