ARK | Compare Intel® Products

Intel® Core™ i5-7500 Processor (6M Cache, up to 3.80 GHz)

Code Name	Kaby Lake
Essentials	
Vertical Segment	Desktop
Processor Number	i5-7500
Status	Launched
Launch Date	Q1'17
Lithography	14 nm
Recommended Customer Price	$192.00 - $202.00
Performance	
# of Cores	4
# of Threads	4
Processor Base Frequency	3.40 GHz
Max Turbo Frequency	3.80 GHz
Cache	6 MB SmartCache
Bus Speed	8 GT/s DMI3
# of QPI Links	0
TDP	65 W
Supplemental Information	
Embedded Options Available	Yes
Conflict Free	Yes
Datasheet	Link
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

Graphics Specifications	
Processor Graphics	Intel® HD Graphics 630
Graphics Base Frequency	350.00 MHz
Graphics Max Dynamic Frequency	1.10 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	4.4
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 2015C (65W)
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	2.0
Intel® vPro 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	SSE4.1/4.2, AVX 2.0
Idle States	Yes
Enhanced Intel SpeedStep® Technology	Yes
Thermal Monitoring Technologies	Yes
Intel® Identity Protection Technology	Yes
Intel® Stable Image Platform Program (SIPP)	Yes
Intel® Data Protection Technology	
Intel® AES New Instructions	Yes
Secure Key	Yes
Intel® Software Guard Extensions (Intel® SGX)	Yes
Intel® Memory Protection Extensions (Intel® MPX)	Yes
Intel® Platform Protection Technology	
OS Guard	Yes
Trusted Execution Technology	Yes
Execute Disable Bit	Yes
Intel® Device Protection Technology with Boot Guard	Yes