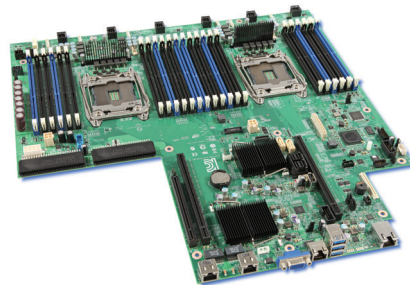


# Intel® Server S2600WT Product Family



The power and performance of the Intel® Xeon® processor E5-2600 v3 product family reaches peak efficiency in a rack mount server form factor with the S2600WT Product Family. High memory capacity, networking, storage and I/O flexibility combine with innovative design to provide an exceptional and reliable server for business IT, appliance, data center, cloud and high performance computing applications.



## Compute performance and large memory capacity

- Energy efficient dual Intel® Xeon® E5-2600 v3 processors
- Up to 90% increase in workload performance with Intel® AVX 2 (Advanced Vector Extensions)<sup>1</sup>
- Support for up to 24 DDR4 DIMMs

## Flexible I/O options

- Dual 1GbE or 10GbE integrated LAN ports
- Up to eight PCIe\* slots in a 2U chassis via three riser cards
- I/O modules available with 1GbE, 10GbE, 40GbE ports or FDR In finiband\* that do not consume PCIe slots

## Storage options

- Up to 12x 3.5" or 24x 2.5" drive bays in a 2U chassis, 12Gbps SAS capable
- Two hot-swap rear mount drive bays in select 2U chassis
- Up to four PCIe SFF (NVMe) SSDs plus support for two add-in card PCIe (NVMe) SSDs
- Full line of 12Gbps Intel® SAS RAID modules that do not consume PCIe slots



S2600WT SERVER BOARD SPECIFICATIONS	
SERVER BOARD SPECIFICATION	DETAILS
On Board LAN Options	1GbE (S2600WT2R) or 10GbE (S2600WTTR)
Board Dimensions	Custom 16.7" x 17"
CPU	Dual Intel® Xeon® E5-2600 v3 processor sockets, up to 145W TDP
Socket	Socket-R3 LGA2011-3
Chipset	Intel® C612 chipset
Memory Type	DDR4 RDIMMs or LRDIMMs at 2133MT/s maximum
Memory Capacity	Up to 1.5TB using 64GB DIMMs
Max DIMM slots	24 DIMMs, 3 DIMMs per channel, 4 channels per processor
Memory Speed	DDR4 RDIMM: 1600MT/s (3DPC), 1866 MT/s (2DPC), 2133(1DPC) DDR4 LRDIMM: 1600MT/s (3DPC), 2133(2DPC & 1DPC)
Memory Voltage	1.2V, DDR4 Standard I/O voltage

EXTERNAL I/O CONNECTORS	DETAILS
USB	Three USB 2.0/3.0 ports on back panel Two USB 2.0/3.0 ports on front panel (non-storage SKUs) One USB 2.0 port on rack handle (storage SKUs only)
Serial	RJ45 Serial Port A
Ethernet	Dual RJ45, Network Interface Connectors supporting either 10GBaseT or 1GBaseT Single RJ45 – dedicated 1GbE server management port
Video	DB-15 VGA connector, front and back (non-storage SKUs) Back only on storage systems (12x 3.5" and 24x 2.5" drive bay configurations)

INTERNAL I/O CONNECTORS AND HEADERS	DETAILS
USB	One Type A USB 2.0 connector One 2x5 pin connector providing front panel support for up to two USB 2.0 ports One 2x10 pin connector providing front panel support for up to two USB2.0/3.0 ports
Serial	One DH-10 serial port B connector
Video	One 2x7 pin front panel video connector
SSI-EEB	One 2x15 pin SSI-EEB compliant front panel header
LCP	One 1x7 pin header for optional Intel® Local Control Panel support

EXPANSION TYPE	DETAILS
I/O Modules	Two proprietary slots (x8 PCIe) supporting 1x Intel® I/O Expansion Module and 1x Intel® Integrated RAID Module
Riser Cards	Up to 3 riser cards for PCIe add-in cards (See 1U or 2U system section)

