



Intel® Core™ i5-8600K Processor

9M Cache, up to 4.30 GHz

Specifications

Compatible Products

Product Images

Ordering and Compliance

Ordering and spec information

Boxed Intel® Core™ i5-8600K Processor (9M Cache, up to 4.30 GHz) FC-LGA14C

Spec Code	SR3QU
Ordering Code	BX80684I58600K
Step	U0
RCP	\$258.00

Boxed Intel® Core™ i5-8600K Processor (9M Cache, up to 4.30 GHz) FC-LGA14C, for China

Spec Code	SR3QU
Ordering Code	BXC80684I58600K
Step	U0

Intel® Core™ i5-8600K Processor (9M Cache, up to 4.30 GHz) FC-LGA14C, Tray

Spec Code	SR3QU
Ordering Code	CM8068403358508
Step	U0
RCP	\$257.00

Trade compliance information

ECCN	5A992C
CCATS	G077159

US HTS

8542310001

PCN/MDDS Information**SR3QU**

960620	PCN MDDS
961570	PCN MDDS
961576	PCN MDDS

Downloads and Software

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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.

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.

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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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Specifications

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- Security & Reliability

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Essentials

Export specifications

Product Collection	8th Generation Intel® Core™ i5 Processors
Code Name	Products formerly Coffee Lake
Vertical Segment	Desktop
Processor Number	i5-8600K
Status	Launched
Launch Date	Q4'17
Lithography	14 nm
Recommended Customer Price	\$257.00 - \$258.00

Performance

# of Cores	6
# of Threads	6
Processor Base Frequency	3.60 GHz
Max Turbo Frequency	4.30 GHz
Cache	9 MB SmartCache
Bus Speed	8 GT/s DMI3
TDP	95 W

Supplemental Information

Embedded Options Available	No
Datasheet	View now

Memory Specifications

Max Memory Size (dependent on memory type)	64 GB
Memory Types	DDR4-2666
Max # of Memory Channels	2
Max Memory Bandwidth	41.6 GB/s
ECC Memory Supported	No

Processor Graphics

Processor Graphics	Intel® UHD Graphics 630
Graphics Base Frequency	350 MHz
Graphics Max Dynamic Frequency	1.15 GHz
Graphics Video Max Memory	64 GB
4K Support	Yes, at 60Hz
Max Resolution (HDMI 1.4)	4096x2304@24Hz
Max Resolution (DP)	4096x2304@60Hz
Max Resolution (eDP - Integrated Flat Panel)	4096x2304@60Hz
DirectX® Support	12
OpenGL® Support	4.5
Intel® Quick Sync Video	Yes
Intel® InTru™ 3D Technology	Yes
Intel® Clear Video HD Technology	Yes
Intel® Clear Video Technology	Yes
# of Displays Supported	3
Device ID	0a3E92

Expansion Options

Scalability	15 Only
PCI Express Revision	3.0
PCI Express Configurations	Up to 1x16, 2x8, 1x8+2x4
Max # of PCI Express Lanes	16

Package Specifications

Sockets Supported	FCLGA1151
Max CPU Configuration	1
Thermal Solution Specification	PCG 20150 (130W)
T _{JUNCTION}	100°C
Package Size	37.5mm x 37.5mm
Low Halogen Options Available	See MDDS

Advanced Technologies

Intel® Optane™ Memory Supported	Yes
Intel® Turbo Boost Technology	2.0
Intel® vPro™ Technology	Yes
Intel® Hyper-Threading Technology	No
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® TSX-NI	Yes
Intel® 64	Yes
Instruction Set	64-bit
Instruction Set Extensions	Intel® SSE4.1, Intel® SSE4.2, Intel® AVX2
Idle States	Yes
Enhanced Intel SpeedStep® Technology	Yes
Thermal Monitoring Technologies	Yes
Intel® Identity Protection Technology	Yes
Intel® Stable Image Platform Program (SIPP)	Yes

Security & Reliability

Intel® AES New Instructions	Yes
Secure Key	Yes
Intel® Software Guard Extensions (Intel® SGX)	Yes
Intel® Memory Protection Extensions (Intel® MPX)	Yes
Intel® OS Guard	Yes
Intel® Trusted Execution Technology	Yes
Execute Disable Bit	Yes
Intel® Boot Guard	Yes

More support options for Intel® Core™ i5-8600K Processor (9M Cache, up to 4.30 GHz)

Product Support

Downloads and Software

Support Community

Warranty and Replacement

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Contact support

Give Feedback

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