

Product Brief
Intel® Server System SR1640TH

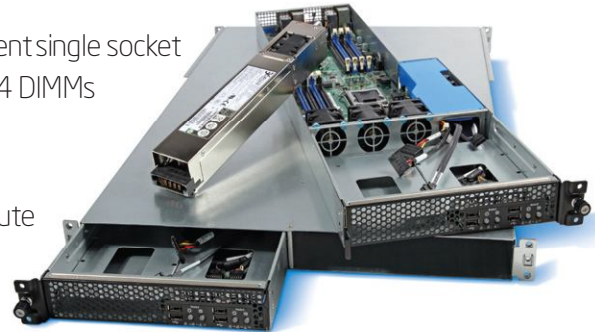
Intel® Server System SR1640TH

A high density 1U server system with four independent Intel® Xeon® processor nodes designed with optimized power efficiency for cost sensitive data center requirements.



Key Features

- **High Density**
 - 1U chassis supports four independent single socket Intel® Xeon® processor nodes with 4 DIMMs per node
- **High Availability**
 - Two independently powered compute trays minimize down time
- **High Energy Efficiency**
 - High-efficiency (80-plus SILVER) power supply
 - High-efficiency on-board voltage regulator
 - Optimized thermal solution
- **Low TCO**
 - Supports Intel® Xeon® 3400 series processors (including lower power processors)
 - Design saves rack and power expense



Target Applications: *For high density data center use as a web server, hosting server, or as a small business application server.*

System Features and Benefits

- **Four independent single socket nodes in standard 1U rack system** Innovative design offers increased performance per square foot and saves rack expense
- **Support for up to four Intel® Xeon® 3400 series processors** Built for 24/7 dependability, the Intel Xeon 3400 series processor delivers increased performance per watt
- **Two independently powered and swappable compute trays** Minimize downtime with easy-to-manage dual compute trays that slide out from the front of the chassis
- **Dedicated on-board management port** Provides a flexible and secure management environment with no extra hardware needed
- **Optional Intel® Remote Management Module 3 Lite** A low cost upgrade to support advanced management features such as KVM redirection, media redirection and WS-MAN
- **Cable and thermal optimized design** Streamlines set up and reduces cooling costs, reducing overall TCO
- **Two high-efficiency power supplies** The 450 watt, 80 PLUS* Silver certified non-redundant power supplies provide redundancy between both boards for added security

Technology that Defines Innovation

Intel server technologies provide powerful capabilities designed to make Intel® Server Products more reliable, more efficient, more available, and easier to service. These innovative technologies are seamlessly integrated into Intel® Server Products to complement the capabilities of the latest generation Intel® Xeon® processor and chipset technologies.

Intel SpeedStep® Technology Dynamically adjusts processor core frequency and voltages which can in turn reduce power consumption and reduce operating costs for data centers

Intel® Active Airflow Control Intel Active Airflow Control operates chassis fans at the minimum speed required to cool the system, reserving additional speed for those times when ambient conditions or high workloads require it

Intel® Server Management Allows increased IT efficiency with a combination of IPMI compatible hardware and software products that streamline the management of servers

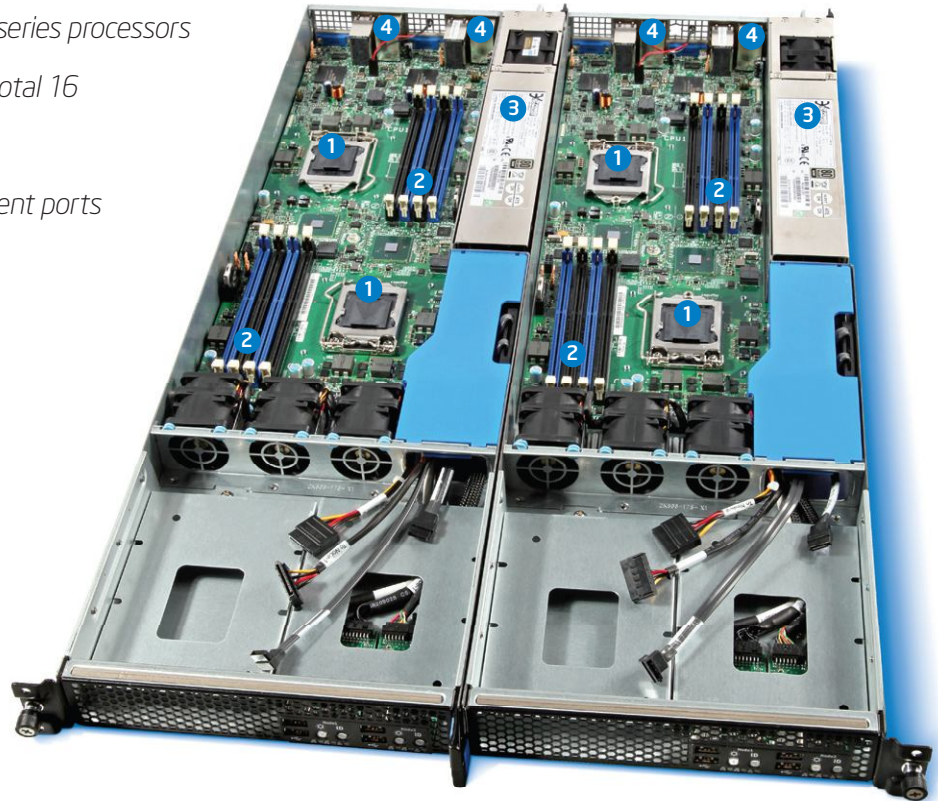
Intel® Enabled Server Acceleration Alliance (Intel® ESAA)

