

[Support Home Product Specifications](#)

[Search specifications](#)



Intel® Core™ i3-7100E Processor
3M Cache, 2.90 GHz

[Add to Compare](#)

[Specifications](#)

[Product Images](#)

[Ordering and Compliance](#)

Ordering and spec information

Intel® Core™ i3-7100E Processor (3M Cache, 2.90 GHz) FC-BGA14F, Tray

Spec Code	SR34V
Ordering Code	CL8067702999007
Step	B0
RCP	\$225.00

Trade compliance information

ECCN	5A992C
CCATS	G077159
US HTS	8542310001

[Downloads and Software](#)

[More support options for Intel® Core™ i3-7100E Processor \(3M Cache, 2.90 GHz\)](#)



Intel® Core™ i3-7100E Processor

3M Cache, 2.90 GHz

Specifications

[Export specifications](#)

Essentials

Product Collection	7th Generation Intel® Core™ i3 Processors
Code Name	Products formerly Kaby Lake
Vertical Segment	Embedded
Processor Number	i3-7100E
Status	Launched
Launch Date ?	Q1'17
Lithography ?	14 nm
Recommended Customer Price ?	\$225.00
Use Conditions ?	Industrial Commercial Temp, Embedded Broad Market Commercial Temp, PC/Client/Tablet

Performance




# of Cores ?	2
# of Threads ?	4
Processor Base Frequency ?	2.90 GHz
Cache ?	3 MB
TDP ?	35 W

Supplemental Information
















Embedded Options Available ?	Yes
Datasheet	View now

Memory Specifications




Max Memory Size (dependent on memory type) ?	64 GB
Memory Types ?	DDR4-2400

Max # of Memory Channels 	2
Max Memory Bandwidth 	34.1 GB/s
ECC Memory Supported [‡] 	Yes



Processor Graphics

Processor Graphics [‡] 	Intel® HD Graphics 630
Graphics Base Frequency 	350 MHz
Graphics Max Dynamic Frequency 	950 MHz
Graphics Video Max Memory 	64 GB
Graphics Output 	eDP/DP/HDMI/DVI
4K Support 	Yes, at 60Hz
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
DirectX* Support 	12
OpenGL* Support 	4.5
Intel® Quick Sync Video 	Yes
Intel® InTru™ 3D Technology 	Yes
Intel® Clear Video HD Technology 	Yes
# of Displays Supported [‡]	3
Device ID	0x591B

Expansion Options

PCI Express Revision 	3.0
PCI Express Configurations [‡] 	1x16,2x8,1x8+2x4
Max # of PCI Express Lanes 	16

Package Specifications

Sockets Supported 	FCBGA1440
Max CPU Configuration	1
T _{JUNCTION} 	100°C

Package Size	42mm x 28 mm
Low Halogen Options Available	See MDDS

Advanced Technologies

Intel® Turbo Boost Technology ‡ ⓘ	No
Intel® vPro™ Technology ‡ ⓘ	No
Secure Boot ⓘ	Yes
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 ⓘ	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

Security & Reliability

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

- Product Images
- Ordering and Compliance
- Downloads and Software

All information provided is subject to change at any time, without notice. Intel may make changes to manufacturing life cycle, specifications, and product descriptions at any time, without notice. The information herein is provided "as-is" and Intel does not make any representations or warranties whatsoever regarding accuracy of the information, nor on the product features, availability, functionality, or compatibility of the products listed. Please contact system vendor for more information on specific products or systems.

Intel classifications are for informational purposes only and consist of Export Control Classification Numbers (ECCN) and Harmonized Tariff Schedule (HTS) numbers. Any use made of Intel classifications are without recourse to Intel and shall not be construed as a representation or warranty regarding the proper ECCN or HTS. Your company as an importer and/or exporter is responsible for determining the correct classification of your transaction.

Refer to Datasheet for formal definitions of product properties and features.

"Announced" SKUs are not yet available. Please refer to the Launch Date for market availability.

Some products can support AES New Instructions with a Processor Configuration update, in particular, i7-2630QM/i7-2635QM, i7-2670QM/i7-2675QM, i5-2430M/i5-2435M, i5-2410M/i5-2415M. Please contact OEM for the BIOS that includes the latest Processor configuration update.

‡ This feature may not be available on all computing systems. Please check with the system vendor to determine if your system delivers this feature, or reference the system specifications (motherboard, processor, chipset, power supply, HDD, graphics controller, memory, BIOS, drivers, virtual machine monitor-VMM, platform software, and/or operating system) for feature compatibility. Functionality, performance, and other benefits of this feature may vary depending on system configuration.

See <http://www.intel.com/content/www/us/en/architecture-and-technology/hyper-threading/hyper-threading-technology.html?wapkw=hyper+threading> for more information including details on which processors support Intel® HT Technology.

Max Turbo Frequency refers to the maximum single-core processor frequency that can be achieved with Intel® Turbo Boost Technology. See www.intel.com/technology/turboboost/ for more information.

The Recommended Customer Price ("RCP") is pricing guidance for Intel products. Prices are for direct Intel customers, typically represent 1,000-unit purchase quantities, and are subject to change without notice. Taxes and shipping, etc. not included. Prices may vary for other package types and shipment quantities, and special promotional arrangements may apply. If sold in bulk, price represents individual unit. Listing of these RCP does not constitute a formal pricing offer from Intel. Please work with your appropriate Intel representative to obtain a formal price quotation.

System and Maximum TDP is based on worst case scenarios. Actual TDP may be lower if not all I/Os for chipsets are used.

Low Halogen: Applies only to brominated and chlorinated flame retardants (BFRs/CFRs) and PVC in the final product. Intel components as well as purchased components on the finished assembly meet JS-709 requirements, and the PCB / substrate meet IEC 61249-2-21 requirements. The replacement of halogenated flame retardants and/or PVC may not be better for the environment.

For benchmarking data see <http://www.intel.com/performance>.

Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See <http://www.intel.com/content/www/us/en/processors/processor-numbers.html> for details.

Processors that support 64-bit computing on Intel® architecture require an Intel 64 architecture-enabled BIOS.