Product Brief

Intel® Storage System SSR212CC

Storage Systems

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Product Overview

The Intel® Storage System SSR212CC is a storage building block that provides up to 6 TB of data storage in a small 2U rackmount form factor. The Intel Storage System SSR212CC is a complete hardware solution that can be coupled with one of a number of different industry software solutions to create a storage area network (SAN), network attached storage (NAS) or direct attached storage (DAS) appliance. With the Low Voltage Intel® Xeon® processor, it has enough power to be used as an application server for data-intensive applications like e-mail and databases.

An Increasing Need for Storage

Businesses today are being inundated with digital data, from the growth in existing applications like e-mail and databases to emerging rich-media applications such as digital video. New government regulatory requirements, corporate business continuity and corporate disaster recovery plans are adding to the explosive growth of storage needs. All of these factors contribute to an ever-increasing need for storage in small and medium business as well as larger enterprises.

The Intel® Storage System SSR212CC addresses this growing storage demand by supporting up to 6 TB of data distributed across 12 Serial ATA (SATA) hard drives. It features hardware support for RAID levels 0, 1, 10, 5, and 50, making data more reliable and faster to access.

Lower Storage Costs

The Intel® Storage System SSR212CC features SATA disk technology, which is less expensive than Fibre Channel or SCSI drives and simplifies cabling. Additionally, SATA storage offers software transparency and scalability to help lower upgrade costs.

Flexible Software Solutions

Intel has engaged with storage software providers to ensure the availability of a variety of software solutions. These include applications that allow the Intel Storage System SSR212CC to be configured as a SAN, a DAS or a NAS system. To see the growing list of industry software solutions optimized for the Intel Storage System SSR212CC, visit:
www.intel.com/design/servers/storage/ssr212cc

Operating Systems Support

- Red Hat Enterprise Linux* 4.0
- Microsoft Windows Storage Server 2003*
- Microsoft Windows Server 2003 Enterprise Edition*†
- Microsoft Windows Server 2003 Standard Edition*†

Note: These operating systems are supported as of May 2006. See the Intel Storage System SSR212CC Tested Hardware and Operating System List (THOL) for a complete and up-to-date OS list.

† Windows Server 2003 supported with limited enclosure management.

Features	Benefits
Support for up to 12 hot-swappable 1.5 or 3.0 Gbps SATA drives in a 2U form factor	Easily add up to 6 TB of raw storage (with 500 GB HDDs) without system downtime for future storage capacity needs. SATA drives currently provide higher capacity at a lower cost than SCSI or Fibre Channel drives
Intel® Xeon® processor	Processing performance to meet the demanding needs of storage virtualization
Dual 1 Gb Ethernet Network Interface Connections	Provide fast access to iSCSI or network attached data
Two Intel® RAID Controller SRCS28Xs	Hardware support for RAID 0, 1, 10, 5, 50

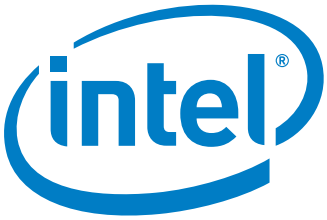
Intel® Storage System SSR212CC Specifications

Raw Storage Capacity	Expandable to 3.0 TB using twelve 250 GB drives Expandable to 4.8 TB using twelve 400 GB drives Expandable to 6.0 TB using twelve 500 GB drives
Drive Bays	12 Serial ATA (SATA) Hot Pluggable
Hard Disk Drive	3.5" SATA I or SATA II NOTE: For specific drive family and capacities supported, please refer to the SSR212CC Tested Hardware and OS List (THOL)
Processor	Low Voltage Intel® Xeon® processor 2.8 GHz with 800 MHz system bus and 1 MB L2 cache

Memory Capacity	Expandable to 12 GB maximum
Memory Type	Synchronous Dynamic Random Access Memory (SDRAM), DDR2-400, Registered, ECC
DIMM Slots	Six 184-pin DIMM sockets
Enclosure Controller	On-board Vitesse* VSC055 micro-controller
Temperature Sensor	Two temperature sensors located on the backplane allow drive cage temperature monitoring by enclosure management
SATA Compliance	SATA 1.5 Gb/s, 3.0 Gb/s