1U SERVER SPECIFICATIONS	
1U SPECIFICATIONS	DETAILS
Server Board	S2600WTTR (10GbE) or S2600WT2R (1GbE)
1U Rack Dimensions	17.25" width x 28" length x 1.72" height
1U Packaging Dimensions	577mm width x 983mm length x 260mm height
PSUs per chassis	Up to 2, supporting 1+0, 1+1 Redundant Power and 2+0 Combined Power
1U Power Supply	750W AC 80 PLUS Platinum, 750W DC 80 PLUS Gold
1U Fans	6 managed system fans

1U EXPANSION	CPU SOURCE	SLOT	OPTIONS
Riser Card 1	CPU1	Single PCIe 3.0 Slot	x16 Electrical, x16 Mechanical
Riser Card 2	CPU2	Single PCIe 3.0 Slot	x16 Electrical, x16 Mechanical
I/O Module	CPU1	Single	x8 Electrical, proprietary connection
RAID Module	CPU1	Single	x8 Electrical, proprietary connection

Note – The population of two riser cards requires dual processors

1U STORAGE OPTIONS	SIZE	# OF DRIVES	TYPE
Front Drive Bays: Choice of 3.5" or 2.5" Hot-Swap Drive Bays Note: Optional NVMe support for 2.5" chassis	3.5" 2.5"	Four (4) Eight (8)	6Gbps SATA or 12Gbps SAS w/ SAS controller 2.5" SSDs can be used in the 3.5" bays 6Gbps SATA drives or 12Gbps SAS drives with SAS controller
PCIe SFF (NVMe) SSD Support	2.5"	Four (4)	Optional backplane kit to support 4x 2.5" PCIe SFF (NVMe) SSDs and 4x 2.5" 12Gbps SAS drives Option can be added to 8x 2.5" systems
Internal SSD	2.5"	One	Front optical drive bay can be converted to support 1x fixed SATA SSD, requires accessory kit AXXSSDODDKIT. Max thickness of supported SSDs is 7mm.

1U STORAGE OPTIONS	SIZE	# OF DRIVES	TYPE
Internal eUSB	eUSB	One	One 2mm LP eUSB module via 2x5 pin connector
SATA DOM	SATA DOM	Two connections	Support for two internal SATA Disk-on-Modules mounted directly on the onboard SATA ports, validated with Apacer* and Innodisk*
SAS Support	NA	NA	Optional SAS IOC/ROC via Intel® Integrated RAID module connector, required to support SAS drives

2U SERVER SPECIFICATIONS	
2U SPECIFICATIONS	DETAILS
Server Board	S2600WTTR (10GbE) or S2600WT2 (1GbE)
2U Rack Dimensions	17.25" width x 28" length x 3.44" height
2U Packaging Dimensions	577mm width x 983mm length x 260mm height
PSUs per chassis	Up to 2, supporting 1+0, 1+1 Redundant Power and 2+0 Combined Power
2U Power Supply	1100W AC 80 PLUS Platinum, 750W AC 80 PLUS Platinum, 750W DC 80 PLUS Gold
2U Fans	6 managed hot swap system fans

2U EXPANSION	SLOT – CPU SOURCE	RISER OPTIONS -PCIE 3.0 UNLESS NOTED	
Riser Slot 1:	Top Slot – CPU 1 Middle Slot – CPU 1 Bottom Slot – CPU 2	<b>Standard 3-slot Riser:</b> A2UL8RISER2 All 2U systems except R2208WTTYC1R system x8 Electrical, x16 Mechanical x8 Electrical, x16 Mechanical x8 Electrical, x8 Mechanical	<b>x16 2-slot Riser:</b> A2UL16RISER2 R2208WTTYC1R only, optional upgrade for other 2U systems x16 Electrical, x16 Mechanical N/A x8 Electrical, x8 Mechanical
Riser Slot 2:	Top Slot – CPU 1 Middle Slot – CPU 1 Bottom Slot – CPU 2	<b>Standard 3-slot Riser:</b> A2UL8RISER2 except R2208WTTYC1R system x8 Electrical, x16 Mechanical x8 Electrical, x16 Mechanical x8 Electrical, x8 Mechanical	<b>x16 2-slot Riser:</b> A2UL16RISER2 R2208WTTYC1R only, optional upgrade for other 2U systems x16 Electrical, x16 Mechanical N/A x8 Electrical, x8 Mechanical
Riser Slot 3: Low Profile	Top Slot – CPU 2 Bottom Slot – CPU 2	<b>Low profile riser:</b> A2UX8X4RISER Included in all 2U systems except storage SKUs R2224WTTYSR and R2312WTTYSR for which it is an optional upgrade x4 Electrical, x8 Mechanical (PCIe 2.0 support only) x8 Electrical, x8 Mechanical	
Expansion Modules	I/O Module Slot – CPU 1 RAID Module Slot – CPU 1	x8 Electrical, proprietary connection x8 Electrical, proprietary connection	

