



Intel® Xeon® Processor E5-4603 v2

10M Cache, 2.20 GHz

Specifications

Export specifications

Essentials

Product Collection	Intel® Xeon® Processor E5 v2 Family
Code Name	Products formerly Ivy Bridge EP
Vertical Segment	Server
Processor Number	E5-4603V2
Status	Launched
Launch Date	Q1'14
Lithography	22 nm
Recommended Customer Price	\$551.00

Performance

# of Cores	4
# of Threads	8
Processor Base Frequency	2.20 GHz
Max Turbo Frequency	2.20 GHz
Cache	10 MB SmartCache



Bus Speed

of QPI Links

TDP

VID Voltage Range

6.4 GT/s QPI
USA (English)   2 

95 W

0.65-1.30V

Supplemental Information

Embedded Options Available

No

Datasheet

[View now](#)

Additional Information
URL

[View now](#)

Memory Specifications

Max Memory Size (dependent on memory type)

768 GB

Memory Types

DDR3 800/1066/1333

Max # of Memory Channels

4

Max Memory Bandwidth

42.6 GB/s

Physical Address Extensions

46-bit

ECC Memory Supported †

Yes

Expansion Options

Scalability

4S Only

PCI Express Revision

3.0

PCI Express Configurations †

x4, x8, x16

Max # of PCI Express Lanes

40

Package Specifications



Sockets Supported

Max CPU Configuration

T_{CASE}

Package Size

Low Halogen Options Available

77°C

52.5 mm x 45 mm

No

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

No

Intel® 64 †

Yes

Instruction Set

64-bit

Instruction Set Extensions

Intel® AVX

Idle States

Yes

Enhanced Intel SpeedStep® Technology

Yes

Intel® Demand Based Switching

Yes

Thermal Monitoring Technologies

Yes

Security & Reliability

Intel® AES New Instructions

Yes

Secure Key

Yes

Intel® OS Guard

Yes

Intel® Trusted Execution Technology †

Yes



Ordering and Compliance

Compatible products

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.

‡ 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.

System and Maximum TDP is based on worst case scenarios. Actual TDP may be lower if not all I/Os for chipsets are used.

"Announced" SKUs are not yet available. Please refer to the Launch Date for market availability.

Processors that support 64-bit computing on Intel® architecture require an Intel 64 architecture-enabled BIOS.

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.


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.

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.

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.

Company Information

Our Commitment

 Communities

USA (English)   

Investor Relations

Contact Us

Newsroom

Jobs



© Intel Corporation

[Terms of Use](#)

[*Trademarks](#)

[Privacy](#)

[Cookies](#)

[Supply Chain Transparency](#)

[Site Map](#)