



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)

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

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

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