



Intel® Core™ i3-8100 Processor

6M Cache, 3.60 GHz

Spec Code

SR3N5

Ordering Code

CM8068403377308

Intel® Core™ i3-8100 Processor (6M Cache, 3.60 GHz)

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|---|-------------------------|
| Code Name | Coffee Lake |
| Essentials | |
| 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 SmartCache |
| Bus Speed | 8 GT/s DMI3 |
| TDP | 65 W |
| Supplemental Information | |
| Embedded Options Available | Yes |
| Datasheet | Link |
| Memory Specifications | |
| Max Memory Size (dependent on memory type) | 64 GB |
| Memory Types | DDR4-2400 |
| Max # of Memory Channels | 2 |
| Max Memory Bandwidth | 37.5 GB/s |
| ECC Memory Supported ‡ | Yes |
| Processor Graphics | |
| Processor Graphics ^{&#x26A;} <small>&#x26A;</small> _{&#x26A;} | Intel® UHD Graphics 630 |
| Graphics Base Frequency | 350 MHz |
| Graphics Max Dynamic Frequency | 1.10 GHz |

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| 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 | 0x3E91/x92 |
| <u>Expansion Options</u> | |
| Scalability | 1S Only |
| PCI Express Revision | 3 |
| PCI Express Configurations ‡ | Up to 1x16, 2x8, 1x8+2x4 |
| Max # of PCI Express Lanes | 16 |
| <u>Package Specifications</u> | |
| 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 |
| <u>Advanced Technologies</u> | |
| 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 | 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 |

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| 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 |