Intel® Core™ i5-6500 Processor

6M Cache, up to 3.60 GHz

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Essentials

Product Collection	6th Generation Intel® Core™ i5 Processors
Code Name	Products formerly Skylake
Vertical Segment	Desktop
Processor Number	i5-6500
Status	Launched
Launch Date ?	Q3'15
Lithography ?	14 nm
Included Items	Thermal Solution - E97379
Recommended Customer Price ?	$192.00 - $202.00

Performance

# of Cores ?	4
# of Threads ?	4
Processor Base Frequency ?	3.20 GHz
Max Turbo Frequency ?	3.60 GHz
Cache ?	6 MB SmartCache
Bus Speed ?	8 GT/s DMI3
TDP ?	65 W

Supplemental Information

Embedded Options Available ?	Yes
Datasheet	View now

Memory Specifications

Max Memory Size (dependent on memory type) ?	64 GB
Memory Types	DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V
Max # of Memory Channels ?	2
Max Memory Bandwidth ?	34.1 GB/s
ECC Memory Supported ‡ ?	No

Processor Graphics

Processor Graphics ‡	Intel® HD Graphics 530
Graphics Base Frequency	350 MHz
Graphics Max Dynamic Frequency	1.05 GHz
Graphics Video Max Memory	64 GB
Graphics Output	eDP/DP/HDMI/DVI
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
Max Resolution (VGA)‡	N/A
DirectX* Support	12
OpenGL* Support	4.4
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	0x1912

Expansion Options

Scalability	1S 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 2015C (65W)
T_{CASE}	71°C
Package Size	37.5mm x 37.5mm
Low Halogen Options Available	See MDDS

Advanced Technologies

Intel® Optane™ Memory Supported ‡	No
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

Ordering and spec information

Boxed Intel® Core™ i5-6500 Processor (6M Cache, up to 3.60 GHz) FC-LGA14C

Spec Code	SR2L6
Ordering Code	BX80662I56500
Step	R0
RCP	$202.00

Boxed Intel® Core™ i5-6500 Processor (6M Cache, up to 3.60 GHz) FC-LGA14C, for China

Spec Code	SR2L6
Ordering Code	BXC80662I56500
Step	R0

Intel® Core™ i5-6500 Processor (6M Cache, up to 3.60 GHz) FC-LGA14C, Tray

Spec Code	SR2L6
Ordering Code	CM8066201920404
Step	R0
RCP	$192.00

Trade compliance information

ECCN	5A992C
CCATS	G077159
US HTS	8542310001

PCN/MDDS Information

SR2L6

947206	PCN	MDDS
947562	PCN	MDDS
947569	PCN	MDDS

Declaration of Conformity

- BX80662I56500
- BXC80662I56500

More support options for Intel® Core™ i5-6500 Processor (6M Cache, up to 3.60 GHz)