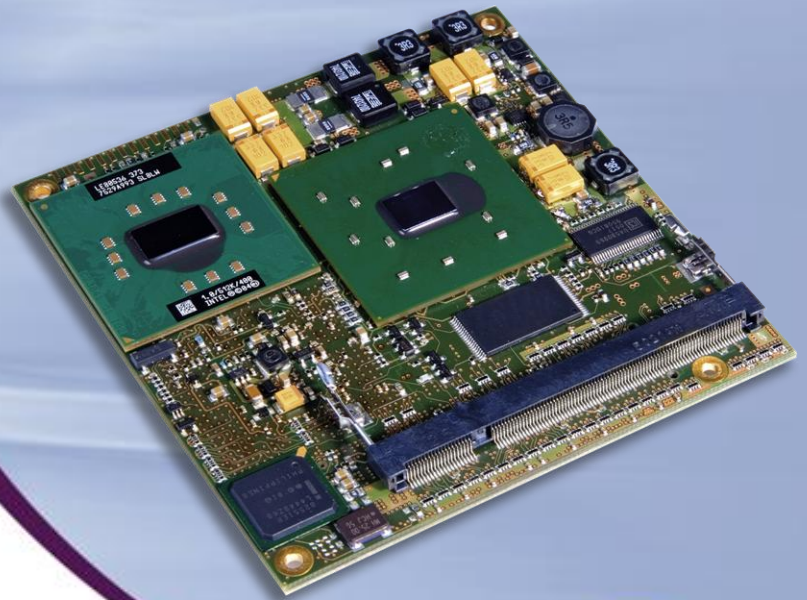


Product Sheet



COM Express™ Family

Intel® Pentium® M Compact

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 in 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 design of the **MSC CXC-PM855** modules supports all current variants of the Intel® Embedded Pentium® M processor up to the latest version with 400 MHz FSB.

For evaluation and design-in of COM Express™ Modules MSC provides evaluation baseboards. These motherboards provides the interface infrastructure for COM Express™ modules and offer PC type connectors for external connection.

Special Starter Kits for Windows® CE .NET and Linux are available upon request.

Features

- Intel® Pentium® M 1.1GHz up to 1.8GHz (2MB Cache)
- Intel® 855GME Chipset with integrated Intel® Extreme Graphics2 Controller
- Up to 1Gbyte PC2700 DRAM (ECC possible)
- Dual Enhanced IDE Interface
- 10/100Base-T Ethernet Interface
- LCD LVDS Interface (18 / 24 / 36 / 48 Bit)
- Resolution up to 1.600 x 1.200
- CRT Interface up to 2.048 x 1.536
- Dual Display Operation supported
- Quad USB 2.0 Interfaces
- AC'97 Audio Interface
- RTC (Battery-buffered)
- System Monitoring, Watchdog
- APM ACPI Power Management including Suspend-to-RAM
- Fully COM Express™ Type 2 compliant
- Windows®XP (embedded), Windows®CE .NET and Linux supported

Product description (more options upon request)	Order No.
MSC CXC-PM855-CPU1400-813000, Pentium® M LV 738, 1.4GHz	32144
MSC CXC-PM855-CPU1800-C13000, Pentium® M 745, 1.8GHz	32145

Technical Data – MSC CXC-PM855

Core Logic, Memory

CPU: Intel® Pentium® M 738 (1.4 GHz) or 745 (1.8 GHz) or LV 1.1GHz (upon request)

Chipset: Intel® 82855GME, ICH4

Memory: 200-pin SO-DIMM socket for up to 1GB PC2700 DDR SDRAM (DDR333), ECC possible with ECC-SODIMM

Drives

EIDE: 2 Enhanced IDE ports ATA/UDMA100

Floppy: Shared with parallel port

Standard Interfaces

USB: 4 x USB 2.0

Bus Interfaces

COM Express™ Interface: Typ2 Interface with PCI and IDE. No PCI Express™ Signal due to used chipset

PCI: 32-bit standard interface

Serial Bus: I²C Bus, SMBus interface

Flat Panel/ CRT Interface

Graphics Controller: Intel® Extreme Graphics (integrated in Intel® 855 GM Chipset)

Video Memory: UMA, up to 32MB

LCD Interface: LVDS 18/24/36/48-bit, max. resolution 1.600 x 1.200

CRT Interface: Max. resolution 2.048 x 1.536

Miscellaneous

Watchdog Timer: Creates system reset (programmable, 1s ... 255h)

Fan Supply: 3-pin header (5V)

Battery: External

System Monitoring: Voltage, Temperature, Fan

LAN Interface

Ethernet: 10/100Base-T controller in ICH4 (Intel® 82559 compatible)

LAN Boot: RPL PXE

Sound Interface

Audio: AC'97 2.3 Audio Codec, Realtek ALC650

Bios

Phoenix (in on-board Flash)

Auto Configuration: Plug & Play (PCI, ISA), PCI Auto Configuration (PCI 2.1), Automatic DRAM configuration

Boot Options: Quick Boot, MultiBoot (FD, HD, CD, LAN, USB), Boot without keyboard

Security: System and setup password, Write protection for BIOS Flash

Power Management: APM ACPI (including suspend-to-RAM), Fixed frequency option (Setup) Geyserville 3 Support

USB: USB legacy support (Keyboard, Mouse, Hub)

Video: VGA Bios with flat panel extensions

Flash Update: BIOS update via storage media

Setup: CMOS setup backup in Flash chip

Power Supply

Power: +5V +/-10%

Power Consumption: 15W typ. (1.4GHz, 256MB) 1.5W typ. (suspend)

Environment

Ambient: 0° ... 60° C (operating)

Temperature: -25° ... 85° C (storage)

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

Mechanical

Dimensions: 95mm x 95mm x 12mm

Heatspreaders: 95mm x 95mm x 2mm with through hole standoffs (3mm) or threaded corner standoffs (2.5mm)

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