



Intel® Core™ i5-660 Processor
(4M Cache, 3.33 GHz)

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SPECIFICATIONS

Essentials

Status	Launched
Launch Date	Q1'10
Processor Number	i5-660
# of Cores	2
# of Threads	4
Clock Speed	3.33 GHz
Max Turbo Frequency	3.6 GHz
Intel® Smart Cache	4 MB
DMI	2.5 GT/s
Instruction Set	64-bit
Instruction Set Extensions	SSE4.2
Embedded Options Available	<input checked="" type="checkbox"/> Yes
Lithography	32 nm
Max TDP	73 W
VID Voltage Range	0.6500V-1.4000V
Recommended Customer Price	

Memory Specifications

Max Memory Size (dependent on memory type)	16 GB
Memory Types	DDR3-1066/1333
# of Memory Channels	2
Max Memory Bandwidth	21 GB/s
Physical Address Extensions	36-bit

Graphics Specifications

Graphics Base Frequency	733 MHz
Intel® Flexible Display Interface (Intel® FDI)	<input checked="" type="checkbox"/> Yes
Intel® Clear Video HD Technology	<input checked="" type="checkbox"/> Yes
# of Displays Supported †	2

Expansion Options

PCI Express Revision	2.0
PCI Express Configurations †	1x16, 2x8

RELATED PRODUCTS

Previous Generation Intel® Core™ i5 Processor

Intel® Core™ i5-600 Desktop Processor Series

Products formerly Clarkdale



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PCN/MDDS INFORMATION

SLBTK
907933: PCN | MDDS

SLBLV
904343: PCN | MDDS
904855: PCN | MDDS

Graphics Base Frequency	733 MHz
Intel® Flexible Display Interface (Intel® FDI)	<input checked="" type="checkbox"/> Yes
Intel® Clear Video HD Technology	<input checked="" type="checkbox"/> Yes
# of Displays Supported †	2

Expansion Options

PCI Express Revision	2.0
PCI Express Configurations †	1x16, 2x8

Max # of PCI Express Lanes	16
Package Specifications	
Max CPU Configuration	1
T _{CASE}	72.6°C
Package Size	37.5mm x 37.5mm
Processing Die Size	81 mm ²
# of Processing Die Transistors	382 million
Graphics and IMC Lithography	45 nm
Graphics and IMC Die Size	114 mm ²
# of Graphics and IMC Die Transistors	177 million
Sockets Supported	FCLGA1156
Low Halogen Options Available	See MDDS
Advanced Technologies	
Intel® Turbo Boost Technology ‡	Yes
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
Thermal Monitoring Technologies	No
Intel® Data Protection Technology	
AES New Instructions	Yes
Intel® Platform Protection Technology	
Trusted Execution Technology ‡	Yes
Execute Disable Bit ‡	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.

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 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. 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.

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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