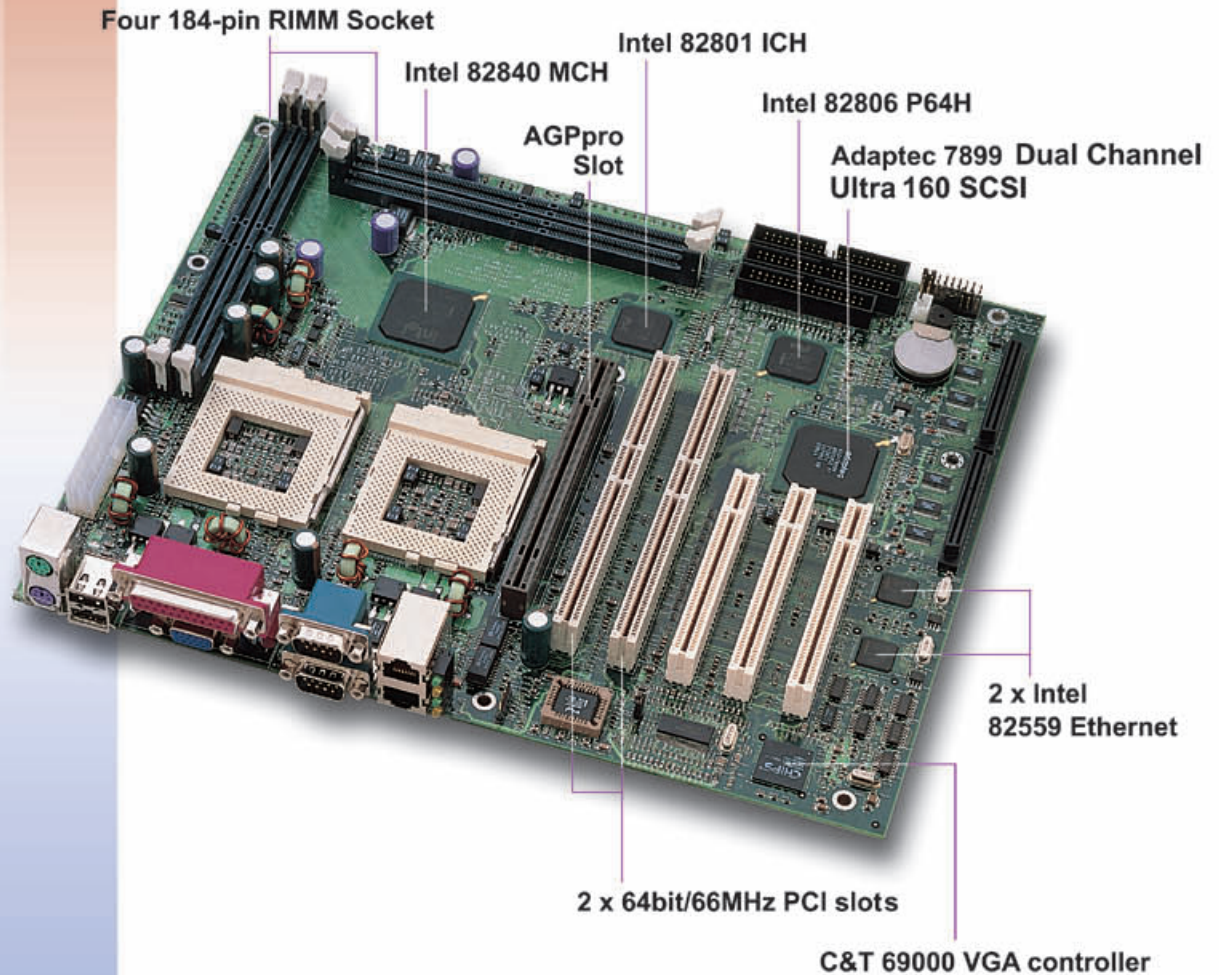


# NEX 6420A

ATX Dual Socket 370 Pentium III AIO Server Board



## Features

- ◆ Intel Dual Pentium III CPU with 100/133 MHz FSB up to 1GHz
- ◆ 2 GB RDRAM (Max.) memory support, RIMM × 4
- ◆ Intel 840 chipset
- ◆ C&T 69000 AGP mode VGA Controller
- ◆ Dual Intel 82559 10/100 Base Ethernet Controller
- ◆ Adaptec 7899 Dual Channel Ultra 160 SCSI controller
- ◆ On board AGPpro slot × 1, 64bit/66Mhz PCI slot × 2, 32bit/33Mhz PCI slot × 3
- ◆ Standard ATX form factor

# NEX 6420A

## Specifications

### System Architecture

- Standard ATX form factor with Dual Pentium III CPU support
- AIO board with dual channel Ultra 160 SCSI, dual channel Ethernet and VGA
- Next generation sever with industry specification

### CPU Support

- Intel Dual Pentium III CPU with 128/256K cache on die
- Brand New Socket 370 FC-PGA CPU running at 100/133MHz FSB up to 1GHz
- Support streaming SIMD instruction

