# **PRODUCT BRIEF**

# Reliable, Cost Effective, Easy-to-Manage Server Board in a microATX Form Factor

Intel® Server Board S1200SP Product Family featuring Intel® Xeon® processor E3-1200 v6 family

SMB, Embedded, Storage and Security Appliance Applications



#### **Outstanding Performance with Manageability**

Small businesses need a robust and cost effective server that can scale as they grow. The Intel® Server Board S1200SP Product Family meets this need in a pedestal or rack system that scales via SATA and PCIe\* expansion options for increased storage, functionality or faster networking speed. The Intel® Xeon® processors E3-1200 v6 product family has the processing to deliver reliability, durability and performance with server management features that make this server ideal for small and medium businesses (SMB), web hosting, content delivery, storage, and security.

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#### **Key Features**

- Intel® Xeon® processors E3-1200 v6 performance with dual 1GBase-T connectivity
- Intel's industry-leading cryptographic isolation technology, Intel® Software Guard Extensions (SGX), supported on Intel® Server Board S1200SPOR, reducing expenses associated with cypto-processor based HSMs
- Maximum memory via 4 DDR4 ECC UDIMM sockets, supporting 2133MT/S memory
- High expansion with up to 3 PCIe Gen3 x8 expansion slots, SAS and Intel® Integrated RAID Module support
- · Storage flexibility with up to 8 SATA 6G drives, SATA DOM and M.2 options
- Server Management features including a 1GBase-T dedicated management port, IPMI\* 2.0 and BMC, and optional Remote Management Key



#### **System Level Options for Flexibility and Choice**

The S1200SP family is configurable with both a rack-mount or pedestal chassis, making it versatile for office or data center installations.

- Intel® Server System R1000SPO family: 1U Rack System based on the S1200SPOR server board, ideal for embedded, storage or security appliances and web hosting rack installations
- Intel® Server Chassis P4000-S family: 4U Pedestal chassis for the S1200SPLR and S1200SPSR boards, supporting higher PCIe flexibility is ideal for SMB applications



Intel® Server Products are backed by Intel® design excellence and manufacturing expertise to deliver processing power with high levels of flexibility, manageability and reliability. Product quality is paired with 3-year standard warranties and robust technical and incident resolution support to ensure customer satisfaction.



## INTEL SERVER BOARD S1200SP FAMILY SPECIFICATIONS

Server Board Specification	S1200SPLR	S1200SPSR	S1200SPOR
On Board LAN	2x 1GbE (i210)	2x 1GbE (i210)	2x 1GbE (i210)
Board Dimensions	microATX 9.6" x 9.6"	microATX 9.6" x 9.6"	microATX 9.6" x 9.6"
CPU	Single Intel® Xeon® processor E3-1200 v6 or v5, up to 80W	Single Intel® Xeon® processor E3-1200 v6 or v5, up to 80W	Single Intel® Xeon® processor E3-1200 v6 or v5, up to 80W
Socket	Socket-H4 LGA1151	Socket-H4 LGA1151	Socket-H4 LGA1151
Chipset	Intel® C236 chipset	Intel® C232 chipset	Intel® C232 chipset
Memory Type	DDR4 UDIMM ECC at 2133MT/s maximum	DDR4 UDIMM ECC at 2133MT/s maximum	DDR4 UDIMM ECC at 2133MT/s maximum
Memory Capacity	4 DIMMs, 64GB total	4 DIMMs, 64GB total	4 DIMMs, 64GB total

External I/O Connectors	S1200SPLR	S1200SPSR	S1200SPOR
USB	Two USB 2.0 and two USB 3.0 ports on back panel	Two USB 2.0 and two USB 3.0 ports on back panel	Two USB 2.0 and two USB 3.0 ports on back panel
Ethernet	Dual 1GBase-T (RJ45)  Single 1GBase-T dedicated server management port (RJ45)		Dual 1GBase-T (RJ45) Single 1GBase-T dedicated server management port (RJ45)
Video	GT2 Graphics (Display Port)  VGA graphics via BMC (DB-15  VGA) (GT2 graphics)	VGA graphics via BMC (DB-15 VGA)	VGA graphics via BMC (DB-15 VGA)

Internal I/O Connectors and Headers	S1200SPLR	S1200SPSR	S1200SPOR
USB	One Type A USB 2.0 connector	One Type A USB 2.0 connector	One Type A USB 2.0 connector
	Two USB 2.0 ports via header for front panel	Two USB 2.0 via header for front panel	Two USB 2.0 ports via header for front panel
	Two USB 2.0/3.0 ports via header for front panel		Two USB 2.0/3.0 ports via header for front panel
			One 2x10 pin connector providing front panel support for up to two USB2.0/3.0 ports
Serial Port	One DH-10 Serial Port connector	One DH-10 Serial Port connector	One DH-10 Serial Port connector
SSI Front Panel	One 2x12 pin SSI front panel header	One 2x12 pin SSI front panel header	One 2x12 pin SSI front panel header
SATA	Eight SATA3 via 7-pin SATA connectors	Six SATA3 via 7-pin SATA connectors	Eight SATA3 via 7-pin SATA connectors
SATADOM	SATA 4 connector for Apacer* SATADOM	SATA 4 connector for Apacer* SATADOM	SATA 4 connector for Apacer* SATADOM
ТРМ	One TPM 1.2 or TPM 2.0 module, 2x7 pin	None	One TPM 1.2 module, or TPM 2.0, 2x7 pin
Intel® Remote Management Module 4 (Intel® RMM4)	One 2x4 pin connector for Intel RMM4 key (AXXRMM4LITE), KVM and remote media redirection	None	One 2x4 pin connector for Intel RMM4 key (AXXRMM4LITE), KVM and remote media redirection

