

Intel® Celeron® Processor B810

(2M Cache, 1.60 GHz)

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COMPATIBLE PRODUCTS**PRODUCT IMAGES****ORDERING / SSPECS / STEPPINGS****SPECIFICATIONS****Essentials**

Status	Launched
Launch Date	Q1'11
Processor Number	B810
# of Cores	2
# of Threads	2
Clock Speed	1.6 GHz
Intel® Smart Cache	2 MB
Instruction Set	64-bit
Instruction Set Extensions	SSE4.x
Embedded Options Available	 Yes
Lithography	32 nm
Max TDP	35 W
Recommended Customer Price	TRAY: \$86.00

Memory Specifications

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

Graphics Specifications

Processor Graphics ‡	Intel® HD Graphics
Graphics Base Frequency	650 MHz
Graphics Max Dynamic Frequency	950 MHz
Graphics Output	eDP/DP/HDMI/SDVO/CRT
Intel® Quick Sync Video	 No
Intel® InTru™ 3D Technology	No
Intel® Wireless Display	 No
Intel® Flexible Display Interface (Intel® FDI)	 Yes
Intel® Clear Video HD Technology	No
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

Max CPU Configuration	1
T _{JUNCTION}	100C
Package Size	37.5mmx37.5mm (rPGA988B)
Graphics and IMC Lithography	32 nm
Sockets Supported	PGA988
Low Halogen Options Available	See MDDs

Advanced Technologies

Intel® Turbo Boost Technology‡	No
Intel® vPro Technology‡	 No
Intel® Hyper-Threading Technology‡	 No
Intel® Virtualization Technology (VT-x)‡	 Yes
Intel® Virtualization Technology for Directed I/O (VT-d)‡	 No
Intel® 64 ‡	 Yes
Intel® My WiFi Technology	No
4G WiMAX Wireless Technology	No

RELATED PRODUCTS

- Intel® Celeron® Processor
- Intel® Celeron® Processor B800 Series for Mobile
- Products formerly Sandy Bridge



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PCN/MDDs Information

SR088
912327: [PCN](#) | [MDDs](#)

Idle States	<input checked="" type="checkbox"/> Yes
Enhanced Intel SpeedStep® Technology	<input checked="" type="checkbox"/> Yes
Intel® Demand Based Switching	<input checked="" type="checkbox"/> No
Thermal Monitoring Technologies	<input checked="" type="checkbox"/> Yes
Intel® Fast Memory Access	<input checked="" type="checkbox"/> Yes
Intel® Flex Memory Access	<input checked="" type="checkbox"/> Yes

Intel® Data Protection Technology

AES New Instructions	<input checked="" type="checkbox"/> No
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Intel® Platform Protection Technology

Trusted Execution Technology‡	<input checked="" type="checkbox"/> No
Execute Disable Bit ‡	<input checked="" type="checkbox"/> Yes
Anti-Theft Technology	No

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

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.

For benchmarking data see <http://www.intel.com/performance>.

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

‡ 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-VM, platform software, and/or operating system) for feature compatibility. Functionality, performance, and other benefits of this feature may vary depending on system configuration.

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.

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.

See <http://www.intel.com/content/www/us/en/architecture-and-technology/hyper-threading/ht-technology.html?wapkw=hyper+threading> for more information including details on which processors support Intel® HT Technology.

Processors that support 64-bit computing on Intel® architecture require an Intel 64 architecture-enabled BIOS.

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.

 Send us your feedback!

