



Intel® Core™ i7-2715QE Processor (6M Cache, up to 3.00 GHz)

Specifications
Essentials
Memory Specifications
Graphics Specifications
Expansion Options
Package Specifications
Advanced Technologies
Intel® Data Protection Technology
Intel® Platform Protection Technology
Compatible Products
Product Images
Ordering / sSpecs / Steppings

Specifications	
Essentials	
Status	Launched
Launch Date	Q1'11
Processor Number	i7-2715QE
# of Cores	4
# of Threads	8
Clock Speed	2.1 GHz
Max Turbo Frequency	3 GHz
Intel® Smart Cache	6 MB
DMI	5 GT/s
Instruction Set	64-bit
Instruction Set Extensions	AVX
Embedded Options Available	Yes
Lithography	32 nm
Max TDP	45 W
Recommended Customer Price	TRAY: \$378.00
Datasheet	Link
Memory Specifications	
Max Memory Size (dependent on memory type)	16 GB
Memory Types	DDR3-1066/1333/1600
# of Memory Channels	2
ECC Memory Supported ‡	Yes
Graphics Specifications	
Processor Graphics ‡	Intel® HD Graphics 3000
Graphics Base Frequency	650 MHz
Graphics Max Dynamic Frequency	1.2 GHz
Graphics Output	eDP/DP/HDMI/SDVO/CRT
Intel® Quick Sync Video	Yes
Intel® InTru™ 3D Technology	Yes
Intel® Wireless Display	Yes
Intel® Flexible Display Interface (Intel® FDI)	Yes
Intel® Clear Video HD Technology	Yes
Macrovision* License Required	No
# of Displays Supported ‡	2
Expansion Options	
PCI Express Revision	2.0
PCI Express Configurations ‡	1x16, 2x8, 1x8+2x4
Max # of PCI Express Lanes	16
Package Specifications	
T _{JUNCTION}	100 C
Package Size	31mm x 24mm (FCBGA1023)
Graphics and IMC Lithography	32 nm
Sockets Supported	FCBGA1023
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® 64 ‡	Yes
Idle States	Yes
Enhanced Intel SpeedStep® Technology	Yes
Intel® Demand Based Switching	No

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PCN/MDDS Information

SR076

911594: [PCN](#) | [MDDS](#)

Thermal Monitoring Technologies	Yes
Intel® Fast Memory Access	Yes
Intel® Flex Memory Access	Yes
Intel® Identity Protection Technology‡	Yes
Intel® Data Protection Technology	
AES New Instructions	 Yes
Intel® Platform Protection Technology	
Trusted Execution Technology‡	 Yes

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"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" means "DRC conflict free", which is defined by U.S. SEC 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 DRC or adjoining countries. We also use 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.

See <http://www.intel.com/content/www/us/en/architecture-and-technology/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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