



Intel® Xeon® Processor E7-4809 v4

20M Cache, 2.10 GHz

Add to Compare

Specifications

Essentials

Performance

Supplemental Information

Memory Specifications

Expansion Options

Package Specifications

Advanced Technologies

Security & Reliability

Ordering and Compliance

Product Images

Downloads and Software

Essentials

Export specifications

Product Collection	Intel® Xeon® Processor E7 v4 Family
Code Name	Products formerly Broadwell
Vertical Segment	Server
Processor Number	E7-4809V4
Status	Launched
Launch Date ?	Q2'16
Lithography ?	14 nm
Recommended Customer Price ?	

Performance

# of Cores ?	8
# of Threads ?	16
Processor Base Frequency ?	2.10 GHz
Cache ?	20 MB
Bus Speed ?	6.4 GT/s QPI
# of QPI Links ?	3
TDP ?	115 W

Supplemental Information




Embedded Options Available ?	No
Datasheet	View now

Memory Specifications



Max Memory Size (dependent on memory type) ?	3.07 TB
Memory Types ?	DDR4-1333/1600/1866 DDR3-1066/1333
Max # of Memory Channels ?	4
Max Memory Bandwidth ?	85 GB/s
Physical Address Extensions ?	46-bit
ECC Memory Supported ‡ ?	Yes

Expansion Options














Scalability	S4S
-------------	-----

PCI Express Revision 	3.0
PCI Express Configurations [‡] 	x4, x8, x16
Max # of PCI Express Lanes 	32





Package Specifications

Sockets Supported 	FCLGA2011
Max CPU Configuration	4
T _{CASE} 	69°C
Package Size	45mm x 52.5mm

Advanced Technologies

Intel® Turbo Boost Technology [‡] 	No
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
Instruction Set 	64-bit
Instruction Set Extensions 	Intel® AVX2
Idle States 	Yes
Enhanced Intel SpeedStep® Technology 	Yes
Thermal Monitoring Technologies 	Yes
Intel® Instruction Replay Technology 	No

Security & Reliability

Intel® AES New Instructions 	Yes
Secure Key 	Yes
Intel® OS Guard	Yes
Intel® Trusted Execution Technology [‡] 	Yes
Execute Disable Bit [‡] 	Yes

More support options for Intel® Xeon® Processor E7-4809 v4 (20M Cache, 2.10 GHz)



Product Support



Downloads and Software



Support Community



Warranty and Replacement





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 are for informational purposes only and 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 as an importer and/or exporter is responsible for determining the correct classification of your transaction.

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/ 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 case scenarios. Actual TDP may be lower if not all I/Os for chipsets are used.

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.



[Company Information](#) [Our Commitment](#) [Communities](#) [Investor Relations](#) [Contact Us](#)

[Newsroom](#) [Jobs](#)

