



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                                 | <div></div> Yes         |
| Lithography                                                | 32 nm                   |
| Max TDP                                                    | 45 W                    |
| Recommended Customer Price                                 | TRAY: \$378.00          |
| Datasheet                                                  | <a href="#">Link</a>    |
| Memory Specifications                                      |                         |
| Max Memory Size (dependent on memory type)                 | 16 GB                   |
| Memory Types                                               | DDR3-1066/1333/1600     |
| # of Memory Channels                                       | 2                       |
| ECC Memory Supported ‡                                     | <div></div> 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                                    | <div></div> Yes         |
| Intel® InTru™ 3D Technology                                | <div></div> Yes         |
| Intel® Wireless Display                                    | <div></div> Yes         |
| Intel® Flexible Display Interface (Intel® FDI)             | <div></div> Yes         |
| Intel® Clear Video HD Technology                           | <div></div> 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 <sub>JUNCTION</sub>                                      | 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 ‡                                   | <div></div> Yes         |
| Intel® Hyper-Threading Technology ‡                        | <div></div> Yes         |
| Intel® Virtualization Technology (VT-x) ‡                  | <div></div> Yes         |
| Intel® Virtualization Technology for Directed I/O (VT-d) ‡ | <div></div> Yes         |
| Intel® VT-x with Extended Page Tables (EPT) ‡              | <div></div> Yes         |
| Intel® 64 ‡                                                | <div></div> Yes         |
| Idle States                                                | <div></div> Yes         |
| Enhanced Intel SpeedStep® Technology                       | <div></div> Yes         |
| Intel® Demand Based Switching                              | <div></div> 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/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/](http://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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