



## Intel® Xeon® Gold 6148 Processor

27.5M Cache, 2.40 GHz

Specifications

Compatible Products

Product Images

Ordering and Compliance

### Ordering and spec information

#### Boxed Intel® Xeon® Gold 6148 Processor (27.5M Cache, 2.40 GHz) FC-LGA14B

Spec Code	SR3B6
Ordering Code	BX806736148
Step	H0
RCP	\$3078.00

#### Intel® Xeon® Gold 6148 Processor (27.5M Cache, 2.40 GHz) FC-LGA14B, Tray

Spec Code	SR3B6
Ordering Code	CD8067303406200
Step	H0
RCP	\$3072.00

### Trade compliance information

ECCN	5A992C
CCATS	G077159
US HTS	8542310001

### PCN/MDDS Information

#### SR3B6

956010

[PCN](#) | [MDDS](#)

958981

PCN | MDDS

## Declaration of Conformity

- [BX806736148](#)

## Downloads and Software

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Refer to Datasheet for formal definitions of product properties and features.

"Announced" SKUs are not yet available. Please refer to the Launch Date for market availability.

Some products can support AES New Instructions with a Processor Configuration update, in particular, i7-2630QM/i7-2635QM, i7-2670QM/i7-2675QM, i5-2430M/i5-2435M, i5-2410M/i5-2415M. Please contact OEM for the BIOS that includes the latest Processor configuration update.

‡ This feature may not be available on all computing systems. Please check with the system vendor to determine if your system delivers this feature, or reference the system specifications (motherboard, processor, chipset, power supply, HDD, graphics controller, memory, BIOS, drivers, virtual machine monitor-VMM, platform software, and/or operating system) for feature compatibility. Functionality, performance, and other benefits of this feature may vary depending on system configuration.

See <http://www.intel.com/content/www/us/en/architecture-and-technology/hyper-threading/hyper-threading-technology.html?wapkw=hyper+threading> for more information including details on which processors support Intel® HT Technology.

Max Turbo Frequency refers to the maximum single-core processor frequency that can be achieved with Intel® Turbo Boost Technology. See [www.intel.com/technology/turboboost/](http://www.intel.com/technology/turboboost/) for more information.

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System and Maximum TDP is based on worst case scenarios. Actual TDP may be lower if not all I/Os for chipsets are used.

Low Halogen: Applies only to brominated and chlorinated flame retardants (BFRs/CFRs) and PVC in the final product. Intel components as well as purchased components on the finished assembly meet JS-709 requirements, and the PCB / substrate meet IEC 61249-2-21 requirements. The replacement of halogenated flame retardants and/or PVC may not be better for the environment.

For benchmarking data see <http://www.intel.com/performance>.

Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See <http://www.intel.com/content/www/us/en/processors/processor-numbers.html> for details.

Processors that support 64-bit computing on Intel® architecture require an Intel 64 architecture-enabled BIOS.

Intel® Xeon® Gold 6148 Processor Add to Compare  
 27.5M Cache, 2.40 GHz

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<b>Essentials</b>	
Product Collection	Intel® Xeon® Scalable Processors
Code Name	Products formerly Skylake
Vertical Segment	Server
Processor Number	6148
Status	Launched
Launch Date <a href="#">?</a>	Q1'17
Lithography <a href="#">?</a>	14 nm
Recommended Customer Price <a href="#">?</a>	\$3072.00 - \$3078.00
<b>Performance</b>	
# of Cores <a href="#">?</a>	20
# of Threads <a href="#">?</a>	40
Processor Base Frequency <a href="#">?</a>	2.40 GHz
Max Turbo Frequency <a href="#">?</a>	3.70 GHz
Cache <a href="#">?</a>	27.5 MB L3
# of UPI Links <a href="#">?</a>	3
TDP <a href="#">?</a>	150 W
<b>Supplemental Information</b>	
Embedded Options Available <a href="#">?</a>	No
Datasheet	<a href="#">View now</a>
Product Brief	<a href="#">View now</a>
<b>Memory Specifications</b>	
Max Memory Size (dependent on memory type) <a href="#">?</a>	768 GB
Memory Types <a href="#">?</a>	DDR4-2666
Maximum Memory Speed	2666 MHz
Max # of Memory Channels <a href="#">?</a>	6
ECC Memory Supported <sup>1</sup> <a href="#">?</a>	Yes
<b>Expansion Options</b>	
Scalability	545
PCI Express Revision <a href="#">?</a>	3.0
Max # of PCI Express Lanes <a href="#">?</a>	48
<b>Package Specifications</b>	
Sockets Supported <a href="#">?</a>	FCLGA3647
T <sub>case</sub> <a href="#">?</a>	86°C
Package Size	78.0mm x 56.5mm
Low Halogen Options Available	See MDDS
<b>Advanced Technologies</b>	
Intel® Optane™ Memory Supported <sup>1</sup> <a href="#">?</a>	No
Intel® Speed Shift Technology <a href="#">?</a>	Yes
Intel® Turbo Boost Max Technology 3.0 <sup>1</sup> <a href="#">?</a>	No
Intel® Turbo Boost Technology <sup>1</sup> <a href="#">?</a>	2.0
Intel® vPro™ Technology <sup>1</sup> <a href="#">?</a>	Yes
Intel® Hyper-Threading Technology <sup>1</sup> <a href="#">?</a>	Yes
Intel® Virtualization Technology (VT-x) <sup>1</sup> <a href="#">?</a>	Yes
Intel® Virtualization Technology for Directed I/O (VT-d) <sup>1</sup> <a href="#">?</a>	Yes
Intel® VT-x with Extended Page Tables (EPT) <sup>1</sup> <a href="#">?</a>	Yes
Intel® TSX-NI <a href="#">?</a>	Yes
Intel® 64 <sup>1</sup> <a href="#">?</a>	Yes
Instruction Set Extensions <a href="#">?</a>	Intel® SSE4.2, Intel® AVX, Intel® AVX2, Intel® AVX-512
# of AVX-512 FMA Units <a href="#">?</a>	2
Enhanced Intel SpeedStep™ Technology <a href="#">?</a>	Yes
Intel® Volume Management Device (VMD) <a href="#">?</a>	Yes
<b>Security &amp; Reliability</b>	
Intel® AES New Instructions <a href="#">?</a>	Yes
Intel® Trusted Execution Technology <sup>1</sup> <a href="#">?</a>	Yes
Execute Disable Bit <sup>1</sup> <a href="#">?</a>	Yes
Intel® Run Sure Technology <a href="#">?</a>	Yes
Mode-based Execute Control (MBE) <a href="#">?</a>	Yes

More support options for Intel® Xeon® Gold 6148 Processor (27.5M Cache, 2.40 GHz)

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[BGSF 1717MN26 E6327](#) [D8086-2](#) [LF80538GF0282M-S-L8VY](#) [CM8063401293902S R1A4](#) [CM8063501521302S R1B8](#)  
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