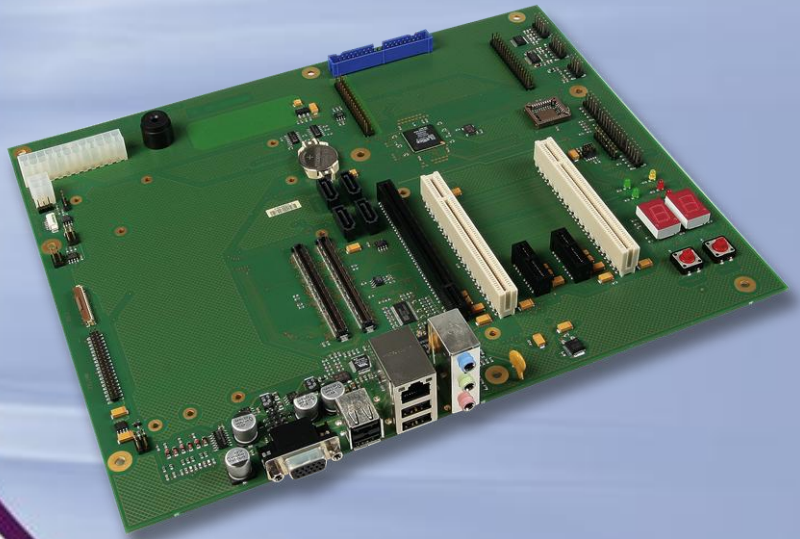


Product Sheet



COM Express™ Family

ATX Motherboard (COM Express™ Type 2)

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

COM Express is plugged onto an application-specific base board similar to the ETX concept, but offers more options and a growth path to future CPU technologies. Utilizing different sizes, COM Express can be used for highly embedded solutions up to high performance platforms.

The **MSC CX-MB-ATX** is an ideal platform to develop and prototype the system electronics before integration in the customer application. 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 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 hardware to speed up the integration process.

For designs requiring more interfaces we recommended the **MSC CX-MB-EVA2** as an alternative.

Features

- Socket for COM Express™ Type 2 compatible modules
- All formats (extended, basic, compact) supported
- ATX form factor for development environment with additional support logic
- Two PCI slots
- Two PCI Express x1 slots
- Four SATA onboard connectors
- IDE (40pin) header
- COM Express™ specific interfaces on PC style connectors accessible
- Four USB interfaces
- AC'97 audio codec on board
- POST Code LED display for easy boot process control
- ATX power connector
- Header for optional Super I/O extension board

Product description (more options on request)

Order No.

MSC CX-MB-ATX, COM Express Motherboard in ATX formfactor for evaluation and development

32233

Technical Data – MSC CX-MB-ATX

Module Interface

COM Express module connector: Socket for COM Express module type 2, Supports all module sizes (small, basic, extended)

Bus Interfaces

PCI Express™: Two PCI Express x1 slots

PCI: Two PCI slots 32-bit V2.1

LPC: LPC bus on 36 pin header for custom Super I/O extension

PCI Express Graphics: One PCI Express x16 Graphics slot, alternatively two SDVO channels

Drives

SATA: 4 x SATA (150MB/s)

IDE: Primary Channel on 40pin Connector for Ultra ATA-100/66/33

Standard Interfaces

USB: Four x USB 2.0 supported

Flat Panel/ CRT Interface

Graphics: Standard VGA monitor interface (Dsub 15pin)

EDID-EEPROM: LVDS-Interface

LCD Interface: Backlight supply voltage, 3,3 / 5 / 12V selectable

Miscellaneous

GPIO: 3 x GPO

Post Code Super I/O-Socket: Port 80 display for boot information

Control LEDs: +5V standby, HD-activity, +12V voltage, type temperature

Buttons: Power, Reset

External Bios Socket: Additional Bios possible

Beeper: Acoustical signals)

LAN Interface

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

Sound Interface

Audio: AC'97 codec for MIC, Line-In, Line-Out

Power Supply

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

Environment

Ambient: 0° ... +55° C operating

Temperature: -40° ... 70° C storage

Humidity: 20 ... 80% operating, 10 ... 100% storage (non condensing)

Mechanical

Dimensions: 304mm x 244mm, (LxW)

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