Expansion Type	S1200SPLR	S1200SPSR	S1200SPOR
I/O Modules	One proprietary slot for a x4 Intel® Integrated RAID Module	None	One proprietary slot for a x8 Intel® I/O Expansion Module
PCIe Slots	1 PCle Gen3 x8 w/ x16 connector 1 PCle Gen3 x4 w/ x8 connector 1 PCle Gen3 x8 w/ x8 connector	1 PCle Gen3 x8 w/ x16 connector 1 PCle Gen3 x4 w/ x8 connector 1 PCle Gen3 x8 w/ x8 connector	1 PCIe Gen3 x8 w/ x16 connector
M.2	One M.2 connector, 22x42mm	None	One M.2 connector, 22x42mm

For product specifications visit: **ark.intel.com** 

## INTEL® SERVER SYSTEM R1000SPO FAMILY SPECIFICATIONS

1U Specifications	R1304SPOSHBNR	R1304SPOSHORR	R1208SPOSHORR	
Server Board	S1200SPOR, server board inst	S1200SPOR, server board installed		
Dimensions	43.5mm x 428m x 535mm (H	43.5mm x 428m x 535mm (Height X Width X Depth)		
PSUs per system	One 350W, fixed	One 350W, fixed Two 450w, redundant Two 450w, redundant		
Storage	4x3.5" hot-swap backplane	4x3.5" hot-swap backplane	8x2.5" hot-swap backplane	

#### **INTEL® SERVER CHASSIS SPECIFICATIONS**

4U Specifications	P4000XXSFDR	P4304XXSFCN	P4304XXSHCN	
Server Board	S1200SPLR andS1200SPSR, s	S1200SPLR andS1200SPSR, server board purchased separately		
Dimensions	17.24 in (438 mm) x 6.81 in (17	17.24 in (438 mm) x 6.81 in (173mm) x 22.05 in (560 mm) (Height X Width X Depth)		
PSUs per chassis	Two 460W, cold redundant	Two 460W, cold redundant One 365W, fixed One 365W, fixed		
Fans	One PCIe* zone, one rear system fan	One rear system fan	One rear system fan	
Storage	4x3.5" fixed drive trays 4x3.5" fixed drive trays		4x3.5" hot-swap backplane	

# STORAGE OPTIONS WITH INTEL® SERVER CHASSIS P4000XXSFDR

Storage Options	Size	# of Drives	Туре
Default Upgrade option 1	3.5" 3.5"	Four (4) Four (4)	Fixed SATA drives Hot-swap 6Gbps SATA drives (FUP4X35HSDK) Hot-swap 6Gbps
Upgrade option 2 Upgrade option 3 Upgrade option 4	3.5" 3.5" 3.5"	Eight (8) Four (4) Eight (8)	SATA drives (FUP8X35HSDK) Hot-swap 12Gbps SAS drives (FUP4X35S3HSDK) Hot-swap 12Gbps SAS drives (2x FUP4X35S3HSDK)
SATA DOM	SATA DOM	One	Support one internal SATA Disk-on-Modules mounted directly on the onboard SATA 4 port. Validated with Apacer* SATADOM
SAS Support	NA	NA	Optional SAS ROC via Intel® Integrated RAID module connector, required to support SAS drives

#### **ORDER CODES: SERVER BOARD AND CHASSIS**

Order Code	Туре	Description	
DBS1200SPLR	Board	Intel Server Board S1200SPLR, Disti 5 pack	
DBS1200SPSR	Board	Intel Server Board S1200SPSR, Disti 5 pack	
P4000XXSFDR	Chassis	Intel $^{\circ}$ Server Chassis P4000XXSFDR, pedestal chassis with 4 x 3.5 fixed hard drive trays, 2 x 460W cold redundant power supplies	
P4304XXSFCN	Chassis	Intel Server Chassis P4304XXSFCN, pedestal chassis with 4x3.5 fixed hard drive trays, one 365W fixed power supply	
P4304XXSHCN	Chassis	Intel Server Chassis P4304XXSHCN, pedestal chassis with 4x3.5 hot-swappable hard drive backplane, one 365W fixed power supply	
R1304SPOSHBNR	System	Intel Server System R1304SPOSHBNR, 1U rack system with 4x3.5 hot- swappable hard drive backplane, one 350W fixed power supply	
R1304SPOSHORR	System	Intel Server System R1304SPOSHORR, 1U rack system with 4x3.5 hot- swappable hard drive backplane, two 450W redundant power supplies	
R1208SPOSHORR	System	Intel Server System R1208SPOSHORR, 1U rack system with 8x2.5 hot- swappable hard drive backplane, two 450W redundant power supplies	

For product specifications visit: ark.intel.com

#### ORDER CODES: 12GBPS SAS 3.0 INTEL® INTEGRATED RAID MODULES

Order Code	Description
RMS3CC080	8 port, Intelligent Hardware RAID, LSI3108 ROC, RAID 0, 1, 10, 5, 50, 6, 60
RMS3CC040	4 port, Intelligent Hardware RAID, LSI3108 ROC, RAID 0, 1, 10, 5, 50, 6, 60
RMS3HC080	8 port, Mid-Tier RAID, LSI3008 IOC, JBOD & RAID 0, 1, 10, Hybrid 5/50

For additional RAID modules and add-in-cards, visit www.intel.com/go/RAID





For more information on Intel® server solutions visit: **intel.com/serverproducts**For product specifications visit: **ark.intel.com** 



Product does not include memory, processors, or hard drives. For compatibility information please refer to the configuration guide at www.intel.com/support.

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