



KEY FEATURES

- ▶ Scalability across the range: 500MHz - 1.5GHz
- ▶ Supports STN, DSTN, TFT, LVDS and analogue displays
- ▶ PoE support
- ▶ 4 USB ports and 2 serial ports
- ▶ Optional Wireless connectivity
- ▶ Optional dual LAN

CABLE KITS

- ▶ LVDS/LCD Cable
- ▶ GPIO/Audio Cable
- ▶ Keyboard/Mouse Splitter
- ▶ Header to standard D-type parallel port

MAGNUM ETX SINGLE BOARD COMPUTER

The Magnum ETX brings a comprehensive feature set with 'real world IO' to a compact form factor of 115mm x 145mm. The board accommodates VIA's C7 CPU with the CN700 chipset with processor options from 500MHz to 1.5GHz, allowing you to scale board power and performance to your target application. It will also support the future release of Via's widely anticipated 'Atom killer' - the Nano ULV CPU, promising dual core options and as much as four times the performance within the same power range.

Onboard I/O support includes 10/100 Ethernet, four USB ports, two serial ports, keyboard/mouse, Audio (inc microphone), CRT, LCD and LVDS (mutually exclusive) display interfaces. The board also includes integrated GPIO - 16 input/output TTL signals. More special function I/O expansion such as wireless or dual LAN is possible via a Mini PCI connector. The Magnum ETX also offers support for both rotational and solid state disks - dual UltraDMA 33/66/100 IDE drive and Compact Flash.

Based on the successful VIA C7 processor set, the Magnum ETX has a very efficient power profile - consuming 7 watts of typical power running at 500MHz, meaning the processor can run full speed at 0°C to +60°C without a fan. Low power consumption also makes the Magnum ETX the ideal candidate for PoE (Power Over Ethernet) support, so you can get power to your device over the LAN. With its display interfacing, wide-screen support and integrated Unichrome Pro 3D/2D Graphics controller, the Magnum ETX is a solid multimedia engine as well as an I/O-intensive solution for demanding applications in industrial automation, transport and analysis. It runs Windows® XP Pro, Windows® Vista, Windows® XP Embedded, Windows® CE, Linux and QNX, a full BSP and technical consultation is included within the support package.

MAGNUM ETX SINGLE BOARD COMPUTER TECHNICAL SPECIFICATION

System

- ▶ VIA C7 options with CN700 north bridge and VT8237R plus south bridge
- ▶ Via C7 Phoenix Trusted Core BIOS, with integrated Ethernet and RAID Boot ROMs. Support for APM, ACPI and hardware disabling of on board PCI devices
- ▶ 256MB, 512MB and 1GB of DDR2 memory using a SODIMM, 128K L1 and 128K L2 cache
- ▶ Customer Splash screen option

Local Storage

- ▶ ATA100/66/33 EIDE port
- ▶ Compact Flash Socket

Operating System Support

- ▶ Windows® XP Pro, Windows® Vista, Windows® XP Embedded, Windows® CE
- ▶ Linux
- ▶ QNX

Enhanced IO

- ▶ Quad USB Ver 2.0 Compliant ports
- ▶ Two serial ports
- ▶ PS/2 compatible keyboard and mouse port
- ▶ GPIO – 16 input/output TTL signals

Local Area Network

- ▶ 10/100 Base - T Ethernet

Expansion

- ▶ PCI and Mini PCI

Power

- ▶ 5 volt only operation
- ▶ 5.25" HDD power supply connector
- ▶ Additional header if -12V required
- ▶ +12 Volt only routed to PCI slot

Display/Audio

- ▶ Integrated graphics controller based on the Unichrome Pro 3D/2D Graphics controller.
- ▶ CRT, 18bit TFT LCD and LVDS SVGA up to 1920 x 1440 resolution
- ▶ Direct LCD support for STN, DSTN and TFT up to 18 bit
- ▶ Single channel LVDS up to 18 bit panels not dual
- ▶ 16 to 64MB Video Memory (SMA)
- ▶ Supports 800 x 480, 848 x 480 & 1024 x 512 resolutions and anything up to the max resolution as a custom option.
- ▶ Integrated AC97 controller, Line In/Out, Microphone In and CD in. (CD in and Line in share the same pins and are therefore mutually exclusive)

System Management

- ▶ Voltage monitors, reset generated if the 5.0 volt rail falls below 4.65 volts
- ▶ Two on board thermistors for system thermal monitoring
- ▶ Hardware Watchdog timer with 1-25 second nominal timeout, software enabled/disable through an IO port
- ▶ The time-out results in a system reset. Device Driver support is available

Environmentals/Mechanicals

- ▶ Dimensions - 115mm x 145mm
- ▶ Operating temperature range 0°C to +60°C
- ▶ Storage temperature -20°C to +70°C
- ▶ Relative Humidity 5 - 95% non-condensing.