Certified, pre-tested hardware and software configuration recipes from Intel® ESAA make it easy to deploy server solutions over a range of applications. For more information or to download validated software and hardware configuration recipes for Intel® Server Products go to: www.intel.com/go/esaa



Intel® Server System SR1640TH

- 1 Up to four Intel® Xeon® 3400 series processors
- 2 Four DDR3 DIMMs per node, total 16
- 3 Independent power supplies
- 4 Dedicated onboard management ports



Intel® Server System SR1640TH Technical Specifications

Form Factor	1U half-width rack system
Processors	Supports up to four Intel® Xeon® processor 3400 series (2 per board)
Chipset	Intel® 3420 chipset
Memory Capacity	Four DDR3 DIMMs (Registered or Unbuffered) per node (16 total) <ul style="list-style-type: none"> • 800/1066/1333MHz
Drive Options	Up to four 3.5" SATA hard drives (1 per node)
Power Supply	Two high efficiency (80-plus Silver) 450-watt non-redundant PSU
Integrated LAN	Two high performance Intel® Gigabit Controller 82574L
Integrated Graphics	Server Engine* Pilot II* with 64 MB DDR2 memory, 8 MB allocated to graphics
Front Panel Features	Separate front panel for each node featuring: <ul style="list-style-type: none"> • LEDs for two LAN, System Health, Power and UID • Button for UID and Power • Two USB ports
Dimensions (H x W x D)	1.7" x 17.3" x 26.8" (44mm x 440mm x 680mm)
Management Hardware	<ul style="list-style-type: none"> • On-board Server Engines*(TM) Pilot II* Server Management Controller with IPMI 2.0 • On-board dedicated Management LAN port • Serial-Over-LAN support • Advanced Management feature enabled by Intel® Remote Management Module 3 Lite
Management Software	<ul style="list-style-type: none"> • Intel® Deployment Assistant • Intel® System Management Software

Safety and EMC Regulatory Compliance

Regulatory compliance for an Intel host system is based on the use of an Intel server base board that was tested in the host chassis and found compliant. Intel server base boards and host chassis are tested to Class A EMC requirements. Intel server products comply with RoHS (Restriction of Hazardous Substances).

Region (Compliance Obtained)	Board Markings	Host Chassis Markings
Argentina (IRAM)	Regulation N/A	
Australia (ACA) / New Zealand (MED)		
Belarus	Regulation N/A	
Canada		
		ICES-003
Europe (EU Directives) - LVD & EMC require CE mark; No mark required for RoHS; WEEE marking added voluntarily for end integrator convenience		
Germany GS for Chassis Only; German Green Dot (Duales System Deutschland) for Board Packaging Only		
International Compliance (CB Report & CISPR Emission & Immunity)	Marking Not Required	
Japan (VCCI for chassis only) & Japan Recycling Marks on Board Retail Packaging Only	Regulation N/A	
		Marking Not Required
Korea (KCC)		
Russia (GOSSTANDART)	Regulation N/A	
Taiwan (BSMI)		
Ukraine (UKRTEST)	Regulation N/A	Marking Not Required
United States NRTL & FCC (For Board Products FCC Notation May Be in Documentation)		
	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation	

Build an Eco-Smart Environment with Intel Server Products.

Worldwide Programs Supported Include:

Energy Star*

Climate Savers Computing*

RoHS
 Restriction of Hazardous Substances Directive*

80 PLUS*

Take the next step:

Select compatible components for a complete server system: www.intel.com/go/serverconfigurator

Why choose Intel® Server Products? Quality, flexibility, support. Learn more: www.intel.com/go/serverproducts

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS OTHERWISE AGREED IN WRITING BY INTEL, THE INTEL PRODUCTS ARE NOT DESIGNED NOR INTENDED FOR ANY APPLICATION IN WHICH THE FAILURE OF THE INTEL PRODUCT COULD CREATE A SITUATION WHERE PERSONAL INJURY OR DEATH MAY OCCUR.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Intel, the Intel logo, Xeon and Xeon Inside are trademarks of Intel Corporation in the U.S. and other countries.

*Other names and brands may be claimed as the property of others.

Copyright © 2010 Intel Corporation. All rights reserved. 0510/JHMD/PDF 323426-001US

