JN440BX

Pentium® II processor-based low profile desktop

Time to market platform solution for Pentium® II processor and 82440BX AGPset

The JN440BX offers a time to market business desktop solution featuring the Pentium® II processor with 100 MHz front side bus and the 82440BX AGPset in an NLX low profile desktop chassis. With integrated AGP graphics, audio, and LAN, the JN440BX desktop system has enhanced manageability features to help reduce total cost of ownership.

High Performance Business Desktop

With faster processor speeds and 100 MHz front side bus support, the JN440BX has the power to handle the most demanding software applications. The 82440BX AGPset includes support for 100 MHz memory bus resulting in better 3-D performance and improved texture rendering applications like data visualization and web-authoring tools.

Enhanced Manageability

The JN440BX includes a set of manageability features designed to make it easy for IT organizations to remotely monitor client system conditions and simplify setup, troubleshooting, and system maintenance. Manageability features include a 100Mbit/S LAN adapter with Wake on LAN* capability, Alert on LAN* ASIC, hardware manageability ASIC, an enhanced Desktop Management Interface (DMI) BIOS, and LANDesk® instrumentation. With management software like Intel's LANDesk Client Manager, these system features allow network administrators to remotely access systems for fault prediction,recovery, software installation, and configuration tasks.

Integration, Expandability, and Serviceability

By integrating high performance sub-systems like the Intel 10/100 Mbit/Sec LAN, ATI* 2X AGP graphics with 4 MB of local frame buffer memory, and Crystal* audio on the motherboard, the JN440BX provides a cost effective system building block for corporate desktop applications. Four bays and three full-length expansion slots provide system configuration flexibility, and the NLX chassis is designed for serviceability.

Features	Benefits
• **Intel Pentium II processor**	High level of computing power
• **Intel 82440BX AGPset**	Supports 66 and 100 MHz front side bus, AGP, SDRAM, and ACPI
• **On-board 100Mbit LAN adapter**	Provides cost effective, high performance LAN connectivity including Wake on LAN functionality
• **Alert on LAN ASIC**	Sends alert messages to a management server as a result of defined trigger events: chassis intrusion, system BIOS hang
• **On-board AGP graphics and audio**	Ensures platform compatibility and lowers total system cost
• **Wired for Management (WfM) 1.1 compliant**	Simplifies asset management, new system setup, and off-hours maintenance
• **Three 168-pin DIMM sockets**	Increases memory configuration flexibiity, supports up to 384 MB total system memory
• **NLX 1.2 compliant chassis**	Provides ease of integration and improves serviceability
• **AGP connector**	Allows future graphics upgrade
• **Hardware management ASIC**	Allows remote monitoring of fan speed, temperature, and power supply voltage

Processor/Cache

Processor Supported	Pentium II processors with 512 KB of integrated L2 cache

System Memory

Memory Capacity	Three 168-pin DIMM sockets for up to 384 MB SDRAM (16 MB minimum)
Memory Type	Accepts Intel 4-clock, 72-bit ECC, or 64-bit non-ECC, unbuffered 66 MHz or 100MHz SDRAM DIMMs
DIMM Sizes	16 MB, 32 MB, 64 MB, 128 MB
Memory Voltage	3.3 volts

Intel 82440BX AGPset

Intel 82443BX	PCI/AGP controller (PAC) supports 100 MHz or 66 MHz front side bus frequencies
Intel 82371EBPIIX4e— Multifunction PCI to ISA bridge	Dual channel enhanced IDE interface supports up to four IDE devices Ultra DMA/33 and PIO Mode 3 & 4 USB controller

Integrated Graphics

Controller	ATI Rage Pro Turbo* 64-bit, 2X AGP
Graphics Memory	4 MB of 100 MHz SGRAM
Upgrade Connector	On-board AGP connector

Integrated Audio

Controller	Crystal 4235 ISA CODEC Sound Blaster* compatible, Plug and Play, enhanced stereo full-duplex operation

Integrated LAN Controller

Controller	Intel 82558
Physical Layer	10/100 Mbit/sec, Auto-Negotiation
Special Features	Remote Wake-on-LAN*technology Alert on LAN

Integrated I/O Controller

Controller	SMC FDC37C777
Two Serial Ports	Async, RS-232C, PC16550A compatible
Parallel Port	ECP and EPP support
Floppy Controller	1.44 MB, 2.88 MB, 3-mode support
Keyboard/Mouse	PS/2
APM/APC	Power On, Off, Sleep, Resume features
Infra Red Interface	IrDA 2.0 and Consumer IR compatible

System BIOS

BIOS Type	4 Mb Symmetrical Flash with Intel/Phoenix BIOS
Special Features	Plug and Play, IDE drive autoconfigure, ACPI 1.0, APM 1.2, ACPI 1.0, DMI 2.0, boot from CDROM support, ECC Support, multilingual support

Jumpers

Single motherboard jumper block for normal, configure, and recovery modes

Hardware Monitor

On-board sensors for remote monitoring of PS voltages, fan speed, and motherboard temperature

System

	NLX low-profile desktop chassis
Height	4.65" (11.81 cm)
Width	17.2" (43.75 cm)
Depth	17.5" (44.45 cm)
Weight (no peripherals)	18 lbs. (8.2 Kg)

Drive Bays

One external 5.25", 1/2 height (1.6")
Two external 3.5", 1/3 height (1.0")
One internal 3.5", 1/3 height (1.0")

Board Style	NLX standard mounting holes Integrated I/O connectors include: two serial ports, one parallel port, PS/2 keyboard and mouse connectors, audio line in, line out, and microphone connectors, one RJ-45 LAN connector, and one USB connector
Board size	8.8" x 13.0" (22.35 cm x 33 cm)
Riser	Full length NLX standard riser Integrated I/O connectors include: Mic-in, Line-out and single USB connector to the front of the system
Riser Size	14.5" x 4.0" (36.7 cm x 10.2 cm)
Riser Expansion Slots	One PCI, one ISA, and one shared slot for either ISA or PCI

Riser Jumpers, LEDs, and Front Panel Connectors

Front I/O Connectors	Speaker, Reset, IrDA, power on/off, sleep/resume
LEDs	Power/sleep, hard drive activity, and message waiting
Jumpers	Tamper detect enable

NLX information is available at: **http://www.teleport.com/~nlx/**

Power Supply Rating

Continuous Power	145W maximum
Peak Power	160W
+3.3V	Tolerance +5/-4%, maximum current 14.0 A
+5V	Tolerance +5/-4%, maximum current 18.0 A
+5V standby	Tolerance ±5%, maximum current 0.72 A
+12V	Tolerance ±5%, maximum current 6.0 A
-5V	Tolerance ±10%, maximum current 0.3 A
-12V	Tolerance ±10%, maximum current 0.8 A

System Environmental Limits

Operating Temperature	+10°C to +35°C
Storage Temperature	-40°C to +70°C
Operating Shock	Half sine, 2G, 11 msec
Unpackaged Vibration	.001 g^2/Hz@5Hz, slope: .01 g^2/Hz, 20-500Hz
Electrostatic Discharge	1.0 to 20.0 KV, limited errors, no damage

Regulations

System marks/certifications:

UL, cUL, TUV GS, N, S, F, D, CE marking, FCC, Canada ICES-003.

The system shall include a CB certificate and report for international compliance (no marking associated with CB scheme)

Ordering Information

For configurations available in your area, please contact your Intel field sales representative.
Reference Intel's web page: **http://www.intel.com**

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