Intel® Storage System SSR212CC Specifications, Continued

Front Panel	
LEDs	Fault, ID, power
Back Panel	
Buttons and Switches	Power button, reset button
I/O Connectors	1x RJ-45 COM B serial port, 2x RJ-45 Ethernet ports, 1x DB-15 video connector, 1x 2.0 USB port, 1x stacked PS/2 mouse/keyboard connector
Power Receptacle	1x IEC AC per installed power supply module
Chassis	
Form Factor	2U rack-mount chassis
Height	86.7 mm, 3.41"
Width	447 mm, 17.6"
Depth	631 mm, 24.8"
Weight	As shipped (zero drives): approximately 19.1 kg, 42 pounds; fully configured (twelve drives): approximately 30.4 kg, 67 pounds ; shipping container: 3.2 kg, 7 pounds
Color	Black plastics, silver sheet metal
Rack Support	Rail mount, compatible with four-post rack mount only
System Cooling	
Fans	Chassis includes three dual-rotor and two single-rotor 40 mm hot-swappable redundant system fans for cooling the hard drives, baseboard, and SATA host bus adapter (HBA) cards; the power supply enclosure contains one 60 mm fan
Power	
Configuration	500 W continuous, 1+1 redundant power supplies; Intel® Storage System SSR212CC ships with one 500 W power supply
Max AC Input Current (PS Module)	7.2 Amperes at 110 Vrms, 3.5 A at 220 Vrms (each power supply module)
Max +3.3 V Output (PS Enclosure)	20.0 A (total combined power for the+ 3.3 V and +5 V outputs should not exceed 120 W)
Max +5 V Output (PS Enclosure)	20.0 A (total combined power for the +3.3 V and +5 V outputs should not exceed 120 W)
Max +12 V Output1 Current (PS Module)	18.0 A (total combined power for the +12 V outputs should not exceed 360 W)
Max +12 V Output2 Current (PS Module)	18.0 A (total combined power for the +12 V outputs should not exceed 360 W)
Max +12 V Output3 Current (PS Module)	18.0 A (total combined power for the +12 V outputs should not exceed 360 W)
Max -12 V Output Current (PS Module)	0.5 A (each power supply module)
Max +5V Standby Output Current (PS Module)	2.0 A (each power supply module)
Environment	
Ambient Temperature	Operating (system): 10° C to +35° C, with maximum change not to exceed 10° C; non-operating (system): -40° C to +70° C
Relative Humidity	Non-operating: 90 percent @ 35° C non-condensing
Acoustics	<59 decibel average (dBA) (rack mount) in an idle state in a normal office environment (23° C)
Electrostatic Discharge	15 KV per Intel test specification
Safety Compliance	
Argentina	IRA
Australia/New Zealand	AS/NZS 3548 (based on CISPR 22)
Canada	UL60950, CSA 60950 (UL and cUL)
China	GB4943- CNCA certification
Europe, CE Mark	EN60950 (complies with 73/23/EEC)
Germany	GS license
International	IEC60950 (CB report and certificate)
Nordic Countries	EMKO-TSE (74-SEC) 207/94
Russia	GOST 50377-92
United States	UL– 60950, CSA 60950 (UL and cUL)
Electromagnetic Capability (Class A) (EMC)	
Canada	ICES-003
China	GB 9254 - CNCA Certification GB 17625 - (Harmonics) CNCA Certification Europe, CE Mark EN55022; EN55024 & EN6 1000-3-2;-3-3 (complies with 89/336/EEC)
International	CISPR22
Japan	VCCI
Korea	RRL, MIC 1997-41 and 1997-42
Russia	GOST 29216-91 and 50628-95
Taiwan	CNS13438
United States	FCC, Part 15



For additional information about Intel Storage System SSR212CC, visit:
www.intel.com/design/servers/storage/ssr212cc

For general storage product information, visit:
www.intel.com/products/server/storage/index.htm

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