Note – The population of two or three riser cards requires dual processors

2U STORAGE OPTIONS	SIZE	# OF DRIVES	TYPE
Front: Choice of 3.5" or 2.5" Hot-Swap Drive Bays Note: Optional NVMe support for 2.5" chassis	3.5"	Eight (8)	6Gbps SATA or 12Gbps SAS w/ SAS controller 2.5" SSDs can be used in the 3.5" bays
		Twelve (12)	Up to 8x 6Gbps SATA drives -or- Up to 12x 12Gbps SAS drives with SAS controller and expander
	2.5"	Eight (8)	Up to 8x 6Gbps SATA drives -or- Up to 8x 12Gbps SAS drives with SAS controller
		Sixteen (16)	Up to 8x 6Gbps SATA drives -or- Up to 16x 12Gbps SAS drives with SAS controller and expander
		Twenty-four (24)	Up to 8x 6Gbps SATA drives -or- Up to 24x 12Gbps SAS drives with SAS controller and expander, Storage SKU
PCIe*SFF (NVMe) SSD Support	2.5"	Four (4)	Optional backplane kit to support 4x 2.5" PCIe* SFF (NVMe) SSDs and 4x 2.5" 12Gbps SAS drives.  Option can be added to 8x2.5" and 16x2.5" systems. Replaces one 8-drive backplane in the 24x2.5" system
Rear SSD, Hot-Swap	2.5"	Two (2)	Optional 2.5" Rear mount 6Gbps SATA Hot-swap bay, A2UREARHSDK. Included in R2312WTTYSR and R2224WTTYSR system SKUs
Internal SSD	eUSB	One (1)	One 2mm LP eUSB module via 2x5 pin connector
SATA DOM	SATA DOM	Two connections	Support for two internal SATA Disk-on-Modules mounted directly on the onboard SATA ports, validated with Apacer* and Innodisk*
SAS Support	NA	NA	Optional SAS IOC/ROC via Intel® Integrated RAID module connector, required to support SAS drives

COMMON 1U/2U SYSTEM SPECIFICATIONS	
SPECIFICATION	DETAILS
Server Management	Integrated Baseboard Management Controller, IPMI 2.0 compliant Dedicated RJ45 management port Remote KVM Management and device mapping available via RMM4-Lite Accessory
BMC Management	IPMI 2.0 compliant
BIOS Type	UEFI BIOS
Warranty	3-year limited warranty

