

# GIE83-D

Intel® Pentium® 4 Processor and Intel® Celeron® Processor

ATX Motherboard with 5 PCI slots and on-board Audio

Introduced: Q4/2002

## Features:

- ATX format
- Supports Intel® Pentium® 4 Processor or Intel® Celeron® Processor
- Intel® 845 chipset – 400 MHz data bus
- Six Expansion Slots:  
4 PCI, 1 Shared PCI/CNR, and 1 AGP
- On-board Audio
- Supports up to 4 USB
- Connector for IrDA interface
- Long and stable product life cycle
- Monitors fan speed, temperature, and power supply voltages

9.6" (24.4cm)



12.05" (30.5cm)

The GIE83-D revision controlled motherboard offers industrial users the high processing power of the Intel® Pentium® 4 processor, on-board audio, and four USB's. This ATX motherboard combines the strength of the Intel® 845 chipset and offers four PCI slots, one AGP slot, and one shared PCI/CNR slot.

The GIE83-D's 400MHz system data bus provides three times the bandwidth over Intel® Pentium® III processor power platforms for seamless user interaction. It's AGP slot will support a 4X AGP card when ultimate video performance is needed. There is also a communication and network riser (CNR) slot for additional system flexibility. Other industry features include voltage, fan speed, and temperature monitoring.

The GIE83-D is produced under strict revision control guidelines to provide a long product life cycle (3 yrs or more). This reduces your 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

- Computer Telephony (CTI)
- Networking
- Medical Imaging
- Security
- Industrial PCs
- Internet (ISPs)
- Video Editing
- Gaming



# GIE83-D Revision Controlled Motherboard

## PROCESSOR

- Intel® Pentium® 4 Processor
- Intel® Celeron® Processor
- 400MHz system data bus

## CHIPSET

- Intel® 845 chipset
  - Intel® 82845 Memory Controller Hub (MCH)
  - Intel® 82801BA I/O Controller Hub (ICH2)

## SYSTEM MEMORY

- Two 184-pin DDR SDRAM DIMM sockets
- 2.5V unbuffered PC200/PC266 DDR SDRAM DIMM
- Supports maximum of 2GB system memory using 64Mbit, 128Mbit, 256Mbit or 512Mbit technology
  - Double-sided x16 DDR SDRAM DIMM is not supported
- Supports ECC function

## BIOS

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

## ENERGY EFFICIENT DESIGN

- Supports ACPI specification and OS Directed Power Management
- Supports ACPI STR (Suspend to RAM) function
- Wake-On-Events include:
  - Wake-On-USB keyboard
  - Wake-On-Ring (through internal or external modem)
  - Wake-On-LAN
  - Wake-On-Keyboard/Wake-On-Mouse
  - RTC timer to power-on the system
- System power management supported
- CPU stopped clock control
- 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

- Monitors system temperature and overheat alarm
- Monitors 5VSB/VBAT/1.5V/3.3V/5V/±12V/CPU voltages and failure alarm
- Monitors CPU/chassis/system fan speed and failure alarm
- Automatic chassis fan on/off control
- Read back capability that displays temperature, voltage and fan speed
- Opened chassis alarm (optional)

## ONBOARD AUDIO FEATURES

- 18-bit stereo full-duplex codec with independent variable sampling rate
- High quality differential CD input
- True stereo line level outputs

## PCI IDE INTERFACE

- Supports ATA/33, ATA/66 and ATA/100 hard drives
- PIO Mode 4 Enhanced IDE (data transfer rate up to 14MB/sec.)
- Bus mastering reduces CPU utilization during disk transfer
- Supports ATAPI CD-ROM, LS-120 and ZIP

## PROCESSOR SOCKET

- Socket 478-based Intel®

## ACCELERATED GRAPHICS PORT (A.G.P.)

- Supports 1.5V AGP with up to 1066MB/sec. bandwidth for 3D graphics applications

## ATX DOUBLE DECK PORTS

- 2 USB ports (1.1 USB port format), header provides support for 2 additional USBs
- 2 DB-9 serial ports
- 1 DB-25 parallel port
- 1 mini-DIN-6 PS/2 mouse port
- 1 mini-DIN-6 PS/2 keyboard port
- 1 game/MIDI port
- 3 audio jacks: line-out, line-in and mic-in

## CONNECTORS

- 1 connector for 2 additional external USB ports
- 1 connector for IrDA interface
- 2 IDE connectors
- 1 floppy connector
- 3 ATX power supply connectors
- 1 Wake-On-LAN connector
- 1 Wake-On-Ring connector
- 3 connectors for CPU, chassis and system fans
- 1 opened chassis alarm connector (optional)
- 3 internal audio connectors (AUX-in, CD-in, and TAD)

## EXPANSION SLOTS

- 1 AGP slot that supports 1.5V AGP
- 4 PCI slots
- 1 shared PCI/CNR slot

## COMPATIBILITY

- Microsoft PC '98 compliant
- PCI 2.2, CNR 1.0 "A" type and AC '97 compliant
- Intel AGP version 2.0

## CIRCUIT BOARD (PCB)

- 4 layers, ATX form factor
- 30.5cm (12.05") x 24.4cm (9.6")

## SAFETY

- UL, CSA, FCC Class B, CE



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