


ARK Compare Intel® Products	
Intel® Xeon® Processor E5-2680 v4 (35M Cache, 2.40 GHz)	
Essentials	
Product Collection	Intel® Xeon® Processor E5 v4 Family
Code Name	Products formerly Broadwell
Vertical Segment	Server
Processor Number	E5-2680V4
Status	Launched
Launch Date	Q1'16
Lithography	14 nm
Use Conditions	Server/Enterprise
Recommended Customer Price	\$1745.00 - \$1749.00
CPU Specifications	
# of Cores	14
# of Threads	28
Processor Base Frequency	2.40 GHz
Max Turbo Frequency	3.30 GHz
Cache	35 MB Intel® Smart Cache
Bus Speed	9.6 GT/s
# of QPI Links	2
Intel® Turbo Boost Technology 2.0 Frequency‡	3.30 GHz
TDP	120 W
VID Voltage Range	0
Supplemental Information	
Embedded Options Available	Yes
Datasheet	View now
Memory Specifications	
Max Memory Size (dependent on memory type)	1.5 TB
Memory Types	DDR4 1600/1866/2133/2400
Max # of Memory Channels	4
Max Memory Bandwidth	76.8 GB/s
Physical Address Extensions	46-bit
ECC Memory Supported ‡	Yes
Expansion Options	
Scalability	2S

PCI Express Revision	3
PCI Express Configurations ‡	x4, x8, x16
Max # of PCI Express Lanes	40
Package Specifications	
Sockets Supported	FCLGA2011-3
Max CPU Configuration	2
TCASE	86°C
Package Size	45mm x 52.5mm
Advanced Technologies	
Intel® Turbo Boost Technology ‡	2
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® Transactional Synchronization Extensions	Yes
Intel® 64 ‡	Yes
Instruction Set	64-bit
Instruction Set Extensions	Intel® AVX2
Idle States	Yes
Enhanced Intel SpeedStep® Technology	Yes
Intel® Demand Based Switching	Yes
Thermal Monitoring Technologies	Yes
Intel® Flex Memory Access	No
Intel® Identity Protection Technology ‡	No
Security & Reliability	
Intel® AES New Instructions	Yes
Secure Key	Yes
Intel® OS Guard	Yes
Intel® Trusted Execution Technology ‡	Yes
Execute Disable Bit ‡	Yes