




## Intel® Core™ i5-2520M Processor (3M Cache, up to 3.20 GHz)

### Specifications

#### - Essentials

Status	Launched
Launch Date	Q1'11
Processor Number	i5-2520M
Intel® Smart Cache	3 MB
DMI	5 GT/s
Instruction Set	64-bit
Instruction Set Extensions	AVX
Embedded Options Available	 No
Lithography	32 nm
Recommended Customer Price	TRAY: \$225.00
Datasheet	<a href="#">Link</a>



#### - Performance

# of Cores	2
# of Threads	4
Processor Base Frequency	2.5 GHz
Max Turbo Frequency	3.2 GHz
TDP	35 W

#### - Memory Specifications

Max Memory Size (dependent on memory type)	16 GB
Memory Types	DDR3 1066/1333
Max # of Memory Channels	2
Max Memory Bandwidth	21.3 GB/s
ECC Memory Supported ‡	 No

#### - Graphics Specifications

Processor Graphics ‡	Intel® HD Graphics 3000
Graphics Base Frequency	650 MHz
Graphics Max Dynamic Frequency	1.3 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
----------------------	-----

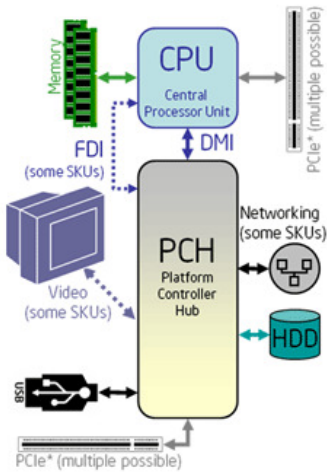
<a href="#">PCI Express Configurations ‡</a>		1x16, 2x8, 1x8+2x4
<a href="#">Max # of PCI Express Lanes</a>		16
<b>- Package Specifications</b>		
<a href="#">Max CPU Configuration</a>		1
<a href="#">T<sub>JUNCTION</sub></a>		100 C
<a href="#">Package Size</a>		37.5mm x 37.5mm (rPGA988B); 31mm x 24mm (BGA1023)
<a href="#">Graphics and IMC Lithography</a>		32 nm
<a href="#">Sockets Supported</a>		PPGA988
<a href="#">Low Halogen Options Available</a>		See MDDS
<b>- Advanced Technologies</b>		
<a href="#">Intel® Turbo Boost Technology ‡</a>		2.0
<a href="#">Intel® vPro Technology ‡</a>		Yes
<a href="#">Intel® Hyper-Threading Technology ‡</a>		Yes
<a href="#">Intel® Virtualization Technology (VT-x) ‡</a>		Yes
<a href="#">Intel® Virtualization Technology for Directed I/O (VT-d) ‡</a>		Yes
<a href="#">Intel® VT-x with Extended Page Tables (EPT) ‡</a>		Yes
<a href="#">Intel® 64 ‡</a>		Yes
<a href="#">Intel® My WiFi Technology</a>		Yes
<a href="#">4G WiMAX Wireless Technology</a>		Yes
<a href="#">Idle States</a>		Yes
<a href="#">Enhanced Intel SpeedStep® Technology</a>		Yes
<a href="#">Intel® Demand Based Switching</a>		No
<a href="#">Thermal Monitoring Technologies</a>		Yes
<a href="#">Intel® Fast Memory Access</a>		Yes
<a href="#">Intel® Flex Memory Access</a>		Yes
<a href="#">Intel® Identity Protection Technology ‡</a>		Yes
<b>- Intel® Data Protection Technology</b>		
<a href="#">AES New Instructions</a>		Yes
<b>- Intel® Platform Protection Technology</b>		
<a href="#">Trusted Execution Technology ‡</a>		Yes
<a href="#">Execute Disable Bit ‡</a>		Yes
<a href="#">Anti-Theft Technology</a>		Yes

## Compatible Products

<b>- Chipsets</b>					
<a href="#">Compare</a> Compare All +	<b>Product Name</b>	<b>Status</b>	<b>Embedded Options Available</b>	<b>TDP</b>	<b>Recommended Customer Price</b>
	<a href="#">Mobile Intel® QS67 Express Chipset (Intel® BD82QS67 PCH)</a>	Launched	No	3.4 W	N/A
	<a href="#">Mobile Intel® QM67 Express Chipset (Intel® BD82QM67 PCH)</a>	Launched	Yes	3.9 W	T&R : \$48.00
	<a href="#">Mobile Intel® HM67 Express Chipset (Intel® BD82HM67 PCH)</a>	Launched	No		N/A

Compare	Product Name	Status	Embedded Options Available	TDP	Recommended Customer Price
Compare All +	<a href="#">Mobile Intel® HM65 Express Chipset (Intel® BD82HM65 PCH)</a>	Launched	Yes	3.9 W	T&R : \$40.00

## Product Images



## Ordering and Spec Information

### Trade Compliance Information

ECCN	CCATS	US HTS
5A992C	G077159	8542310000-HYBRD

### Ordering and Spec Information

Spec Code	Ordering Code	Step	RCP
Intel® Core™ i5-2520M Processor (3M Cache, up to 3.20 GHz) FC-PGA10, Tray			
SR048	FF8062700840017	J1	\$225.00

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" 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 may be the exporter of record, and as such, your company is responsible for determining the correct classification of any item at the time of export.

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.

"Conflict free" and "conflict-free" means "DRC conflict free", which is defined by the U.S. Securities and Exchange Commission 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 Democratic Republic of the Congo (DRC) or adjoining countries. Intel also uses 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. Intel processors manufactured before January 1, 2013 are not confirmed conflict free. The conflict free designation refers only to product manufactured after that date. For Intel Boxed Processors, the conflict free designation refers to the processor only, not to any additional included accessories, such as heatsinks/coolers.

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.

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.

[Send us your feedback!](#)

---