

APOLLO



Key Features



- Thermally Advantaged MidTower Chassis
- 250, 300, 350 or 400 Watt Power Supply
- Intel® Pentium® 4 Processors - up to 3.2 GHz
- Intel® Celeron® Processors - up to 2.4 GHz
- Intel® 865PE Chipset
- Intel® NetBurst™ Microarchitecture
- Intel® Hyper-Threading Technology
- 400, 533, and 800 MHz Front Side Bus (FSB)
- Maximum 4 GB DDR/266/333/400 SDRAM
- Front Panel USB 2.0 Ports and Audio Connections
- Integrated Intel® 6-channel Audio
- Intel® PRO/100+ LAN or Intel® PRO/1000 Gigabit
- Six Hi-Speed USB 2.0 ports
- IDE/Serial ATA with support for RAID 0
- FCC DoC, UL Listed, EPA Energy Star Compliant
- DMI, ACPI, PC '01 Compliant

Apollo Series Workstation

The Apollo Series Model I190, in a Thermally Advantaged MidTower cabinet design, positioned for the performance enthusiast/multimedia user, delivers an extremely versatile, solid, cutting-edge platform. Its Intel® 865PE chipset utilization of up to 4 GB of next generation dual channel DDR400 SDRAM, coupled with Intel's Pentium® 4 800 MHz frequency processors, absolutely delivers unrivaled office productivity and extreme gaming performance. The Apollo's cutting-edge technology includes: Intel® Active Monitor and Precision Cooling Technology, six channel digital audio, and AGP 8X high-end graphics support. Other hardware characteristics of its feature set include: having up to three IEEE 1394a (Firewire) ports, six USB 2.0 ports, and unparalleled data throughput with integrated network connectivity provided through Intel® PRO/100+ 10/100 Ethernet or Intel® PRO/1000 Gigabit LAN connection. With the Intel® RAID Technology and two Serial ATA channels, the Apollo ensures higher speeds of data transfers and better hard drive performance while providing many years of scalability. These exceptional characteristics of the Apollo Series will bring new levels of business productivity or competitive gaming performance.

NCS Recommends Microsoft® Windows® XP Professional



Model CM3-I190

Apollo Series Workstation

Processor

mPGA478-pin Package
400 MHz, 533 MHz, or 800 MHz Front Side Bus (FSB)
Intel® NetBurst™ Microarchitecture
Intel® Hyper-Threading Technology
Intel® Pentium® 4 Processors 1.5 GHz to 2.8 GHz @ 533 MHz FSB
Intel® Pentium® 4 Processors w/ HT 3.06 GHz @ 533 MHz FSB
Intel® Pentium® 4 Processors w/ HT 2.4 to 3.2 GHz @ 800 MHz FSB
Intel® Celeron® Processors 1.7 GHz to 2.4 GHz @ 400 MHz

Chipset

Intel® 865PE Chipset
Intel® 82865PE Memory Controller Hub (MCH) with Accelerated Hub Architecture (AHA) Bus
Intel® 82801EB I/O Controller Hub (ICH5) with AHA Bus
Intel® 82801ER I/O Controller Hub (ICH5-R) with AHA Bus (Optional)
Intel® 82802AB Firmware Hub (FWH)
PCI 2.2 Compliant & Concurrent PCI for Real-Time I/O

BIOS

4 Mbit Flash EEPROM
Intel®/AMI BIOS - DMI 2.0, WfM 2.0, Plug & Play, SMBIOS, Multi-lingual support
IDE Drive Auto-Configure
Intel® Rapid BIOS Boot
Supports ZIP Drives, Supports IDE CD-ROM or SCSI Bootup
Enhanced Advanced Configuration and Power Interface (ACPI) v1.0b
PC '01 Compliant

Cache

12k µop Level 1 Execution Trace Cache
8 KB Level 1 Data Cache
128 KB or 512 KB On-Die, Full Speed Level 2 Cache (Advanced Transfer Cache)

System Memory

Four 184-pin Dual Channel DIMM Sockets supporting non-ECC DDR266/333/400 SDRAM Memory
128 MB, 256 MB, 512 MB and 1 GB DIMMs
Maximum Memory Capacity of 4 GB

