Intel® Xeon® Processor E3-1275 v5 (8M Cache, 3.60 GHz)

Specifications

– Essentials

Status	Launched
Launch Date	Q4'15
Processor Number	E3-1275V5
Intel® Smart Cache	8 MB
DMI3	8 GT/s
Instruction Set	64-bit
Instruction Set Extensions	SSE4.1/4.2, AVX 2.0
Embedded Options Available 🔍	Yes
Lithography	14 nm
Scalability	1S Only
VID Voltage Range	0.55V-1.52V
Recommended Customer Price	BOX : $350.00 TRAY: $339.00
Conflict Free	Yes
Datasheet	Link

– Performance

# of Cores	4
# of Threads	8
Processor Base Frequency	3.6 GHz
Max Turbo Frequency	4 GHz
TDP	80 W

– Memory Specifications

Max Memory Size (dependent on memory type)	64 GB
Memory Types	DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V
Max # of Memory Channels	2
Max Memory Bandwidth	34.1 GB/s
ECC Memory Supported ‡ 🔍	Yes

– Graphics Specifications

Processor Graphics ‡	Intel® HD Graphics P530
Graphics Base Frequency	400 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 (Intel® WiDi)‡	1080p
Max Resolution (HDMI 1.4)‡	4096x2304@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® Insider™	Yes
Intel® Wireless Display	Yes
Intel® Clear Video HD Technology	Yes
Intel® Clear Video Technology	Yes
# of Displays Supported ‡	3
Device ID	0x191D

- Expansion Options

PCI Express Revision	3.0
PCI Express Configurations ‡	1x16, 2x8, 1x8+2x4
Max # of PCI Express Lanes	16

- Package Specifications

Max CPU Configuration	1
Package Size	37.5mm x 37.5mm
Graphics and IMC Lithography	14 nm
Sockets Supported	FCLGA1151
Low Halogen Options Available	See MDDS

- Advanced Technologies

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 (VT-d) ‡	Yes
Intel® VT-x with Extended Page Tables (EPT) ‡	Yes
Intel® TSX-NI	Yes
Intel® 64 ‡	Yes

Idle States	Yes
Enhanced Intel SpeedStep® Technology 🔍	Yes
Thermal Monitoring Technologies	Yes

- Intel® Data Protection Technology	
Intel® AES New Instructions 🔍	Yes
Secure Key	Yes
Intel® Software Guard Extensions (Intel® SGX)	Yes
Intel® Memory Protection Extensions (Intel® MPX)	Yes

- Intel® Platform Protection Technology	
OS Guard	Yes
Trusted Execution Technology ‡ 🔍	Yes
Execute Disable Bit ‡	Yes

Compatible Products

- Server/Workstation Board

Compare	Product Name	Status	Board Form Factor	Chassis Form Factor	Socket	Embedded Options Available	TDP
	Intel® Server Board S1200SPL	Launched	uATX	Pedestal	1	No	80 W

Ordering and Spec Information

Trade Compliance Information

ECCN	CCATS
5A992C	G077159

Ordering and Spec Information

Spec Code	Ordering Code	Step	US HTS	RCP
Boxed Intel® Xeon® Processor E3-1275 v5 (8M Cache, 3.60 GHz) FC-LGA14C				
SR2LK	BX80662E31275V5	R0	8542310000	$350.00
Intel® Xeon® Processor E3-1275 v5 (8M Cache, 3.60 GHz) FC-LGA14C, Tray				
SR2LK	CM8066201934909	R0	8542310000	$339.00

Retired and Discontinued

Spec Code	Ordering Code	Step	US HTS	RCP
Intel® Xeon® Processor E3-1275 v5 (8M Cache, 3.60 GHz) FC-LGA14C, Tray				
SR2CT	CM8066201934909	R0	8542310000-HYBRD	N/A

Download Drivers

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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.

"Conflict free" and "conflict-free" means "DRC conflict free", which is defined by the U.S. Securities and Exchange Commission rules to mean products that do not contain conflict minerals (tin, tantalum, tungsten and/or gold) that directly or indirectly finance or benefit armed groups in the Democratic Republic of the Congo (DRC) or adjoining countries. Intel also uses the term "conflict-free" in a broader sense to refer to suppliers, supply chains, smelters and refiners whose sources of conflict minerals do not finance conflict in the DRC or adjoining countries. Intel processors manufactured before January 1, 2013 are not confirmed conflict free. The conflict free designation refers only to product manufactured after that date. For Intel Boxed Processors, the conflict free designation refers to the processor only, not to any additional included accessories, such as heatsinks/coolers.

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/ 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.

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