

NB78-HL

Intel® 845PE Socket 478 ATX System Board

PROCESSOR

- Intel® Pentium® 4 Processor with Hyper-Threading Technology - 533MHz FSB
- Intel® Pentium® 4 processor (478-pin)
 - 533MHz system data bus
 - 400MHz system data bus
- Intel® Celeron® processor (478-pin)
 - 400MHz system data bus

CHIPSET

- Intel® 845PE chipset
 - Intel® 845PE Memory Controller Hub (MCH)
 - Intel® 82801DB I/O Controller Hub (ICH4)

SYSTEM MEMORY

- Two 184-pin DDR SDRAM DIMM sockets
- 2.5V unbuffered PC1600 (DDR200), PC2100 (DDR266) or PC2700 (DDR333) DDR SDRAM DIMM
 - DDR333 is supported only when using a 533MHz FSB processor
- Supports maximum of 2GB system memory using 64Mbit, 128Mbit, 256Mbit or 512Mbit technology
 - Double-sided x16 DDR SDRAM DIMM is not supported

BIOS

- Award BIOS, Windows® 98SE/2000/ME/XP 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:
 - Wake-On-Keyboard/Mouse
 - Wake-On-USB Keyboard
 - Wake-On-Ring
 - Wake-On-LAN
 - 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/1.5V/3.3V/5V/±12V/CPU voltages and failure alarm
- Monitors CPU/chassis/second fan speed and failure alarm
- Automatic chassis/second fans on/off control
- Read back capability that displays temperature, voltage and fan speed
- Opened chassis alarm

ONBOARD AUDIO FEATURES

- 16-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 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

ACCELERATED GRAPHICS PORT (A.G.P.)

- Supports 1.5V AGP 4x with up to 1066MB/sec. bandwidth for 3D graphics applications

REAR PANEL I/O PORTS

- 2 USB 2.0/1.1 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

I/O CONNECTORS

- 2 connectors for 4 additional external USB 2.0/1.1 ports
- 1 connector for external line-out and mic-in jacks
- 1 CD-in internal audio connector
- 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 opened chassis alarm connector
- 3 fan connectors for CPU fan, chassis fan and second fan

EXPANSION SLOTS

- 1 AGP slot that supports 1.5V AGP 4x
- 6 PCI slots

COMPATIBILITY

- PCI 2.2 and AC '97 compliant
- Intel AGP version 2.0

PCB

- 4 layers, ATX form factor
- 30.5cm (12") x 21cm (8.26")