

## G4E620-N-G

### Intel 845E chipset Socket 478-based Intel<sup>®</sup> ATX board

#### PROCESSOR (Socket 478-based Intel<sup>®</sup>)

- Intel<sup>®</sup> Pentium<sup>®</sup> 4 Processor with Hyper-Threading Technology
- Intel<sup>®</sup> Pentium<sup>®</sup> 4 Processor (478-pin)
  - 533MHz system data bus
  - 400MHz system data bus
- Intel<sup>®</sup> Celeron<sup>®</sup> Processor (478-pin)
  - 400MHz system data bus

#### CHIPSET

- Intel<sup>®</sup> 845E chipset
  - Intel<sup>®</sup> 82845E Memory Controller Hub (MCH)
  - Intel<sup>®</sup> 82801DB I/O Controller Hub (ICH4)

#### SYSTEM MEMORY

- Two 184-pin DDR SDRAM DIMM sockets
- 2.5V unbuffered PC1600 (DDR200) or PC2100 (DDR266) SDRAM DIMM
- Supports maximum of 2.1GB 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<sup>®</sup> 98SE/2000/ME/XP Plug and Play compatible
- Supports SCSI sequential boot-up
- Flash EPROM for easy BIOS upgrades
- Supports DMI 2.0 function
- 4Mbit flash memory

#### ENERGY EFFICIENT DESIGN

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

#### DAMAGE FREE INTELLIGENCE

- Watchdog timer function
- Monitors CPU/system temperature and overheat alarm
- Monitors 5VSB/VBAT/1.5V/3.3V/±5V/±12V/Vcore voltages and failure alarm
- Monitors CPU/system/second fan speed and failure alarm
- 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
- S/PDIF-out interface
- 2-channel audio output

#### ONBOARD LAN FEATURES

- Uses 82562 fast ethernet controller
- Basic 10/100 Client Connection. Supports 559 level cable and PHY Stats. Support for Server OS included as check item, but no server function included
- Same Quality Driver suits as 82559
- Supports DMI/SNMP/WMI
- 10/100 Auto Sensing
- IEEE 802.3, 10BASE-T/100BASE-TX compliant physical layer interface
- IEEE 802.3u Auto-Negotiation
- 48-pin SSOP, 3.3V device
- Uses 82551 fast ethernet controller
- Integrated IEEE 802.3, 10BASE-T, and 100BASE-TX compatible
- Glueless 32-bit PCI master interface
- Glueless CardBus master interface
- Integrated power management functions
- 128 Kbyte Flash interface
- Thin BGA 15<sup>2</sup>mm package

#### 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

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

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

#### REAR PANEL I/O PORTS

- 4 USB 2.0/1.1 ports
- 1 RJ45 LAN port
- 2 DB-9 serial 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

- 1 CompactFlash<sup>™</sup> socket
- 1 connector for 2 additional external USB 2.0/1.1 ports
- 1 connector for an external game/MIDI port
- 2 internal audio connectors (CD-in and AUX-in)
- 1 S/PDIF-out connector
- 1 connector for IrDA interface
- 2 IDE connectors
- 1 floppy connector
- 2 ATX power supply connectors
- 1 Wake-On-LAN connector
- 1 Wake-On-Ring connector
- 1 keylock connector
- CPU fan, system fan and second fan connectors

#### EXPANSION SLOTS

- 1 AGP slot that supports 1.5V AGP
- 3 PCI slots
- 1 Shared PCI/ISA slot
- 2 ISA slots

#### COMPATIBILITY

- PCI 2.2 and AC '97 compliant

#### CIRCUIT BOARD (PCB)

- 4 layers, ATX form factor
- 30.5cm (12") x 24.4cm (9.6")

#### SAFETY

- UL, cUL, FCC Class B, CE