

Essentials

Product Collection	8th Generation Intel® Core™ i5 Processors
Code Name	Products formerly Coffee Lake
Vertical Segment	Desktop
Processor Number	i5-8400
Status	Launched
Launch Date	Q4'17
Lithography	14 nm
Recommended Customer Price	\$182.00 - \$187.00

Performance

# of Cores	6
# of Threads	6
Processor Base Frequency	2.80 GHz
Max Turbo Frequency	4.00 GHz
Cache	9 MB
Bus Speed	8 GT/s DMI3
TDP	65 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
ECC Memory Supported [‡]	No

Processor Graphics

Processor Graphics [‡]	Intel® UHD Graphics 630
Graphics Base Frequency	350 MHz
Graphics Max Dynamic Frequency	1.05 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	0x3E92

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 _{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 [‡]	No
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	No
Intel® 64 [‡]	Yes
Instruction Set	64-bit
Instruction Set Extensions	SSE4.1/4.2, AVX2
Idle States	Yes
Enhanced Intel SpeedStep® Technology	Yes
Thermal Monitoring Technologies	Yes
Intel® Identity Protection Technology [‡]	Yes
Intel® Stable Image Platform Program (SIPP)	No

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 [‡]	No
Execute Disable Bit [‡]	Yes
Intel® Boot Guard	Yes