



Intel® Xeon® Gold 6138 Processor

27.5M Cache, 2.00 GHz

Spec Code

SR3B5

Ordering Code

CD8067303406100

Intel® Xeon® Gold 6138 Processor (27.5M Cache, 2.00 GHz)

Code Name	Skylake
<u>Essentials</u>	
Vertical Segment	Server
Processor Number	6138
Status	Launched
Launch Date	Q3'17
Lithography	14 nm
Recommended Customer Price	\$2612.00 - \$2618.00
<u>Performance</u>	
# of Cores	20
# of Threads	40
Processor Base Frequency	2.00 GHz
Max Turbo Frequency	3.70 GHz
Cache	27.5 MB L3
# of UPI Links	3
<u>TDP</u>	<u>125 W</u>
Supplemental Information	
Embedded Options Available	Yes
Conflict Free	Yes
Datasheet	Link
<u>Product Brief</u>	Link
Memory Specifications	
Max Memory Size (dependent on memory type)	768 GB

Memory Types	DDR4-2666
Maximum Memory Speed	2.67 GHz
Max # of Memory Channels	6
<u>ECC Memory Supported ‡</u>	<u>Yes</u>
Expansion Options	
Scalability	S4S
PCI Express Revision	3.0
<u>Max # of PCI Express Lanes</u>	<u>48</u>
Package Specifications	
Sockets Supported	FCLGA3647
T_{CASE}	86°C
Package Size	76.0mm x 56.5mm
<u>Low Halogen Options Available</u>	<u>See MDDS</u>
Advanced Technologies	
Intel® Optane™ Memory Supported ‡	No
Intel® Speed Shift Technology	Yes
Intel® Turbo Boost Max Technology 3.0 ‡	No
Intel® Turbo Boost Technology	2.0
Intel® vPro™ Technology ‡	Yes
Intel® Hyper-Threading Technology ‡	Yes
Intel® Virtualization Technology (VT-x) ‡	Yes
Intel® TSX-NI	Yes
Intel® 64 ‡	Yes
Instruction Set Extensions	Intel® SSE4.2, Intel® AVX, Intel® AVX2, Intel® AVX-512
# of AVX-512 FMA Units	2
<u>Intel® Volume Management Device (VMD)</u>	<u>Yes</u>
Security & Reliability	
Intel® AES New Instructions	Yes
Intel® Trusted Execution Technology ‡	Yes
Intel® Run Sure Technology	Yes
Mode-based Execute Control (MBE)	Yes