

# ORION



## Key Features

- MidTower Chassis
- 250, 300 or 350 Watt Power Supply
- Intel® Celeron® Processor - 1.7 to 2.0 GHz CPU
- Intel® Pentium® 4 Processor - 1.5 to 2.8 GHz CPU
- Intel® NetBurst™ Microarchitecture
- 400 or 533 MHz Front Side Bus (FSB)
- 128 or 512 KB L2 Cache
- Intel® 845PE Chipset
- Maximum 2 GB DDR333/266 SDRAM memory
- 1.5V AGP 4X AGP Slot
- Integrated 20-bit Audio with SoundMAX® Cadenza®
- Optional Intel® PRO/100 Network Connection
- Six High-Speed USB 2.0 Ports
- IDE/Serial ATA with support for RAID
- FCC DoC, UL Listed, EPA Energy Star Compliant
- DMI, ACPI, PC '01 Compliant

## Orion II Series Workstation

The Orion II Series Model I180, in a MidTower cabinet design, delivers an extremely robust, solid, cutting-edge platform. Its Intel® 845PE chipset utilizing next generation DDR333 SDRAM, coupled with Intel's Pentium® 4 533 MHz or Celeron® 400 MHz frequency processors, absolutely delivers unrivaled office productivity or extreme gaming performance. The Orion's cutting-edge technology includes Intel's Precision Cooling Technology and Serial ATA Technology bearing up to a 50% performance delta while delivering real-time fan cooling capability and quieter system performance. Other hardware characteristics of its feature set include: having up to three IEEE 1394a (Firewire) and six USB 2.0 ports, integrated high quality 20-bit audio architecture, and unparalleled data throughput with up to 4.2 GB per second system bus transfer rate. Network connectivity is provided through Intel's PRO/100 LAN connection utilizing a LAN connect interface (LCI) offering a flexible network solution such as 10/100 Ethernet or 10/100 Ethernet with LAN management. These exceptional characteristics of the Orion II Series will bring new levels of business productivity or gaming arena performance.



# Model CM2-I180

# Orion II Series Workstation

## Processor

mPGA478-pin Package  
400 MHz Front Side Bus (FSB)  
533 MHz Front Side Bus (FSB)  
Intel® NetBurst™ Microarchitecture  
Intel® Pentium® 4 Processors, 1.5 to 2.8 GHz CPUs  
Intel® Celeron® Processors, 1.7 to 2.0 GHz CPUs

## Chipset

Intel® 845PE Chipset  
Intel® 82845PE Memory Controller Hub (MCH) with Accelerated Hub Architecture (AHA) Bus  
Intel® 82801DB I/O Controller Hub (ICH4) with AHA Bus  
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, and Wake-On-LAN  
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 Advanced Transfer Cache

## System Memory

Two 184-pin DIMM Sockets supporting up to two Double-Sided DIMMS for DDR333/266 SDRAM Memory  
128 MB, 256 MB, 512 MB and 1 GB DIMMS  
Maximum Memory Capacity of 2 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/SATA Interface

2 Independent Channels - PCI Bus Master IDE Ports  
Supports 4 IDE and EIDE Drives  
Supports Ultra DMA, ATA-66 and ATA 100  
ATAPI Devices Supported  
Laser Servo Devices Supported  
SCSI LED Connector  
Promise® Technology PDC20267 RAID Controller (Optional)  
Support for RAID 0, 1, or 0+1  
Max Data Transfer: up to 100 MB/sec with CRC Error Checking  
Silicon Image SiI 3112a PCI-to-Serial Controller (Optional)  
Two Dedicated SATA Connectors  
Support for RAID 0, 1  
Max Data Transfer: up to 150 MB/sec

## Options

6 cm Cooling Fan	1
8 cm Cooling Fan	1
3.5 inch Hard Drive Bracket	1

## Integrated Audio

Analog Devices AD1981B AC'97 Audio CODEC with SoundMAX® Cadenza®  
Back Panel Connectors: One Line-In, One Line-Out, and One Microphone-In (Mono or Stereo)  
Front Panel Connectors: Pins for Line-Out and Microphone-In (Mono or Stereo)  
Analog Devices AD1980 AC'97 Audio CODEC with Six Channel Audio Subsystem (Optional)  
Front Panel Connectors: Front Left & Right Out, Center & Low Frequency Effects (LFE) Out, Line-In, Microphone-In (Mono or Stereo)  
Back Panel Connectors: Front Left & Right Out, LFE Out, Rear Left & Right Out, Line-In, Microphone-In (Mono or Stereo), Digital S/PDIF (RCA), Optical S/PDIF (Toslink)

## Integrated LAN (Optional)

Intel® ICH4 (w/ Integrated LAN Media Access) Network Interface Controller Subsystem  
Intel® 82562ET Chipset complying with IEEE 802.3u Auto-Negotiation and IEEE 802.3x Full-Duplex Flow Control Standards

## 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)  
One ECP/EPP Parallel Port  
Six USB 2.0 Ports  
Four Back Panel: Two Dual Stack Connectors  
Two Front Panel: Header  
One RJ-45 Port with Integrated LED (Optional)  
IEEE 1394a-2000 Controller (Optional)  
One back panel port and two front panel headers

## Expansion Slots

Five PCI Slots, 1 AGP 4X Slot  
Communication and Networking Riser (CNR) (Optional)

## Bus Architecture

32-bit PCI, AGP 4X

## Housing Configuration

MidTower Chassis

## Dimensions (d) x (w) x (h) cm/inch

42 x 18.5 x 42.8 / 16.5 x 7.3 x 16.8

## Drive Bays

5.25 inch External = 2  
3.5 inch External = 2  
3.5 inch Internal = 2

## Power Supply Features

Input Voltage	100-240 VAC
Input Frequency	50/60 Hz
Input Currents	9 A
Device Power Connectors	7 for 5.25" and 2 for 3.5" Devices
Green PC	EEF Energy Efficient PC
Maximum Output	350 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 1950, 1st Edition  
EPA: Energy Star Compliant

# NCS Technologies, Inc.

9490 Innovation Loop Voice: (703) 621-1700  
Manassas, VA 20110 Toll-Free: 1 (888) RING-NCS  
www.ncst.com Fax: (703) 621-1701

