

## Essentials

Product Collection	8th Generation Intel® Core™ i3 Processors
Code Name	Products formerly Coffee Lake
Vertical Segment	Desktop
Processor Number	i3-8100
Status	Launched
Launch Date	Q4'17
Lithography	14 nm
Recommended Customer Price	\$117.00

## Performance

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

## Supplemental Information

Embedded Options Available	No
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Datasheet	<a href="#">View now</a>
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## Memory Specifications

Max Memory Size (dependent on memory type)	64 GB
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Memory Types	DDR4-2400
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Max # of Memory Channels	2
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ECC Memory Supported †	Yes
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## Processor Graphics

Processor Graphics †	Intel® UHD Graphics 630
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Graphics Base Frequency	350 MHz
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Graphics Max Dynamic Frequency	1.10 GHz
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Graphics Video Max Memory	64 GB
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4K Support	Yes, at 60Hz
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Max Resolution (HDMI 1.4)‡	4096x2304@24Hz
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Max Resolution (DP)‡	4096x2304@60Hz
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Max Resolution (eDP - Integrated Flat Panel)‡	4096x2304@60Hz
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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	0x3E91/x92

## 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 <sub>JUNCTION</sub>	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 ‡	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) ‡	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

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Intel® Stable Image Platform Program (SIPP)

No

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## Security & Reliability

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Intel® AES New Instructions

Yes

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Secure Key

Yes

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Intel® Software Guard Extensions (Intel® SGX)

Yes

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Intel® Memory Protection Extensions (Intel® MPX)

Yes

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Intel® OS Guard

Yes

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Intel® Trusted Execution Technology †

No

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Execute Disable Bit †

Yes

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Intel® Boot Guard

Yes

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