Intel® ISP1100 Internet Server Platform

Maximum Density, Flexibility, & Scalability to Power your e-Business

Product Brief

- Support for the Intel® Pentium® III processor

- Compact 1U, Rack-Optimized Design

- Two Integrated Intel® Pro/100+ Server Adapters

intel®

High-Density Uni-Processing Server Platform for e-Business Applications

High Density with the Power of the Intel® Pentium® III Processor

If high density, scalability, and Web-based management are important to you, rely on the Intel® ISP1100 1U rack server platform as you grow your e-Business. Engineered for quick, high-volume deployment and ease of use, the ultra-dense ISP1100 1U rack server platform features the power of the Intel® Pentium® III processor and the industry-leading hardware you need to successfully run and expand your business.

Server Performance with Flexibility and Scalability

The ISP1100 1U rack server platform can be used in multiple server configurations and within various environments. Well suited for any business with space or budget constraints, the extremely compact ISP1100 provides a surprising amount of scalable power in a highly dense system. The ISP1100 supports up to 1 GB of ECC SDRAM and two PCI cards, has two on-board Intel® Pro/100+ Server Adapters, and can support either the Intel® Pentium® III processor or the Intel® Celeron™ processor. These flexible features make the Intel ISP1100 an ideal platform for front-end services or for scaling to handle more complex e-Business capabilities.

Innovative Features to Manage Growth

The ISP1100 incorporates innovative technology to help you easily deploy, manage, and scale your e-Business for continued success. It is full of features that enable fast, efficient installation, upgrades, and service, including front and back serial ports, additional space for cable management, and tool-less access to hard drives. The slim 1U design makes the ISP1100 a perfect fit for open-air or closed-cabinet-style racks.

Easy to Deploy, Use, and Manage

The Intel® ISP1100 offers hardware-based remote server management that helps make the platform easy to use and manage. By monitoring the health of key components, this built-in management system can help identify potential problems, even at remote sites. Should a preset parameter exceed its threshold, built-in server intelligence can alert you via page or central console for quick response. You can take control of the system remotely over the LAN or WAN, or access the front-panel serial port for BIOS setup/update or text-based applications.

For ease of deployment, the ISP1100 has a built-in utility that allows Linux[1] operating system users to simultaneously deploy multiple ISP1100 systems. This "headless" installation process provides significant time savings and system standardization when deploying large volumes of servers either on-site or remotely. The same process can be used to efficiently re-purpose your ISP1100s by simply altering a boot image and re-deploying.

Service, Support, and Three-Year Limited Warranty

Through its authorized dealers, Intel offers several features to enhance customer satisfaction. These include a three-year limited warranty, next-business-day replacement of in-warranty Intel server building blocks[2], and optional spares kits to enable same-day service. In addition, Intel provides access to support personnel for assistance with technical questions, and dedicated Web sites such as http://support.intel.com and http://channel.intel.com/go/serverbuilder

