


[Compare Queue \(0\)](#) [Send Feedback](#)

Type Here to Search Products

[Home](#) [Intel® Processors](#) [Intel® Core™ i5 Mobile Processor](#) [Intel® Core™ i5-2500 Mobile Processor Series](#) [i5-2540M](#)


Intel® Core™ i5-2540M Processor (3M Cache, 2.60 GHz)

SPECIFICATIONS

[All](#)
[Essentials](#)
[Memory Specifications](#)
[Graphics Specifications](#)
[Expansion Options](#)
[Package Specifications](#)
[Advanced Technologies](#)
[COMPATIBLE PRODUCTS](#)
[BLOCK DIAGRAMS](#)
[ORDERING / SPECS /
STEPPINGS](#)

SPECIFICATIONS

Essentials

| | |
|----------------------------|----------|
| Status | Launched |
| Launch Date | Q1'11 |
| Processor Number | i5-2540M |
| # of Cores | 2 |
| # of Threads | 4 |
| Clock Speed | 2.6 GHz |
| Max Turbo Frequency | 3.3 GHz |
| Intel® Smart Cache | 3 MB |
| Bus/Core Ratio | 26 |
| Instruction Set | 64-bit |
| Instruction Set Extensions | AVX |
| Embedded Options Available | No |
| Lithography | 32 nm |
| Max TDP | 35 W |
| Recommended Channel Price | \$266.00 |

Memory Specifications

| | |
|---|----------------|
| Max Memory Size (dependent on memory type) | 8 GB |
| Memory Types | DDR3-1066/1333 |
| # of Memory Channels | 2 |
| Max Memory Bandwidth | 21.3 GB/s |
| <u>ECC Memory Supported</u> | No |

Graphics Specifications

| | |
|--|----------------------|
| Processor Graphics | Yes |
| 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 |
| Dual Display Capable | Yes |
| Macrovision* License Required | No |

Expansion Options

| | |
|----------------------------|--------------------|
| PCI Express Revision | 2.0 |
| PCI Express Configurations | 1x16, 2x8, 1x8+2x4 |
| # of PCI Express Ports | 1 |

Package Specifications

| | |
|-----------------------|-------|
| Max CPU Configuration | 1 |
| T _{JUNCTION} | 100 C |

COMPARE PRODUCTS

- [Add to Compare](#)
- [Compare Now \(0\)](#)

QUICK LINKS

- [Products formerly Sandy Bridge](#)
- [Download Datasheet](#)









ADDITIONAL INFORMATION

SUPPORT AND DOWNLOADS

[Software Downloads >](#)
[Support Overview >](#)

SEARCH DISTRIBUTORS

PCN/MDDS INFORMATION

| | |
|--|---|
| Package Size | 37.5mm x 37.5mm (rPGA988B); 31mm x 24mm (BGA1023) |
| Graphics and IMC Lithography | 32 nm |
| Sockets Supported | FCBGA1023, PPGA988 |
| Halogen Free Options Available | Yes |
| Advanced Technologies | |
| Intel® Turbo Boost Technology | 2.0 |
| Intel® Hyper-Threading Technology |  Yes |
| Intel® Virtualization Technology (VT-x) |  Yes |
| Intel® Virtualization Technology for Directed I/O (VT-d) |  Yes |
| Intel® Trusted Execution Technology |  Yes |
| AES New Instructions |  Yes |
| Intel® 64 |  Yes |
| Intel® Anti-Theft Technology | Yes |
| Intel® My WiFi Technology | Yes |
| 4G WiMAX Wireless Technology | Yes |
| Idle States | Yes |
| Enhanced Intel SpeedStep® Technology |  Yes |
| Intel® Demand Based Switching |  No |
| Thermal Monitoring Technologies | Yes |
| Intel® Fast Memory Access | Yes |
| Intel® Flex Memory Access | Yes |
| Execute Disable Bit | Yes |

ppm (0.09%) of Bromine [if the Bromine (Br) source is from BFRs] and < 900 ppm (0.09%) of Chlorine [if the Chlorine (Cl) source is from CFRs or PVC. Higher concentrations of Br and Cl are allowed in homogenous materials of components other than PCB laminates as long as their sources are not BFRs, CFRs, PVC. Although the elemental analysis for Br and Cl in homogeneous materials can be performed by any analytical method with sufficient sensitivity and selectivity, the presence or absence of BFRs, CFRs or PVC must be verified by any acceptable analytical techniques that allow for the unequivocal identification of the specific Br or Cl compounds, or by appropriate material declarations agreed to between customer and supplier.

Max Turbo Frequency refers to the maximum single-core frequency that can be achieved with Intel® Turbo Boost Technology, which requires a PC with a processor with Intel Turbo Boost Technology capability. Intel Turbo Boost Technology performance varies depending on hardware, software, and overall system configuration. Check with your PC manufacturer on whether your system delivers Intel Turbo Boost Technology. See www.intel.com/technology/turboboost/ for more information.

©Intel Corporation

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

Enabling Execute Disable Bit functionality requires a PC with a processor with Execute Disable Bit capability and a supporting operating system. Check with your PC manufacturer on whether your system delivers Execute Disable Bit functionality.

64-bit computing on Intel® architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. Consult with your system vendor for more information.

Hyper-Threading Technology (HT Technology) requires a computer system with an Intel® processor supporting HT Technology and an HT Technology enabled chipset, BIOS and operating system. Performance will vary depending on the specific hardware and software you use. See www.intel.com/products/ht/hyperthreading_more.htm for more information including details on which processors support HT Technology.

Intel® Virtualization Technology requires a computer system with a processor, chipset, BIOS, virtual machine monitor (VMM) and for some uses, certain platform software, enabled for it. Functionality, performance or other benefit will vary depending on hardware and software configurations. Intel Virtualization Technology-enabled VMM applications are currently in development.

Note: Prices subject to change without notice. Prices are for direct Intel customers in 1000-unit bulk quantities and, unless specified, represent the latest technology versions of the products. Taxes and shipping, etc. not included. Prices may vary for other package types and shipment quantities, and special promotional arrangements may apply.

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/products/processor_number for details.

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

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.

Halogen Free implies the following:

Bromine and/or chlorine in materials that may be used during processing, but do not remain within the final product are not included in this definition. The halogens fluorine (F), iodine (I), and astatine (At) are not restricted by this standard.

"BFR/CFR and PVC-Free" Definition :

All PCB laminates must meet Br and Cl requirements for low halogen as defined in IPC-4101B

For components other than PCB laminates, all homogeneous materials must contain < 900 ppm of Bromine and Chlorine. Higher concentrations of Br and Cl are allowed in homogenous materials of components other than PCB laminates as long as their sources are not BFRs, CFRs, PVC.