

# 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.

## 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 crypto-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



## Built with Intel® Quality, Reliability and Performance

Intel® Server Products are backed by Intel's 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)<br><br>Single 1GBase-T dedicated server management port (RJ45) | Dual 1GBase-T ( RJ45)                           | Dual 1GBase-T ( RJ45)<br><br>Single 1GBase-T dedicated server management port (RJ45) |
| Video                   | GT2 Graphics (Display Port)<br><br>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<br><br>Two USB 2.0 ports via header for front panel<br><br>Two USB 2.0/3.0 ports via header for front panel | One Type A USB 2.0 connector<br><br>Two USB 2.0 via header for front panel | One Type A USB 2.0 connector<br><br>Two USB 2.0 ports via header for front panel<br><br>Two USB 2.0/3.0 ports via header for front panel<br><br>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  |
| TPM   | One TPM 1.2 module, 2x7 pin connector  | None   | One TPM 1.2 module, 2x7 pin connector   |
| 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 PCIe Gen3 x8 w/ x16 connector<br>1 PCIe Gen3 x4 w/ x8 connector<br>1 PCIe Gen3 x8 w/ x8 connector | 1 PCIe Gen3 x8 w/ x16 connector<br>1 PCIe Gen3 x4 w/ x8 connector<br>1 PCIe 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: [intel.com/raid](https://www.intel.com/raid)

#### INTEL® SERVER SYSTEM R1000SPO FAMILY SPECIFICATIONS

| 1U Specifications | R1304SPOSHBNR                                   | R1304SPOSHORR             | R1208SPOSHORR             |
|-------------------|---|---------------------------|---------------------------|
| Server Board      | S1200SPOR, server board installed               |                           |                           |
| Dimensions        | 43.5mm x 428mm x 535mm (Height X Width X Depth) |                           |                           |
| PSUs per system   | 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 and S1200SPSR, server board purchased separately                       |                          |                           |
| Dimensions        | 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   | 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 | Type  |
|------------------|----------|-------------|---|
| Default          | 3.5"     | Four (4)    | Fixed SATA drives   |
| Upgrade option 1 | 3.5"     | Four (4)    | Hot-swap 6Gbps SATA drives (FUP4X35HSDK)  |
| Upgrade option 2 | 3.5"     | Eight (8)   | Hot-swap 6Gbps SATA drives (FUP8X35HSDK)  |
| Upgrade option 3 | 3.5"     | Four (4)    | Hot-swap 12Gbps SAS drives (FUP4X35S3HSDK)  |
| Upgrade option 4 | 3.5"     | Eight (8)   | 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**

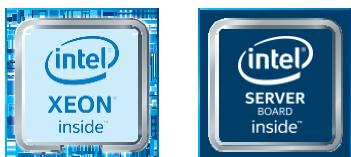
| Order Code    | Type    | Description  |
|---------------|---------|--|
| DBS1200SPLR   | Board   | Intel Server Board S1200SPLR, Disti 5 pack   |
| DBS1200SPSR   | Board   | Intel Server Board S1200SPSR, Disti 5 pack   |
| P4000XXSFDR   | Chassis | Intel® Server Chassis P4000XXSFDR, pedestal chassis 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](http://ark.intel.com)

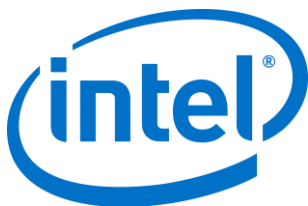
**ORDER CODES: 12GBPS SAS 3.0 INTEL® INTEGRATED RAID MODULES**

| 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/RAID](http://www.intel.com/RAID)



For more information on Intel® server solutions visit: [intel.com/serverproducts](http://intel.com/serverproducts)  
 For product specifications visit: [ark.intel.com](http://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](http://www.intel.com/support).  
 Results have been estimated or simulated using internal Intel analysis or architecture simulation or modeling, and provided to you for informational purposes. Any differences in your system hardware, software or configuration may affect your actual performance.  
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