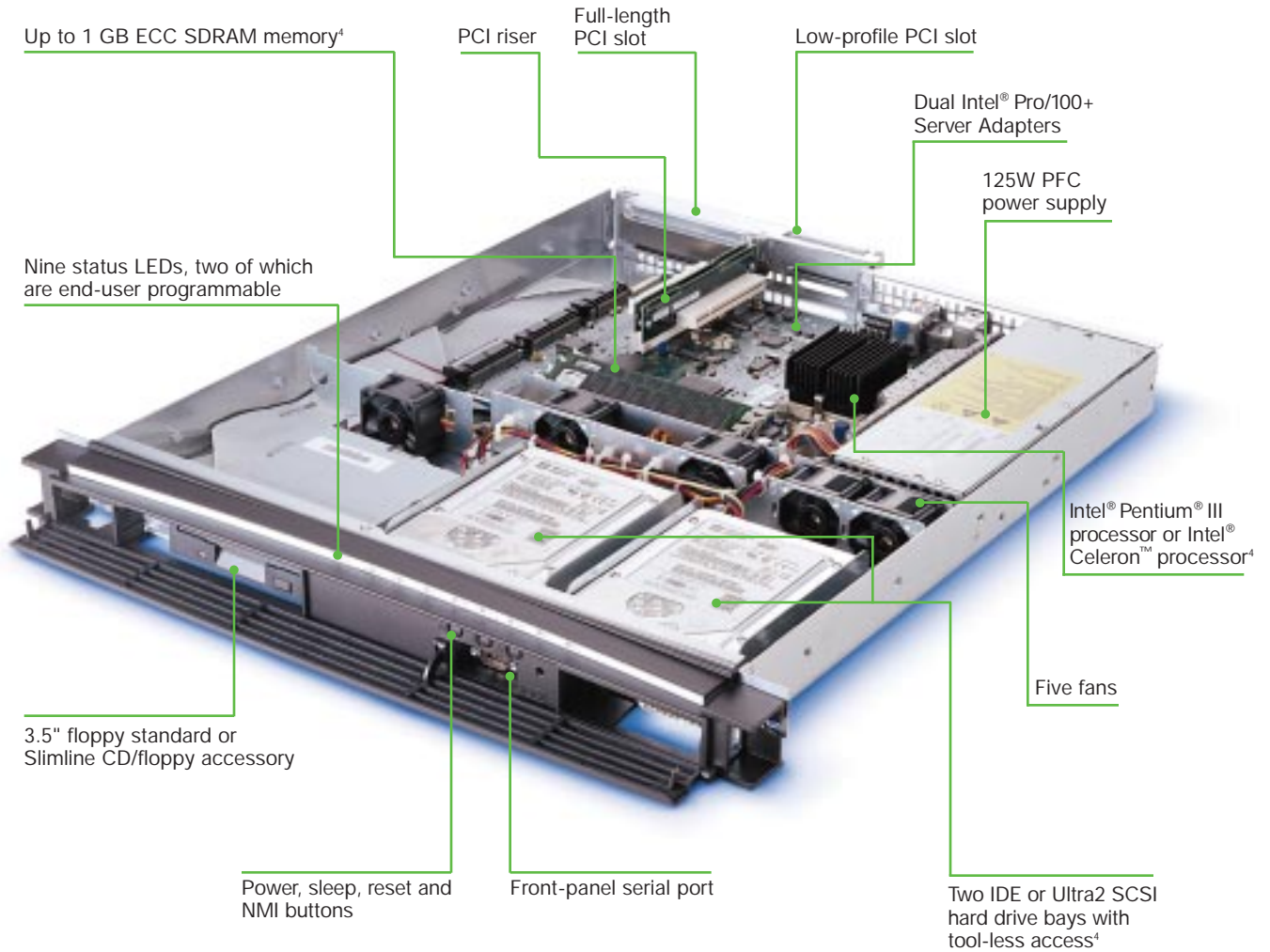| Features	Benefits
Support for the Intel® Pentium® III processor and the Intel® Celeron™ processor[3]	Intel® Pentium® III processor-based performance in minimum space and an Intel® Celeron processor option for less demanding applications
Compact 1U rack-optimized server design (1.70" H x 22" L x 16.75" W)	High-density design for easy deployment and solid performance per inch, includes additional 1.5" for cable management
Support for up to 1 GB of ECC SDRAM memory	Ample memory capacity for a wide variety of server needs
Two integrated Intel® Pro/100+ Server Adapters	Excellent network capabilities without filling any PCI slots, leaving all PCI slots open for future expansion
Two PCI slots (32-bit/33 MHz, one full-height, one low-profile)	Flexibility and scalability
Intel Web-based Server Management	Innovative technology that enables high-volume headless deployment, remote operation and monitoring, and proactive management throughout the lifecycle of the product
Three-year limited warranty	Peace of mind
Designed by Intel	Performance, value, and choice that you expect from Intel

[1] For optimized versions of Linux, or additional information on headless installation, see http://www.intel.com/network/products/isp1100.htm
[2] Some restrictions apply. Not available in all countries.
[3] See http://support.intel.com/support/motherboards/server/isp1100 for a full list of supported processors.

