

Essentials

Product Collection	9th Generation Intel® Core™ i5 Processors
Code Name	Products formerly Coffee Lake
Vertical Segment	Desktop
Processor Number	i5-9400F
Status	Launched
Launch Date	Q1'19
Lithography	14 nm
Use Conditions	PC/Client/Tablet

Performance

# of Cores	6
# of Threads	6
Processor Base Frequency	2.90 GHz
Max Turbo Frequency	4.10 GHz
Cache	9 MB SmartCache
Bus Speed	8 GT/s DMI3

TDP

65 W

Supplemental Information

Embedded Options Available

No

Datasheet

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Memory Specifications

Max Memory Size (dependent on memory type)

128 GB

Memory Types

DDR4-2666

Max # of Memory Channels

2

Max Memory Bandwidth

41.6 GB/s

ECC Memory Supported ‡

No

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

Advanced Technologies

Intel® Optane™ Memory Supported [‡]	Yes
Intel® Turbo Boost Technology [‡]	2.0
Intel® vPro™ Platform Eligibility [‡]	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	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)	No

Security & Reliability

Intel® AES New Instructions	Yes
Secure Key	Yes
Intel® Software Guard Extensions (Intel® SGX)	Yes with Intel® ME
Intel® Memory Protection Extensions (Intel® MPX)	Yes
Intel® OS Guard	Yes
Intel® Trusted Execution Technology ‡	No
Execute Disable Bit ‡	Yes
Intel® Boot Guard	Yes