NOVA-EDEN-733

5.25" Embedded Low Power VIA Eden CPU board with
LCD/CRT VGA, DUAL LAN, AUDIO, USB 2.0 and TV-OUT
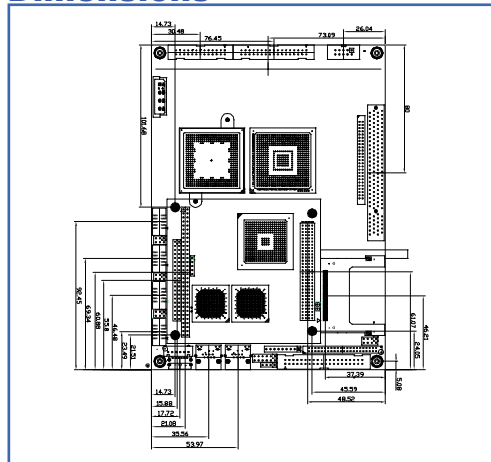
**All-in One
Embedded Solution**

**4 x RS-232
Serial Ports**

Dimensions

- CF II
- PC/104 Plus
- Dual LAN
- PC/104
- VIA CPU

Why VIA Eden CPU and ProSavage™ PN133T chipset?

The VIA Eden™ Platform is a low power, high performance, and highly integrated x86 platform that provides the most flexible, compatible, and cost-effective solution for building the emerging new generation of connected digital information & entertainment devices. It combines a proven ultra low power sixth generation processor core with a choice of a highly integrated North Bridge and South Bridge chips, as well as a broad spectrum of expansion options for enhanced communications, connectivity, and multimedia functions.

The VIA ProSavage™ PN133T integrated mobile graphics chipset combines the rich 2D/3D graphics capabilities of the proven Savage4™ graphics core with advanced North Bridge features such as a 133MHz Front Side Bus and 133MHz SDRAM support. This delivers unrivaled performance and flexibility in an affordable, highly integrated laptop chipset. With its low power characteristics and highly integrated nature, the VIA ProSavage PN133T is ideally suited for the thin, light and ultra small mobile sectors, and its low cost points also make it appropriate for entry level and mainstream systems.

Bringing all the accepted SMA features to the laptop market, including extremely low power consumption, effective heat dissipation, space saving single chip design and full ACPI compliance enables OEMs and System Integrators to reduce the cost of building smaller, thinner laptops without sacrificing features and performance.

What is I²C interface?

I²C bus is also called SMBus (System Management Bus). It is a two-wire developed for component communication (especially for semiconductor IC). For example, set clock of clock generator for jumpless function. The data transfer rate of I²C bus is only 100Kbit/s, it allows one host to communicate with CPU and memory masters and slaves to send/receive message.

SPECIFICATIONS

USB 2.0

AUTO DIRECTION 485

- ◆ CPU: Embedded low power consumption VIA Eden CPU (EBGA package)
- ◆ System chipset: VIA VT8606T (PN133T) with VT82C686B
- ◆ System memory: 1x PC100/133 SDRAM up to 512MB
- ◆ Display:
  – On-chip ProSavage™ VGA controller
  – Bus: AGP 4x
  – V-RAM: Shared with system memory up to 32MB (SMA technology)
  – Resolution: Up to 1920x1440 (CRT)
  – Connector: DB-15 for CRT display
  – 36-bit, 1920x1440 (CRT), 50 pin header for LCD digital signal output
  – TV-OUT: Both NTSC and PAL output signal are supported
- ◆ SSD: 1x on board Compact Flash type II socket
- ◆ Ethernet:
  – 2x on board 10/100Mbps fast Ethernet controller
  – Dual Intel 82551: NOVA-EDEN-733N
  – Dual Realtek RTL8100BL: NOVA-EDEN-733R
- ◆ Audio: On board AC'97 codec with 6W amplifier
- ◆ I/O:
  – 3 x RS-232 serial ports by pin-header
  – 1 x RS-232/422/485 selectable port with Auto-Direction function
  – 1 x LPT parallel port by pin-header (supports SPP/EPP/ECP mode)
  – 1 x IrDA (SIR mode)
  – 4 x USB 2.0 + 2 x USB 1.1 by pin-header
  – 2 x ATA/100 IDE channel, supports CD-ROM, ZIP and LS-120 drive bootable (IDE1: 40-pin, IDE2: 44-pin).
  – 1 x FDD connector, supports 1.44/2.88MB and 3-mode floppy drive
- ◆ WDT: Software programmable supports 1~255 seconds system reset
- ◆ PC/104 and PC/104 Plus: For PCI and ISA device modules expansion
- ◆ Expansion slot:
  – 1x 32-bit/33MHz PCI expansion slot for PCI devices expansion
  – 1x PC/104 for ISA device modules expansion
  – 1x PC/104 Plus for PCI device modules expansion
- ◆ Digital I/O: 4 pins for input and 4 pins for output
- ◆ Hardware Monitoring: Provides CPU Vcore, Vcc; CPU/System fan speed and temperature detecting function.
- ◆ ATX power control function: Meets ACPI 1.1 specification
- ◆ Power Consumption: 5V@3.1A; 12V@160mA (with 256MB SDRAM)
- ◆ Operating Temperature: 0~60°C
- ◆ Relative Humidity: 5~95%, non-condensing
- **Notes:** Contact Supplier about other VIA CPU's

ORDERING INFORMATION

- ● **NOVA-EDEN-733N** 5.25" VIA Eden 733MHz CPU with dual Intel 82551 LAN/VGA/TV-OUT
- ● **NOVA-EDEN-733R** 5.25" VIA Eden 733MHz CPU with dual Realtek RTL8100BL LAN/VGA/TV-OUT