Intel® ISP1100 Internet Server Platform

Up to 1 GB ECC SDRAM memory⁴

PCI riser

Full-length
PCI slot

Low-profile PCI slot

Dual Intel® Pro/100+
Server Adapters

125W PFC
power supply

Nine status LEDs, two of which
are end-user programmable

Intel® Pentium® III
processor or Intel®
Celeron™ processor⁴

Five fans

3.5" floppy standard or
Slimline CD/floppy accessory

Power, sleep, reset and
NMI buttons

Front-panel serial port

Two IDE or Ultra2 SCSI
hard drive bays with
tool-less access⁴

Affordable Density

Intel's most affordable high-density server is designed to deliver a unique combination of Web-based management, reliable hardware, flexibility, and value in a compact, easy-to-use server platform.

1. Power receptacle   **2.** Two PS/2 ports   **3.** Two USB ports   **4.** Two Ethernet ports
5. Back serial port

⁴ Memory, harddrives, and processor not included.

Intel® ISP1100 Internet Server Platform Specifications

Processor & Chipset

Processors Supported	Intel® Pentium® III processors with PGA370 package and the Intel® Celeron™ processor. For the latest processor support, go to: http://support.intel.com/support/motherboards/server
Chipset	Intel® 82440BX AGPSet consists of Intel® 82443BX PCI/AGP Controller (PAC) and Intel® 82371EB PCI ISA IDE Xcelerator (PIIX4E)

System Memory

Memory Capacity	Four 25°-angle DIMM sockets for 16 MB to 1 GB SDRAM
Memory Type	PC-100 100 MHz or 66 MHz registered or unbuffered SDRAM, 72-bit ECC or 64-bit non-ECC, 168-pin gold-plated DIMMs
DIMM Sizes	Registered: 64 MB, 128 MB and 256 MB Unbuffered: 16 MB, 32 MB, 64 MB, 128 MB, and 256 MB
Memory Voltage	3.3V only
Error Detection	Corrects single-bit errors, detects double-bit errors (using ECC memory)

Expansion Slots

PCI Slots	One full-length PCI slot and one low-profile PCI slot (32-bit/33 MHz) on passive riser card

Integrated Onboard

Ethernet Controller	Two stacked Intel® Pro/100+ Server Ethernet Network Adapter Controllers (Intel® 82559) Supports 100BASE-T and 10BASE-T, RJ45 output
IDE Xcelerator	Integrated PCI/ISA IDE Xcelerator (PIIX4E)
IDE	Two independent channels for a total of four IDE devices PIO Modes 0 to 4, ATA-33 and CD-ROM support
USB	Two stacked USB connectors
Super I/O Controller	SMSC* FDC37B807
Floppy Controller	1.44 MB, 2.88 MB, 3-mode support
Keyboard/Mouse	Two interchangeable PS/2 connectors
Serial Ports	Two asynchronous, RS-232C, 9-pin (1 rear, 1 front)

Front Panel

LED Indicators	Power, status, hard drive activity, two LAN link/activity, two LAN 100Mbps and two user-programmable
Switches	Power, sleep, reset and NMI (Non-maskable Interrupt)
I/O Port	Serial port B

Jumpers and Connectors

Jumpers & Connectors	CMOS clear, BIOS recovery, password clear, Wake on LAN (WOL), Wake on Ring (WOR), SCSI LED

System BIOS

BIOS Type	8-Mbit Flash EEPROM with AMIBIOS* BIOS 7.0, Multi-boot BIOS Boot Specification 1.01 (BBS)-compliant
Special Features	Plug and Play, IDE drive autoconfigure, SMBIOS 2.3, ECC/Parity, multilingual, LAN/serial console redirection and network boot using Preboot Execution Environment 2.0 (PXE)

