

Product Sheet



ETX® Family

VIA Eden(V4)/C7



ET(e) modules provide the functionality of an Embedded PC supporting the ETX® specification 3.0.

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 module may replace heritage products based on the previous VIA Eden and VIA C3 processors using bridge components like Twister-T and CN400.

The design of the **MSC ETE-CN700** module supports the VIA Eden(V4) and VIA C7 processor combined with the CN700 and 8237R+ bridge components thus enabling new features like DDR memory support, Dual Display Support, USB 2.0 and onboard SATA according to the new ETX® Specification 3.0.

For design-in and evaluation of the ET(e) modules base boards are available which supply all interfaces of a standard PC.

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

Features

- VIA Eden(V4) 400MHz - 1.2GHz, Eden ULV (V4), VIA C7 up to 1.5GHz (400MHz FSB)
- VIA CN700 Chipset with integrated 3D Unichrome™ Pro
- Up to 1GB DDR (SO-DIMM, 400MHz)
- Two SATA-150 mass storage interfaces
- 10/100Base-TX Ethernet interface
- LVDS interface (24 Bit, dual channel)
- Resolution up to 2.048 x 1.536 (CRT)
- Dual Independent Display mode supported
- Four USB 2.0 interfaces
- RTC (battery-buffered on baseboard)
- System monitoring
- Watchdog timer
- ACPI power management
- ETX® specification 3.0 compliant
- Windows®XP (embedded) supported

Product description [more options on request]	Order No.
MSC ETE-CN700-CPU400-011000, VIA Embedded Eden 400MHz, 10/100 Base-TX, LVDS	32205
MSC ETE-CN700-CPU800-011000, VIA Embedded Eden 800MHz, 10/100 Base-TX, LVDS	32257
MSC ETE-CN700-CPU1000-011000, VIA Embedded Eden 1.0GHz, 10/100 Base-TX , LVDS	32181
MSC ETE-CN700-CPU1200-011000, VIA Embedded Eden(V4) 1.2GHz, 10/100 Base-TX , LVDS	32206
MSC ETE-CN700-CPU1500-012000, VIA Embedded C7 1.5 GHz, 10/100 Base-TX , LVDS	32208
MSC ETE-CN700-CPU1000-091000, VIA Embedded Eden 1.0GHz, 10/100 Base-TX , TTL	32322

Technical Data - MSC ETE-CN700

Core Logic, Memory

CPU: VIA Eden(V4) 400MHz - 1.2GHz,
Eden ULV(V4), VIA C7 up to 1.5GHz

Chipset: VIA CN700, VIA VT8237R+

Memory: 200-pin SO-DIMM socket for up to 1GB, DDR SDRAM (DDR400)

Drives

SATA: 2 x SATA (up to 150MB/s)

EIDE: 2 x Enhanced IDE port ATA/UDMA133

Floppy: shared with LPT (Parallel)

Standard Interfaces

Parallel: Uni / ECP / EPP, shared with Floppy

Serial: 2 x TTL

Infrared: IrDA 1.1 Tx/Rx interface

Keyboard / Mouse: PS/2

USB: 4 x USB 2.0 ports

Bus Interfaces

PCI: 32 Bit standard interface, 32bit @ 33MHz

ISA: Standard ISA interface (ITE8888 bridge)

Serial Bus: I2C Bus, SMBus interface

Flat Panel / CRT Interface

Graphics Controller: VIA 3D Unichrome™ Pro, (integrated in CN700 Chipset)

Video Memory: UMA, up to 32MB, dual video streams

LVDS Interface: LVDS 24-bit, 2 pixel/clock, max. resolution 1.600 x 1.200

TTL Interface: 18-bit (optional)

CRT Interface: max. resolution 1.600 x 1.200

Miscellaneous

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

Fan Supply: 3-pin header (5V)

Battery: external

System Monitoring: 6 x voltage, 2 temperature sensors, onboard fan

Certifications

UL Listing: UL File E254492



LAN Interface

Ethernet: 10/100Base-TX controller in VT8237R+ (PHY VT1631)

LAN Boot: RPL PXE

Sound Interface

VT1613 Audio Interface (AC'97)

Bios

Type: Phoenix (in on-board Flash)

Auto: Plug & Play (PCI, ISA)

Configuration: PCI Auto Configuration (PCI 2.3), 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: ACPI

USB: USB legacy support(keyboard, mouse)

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. (C7 1.5GHz), 7W Typ.(Eden ULV 500MHz)

Environment

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

Humidity: 5 ... 95% (operating), 5 ... 95% (storage, non-condensing)

Mechanical

Dimensions: 95mm x 114mm x 12mm

Accessoires

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

Cooling: Active or passive heat sinks

Memory: SO-DIMMs from 256MB to 1 GB

Base Boards: Various formats (for evaluation and SW 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 supported

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