SERVER BOARD AND 1U/2U SYSTEM ORDER CODES		
ORDER CODE	TYPE	DESCRIPTION
S2600WT2R	Server Board	Server board supporting two Intel® Xeon® processor E5-2600 v3 product family up to 145W, 24 DIMMs, two 1Gb Ethernet ports
S2600WTTR	Server Board	Server board supporting two Intel® Xeon® processor E5-2600 v3 product family up to 145W, 24 DIMMs, two 10Gb Ethernet ports
R1208WT2GSR	1U Server	System includes: Intel® Server Board S2600WT2R, Dual 1GbE, Single 750W PSU Support for 8x 2.5" drives, 24 DDR4 DIMMs
R1208WTTGSR	1U Server	System includes: Intel® Server Board S2600WTTR, Dual 10GbE, Single 750W PSU Support for 8x 2.5" drives, 24 DDR4 DIMMs
R1304WT2GSR	1U Server	Includes Intel® Server Board S2600WT2R, Dual 1GbE, Single 750W PSU Support for 4x 3.5" drives, 24 DDR4 DIMMs
R1304WTTGSR	1U Server	Includes Intel® Server Board S2600WTTR, Dual 10GbE, Single 750W PSU Support for 4x 3.5" drives, 24 DDR4 DIMMs
R2208WT2YSR	2U Server	Includes Intel® Server Board S2600WT2R, Dual 1GbE, Single 1100W PSU Support for 8x 2.5" drives, 24 DDR4 DIMMs
R2208WTTYC1R	2U Server	Includes Intel® Server Board S2600WTTR, Dual 10GbE, Single 1100W PSU Support for 8x 2.5" drives, 24 DDR4 DIMMs, passive Intel® Xeon Phi™ co-processor add-in card support
R2208WTTYSR	2U Server	Includes Intel® Server Board S2600WTTR, Dual 10GbE, Single 1100W PSU Support for 8x 2.5" drives, 24 DDR4 DIMMs
R2224WTTYSR	2U Server	Includes Intel® Server Board S2600WTTR, Dual 10GbE, Single 1100W PSU Support for 24x 2.5" drives, 24 DDR4 DIMMs, 2x 2.5" rear-mount SSDs
R2308WTTYSR	2U Server	Includes Intel® Server Board S2600WTTR, Dual 10GbE, Single 1100W PSU Support for 8x 3.5" drives, 24 DDR4 DIMMs
R2312WTTYSR	2U Server	Includes Intel® Server Board S2600WTTR, Dual 10GbE, Single 1100W PSU Support for 12x 3.5" drives, 24 DDR4 DIMMs, 2x 2.5" rear-mount SSDs
R1304WTXXX	1U Chassis	1U chassis with support for four 3.5" drives, no Server Board, no PSU
R1208WTXXX	1U Chassis	1U chassis with support for eight 2.5" drives, no Server Board, no PSU
R2312WTXXX	2U Chassis	2U chassis with support for twelve 3.5" drives, no Server Board, no PSU
R2000WTXXX	2U Chassis	2U chassis, no drive bays, no server board, no PSU

See Configuration Guide for Accessory Kit and Spare Order Codes

INTEL® I/O MODULES	
I/O MODULE ORDER CODE	DESCRIPTION
AXX4P1GBPWL1OM	Quad RJ45 1GbE: Intel® I350-AE4 GbE I/O module
AXX10GBNIAIOM	Dual SFP+ 10GbE: Intel® 82599EB 10 GbE I/O module
AXX10GBTWLIOM3	Dual RJ45 10GbE: Intel® X540-BT2 10 GbE I/O module
AXX1FDRIBIOM	Single Port QSFP FDR – InfiniBand* ConnectX-3* I/O Module
AXX2FDRIBIOM	Dual Port QSFP FDR - InfiniBand* ConnectX-3* I/O Module

For more information on Intel server solutions visit: [IntelServerEdge.com](http://IntelServerEdge.com)

For more information on Intel® Server Products visit: [intel.com/IntelServerSystems](http://intel.com/IntelServerSystems)

For product specifications visit: [ark.intel.com](http://ark.intel.com)

NEW 12GBPS SAS 3.0 INTEL® INTEGRATED RAID MODULES	
12GBPS SAS 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
RMS3JC080	8 port, Entry RAID LSI3008 IOC, JBOD & RAID 0, 1, 1E

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)

For additional RAID modules and add-in-cards, visit [www.intel.com/go/RAID](http://www.intel.com/go/RAID)

Intel technologies may require enabled hardware, specific software, or services activation. Check with your system manufacturer or retailer.

No computer system can be absolutely secure. Intel does not assume any liability for lost or stolen data or systems or any damages resulting from such losses. Intel disclaims all express and implied warranties, including without limitation, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement, as well as any warranty arising from course of performance, course of dealing, or usage in trade. No license (express or implied, by estoppel or otherwise) to any intellectual property rights is granted by this document.

All information provided here is subject to change without notice. Contact your Intel representative to obtain the latest Intel product specifications and roadmaps.

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

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