Server Management Instrumentation

Failure Detection	Voltage variation, thermal, operating system watchdog timer, fan failure, processor status, and ECC memory
Remote Power Control	Power-up using WOR and WOL power-down through GUI management console and Reboot-on-Break
Event Logging	Nonvolatile storage to prevent loss of logs in event of system failure
Security	Video blanking and password protection

Intel® Web-based Server Management

Managed Server	Operating systems supported: Windows NT* 4.0 Server and Red Hat* Linux 6.1
Management Console	Web-based management console (Internet Explorer* 4.0/SP1 and Netscape* 5.0) Integrates into HP OpenView*
System Health Monitor	Temperature, voltage, system fans, ECC memory, hard drives, and OS hang monitoring via watchdog timer
Alert Notification	Pager alert, LAN alert, SNMP traps, system event methods log, and continuous speaker beep alert
Critical Event Actions	Gracefully shutdown operating system with reboot or power-down at administrator's discretion, immediate power-down, reset

Environment

Ambient Temperature	
Operating	+10°C to +35°C to 5,000 ft. De-rated 1°C/1000 to 10,000 ft. Maximum rate of change of 10°C per hour.
Non-operating	-40°C to +70°C ambient
Relative Humidity	
Non-operating	95%, non-condensing @ +30°C
Acoustic Noise	<45 dBA @ 23°C±2°C

Safety Regulations

USA/Canada	UL1950, 3rd Edition/CSA 22.2, No. 950M93, 3rd Edition
Europe CE Mark	Low-Voltage Directive, 73/23/EEC TUV/GS to EN60950 2nd Edition with Amendments, A1 = A2 + A3 + A4
International	CB Certificate and Report to IEC 60950, 3rd Edition including EMKO-TSE (74-SEC) 207/94 and other national deviations

EMI/RFI

USA	FCC 47 CFR Parts 2 and 15, Verified Class A Limit
Canada	IC ICES-003 Class A Limit
Europe	EMC Directive, 89/336/EEC EN55022, Class A Limit, Radiated and Conducted Emissions EN55024, Immunity Standard for Information Technology Equipment EN61000-3-2 Harmonic Currents EN61000-3-3 Voltage Flicker
Australia/New Zealand	AS/NZS 3548, Class A Limit
Japan	VCCI Class A ITE (CISPR 22, Class A Limit) IEC 1000-3-2; Harmonic Currents
Taiwan	BSMI, Class A (CISPR 22)
Russia	Gost Approval
International	CISPR 22, Class A Limit

System

Form Factor	1U, rack-mountable
Rackmount	Midmount brackets or sliding rails (optional)
Height	1.70" (43.18mm)
Width	16.75" (425.45mm)
Depth	22.00" (558.80mm) (20.50" without bezel)
Weight	23 lbs. (maximum configuration)
Fans	Five 40mm variable-speed fans with tachometer output
3.5" Drive Bay	One standard 3.5" diskette drive or slim-line CD-ROM/diskette drive combo (optional)
Hard Drive Bay	Two 1" IDE or LVD/SE 68-pin SCSI hard drives (SCSI requires third-party controller)

PFC Power Supply

AC Voltage & Frequency	90-135, 180-265 VAC (40/63 Hz)
DC Power Supply	125W
+5VDC	13A maximum
+12VDC	3.0A maximum
+3.3VDC	6.0A maximum
-12VDC	0.2A maximum
Remote Voltage Sense	Senses voltage levels on server board for more precise power supply voltage regulation, leading to more efficient use of power

Intel Order Codes:

Server	ISP1100
Spare Kit	Ai1100 Spares
Cable Spare Kit	Ai1100 Sparemisc
Spare Packaging	Ai1100 Sparepack
Slimline CD/floppy Option Kit	Ai1100 CDfloppy
Rail Option Kit	Ai1100 Railkit
Spare Black Bezel	Ai1100bezelblk
Front Mount Kit	Ai1100frontmnt
SCSI Cable Option Kit	Ai1100 scsicbl

For the most current product information on all of Intel's server building blocks, visit the web site at:

www.intel.com/go/serverbuilder and
www.intel.com/network/products/internet_servers.htm