

Main Features

- **Intel® Pentium® 4 Processor with 400/533/800 MHz FSB, CPU Speed Up to 3.6 GHz**
- **Supports 4 x DIMM Dual Channel DDR 266/333/400 SDRAM Memory up to 4GB**
- **Intel® 875P/6300ESB Chipsets**
- **1 x On-board AGP Slot, 3 x PCI-X Slots, 3 x PCI Slots**
- **Standard ATX Form Factor**

Product Overview

The NEX 732L2G is an industrial ATX board that supports Intel® Pentium® 4 processors with 400/533/800 MHz FSB and various frequencies and L2 caches. The product incorporates an Intel® 875P and 6300ESB chipset and supports unbuffered ECC DDR 266/333/400 memory up to 4GB, three 33-bit/33 MHz PCI slots, three 64-bit/66 MHz PCI-X slots, one AGP 8X slot, two 40-pin IDE connectors, and other versatile I/O ports such as one parallel port, a floppy port, two serial ports, four USB 2.0 ports, dual LAN ports, audio interface, and more.

The NEX 732L2G offers various processor selections and multiple I/O ports and is the best choice for industrial applications requiring superior performance and reliability.

Specifications

CPU Support

- Single mPGA478 ZIF socket
- Intel® Pentium® 4 Processor with HT Technology, with 1M L2 cache (Intel® Prescott (0.09µ process)/Intel® Pentium® 4 Processor with 256/512K L2 cache (Northwood) on die
- Socket 478 processor supports 400/533/800 MHz FSB, CPU speeds up to 3.6 GHz
- Supports Hyper-Threading technology (for all Prescott processors, or Northwood 3.06 GHz)

Main Memory

- Four 184-pin DDR DIMM sockets, supports up to 4GB unbuffered ECC DDR 266/333/400 SDRAM
Note: Maximum 4GB. Actual memory size is dynamic based on the OS I/O resource allocation
- Available bandwidth up to 3.2GB/s (DDR 400) for single-channel mode and 6.4GB/s (DDR 400) in dual-channel mode

Chipset

- Intel® 875P/6300ESB Chipsets
- Firmware Hub (FWH) 4 Mbit flash ROM x 1

BIOS

- Award System BIOS
- Plug & Play support

- Advanced Power Management support
- Advanced Configuration & Power Interface support
- Jumperless for CPU FSB
- 4 Mbit flash ROM
- Supports Power On After Power Failure

On-board LAN

- Intel® 82551QM 10/100 Ethernet controller x 1
- Optional Intel® 82547GI Gigabit Ethernet controller x 1 (dedicated by CSA port directly from the Intel® 875P)
- Compliant with PCI V2.1/2.2. IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3ab
- RJ45 with LED connector x 2

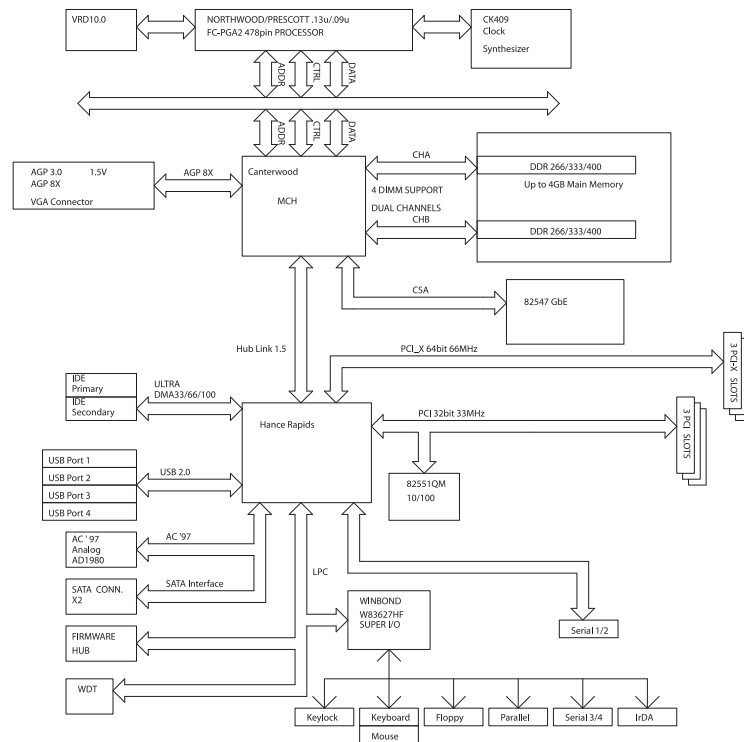
Display

- One on-board AGP 8X slot

I/O Interface

- Winbond W83627HF Super I/O on board
- SIO x 4, DB9 x 2, 10-pin header x 2,
- PIO x 1, Bi-directional, EPP/ECP support, DB25 x 1
- Floppy Disk controller: 3.5" 1.44 MB/2.88 MB support, 34-pin connector x 1
- On-chip enhanced IDE x 2, PIO up to mode 4, Ultra ATA 33/66/100 support, total of 4 EIDE device support, 40-pin connector x 2
- PS/2 Keyboard/Mouse Mini-Din connector x 2

Block Diagram



- GPIO (4 in, 4 out) pin header
- On-board USB 2.0 ports x 4
- On-board buzzer x 1
- 2-pin power on button switch
- On-board 4-pin header for SM bus (12C)
- On-board 2-pin header for reset SW, 4-pin for speaker, 5-pin for keylock and 2-pin for power LED, 2-pin for IDE HDD Led
- Serial ATA support, SATA connector x 2; data transfer bandwidth up to 150 MB/s, RAID 0, 1 supported (for two HDD)

On-board RTC

- On-chip real time clock with battery back up

Disk On Module

- On-board reserved power pin for DOM (Disk On Module)

ISA Support

- Through PCI to ISA interface
- No ISA Master Device support
- No ISA DMA support
- Maximum of 3 ISA slots supported

System Monitor

- System monitor controller derived from Winbond W83627HF super I/O
- 7 voltage (For +3.3 V, +5 V, +12 V, Vcore, +2.5 V, +5 Vsb)
- 3 fan speed (For CPU x 1, system x 2)
- 3 temperature (For CPU x 1, system x 2)

Power Requirements

- +3.3 V: 11 A
- +5 V: 17 A
- +12 V: 14 A for Prescott P4 or 11 A for Northwood P4
- 5 Vsb: 2 A

Dimensions

- ATX form factor: 305mm (L) x 244mm (W) (12" x 9.6")

Environment

- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 90% (Non-condensing)

Certifications

- CE approval
- FCC Class A

Ordering Information

- **NEX 732L2G (LF) (P/N: 10G0732L200X0)**
Intel® mPGA478 ZIF Socket Pentium® 4 CPU up to 3.6 GHz
Supports ATX power supply, 400/533/800 MHz FSB
DDR DIMM x 4 for Max. 4GB
Intel® 875P Chipset with 1 x AGP slot, 3 x PCI-X slots, 3 x PCI slot, 1 x 10/100 LAN, and 1 x Gigabit LAN
- **NEX 732L (LF) (P/N: 10G00732L00X0)**
Intel® mPGA478 ZIF Socket Pentium® 4 CPU up to 3.6 GHz
Supports ATX power supply, 400/533/800 MHz FSB
DDR DIMM x 4 for Max. 4GB
Intel® 875P Chipset with 1 x AGP slot, 3 x PCI-X slots, 3 x PCI slot, and 1 x 10/100 LAN