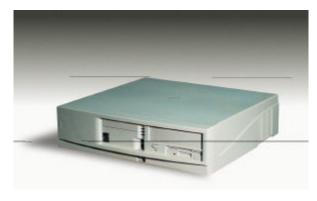# KU440EX *PRELIMINARY*

Celeron™ processor based low profile desktop

Cost Effective Basic PC for Business

The KU440EX offers a business desktop solution featuring the Celeron™ processor with the cost reduced 82440EX AGPset in an NLX low profile desktop chassis. The Celeron processor combines MMX™ technology with the dynamic execution of the Pentium® II processor to provide good performance for the business desktop. With integrated AGP graphics, audio, LAN, and enhanced manageability features, the KU440EX is a cost effective managed PC platform for the corporate networked environment.

Enhanced Manageability

The KU440EX includes manageability features designed to make it easy for IT organizations to remotely monitor client system conditions and simplify connectivity setup, troubleshooting, and system maintenance. Manageability features include Intel's 82558 10/100 Mbit/s integrated LAN on motherboard, Wake on LAN* capability on riser, hardware manageability ASIC, an enhanced System Management (SM) 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* AGP graphics, and Crystal* audio on the motherboard, the KU440EX provides a cost effective system building block for corporate desktop applications. Four bays and three expansion slots provide system configuration flexibility and the NLX chassis is designed to improve serviceability.

System Features	Benefits
• Intel Celeron™ processor	• Meets the core needs and affordability requirements for Basic PC corporate desktops
• Intel 82440EX AGPset	• Supports AGP, SDRAM, and ACPI
• On-board Intel 10/100 Mbit LAN (optional)	• Provides cost effective, high performance LAN connectivity including Wake on LAN* functionality
• On-board AGP graphics and audio	• Ensures platform compatibility and lowers total system cost
• Wired for Management (WfM) 1.1a compliant	• Simplifies asset management, new system setup, and off-hours maintenance and lowers total cost of ownership in corporate applications.
• Two 168-pin DIMM sockets	• Supports up to 256 MB total system memory
• NLX 1.2 compliant chassis	• Provides ease of integration and improves serviceability
• Hardware management ASIC	• Allows remote monitoring of fan speed, temperature, and power supply voltage

KU440EX Low profile desktop *PRELIMINARY*

PROCESSOR/CACHE

Processors Supported	Standard system configurations ship with Celeron™ processor. Motherboard supports Pentium® II processors with 66 MHz front side bus and Celeron processors

SYSTEM MEMORY

Memory Capacity	2 168-pin DIMM sockets for up to 256 MB SDRAM (8 MB minimum)
Memory Size	32 MB non-ECC SDRAM DIMM with serial presence detect standard
Memory Type	Accepts Intel 4-clock 64-bit non-ECC unbuffered 66-MHz SDRAM DIMMs
DIMM Sizes	8 MB, 16 MB, 32 MB, 64 MB, 128 MB
Memory Voltage	3.3 volts

INTEL 82440EX AGPSET

Intel 82443EX - PCI/AGP Controller (PAC)
    Integrated AGP controller
    Integrated PCI bus mastering controller
Intel 82371EB PIIX4e - Multifunction PCI to ISA bridge
    Dual channel enhanced IDE interface
      Supports up to 4 IDE devices
      Ultra DMA/33 and PIO Mode 3 & 4
    USB controller

INTEGRATED GRAPHICS

Controller	ATI Rage IIc* 64-bit, 1X AGP
Graphics Memory	2 or 4 MB SGRAM
Video Port	ATI Multimedia Channel Connector
Plug & Play Monitor	Supports DDC1, DDC2B+

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/S, Auto-Negotiation
Special Features	Remote Wake on LAN* technology

INTEGRATED I/O CONTROLLER

Controller	SMC FDC37C707
One Serial Port	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 1.1 and Consumer IR compatible
Real Time Clock	Century Reg., +/- 13 min/yr accuracy

SYSTEM BIOS

BIOS Type	2 Mb Symmetrical Flash with Intel/Phoenix SM BIOS
Special Features	Plug and Play, IDE drive autoconfigure, ACPI 1.0 (with Windows* 98), APM 1.2, DMI 2.0, boot from CDROM 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	
External 5.25", 1/2 height (1.6")	1
External 3.5", 1/3 height (1.0")	2
Internal 3.5"; 1/3 height (1.0")	1
Board Style	NLX standard mounting holes Integrated I/O connectors include: one serial port (with header for second serial port), one parallel port, PS/2 keyboard and mouse connectors, line out and microphone connectors, two USB connectors, VGA connector, one RJ-45 LAN connector (optional)
Board size	8.25" x 10.0" (21.0 cm x 25.4 cm)
Riser	Full length NLX standard riser Headers: speaker, reset, IrDA, power on/off, and sleep/resume LEDs: Power/sleep, hard drive activity, and message waiting
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

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

POWER SUPPLY RATING

+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	.001g2/Hz@5Hz, slope: .01g^2/Hz, 20-500Hz
Electrostatic Discharge	1.0 to 20.0 KV, limited errors, no damage

REGULATIONS

System marks/certifications:

    (c)UL(us), TUV GS, CE marking, FCC, Canada ICES-003, VCCI

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**