UPE | Compare Intel® Products	10/12/2022 17:31 **Intel® Core™ i7-6700 Processor** (8M Cache- up to 4.00 GHz)	10/12/2022 17:32 **Intel® Core™ i7-4790 Processor** (8M Cache- up to 4.00 GHz)	10/12/2022 17:32 **Intel® Core™ i5-2500 Processor** (6M Cache- up to 3.70 GHz)
Essentials			
Product Collection	6th Generation Intel® Core™ i7 Processors	4th Generation Intel® Core™ i7 Processors	Legacy Intel® Core™ Processors
Code Name	Products formerly *Skylake*	Products formerly *Haswell*	Products formerly *Sandy Bridge*
Vertical Segment	Desktop	Desktop	Desktop
Processor Number	i7-6700	i7-4790	i5-2500
Status	Launched	Discontinued	Discontinued
Launch Date	Q3'15	Q2'14	Q1'11
Expected Discontinuance	N/A	07/14/2017	Q1'13
Lithography	14 nm	22 nm	32 nm
Included Items	Thermal Solution - E97379	N/A	N/A
Recommended Customer Price	$303.00	$312.00	N/A
Use Conditions	PC/Client/Tablet	N/A	N/A
CPU Specifications			
Total Cores	4	4	4
Total Threads	8	8	4
Max Turbo Frequency	4.00 GHz	4.00 GHz	3.70 GHz
Intel® Turbo Boost Technology 2.0 Frequency‡	4.00 GHz	4.00 GHz	3.70 GHz
Processor Base Frequency	3.40 GHz	3.60 GHz	3.30 GHz
Cache	8 MB Intel® Smart Cache	8 MB Intel® Smart Cache	6 MB Intel® Smart Cache
Bus Speed	8 GT/s	5 GT/s	5 GT/s
TDP	65 W	84 W	95 W
Supplemental Information			
Embedded Options Available	Yes	No	No
Datasheet	View now	View now	View now
Memory Specifications			
Max Memory Size (dependent on memory type)	64 GB	32 GB	32 GB
Memory Types	DDR4-1866/2133 | DDR3L-1333/1600 @ 1.35V	DDR3-1333/1600 | DDR3L-1333/1600 @ 1.5V	DDR3 1066/1333
Max # of Memory Channels	2	2	2
Max Memory Bandwidth	34.1 GB/s	25.6 GB/s	21 GB/s
ECC Memory Supported ‡	No	No	No
Processor Graphics			
Processor Graphics ‡	Intel® HD Graphics 530	Intel® HD Graphics 4600	Intel® HD Graphics 2000
Graphics Base Frequency	350 MHz	350 MHz	850 MHz
Graphics Max Dynamic Frequency	1.15 GHz	1.20 GHz	1.10 GHz
Graphics Video Max Memory	64 GB	2 GB	N/A
Graphics Output	eDP/DP/HDMI/DVI	eDP/DP/HDMI/DVI/VGA	N/A
4K Support	Yes | at 60Hz	N/A	N/A
Max Resolution (HDMI)‡	4096x2304@24Hz	4096x2304@24Hz	N/A

Max Resolution (DP)‡	4096x2304@60Hz	3840x2160@60Hz	N/A
Max Resolution (eDP - Integrated Flat Panel)‡	4096x2304@60Hz	3840x2160@60Hz	N/A
Max Resolution (VGA)‡	N/A	1920x1200@60Hz	N/A
DirectX* Support	12	11.2/12	N/A
OpenGL* Support	4.5	4.3	N/A
Intel® Quick Sync Video	Yes	Yes	Yes
Intel® InTru™ 3D Technology	Yes	Yes	Yes
Intel® Flexible Display Interface (Intel® FDI)	N/A	Yes	Yes
Intel® Clear Video HD Technology	Yes	Yes	Yes
Intel® Clear Video Technology	Yes	N/A	N/A
# of Displays Supported ‡	3	3	2
Device ID	0x1912	0x412	0x102

Expansion Options

Scalability	1S Only	1S Only	N/A
PCI Express Revision	3	Up to 3.0	2
PCI Express Configurations ‡	Up to 1x16 | 2x8 | 1x8+2x4	Up to 1x16 | 2x8 | 1x8+2x4	N/A
Max # of PCI Express Lanes	16	16	16

Package Specifications

Sockets Supported	FCLGA1151	FCLGA1150	LGA1155
Max CPU Configuration	1	1	1
Thermal Solution Specification	PCG 2015C (65W)	PCG 2013D	N/A
TCASE	71°C	72.72°C	72.6°C
Package Size	37.5mm x 37.5mm	37.5mm x 37.5mm	37.5mm x 37.5mm

Advanced Technologies

Intel® Optane™ Memory Supported ‡	No	N/A	N/A
Intel® Turbo Boost Technology ‡	2	2	2
Intel® Hyper-Threading Technology ‡	Yes	Yes	No
Intel® Transactional Synchronization Extensions	Yes	No	N/A
Intel® 64 ‡	Yes	Yes	Yes
Instruction Set	64-bit	64-bit	64-bit
Instruction Set Extensions	Intel® SSE4.1 | Intel® SSE4.2 | Intel® AVX2	Intel® SSE4.1 | Intel® SSE4.2 | Intel® AVX2	Intel® SSE4.1 | Intel® SSE4.2 | Intel® AVX
Intel® My WiFi Technology	N/A	Yes	N/A
Idle States	Yes	Yes	Yes
Enhanced Intel SpeedStep® Technology	Yes	Yes	Yes
Thermal Monitoring Technologies	Yes	Yes	Yes
Intel® Fast Memory Access	N/A	N/A	Yes
Intel® Flex Memory Access	N/A	N/A	Yes
Intel® Identity Protection Technology ‡	Yes	Yes	Yes

Security & Reliability

Intel vPro® Eligibility ‡	Intel vPro® Platform	Intel vPro® Platform	Intel vPro® Platform
Intel® AES New Instructions	Yes	Yes	Yes
Secure Key	Yes	Yes	N/A
Intel® Software Guard Extensions (Intel® SGX)	Yes with Intel® ME	N/A	N/A

Intel® Memory Protection Extensions (Intel® MPX)	Yes	N/A	N/A
Intel® OS Guard	Yes	Yes	N/A
Intel® Trusted Execution Technology ‡	Yes	Yes	Yes
Execute Disable Bit ‡	Yes	Yes	Yes
Anti-Theft Technology	N/A	Yes	N/A
Intel® Boot Guard	Yes	N/A	N/A
Intel® Stable IT Platform Program (SIPP)	Yes	Yes	N/A
Intel® Virtualization Technology (VT-x) ‡	Yes	Yes	Yes
Intel® Virtualization Technology for Directed I/O (VT-d)	Yes	Yes	Yes
Intel® VT-x with Extended Page Tables (EPT) ‡	Yes	Yes	Yes