### Main Memory

- Support RDRAM up to 2GB (Max.)
- Two direct RDRAM channels support up to 3.2GB/s of data bandwidth
- 184 pin RIMM socket × 4
- ECC support (single bit error correction/Multiple bit errors reporting)

### BIOS

- Award System BIOS
- Plug & Play support
- Advanced Power Management support
- Advanced Configuration & Power Interface support
- Jumperless for CPU FSB
- 4M bits flash ROM, upgradeable to 8M bits

### Chip Set

- Intel 840 Chipset support up to 2-way configurations
- 64bit and 66MHz PCI interface
- 82840 × 1 Memory Controller Hub (MCH)
- 82801 × 1 I/O Controller Hub (ICH)
- 82802 × 1 Firmware Hub (FWH)
- 82806 × 1 64 bit PCI Controller Hub (P64H)

### On Board VGA

- C&T 69000 VGA controller (PCI mode)
- 2MB SDRAM on die
- Maximum Res. Color & Refresh Rate

Resolution	Colors	Refresh Rate (Hz)
1280×1024	256	60
1024×768	16bits (High color)	85, 75, 60
800×600	24bits (True color)	85, 75, 60

- Drivers support: Windows 95/98, Windows NT4.0

### On Board LAN

- Intel 82559 Single Ethernet controller × 2
- 10 Base T/100 Base TX support, full duplex
- Complied with PCI V2.1, IEEE802.3, IEEE 802.3U
- Drivers support: DOS/Windows, Windows 95/98, Windows NT4.0, Netware, SCO Open Server 5.0
- Rear Panel 4 LAN LED (active/link × 2, speed × 2)

### On Board SCSI

- Adaptec AIC 7899 dual channel Ultra 160 SCSI controller
- Brand New Ultra 160 SCSI support
- 160MB/s (Max.) transfer rate, up to 12 meter cable
- Backward compatible with Ultra Wide SCSI, SCSI II, etc.
- Drivers support: Windows 95/98, Windows NT4.0, SCO Open Server 5.0
- 68 pin SCSI connector × 2
- On board 4 pin header for LED

### On Board I/O

- SMSC LPC47B27x Enhanced Super I/O on board
- SIO × 2, with 2 × 16C550 UARTs, optional RS422/485 × 1
- PIO × 1, Bi-directional, EPP/ECP support

- Floppy Disk controller: 5.25" 360KB/1.2MB, 3.5" 720KB /1.2MB/1.44MB/2.88MB support, 34 pin connector × 1
- On chip enhanced IDE × 2, PIO up to mode 4, DMA master up to mode 2, Ultra DMA/33/66 support, total 4 E.IDE Devices support, 40 pin connector × 2
- On chip keyboard, mouse controller
- On board USB port × 2
- On board buzzer × 1
- IrDA connector × 1
- On board 2 pin header for I<sup>2</sup>C
- On board 2 pin header for reset SW, 4 pin for speaker, 5 pin for keylock and power LED

### ACPI Function

- Soft off
- Wake On LAN
- Wake On Keyboard
- Wake On Ring
- RTC alarm wake up
- Intruder detect input
- Suspend to RAM
- Suspend to Disk

### On Board Slot

- Total 6 slots, include AGPpro slot × 1, 64bit/66MHz PCI slot × 2, 32bit/33MHz PCI slot × 3 (reserved 2 horizontal PCI slot expand for 2U chassis)

### On Board RTC

- High precision real time clock/calendar with battery back up

### On Board Solid State Disk Socket

- On board reserved power pin for DOM (DiskOnModule): 4MB ~160MB, etc

### System Monitor

- Winbond W83782D system monitor controller
- Seven voltage (For +3.3V, +5V, +12V, -12V, Vtt and Vcore × 2)
- Two Fan speed (For CPU)
- Two temperature (For CPU)
- Drivers support: Windows 95/98, Windows NT4.0/2000

### Power Input

- ATX power connector × 1

### Back Panel

- PS2 connector × 2 (for Keyboard/Mouse)
- USB port × 2
- RJ45 connector × 2 (for LAN)
- 15 pin D-type connector × 1 (for VGA)
- 9 pin D-type connector × 2 (for SIO)
- 26 pin D-type connector × 1 (for PIO)
- LAN LED × 4 (active/link × 2, speed × 2)

### Dimensions

- 305mm(L)×244mm(W)

### Watchdog Timer

- 1,2,4...64 seconds time-out intervals

### Power Requirements

- +3.3: 10A
- +5: 20A
- +12: 500mA
- 5VSTBY: 1A

### Environments

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

### Certification

- CE approval
- FCC Class A

## Model Available

### NEX 6420A

- ATX Dual Socket 370 Pentium III AIO Main Board

### NEX 6420VL2

- ATX Dual Socket 370 Pentium III Main Board w/VGA/Dual LAN

### NEX 6420

- ATX Dual Socket 370 Pentium III Main Board