



# Intel® Core™ i7-7700T Processor

8M Cache, up to 3.80 GHz

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## Specifications

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## Essentials

Export specifications

Product Collection	7th Generation Intel® Core™ i7 Processors
Code Name	Products formerly Kaby Lake
Vertical Segment	Desktop
Processor Number	i7-7700T
Status	Launched
Launch Date	Q1'17
Lithography	14 nm
Recommended Customer Price	-
Use Conditions	Embedded Broad Market Commercial Temp, PC/Client/Tablet

## Performance

# of Cores	4
# of Threads	8
Processor Base Frequency	2.90 GHz
Max Turbo Frequency	3.80 GHz
Cache	8 MB SmartCache
Bus Speed	8 GT/s DMI3
# of QPI Links	0
TDP	35 W
Configurable TDP-down Frequency	1.90 GHz
Configurable TDP-down	25 W

## Supplemental Information

Embedded Options Available	Yes
Datasheet	<a href="#">View now</a>

## Memory Specifications

Max Memory Size (dependent on memory type)	64 GB
Memory Types	DDR4-2133/2400, DDR3L-1333/1600 @ 1.35V
Max # of Memory Channels	2
ECC Memory Supported ‡	No

## Processor Graphics

Processor Graphics ‡ ?	Intel® HD Graphics 630
Graphics Base Frequency ?	350 MHz
Graphics Max Dynamic Frequency ?	1.15 GHz
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	0x5912

## 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 2015A (35W)
T <sub>JUNCTION</sub> ?	80°C
Package Size	37.5mm x 37.5mm

## Advanced Technologies

Intel® Optane™ Memory Supported ‡ ?	Yes
Intel® Turbo Boost Technology ‡ ?	2.0
Intel® vPro™ Platform Eligibility ‡ ?	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 ?	Yes
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
Intel® Stable Image Platform Program (SIPP) 	Yes

## 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 ‡ 	Yes
Execute Disable Bit ‡ 	Yes
Intel® Boot Guard 	Yes

More support options for Intel® Core™ i7-7700T Processor (8M Cache, up to 3.80 GHz)



Product Support



Downloads and Software



Support Community



Warranty and Replacement



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Give Feedback

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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> for more information including details on which processors support Intel® HT Technology.

Downloaded from Arrow.com

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/](http://www.intel.com/technology/turboboost/) for more information.

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

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.



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