



Intel® Core™ i3-7101E Processor

3M Cache, 3.90 GHz

Spec Code

SR32Z

Ordering Code

CM8067702867060

Intel® Core™ i3-7101E Processor (3M Cache, 3.90 GHz)

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| Code Name | Kaby Lake |
| Essentials | |
| Vertical Segment | Desktop |
| Processor Number | i3-7101E |
| Status | Launched |
| Launch Date | Q1'17 |
| Lithography | 14 nm |
| Recommended Customer Price | \$117.00 |
| Performance | |
| # of Cores | 2 |
| # of Threads | 4 |
| Processor Base Frequency | 3.90 GHz |
| Cache | 3 MB SmartCache |
| TDP | 54 W |
| Supplemental Information | |
| <u>Embedded Options Available</u> | <u>Yes</u> |
| Conflict Free | Yes |
| Datasheet | Link |
| Memory Specifications | |
| Max Memory Size (dependent on memory type) | 64 GB |
| <u>Memory Types</u> | DDR3L-1600, DDR4-2400 |
| Max # of Memory Channels | 2 |
| Max Memory Bandwidth | 34.1 GB/s |

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| ECC Memory Supported ‡ | Yes |
| Graphics Specifications | |
| Processor Graphics ‡ | Intel® HD Graphics 630 |
| <u>Graphics Base Frequency</u> | <u>350 MHz</u> |
| Graphics Max Dynamic Frequency | 1.10 GHz |
| Graphics Video Max Memory | 64 GB |
| Graphics Output | eDP/DP/HDMI/DVI |
| <u>4K Support</u> | <u>Yes, at 60Hz</u> |
| Max Resolution (HDMI 1.4)‡ | 4096x2304@30Hz |
| Max Resolution (DP)‡ | 4096x2304@60Hz |
| Max Resolution (eDP - Integrated Flat Panel)‡ | 4096x2304@60Hz |
| Max Resolution (VGA)‡ | N/A |
| <u>DirectX* Support</u> | <u>12</u> |
| OpenGL* Support | 4.4 |
| Intel® Quick Sync Video | Yes |
| Intel® InTru™ 3D Technology | Yes |
| Intel® Clear Video HD Technology | Yes |
| # of Displays Supported ‡ | 3 |
| Device ID | 0x5902 |
| Expansion Options | |
| Scalability | 1S Only |
| PCI Express Revision | 3.0 |
| PCI Express Configurations ‡ | 1x16,2x8,1x8+2x4 |
| Max # of PCI Express Lanes | 16 |
| Package Specifications | |
| <u>Sockets Supported</u> | <u>FCLGA1151</u> |
| Max CPU Configuration | 1 |
| 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 | No |

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| Intel® vPro™ Technology ‡ | No |
| Intel® Hyper-Threading Technology ‡ | Yes |
| 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 |
| Security & Reliability | |
| Intel® AES New Instructions | 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 |