(intel®)

Entry Server Delivering Enterprise-Grade Performance

Intel® Data Center Blocks for Business – Entry Server Block
Web Infrastructure, Public Cloud Hosting, Enterprise Applications and Storage

Entry Server Blocks from Intel

- **Fully Validated Server Block** saves time and money[1], freeing up resources to focus on value-add and competitive differentiation

- **Unbranded systems** enable resellers to customize and brand to meet end- user requirements

- **Intel Quality & Reliability** with world-class integration, validation, certification, and support

- **Standard Intel 3-year warranty,** with the option to extend parts of coverage to 5 years, ensures customer satisfaction

Making it Easier to Deliver Competitive Entry Server Solutions

In a highly competitive market, small enterprise and cloud service providers (CSPs) need a cost-effective server that delivers enterprise-grade performance, reliability and security in an easy-to-manage system. They also need solutions that are able to scale and be more agile, while also being competitively priced.

Small enterprises and cloud service providers are turning to easy-to-manage, entry-level servers to address these needs. With an on-premises server, businesses can reduce costs and improve application performance and reliability. With security features built in, a server helps protect data and provides support for back-up/ recovery needs. Employees also have secure, 24/7 access to the data and systems that will help drive innovation and growth.

To help address this demand for entry-level solutions with enterprise-grade performance, Intel is providing pre-configured, fully-validated Entry Server Blocks that will help accelerate time to market with server solutions optimized for the needs of small enterprises and CSPs. The Entry Server Block is a fully-integrated 1U rack system that includes Intel components and 3rd party memory, in an unbranded

offering that will help reduce the complexity and costs associated with designing, configuring and validating server solutions. With this pre-configured building block, Intel partners can remain competitive in a growing and cost-sensitive market.

Reduced Complexity, Improved ROI & Faster Time to Market

To meet the needs of small enterprises and CSPs, many resellers custom design server solutions. However, designing, testing and validating solutions is a costly and resource-intensive process. By taking advantage of Intel engineering and validation resources, resellers can reduce both capital and operational costs by starting with a higher level of integration. This approach gives partners more flexibility and choice about where to invest R&D funds to ensure they remain competitive and drive differentiation in the market.

By starting with an Entry Server Block, resellers, enterprise customers and CSPs can bring Intel® Xeon® based server solutions to market faster, meeting the demands of a dynamic and fast-paced market. There is also increased acquisition value as purchasing a validated, bundled solution simplifies the order process while offering cost savings. This value can be passed on to the customer with server solutions that deliver enterprise-class features at an affordable price.

Entry Server Blocks

Fully integrated and validated 1U rack server block featuring the latest Intel data center technology and optimized for small enterprise and cloud Service providers.

Help Your Customers

- Create basic web infrastructure
- Host public cloud
- Enable simple storage solutions
- Deploy Enterprise and EDA/CAD applications
- Reduce costs
- Grow and innovate

Features:

- 1x Intel® Xeon® processor E3-1230 v6
- 16GB DDR4, UDIMM, 2133 MHz
- 1 x 1.2 TB (2.5") Intel® S3520 SSD
- 2x GbE ports (Intel® i210)
- 1x dedicated management port
- Intel® RMM4 Lite for advanced management options
- 2x 450W Gold redundant hot swap power supplies
- 1x PCIe* 3.0 x16 expansion slot
- Support for one Intel® I/O module option
- Support for one Intel® Integrated RAID Module option

Upgrade Options:

- Up to 4x 2.5" SSD drives
- Intel® Integrated RAID Module options
- Intel® I/O Expansion Module options

Intel Built for Quality, Reliability and Value

Designed for Enterprise and CSP Needs

Entry Server Blocks from Intel are powered by the latest Intel technology, and include the Intel® Server Board S1200SPOR that can scale as customers grow via SATA and PCIe* expansion options for increased storage functionality or faster networking speed. The Entry Server Block is designed with small enterprises and CSPs in mind, featuring a 1U rack optimized system configuration that is quiet and well-suited for a small datacenter environment. To make server management easier, this product supports Intel® Node Manager and includes a dedicated management port with support for advanced management features to enable secure, anywhere-access from any device, and provide ongoing monitoring and troubleshooting.

Business-Class Performance with Intel® Xeon® processor E3 Family

These pre-configured server blocks feature the Intel® Xeon® processor E3 family that delivers high memory, I/O and storage capacity, fast application loading and performance, and the capacity to support multiple users. This latest processor from Intel delivers increased productivity with Intel® Turbo Boost Technology, Intel® Hyper-Threading Technology, and more performance than previous generations.[2] It also delivers hardware-based security features like Intel® Data Protection Technology and Intel® Platform Protection technology for better protection of data.[3]

To allow the system to scale as your business grows, the configuration is upgradable with up to 4x 2.5" SSD drives and Intel® RAID Modules for increased storage capacity, as well as having additional Intel® I/O Expansion Module options.

