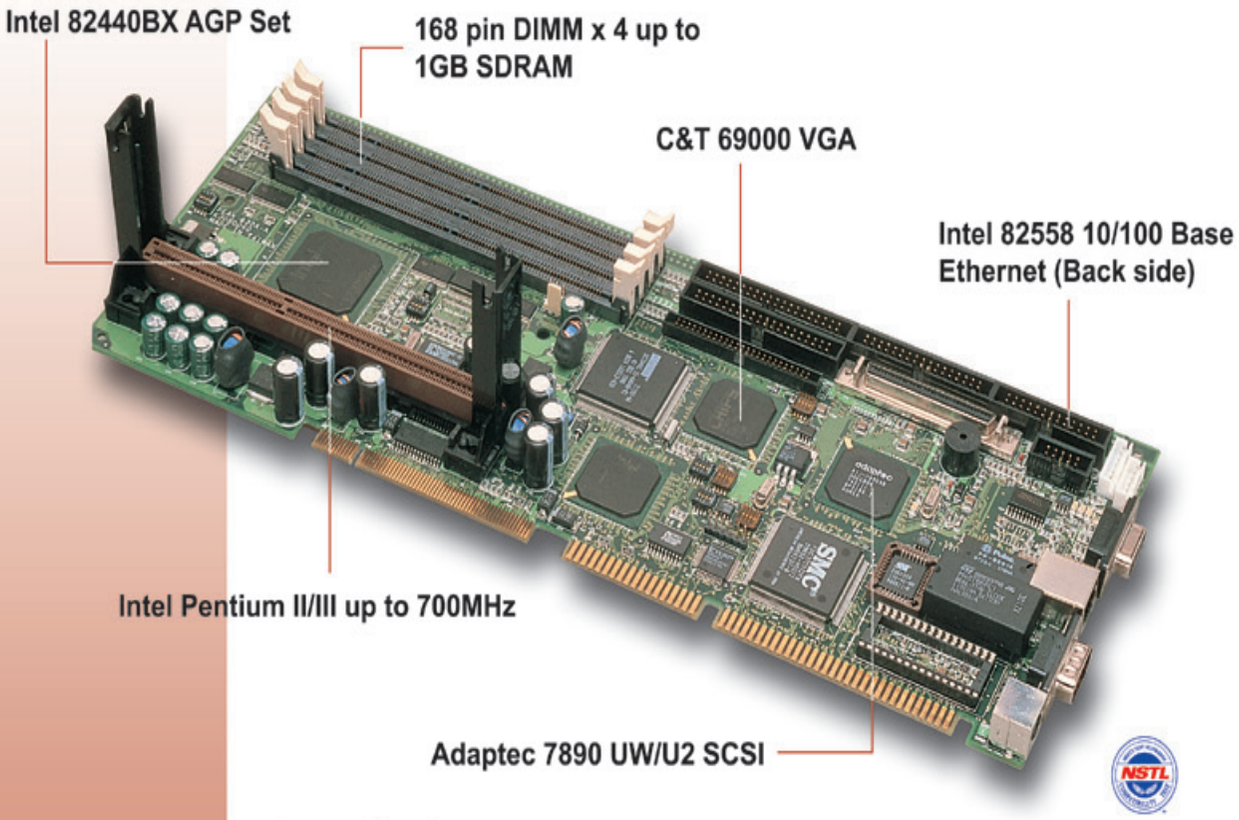
Industrial Computer Series

PEAK 630A

Full-size Slot 1 Pentium II /III AIO CPU Card



Introduction

The PEAK 630A is a full-size single board computer built with high performance Pentium II/III CPU with 100 MHz Slot 1 Bus, high performance PCI Bus and I/O's, huge memory support (1GB), and complies with the new PICMG standard. Furthermore, this is the first Pentium II SBC designed with all advanced features in one SBC. The Ultra 2 SCSI now supports 80MB/s data rate, and extends the SCSI cable up to 12 meters long. To support these high performances on board PCI Device, the Intel 21152 PCI Bridge Controller is used. The PEAK 630A is an all-in-one single board server.

