

# GVPC3

VIA® Eden 600MHz Fanless Processor Included

Fanless PCI/ISA ATX format with on-board Audio, Video, and LAN

Introduced: Q2/2003

## Features:

- ATX format
- Includes VIA® Eden processor
- Fanless low power X86 embedded processor
- VIA® VT8606 TwisterT chipset
- Four PCI, One shared PCI/ISA and One ISA Slots
- On-board LAN
- On-board Audio & Video
- Supports up to 4 USB
- Long and stable product life cycle
- LVDS (Low Voltage Differential Signaling) for flat panel support
- Saves energy and ensures a battery life extended for mobile platforms



8" (20.4 cm)

12" (30.5 cm)

The GVPC3 revision controlled motherboard offers users a cost-effective, low power, high performance solution for the emerging digital information and entertainment markets.

This motherboard includes a fanless VIA® Eden processor, on-board audio, video, one LAN and up to four USBs. This ATX motherboard offers four PCI slots, one shared PCI/ISA, and One ISA.

The VIA® Eden 600MHz low power processor enables energy saving and low noise designs for low profile, small form factor platforms. The GVPC3 offers LVDS (Low Voltage Differential Signaling) for flat panel support. DVI available per special order. The GVPC3 motherboard supports internet applications, mobile systems, digital media and servers.

Other features include voltage, fan speed and temperature monitoring.

The GVPC3 is produced under strict revision control guidelines to provide a long product life cycle (3 years or more). This reduces long-term costs for system testing, certification, and maintenance. ITOX motherboards are used in a variety of applications and in many industries including those listed below.

## Markets

- Network Servers
- Medical Imaging
- Video-On-Demand
- Mobile devices
- High Heat or Low Ventilation Environments
- Internet (ISPs)
- Video Editing
- Kiosks
- Industrial PCs



# GVPC3 Revision Controlled Motherboard

## PROCESSOR

- VIA® Eden 600MHz low power processor

## CHIPSET

- VIA® VT8606 TwisterT / VT82C686B

## SYSTEM MEMORY

- Up to 1GB using PC SDRAM DIMM
- Two 168-pin DIMM sockets
- Supports standard PC-133 and PC-100 SDRAM

## BIOS

- Award BIOS, Windows® 95/98/2000/ME Plug and Play compatible
- Supports SCSI sequential boot-up
- Flash EPROM for easy BIOS upgrades
- Supports DMI 2.0 function
- 2Mbit flash memory

## ENERGY EFFICIENT DESIGN

- Supports ACPI specification and OS Directed Power Management
- Supports ACPI STR (Suspend to RAM) function
- Wake-On-Events include:
  - RTC timer to power-on the system
  - Wake-On-Ring (through external modem)
  - Wake-On-LAN
- System power management supported
- Hardware supports SMI green mode
- Microsoft®/Intel® APM 1.2 compliant
- Soft Power supported - ACPI v1.0a specification
- AC power failure recovery

## DAMAGE FREE INTELLIGENCE

- Supports Watchdog timer function
- Monitors CPU/system temperature
- Monitors VCore/3.3V/5V/12V/2.5V voltages
- Monitors CPU/chassis fan speed
- Read back capability that displays temperature, voltage and fan speed

## ONBOARD GRAPHICS FEATURES

- Integrated Savage4 2D/3D/Video accelerator
  - Optimized Shared Memory Architecture (SMA)
  - Full internal AGP 4x performance
  - High quality DVD video playback
  - Supports flat panel monitor
  - 2D/3D resolution up to 1920x1440 for high resolution CRT support
- 3D rendering features
  - 32-bit true color rendering
  - MPEG-2 video textures
- 2D hardware acceleration features
- Motion video architecture
- Extensive LCD support
  - Integrated 2-channel LVDS interface
  - Panel power sequencing
- Software drivers
  - Windows® 9x/NT4.0/2000/ME/XP

## AUDIO FEATURES

- AC'97 supported with full duplex, independent sample rate converter for audio recording and playback

## ONBOARD LAN FEATURES

- Uses Realtek RTL8100 fast ethernet controller
- Integrated IEEE 802.3 10BASE-T and 100BASE-TX compatible PHY
- 32-bit PCI master interface
- Integrated power management functions
- Full duplex support at both 10 and 100 Mbps
- Supports IEEE 802.3u auto-negotiation

## PCI IDE INTERFACE

- Supports Ultra ATA/100 hard drives
- PIO Mode 3 and Mode 4 Enhanced IDE (data transfer rate up to 6.6MB/sec.)
- Bus mastering reduces CPU utilization during disk transfer
- ATAPI CD-ROM, LS-120 and ZIP supported

## REAR PANEL I/O PORTS

- 4 USB ports
- 1 RJ45 LAN port
- 1 DB-9 serial ports
- 1 DB-15 VGA port
- 1 DB-25 parallel port
- 1 mini-DIN-6 PS/2 mouse port
- 1 mini-DIN-6 PS/2 keyboard port
- 3 audio jacks: line-out, line-in and mic-in

## I/O CONNECTORS

- 3 connectors for 3 additional external serial ports
- 1 connector for IrDA interface
- 2 IDE connectors
- 1 floppy connector
- 1 ATX power supply connector
- 1 Wake-On-LAN connector
- CPU fan and chassis fan connectors
- 1 CD-in internal audio connector
- 1 connector for external game/MIDI port
- 1 connector for LCD brightness control
- 1 connector for LVDS LCD panel

## EXPANSION SLOTS

- 4 dedicated PCI slots
- 1 shared PCI/ISA slot
- 1 ISA slot

## CIRCUIT BOARD (PCB)

- 6 layers, ATX form factor
- 30.5cm (12") x 20.4cm (8")

## SAFETY

- UL, cUL, FCC Class B, CE



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