Industry-Leading Cryptographic Isolation Technology

The Entry Server Block supports Intel® Software Guard Extensions (SGX), which provides CPU-hardened enclaves, or protected areas of execution in memory, that increase security for selected code and data on compromised platforms. SGX reduces expenses associated with cypto-processor based HSMs.

Smart Boards Ensure System Stability and Increased Uptime

Intel® Server Boards have more than 100 sensors built in that monitor all critical functions and use management capabilities to automatically flag problems before they impact business operations. Event logs and light-guided diagnostics also assist in rapid identification and remediation of issues.

Intel Warranty Delivers Value and Confidence

Entry Server Blocks from Intel come with a standard three-year warranty with the option to extend parts of coverage to five years. Warranties come with Intel's 24/7 technical support and commitment to replace or refund any product that fails. Additionally, since all components are purchased in a single SKU, there is a single source for all support needs.

Engage with Intel Today

Intel continuously delivers leading-edge technologies to help you innovate and differentiate in the market. This is true with Entry Server Blocks from Intel, designed to help you realize an easier path to reliable Enterprise and cloud server solutions.

Contact your Intel sales representative or Intel authorized distributor for any inquiries.

More information can be found at http://www.intel.com/content/www/us/en/data-center-blocks/business/entry-server-blocks.html

1U Server Block	Components Included in the system	
Order Code: **LR1304SPCFG1R** MM#: 957505	**Component**	**Description**
	Chassis	Intel 1U chassis with hot-swappable 4x3.5" (2.5" SSD ready) drive trays, dual 450W redundant PSUs (R1304SPOSHOR)
	Board	Intel® Server Board S1200SPOR
	CPU	Intel® Xeon® Processor E3-1230 v6 (8M Cache, 3.40 GHz)
	Memory	16GB, 2133MHZ, DDR4, UDIMM
	Storage	Not Included
	Adv. Remote Management	Not Included
	Security	Not Included

Server Specifications	Intel® Server System R1304SPOSHOR
Form Factor	1U
Chassis Dimensions	1.7 in (43.18 mm) x 17.26 in (438.5mm) x 21.06 in (548.9 mm) (Height x Width x Depth)
Server Board	Intel® Server Board S1200SPOR
Server Board Form Factor	microATX 9.6" x 9.6"
Storage	4 x 3.5" (2.5" SSD Ready) hot-swap drive bays 1 x optical drive bay
Cooling	Three managed 40mm single rotor system fans One fan for each installed power supply module
System Power	Two 450 Watt, Gold, hot swap modules, redundant
Processor Support	Single Intel® Xeon® processor – E3-1200 v6, up to 80W TDP
Processor Socket	Socket-H4 LGA1151
Chipset	Intel® C236 chipset
Memory Support	4 DIMMs, 64GB maximum total DDR4 UDIMM ECC at 2133MT/s maximum
On Board LAN Support	Dual 1GbE – Intel® i210
Front Control Panel	Control Buttons – Power/Sleep, System ID, System Reset, NMI LEDs – Power, System Status, System ID, NIC Activity, Drive Activity

External I/O Connectors	
USB	Back Panel – 2x USB 2.0 + 2x USB 2.0/3.0 Front Panel – 2x USB 2.0/3.0
Network Interface	Dual 1GBase-T (RJ45)
Management Port	Single 1GBase-T dedicated server management port (RJ45)
Video	VGA graphics via BMC (Front and Back DB-15 VGA connectors)

Internal I/O Connectors	
USB	One Type A USB 2.0 connector
Serial Port	One DH-10 Serial Port 'A' connector
SATA	Eight SATA3 via 7-pin SATA connectors One M.2 SATA SSD 2242 connector Embedded Software SATA RAID Options – Intel® RSTe & Intel® ESRT2
SATADOM Support	Yes - Apacer* SATADOM options
TPM Support	One TPM 2.0 connector

Expansion Options	
I/O Module Support	One proprietary connector for Intel® I/O Expansion Module options One proprietary connector for Intel® Integrated SAS RAID Module option - Mounting Support for one Intel® RMFBU (RAID Maint. Free Backup)
PCIe Add-in Card Slot via 1U Riser Card	One PCIe 3.0 x16 slot (x8 electrical)

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

1. Cost reduction scenarios described are intended as examples of how a given Intel- based product, in the specified circumstances and configurations, may affect future costs and provide cost savings. Circumstances will vary. Intel does not guarantee any costs or cost reduction.
2. Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more information go to **http://www.intel.com/performance**
3. Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software, or service activation. Performance varies depending on system configuration. No computer system can be absolutely secure. Check with your system manufacturer or retailer or learn more at intel.com.