Features

- Intel Pentium II/III up to 700MHz
- 1GB SDRAM (Max.) memory support, DIMM x 4
- Intel 440BX AGP set
- C&T 69000 VGA Controller with CRT/LCD support
- Intel 82558 10/100 Base Ethernet Controller
- Adaptec 7890 UW/U2 SCSI Controller
- NSTL Compatibility Test approved
- On board socket for DiskOnChip up to 144MB

PEAK 630A

Specifications

System Architecture
- Full size SBC with PCI/ISA Golden finger
- Intel Slot 1 Pentium II/III with 66/100MHz FSB
- PCI V2.1 complied
- PICMG 1.0 (Rev.2.0) complied

CPU Support
- Intel Pentium II/III CPU with 512K L2 cache on CPU module
- Slot 1 CPU running at 66/100MHz FSB up to 700MHz
- On board intelligent switching type power regulator×2

Main Memory
- Support SDRAM up to 1GB (Max.)
- 168 pin DIMM socket×4
- ECC support (single bit error correction/multiple bit errors reporting)

BIOS
- Award System BIOS
- Plug & Play support
- Advanced Power Management support
- 2M bits flash ROM

Chip Set
- Intel 82440BX AGP set
- 66/100MHz FSB support
- PCI V2.1 complied
- Optimized SDRAM support

On Board VGA
- C&T 69000 VGA controller
- TFT LCD/DSTN LCD/CRT control
- 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

- Driver support: Windows 95/98, Windows NT4.0
- 15 pin CRT connector×1, 50 pin LCD panel connector×1

On Board LAN
- Intel 82558 Single Ethernet controller
- 10 Base T/100 Base TX support, full duplex
- Complied with PCI V2.1, IEEE802.3, IEEE 802.3U
- Backward compatible with former 82557 Ethernet controller base net modules
- Driver support: DOS/Windows, Windows 95/98, Windows NT4.0, Netware, SCO Open Server 5.0
- RJ45 connector×1

On Board SCSI
- Adaptec AIC 7890 RISC SCSI controller
- Brand New Ultra 2 SCSI support
- 80MB/s (Max.) transfer rate, 12 meter cable support
- Backward compatible with Ultra Wide SCSI, SCSI II, etc.
- Driver support: Windows 95/98, Windows NT4.0, SCO Open Server 5.0
- 68 pin SCSI connector×1

On Board I/O
- SMSC 37C932 Super I/O on board
- SIO×2, with 2×16C550 UARTs, 9 pin D-type×1, 10 pin connector×1
- PIO×1, Bi-directional, EPP/ECP support, 26 pin×1
- Floppy Disk controller: 5.25" 360K/1.2MB, 3.5" 720K/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 support, 40 pin×2, total 4 E.IDE Device support
- On chip keyboard/Mouse controller, 5pin connector×1, (for other keyboard); 6pin min DIN connector×1 PS2 keyboard/ Mouse share by Y cable (for Peak 630VL/Peak 630A) 6pin mini DIN connector×2(for Peak 630/Peak 630V)
- On board USB port×2 (6 pin header×1)
- On board buzzer×1
- On board 2 pin header for reset SW, 4 pin for speaker, 5 pin for keylock
- On board 2 pin header for I^2C

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

On Board Solid State Disk Socket
- On board reserved socket for DOC of M-systems: 2MB~144MB, etc

System Monitor
- Genesys GL520 system monitor controller
- Four voltage values (for +3.3V, +5V, +12V and Vcore)
- One Fan speed (For CPU)
- One temperature
- Drivers support: Windows 95/98, Windows NT4.0

ISAMAX Support
- Maximize ISA signals to support ISA cards up to 20

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

Dimensions
- 340mm(L)×122mm(W)

Power Requirements
- +5V : 16A (Max.)
- +12V : 400mA (Max.)
- -12V : 20mA (Max.)

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
- NSTL compatibility test

Model Available

PEAK 630A
- Full-size Slot 1 Pentium II/III AIO CPU Card

PEAK 630VL
- Full-size Slot 1 Pentium II/III CPU Card w/ VGA/LAN

PEAK 630V
- Full-size Slot 1 Pentium II/III CPU Card w/ VGA

PEAK 630
- Full-size Slot 1 Pentium II/III CPU Card