


<p>ARK Compare Intel® Products</p>	
<p>Intel® Xeon® Processor E5-2650 v4 (30M Cache, 2.20 GHz)</p>	
<p style="text-align: center;">Essentials</p>	
<p>Product Collection</p>	<p>Intel® Xeon® Processor E5 v4 Family</p>
<p>Code Name</p>	<p>Products formerly Broadwell</p>
<p>Vertical Segment</p>	<p>Server</p>
<p>Processor Number</p>	<p>E5-2650V4</p>
<p>Status</p>	<p>Launched</p>
<p>Launch Date</p>	<p>Q1'16</p>
<p>Lithography</p>	<p>14 nm</p>
<p>Recommended Customer Price</p>	<p>\$1166.00 - \$1171.00</p>
<p style="text-align: center;">CPU Specifications</p>	
<p># of Cores</p>	<p>12</p>
<p># of Threads</p>	<p>24</p>
<p>Processor Base Frequency</p>	<p>2.20 GHz</p>
<p>Max Turbo Frequency</p>	<p>2.90 GHz</p>
<p>Cache</p>	<p>30 MB Intel® Smart Cache</p>
<p>Bus Speed</p>	<p>9.6 GT/s</p>
<p># of QPI Links</p>	<p>2</p>
<p>Intel® Turbo Boost Technology 2.0 Frequency‡</p>	<p>2.90 GHz</p>
<p>TDP</p>	<p>105 W</p>
<p>VID Voltage Range</p>	<p>0</p>
<p style="text-align: center;">Supplemental Information</p>	
<p>Embedded Options Available</p>	<p>Yes</p>
<p>Datasheet</p>	<p>View now</p>
<p style="text-align: center;">Memory Specifications</p>	
<p>Max Memory Size (dependent on memory type)</p>	<p>1.5 TB</p>

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	80°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