



Intel® Xeon® Processor E3-1275 v6

8M Cache, 3.80 GHz

Spec Code

SR32A

Ordering Code

CM8067702870931

Intel® Xeon® Silver 4116 Processor (16.5M Cache, 2.10 GHz)

Code Name	Kaby Lake
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Essentials

Vertical Segment	Server
Processor Number	E3-1275V6
Status	Launched
Launch Date	Q1'17
Lithography	14 nm
Recommended Customer Price	\$339.00

Performance

# of Cores	4
# of Threads	8
Processor Base Frequency	3.80 GHz
Max Turbo Frequency	4.20 GHz
Cache	8 MB
Bus Speed	8 GT/s DMI3
TDP	73 W
VID Voltage Range	0.55V-1.52V

Supplemental Information

Embedded Options Available	Yes
Conflict Free	Yes
Datasheet	Link

Memory Specifications

Max Memory Size (dependent on memory type)	64 GB
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Memory Types	DDR4-2400, DDR3L-1866
Max # of Memory Channels	2
Max Memory Bandwidth	37.5 GB/s
ECC Memory Supported ‡	Yes
<u>Graphics Specifications</u>	
Processor Graphics ‡	Intel® HD Graphics P630
Graphics Base Frequency	350 MHz
Graphics Max Dynamic Frequency	1.15 GHz
Graphics Video Max Memory	1.7 GB
Graphics Output	eDP/DP/HDMI/DVI
4K Support	Yes, at 60Hz
Max Resolution (HDMI 1.4)‡	4096x2160@24Hz
Max Resolution (DP)‡	4096x2304@60Hz
Max Resolution (eDP - Integrated Flat Panel)‡	4096x2304@60Hz
Max Resolution (VGA)‡	N/A
DirectX* Support	12
OpenGL* Support	4.4
Intel® Quick Sync Video	Yes
Intel® InTru™ 3D Technology	Yes
Intel® Clear Video HD Technology	Yes
Intel® Clear Video Technology	Yes
# of Displays Supported ‡	3
Device ID	0x591D
<u>Expansion Options</u>	
Scalability	1S Only
PCI Express Revision	3.0
PCI Express Configurations ‡	1x16, 2x8, 1x8+2x4
Max # of PCI Express Lanes	16
<u>Package Specifications</u>	
Sockets Supported	FCLGA1151
Max CPU Configuration	1
Package Size	37.5mm x 37.5mm
Low Halogen Options Available	See MDDS

Advanced Technologies	
Intel® Optane™ Memory Supported ‡	Yes
Intel® Turbo Boost Technology	2.0
Intel® vPro™ Technology ‡	Yes
Intel® Hyper-Threading Technology ‡	Yes
Intel® Virtualization Technology (VT-x) ‡	Yes
Intel® Virtualization Technology for Directed I/O	Yes
Intel® VT-x with Extended Page Tables (EPT) ‡	Yes
Intel® TSX-NI	Yes
Intel® 64 ‡	Yes
Instruction Set	64-bit
Instruction Set Extensions	SSE4.1/4.2, AVX 2.0
Idle States	Yes
Enhanced Intel SpeedStep® Technology	Yes
Thermal Monitoring Technologies	Yes
Security & Reliability	
Intel® AES New Instructions	Yes
Secure Key	Yes
Intel® Software Guard Extensions (Intel® SGX)	Yes
Intel® Memory Protection Extensions (Intel® MPX)	Yes
Intel® OS Guard	Yes
Intel® Trusted Execution Technology ‡	Yes
Execute Disable Bit ‡	Yes
Intel® Boot Guard	Yes