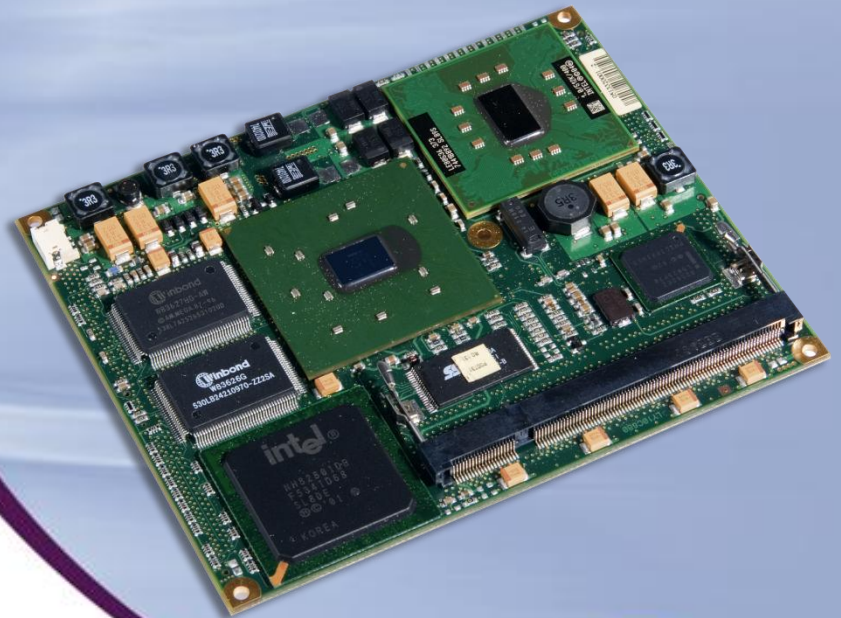


Product Sheet



ETX Family

Intel® Pentium® M / Celeron® M Module

ET(e) modules provide the functionality of an Embedded PC on a standard ETX-sized module. ET(e) modules are fully compliant with the ETX specification.

ET(e) modules are plugged onto an application-specific base board by high-density SMD connectors. The combination of a standardized CPU module and a base board designed for the specific requirements of the application enables a flexible, configurable system platform with scalable CPU performance.

The design of the **MSC ET(e)-PM855/CM855** modules supports all current variants of the Intel® Embedded Pentium® M and Celeron® M processors up to the latest version with 400 MHz FSB.

For evaluation and design-in of the ET(e) modules, various evaluation baseboards and application motherboards are available each providing the interface infrastructure for the ET(e) module and offering PC plug connectors for external connection.

Support for Windows® XP, Windows CE® and Linux is available on request.

Features

- Intel® Pentium® M 1.1GHz up to 1.8GHz (2MB Cache)
- Intel® Celeron® M 600MHz up to 1.5GHz (512kB Cache)
- Up to 1Gbyte PC2700 DRAM (ECC possible)
- Dual Enhanced IDE Interface
- 10/100Base-T Ethernet Interface
- Intel 855GME Chipset with integrated Intel Extreme Graphics2 Controller (up to 32MB)
- 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
- IrDA 1.1 Interface
- Dual Serial Interfaces (TTL)
- LPT (Uni/EPP/ECP)
- RTC (Battery-buffered)
- System Monitoring, Watchdog
- APM ACPI Power Management including Suspend-to-RAM
- Fully ETX compliant
- Windows® XP (embedded), Windows® CE and Linux supported

Product description (more options on request)	Order No.
MSC ETE-CM855-CPU600 112000/1, ULV Intel® Celeron® M 600MHz	32268
MSC ETE-CM855-CPU1000 414000/1, Intel® Celeron® M ULV 373, 1.0GHz	32119

Technical Data – MSC ETE-PM855 / CM855

Core Logic, Memory

CPU: LV Intel® Pentium® M 1.6GHz, 738 (1.4 GHz) or 745 (1.8 GHz)
Intel® Celeron® M ULV 600MHz, Intel® Celeron® M LV 373 (1.0 GHz),
1.3GHz (512kB L2 Cache)

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

Parallel: Uni/EPP/ECP (FDC shared)

Serial: 2x TTL

Infrared: IrDA 1.1 Tx/Rx interface

Keyboard / Mouse: PS/2

USB: 4 x USB 2.0

Bus Interfaces

PCI: 32-bit standard interface

ISA: Standard ISA interface (LPC Bridge Winbond W83626F)

Serial Bus: I2C Bus, SMBus interface

Flat Panel/ CRT Interface

Graphics Controller: Intel® Extreme Graphics2 (integrated in Intel®
855 GME 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

Certifications

UL Listing: UL File E254492



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

Type: 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 8W typ. (600 MHz)

Environment

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

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

Mechanical

Dimensions: 95mm x 114mm x 12mm

Accessoires

Heatspreaders: 95mm x 114mm x 2mm with through hole or
threaded standoffs

Memory: SO-DIMMs from 256MB to 1 GB

Base Boards: Various formats (for evaluation and software
development)

Display Kits: TFT displays with backlight inverter and cabling set
from 15,24cm (640 x 480) up to 53,34cm (1,600 x 1,200)

Board Support Packages: Linux and Windows® CE support

