



Intel® Pentium® 4 Processor

MicroATX board with 3 PCI slots, on-board LAN and Audio

GIE65-D

Introduced: Q4/2002

The GIE65-D revision controlled motherboard offers industrial users the high processing power of Intel® Pentium® 4 processor, on-board audio, and on-board LAN controller.

The GIE65-D features the Intel® 845 chipset on a microATX format motherboard. The 400MHz system data bus provides three times the bandwidth over Intel® Pentium® III platforms for seamless user interaction. The GIE65-D provides two PCI slots, one shared PCI/CNR and one AGP slot. The AGP slot will support a 4X AGP card when ultimate video performance is needed. There is also a communication and networking riser (CNR) slot for additional system flexibility. When the CNR slot is used, PCI expansion is three slots. Another high performance feature is the two USB controllers, which support up to four USB ports.

The GIE65-D is produced under strict revision control guidelines to provide a long product life cycle. This makes it ideal for network, medical instrumentation, internet, video editing, gaming, and other applications.

9.6" (24.4 cm)



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Features:

- Long and stable product life cycle
- Supports Intel® Pentium® 4 processor
- Four expansion slots: 2 PCI, 1 Shared PCI/CNR, and 1 AGP
- Intel® 845 chipset – 400MHz data bus
- microATX form factor
- On-board LAN and Audio
- Supports up to 4 USB
- Monitors fan speed, temperature, and power supply voltages



GIE65-D Revision Controlled Motherboard

Intel® 845 chipset microATX System Board

PROCESSOR

- Intel® Pentium® 4 processor (478-pin)
- 400MHz system data bus

CHIPSET

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

SYSTEM MEMORY

- Three 168-pin PC SDRAM DIMM sockets
- Supports 3GB system memory
 - Uses 64Mbit, 128Mbit, up to 1.5GB using 256Mbit or up to 3GB using 512Mbit technology, PC-133 PC SDRAM DIMM
- 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 CPU/system temperature and overheat alarm
- Monitors 5VSB/VBAT/3.3V/5V/±12V/CPU voltages and failure alarm
- Monitors CPU/system/second fan speed and failure alarm
- Automatic system and second fans on/off control
- Read back capability that displays temperature, voltage and fan speed
- Opened chassis alarm

ONBOARD AUDIO FEATURES

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

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
- Supports wire for management

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 4x with up to 1066MB/sec. bandwidth for 3D graphics applications

ATX DOUBLE DECK PORTS

- 2 USB ports
- 1 RJ45 LAN port
- 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, system and 2 chassis fans
- 1 opened chassis alarm connector
- 2 internal audio connectors (CD-in and TAD)

EXPANSION SLOTS

- 1 AGP slot that supports 1.5V AGP 4x
- 2 dedicated 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, microATX form factor
- 24.4cm (9.6") x 24.4cm (9.6")

SAFETY

- UL, CSA, FCC Class B, CE

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