System Management

Intel® Precision Cooling Technology
Intel® Active Monitor
Fan Status/Temperature Monitoring and Alert
Auto Stop of CPU Fan in Suspend Mode to Save Power
Auto Slow-Down of CPU When Overheating is Detected
Power Supply Voltage Monitoring and Alert
Chassis Intrusion Detection
Keyboard Power-on
System Resources: Memory & Hard Disk Drive Utilization Monitoring & Alert,
Wake-on-LAN, Wake-on-Ring, Wake-from-USB, and Wake-from-PS/2 Devices Support
Suspend-to-RAM

Integrated PCI IDE

2 Independent Channels - PCI Bus Master IDE Ports
Supports 4 IDE and EIDE Drives
Supports Bus Master 8237-style DMA Mode (16 MB/sec maximum)
Supports Bus Master Ultra DMA/33/66/100 (100 MB/sec maximum)
ATAPI Devices Supported
Laser Servo Devices Supported
SCSI LED Connector (Optional)

Integrated Serial ATA

2 Independent Channels
Supports 2 SATA Devices
Supports First Party DMA (150 MB/sec maximum)

Integrated RAID (Optional)

Intel® Raid Technology RAID 0 via Intel® 82801ER I/O Controller Hub (ICH5-R)

Integrated Audio

Intel® 82801EB I/O Controller Hub (ICH5)
Intel® Flex 6 Audio Subsystem with Analog Devices AD1985 Audio CODEC
Back Panel Connectors: Line-In, S/PDIF/Line-Out, and Microphone-In (Mono or Stereo)
Front Panel Connectors: Line-Out and Microphone-In (Mono or Stereo) Ports
Intel® 6-Channel Audio Subsystem with Analog Devices AD1985 Audio CODEC (Optional)
Front Panel Connectors: Front Left & Right Out and Microphone-In (Mono or Stereo)
Back Panel Connectors: Front Left & Right Out, Center and LFE Out, Rear Left & Right Out, Line-In, Microphone-In (Mono or Stereo), Coaxial S/PDIF (RCA), Optical S/PDIF (Toslink)

Integrated LAN (Optional)

Intel® Network Interface Controller Subsystem Supporting Wake-on-LAN
Full Duplex and Half Duplex Data Transmission
Intel® PRO/100+ utilizing Intel® 82562EX PLC for 10/100 Ethernet LAN Connectivity or
Intel® PRO/1000 utilizing Intel® 82547EI PLC for Gigabit Ethernet LAN Connectivity

Integrated Super I/O

Floppy Controller for 3 Mode Support (up to 2.88 MB drive type)
1 PS/2 Keyboard and 1 PS/2 Mouse Port
One Serial Port (16550 Fast UART Compatible) – DB-9 Connector
One ECP/EPP Parallel Port – DB-25 Connector
Six USB 2.0 Ports
Four Back Panel: Two Dual Stack Connectors
Two Front Panel: One Dual Stack
One RJ-45 Port with Integrated LED (Optional)
IEEE 1394a Controller Providing Three Ports:
One Back Panel Port and Two front Panel Headers

Expansion Slots

Five PCI and AGP 8X

Bus Architecture

32-bit PCI and 1.5V AGP 8X

Housing Configuration

Thermally Advantaged MidTower Chassis

Dimensions (d) x (w) x (h) mm/inch

428 x 181 x 395 / 16.85 x 7.13 x 15.55

Drive Bays

5.25 inch External = 3
3.5 inch External = 2
3.5 inch Internal (Standard/Optional) = 2/0

Power Supply Features

Input Voltage	100-240 VAC
Input Frequency	50/60 Hz
Input Currents	10.0 /5.5 A
Device Power Connectors	7 for 5.25" and 2 for 3.5" Devices
Green PC	EEF Energy Efficient PC
Maximum Output	250/300/350/400 Watts
Form Factor	Intel® ATX
Soft Power Switch	DC On/Off via TTL Signal

Environmental

Operating Temperature: 0° to 55° C / 32° to 131° F
Storage Temperature: -40° to 70° C / -42° to 158° F
Relative Humidity: 92% RH @ 36° C / 97° F
Airflow Requirements: 100 LFM

Regulatory & Product Certifications

EMI/RFI: FCC Declaration of Conformity (DoC)
Safety: Underwriter Laboratories (UL) 60950, 3rd Edition
EPA: Energy Star Compliant

Options

Front Bezel and Side Panel Dust Filter
80 mm Cooling Fan 2

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