



Intel® Xeon® Processor E5-2658 v2 (25M Cache, 2.40 GHz)

Compare +

Specifications

- Essentials
- Performance
- Memory Specifications
- Expansion Options
- Package Specifications
- Advanced Technologies
- Intel® Data Protection Technology
- Intel® Platform Protection Technology

Compatible Products

Ordering / sSpecs / Steppings

Download Drivers

Specifications

Essentials

Status	Launched
Launch Date	Q3'13
Processor Number	E5-2658V2
Cache	25 MB SmartCache
Bus Speed	8 GT/s QPI
# of QPI Links	2
Instruction Set	64-bit
Instruction Set Extensions	AVX
Embedded Options Available	Yes
Lithography	22 nm
Scalability	2S
VID Voltage Range	0.65–1.30V
Recommended Customer Price	\$1750.00
Conflict Free	Yes
Datasheet	Link

Performance

# of Cores	10
# of Threads	20
Processor Base Frequency	2.4 GHz
Max Turbo Frequency	3 GHz
TDP	95 W

Memory Specifications

Max Memory Size (dependent on memory type)	768 GB
Memory Types	DDR3 800/1066 /1333/1600/1866
Max # of Memory Channels	4
Max Memory Bandwidth	59.7 GB/s
Physical Address Extensions	46-bit
ECC Memory Supported ‡	Yes

Expansion Options

PCI Express Revision	3.0
PCI Express Configurations ‡	x4, x8, x16
Max # of PCI Express Lanes	40

Package Specifications

Max CPU Configuration	2
T _{case}	87°C
Package Size	52.5mm x 45mm
Sockets Supported	FCLGA2011
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	No
Intel® 64 ‡	Yes
Idle States	Yes
Enhanced Intel SpeedStep® Technology	Yes
Intel® Demand Based Switching	Yes
Thermal Monitoring Technologies	Yes
Intel® Flex Memory Access	No
Intel® Identity Protection Technology ‡	No

Intel® Data Protection Technology

Intel® AES New Instructions	Yes
Secure Key	Yes

Intel® Platform Protection Technology

OS Guard	Yes
Trusted Execution Technology ‡	Yes
Execute Disable Bit ‡	Yes

All information provided is subject to change at any time, without notice. Intel may make changes to manufacturing life cycle, specifications, and product descriptions at any time, without notice. The information herein is provided "as-is" and Intel does not make any representations or warranties whatsoever regarding accuracy of the information, nor on the product features, availability, functionality, or compatibility of the products listed. Please contact system vendor for more information on specific products or systems.

"Intel classifications" consist of Export Control Classification Numbers (ECCN) and Harmonized Tariff Schedule (HTS) numbers. Any use made of Intel classifications are without recourse to Intel and shall not be construed as a representation or warranty regarding the proper ECCN or HTS. Your company may be the exporter of record, and as such, your company is responsible for determining the correct classification of any item at the time of export.

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 Based Processors, the conflict free designation refers to the processor only, not to any additional included accessories, such as heatinks/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.

The Recommended Customer Price ("RCP") is pricing guidance for Intel products. Prices are for direct Intel customers, typically represent 1,000-unit purchase quantities, and are subject to change without notice. Taxes and shipping, etc. not included. Prices may vary for other package types and shipment quantities, and special promotional arrangements may apply. If sold in bulk, price represents individual unit. Listing of these RCP does not constitute a formal pricing offer from Intel. Please work with your appropriate Intel representative to obtain a formal price quotation.

System and Maximum TDP is based on worst cases 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 J5-709 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 an Intel® architecture require an Intel 64 architecture-enabled BIOS.

Send us your feedback!

USA (English)

Company Information Our Commitment Communities Investor Relations Contact Us

Newsroom Jobs

