Intel Xeon E5-2600v3

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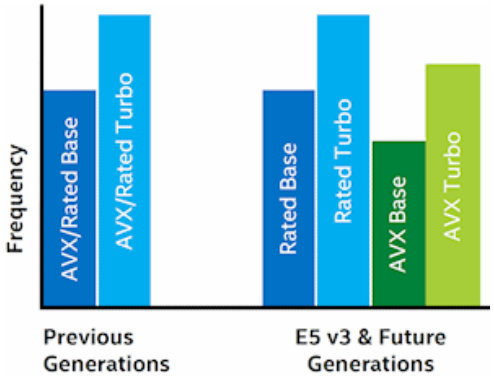
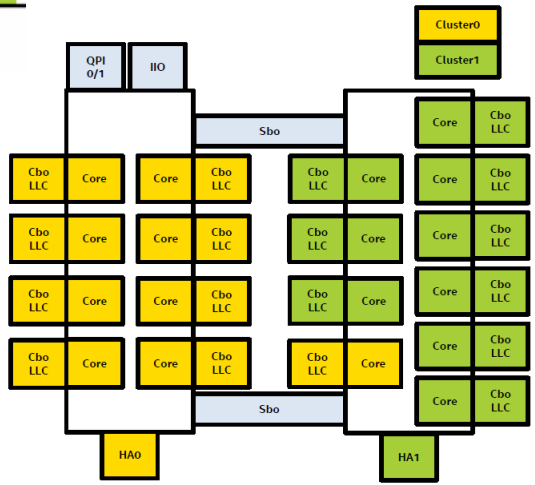
Features

- Haswell-EP architecture
- Up to 18 cores, 36 threads
- Up to 45MB L3 cache
- More power/frequency domains
  - Each core/uncore
- Separate AVX frequencies
- Energy-efficient Turbo Boost
  - Monitors throughput/stall behavior
- Cluster-On-Die (COD) snooping
  - Optimized for NUMA workloads
- VM improvements
  - Lower entry/exit latency, Shadowing, cache monitoring



Source: AnandTech

COD Mode for 18C E5-2600 v3



Versions & Configurations

Advanced
- 25-30 MB LLC cache
- 9.6 GT/s QPI
- DDR4-2133
- Intel® Hyper-Threading
- Intel® Turbo boost

12C 2.6 GHz	135W	E5-2690v3
12C 2.5 GHz	120W	E5-2680v3
12C 2.3 GHz	120W	E5-2670v3
10C 2.6 GHz	105W	E5-2660v3
10C 2.3 GHz	105W	E5-2650v3

Standard
- 15-20 MB LLC cache
- 8.0 GT/s QPI
- DDR4-1866
- Intel® Hyper-Threading
- Intel® Turbo boost

8C 2.6 GHz	90W	E5-2640v3
8C 2.4 GHz	85W	E5-2630v3
6C 2.4 GHz	85W	E5-2620v3

Basic
- 15 MB LLC cache
- 6.4 GT/s QPI
- DDR4-1600

6C 1.9 GHz	85W	E5-2609v3
6C 1.6 GHz	85W	E5-2603v3

Segmented Optimized
- 45-35 MB LLC cache
- 9.6 GT/s QPI
- DDR4-2133
- Intel® Hyper-Threading
- Intel® Turbo boost

18C (2U) 2.3 GHz	145W	E5-2699v3
16C (1U) 2.3 GHz	135W	E5-2698v3
14C (2U) 2.6 GHz	145W	E5-2697v3
14C (1U) 2.3 GHz	120W	E5-2695v3
14C (1U) 2.0 GHz	120W	E5-2683v3

Frequency Optimized
- ≥2.5MB/core LLC cache
- 9.6 GT/s QPI
- DDR4-2133
- Intel® Hyper-Threading
- Intel® Turbo boost

8C (20M) 3.2 GHz (2U)	135W	E5-2667v3
6C (20M) 3.4 GHz (2U)	135W	E5-2643v3
4C (15M) 3.5GHz (2U)	135W	E5-2637v3
4C (10M) 3.0GHz (1U)	105W	E5-2623v3

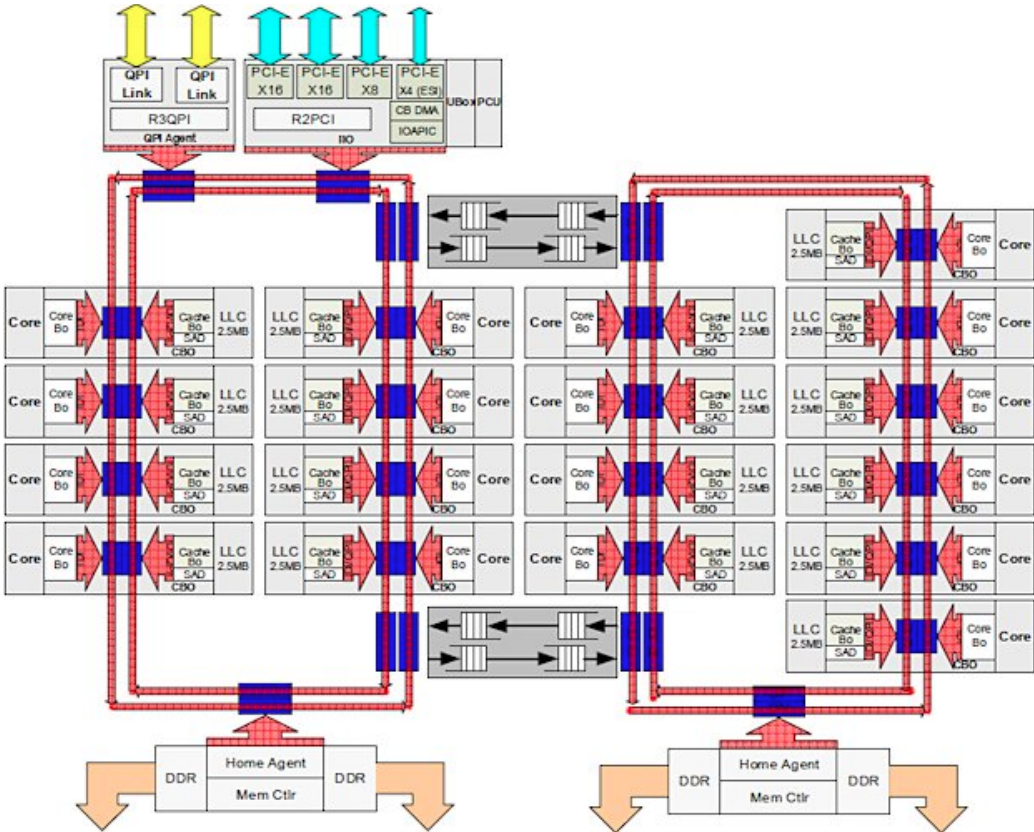
- 10MB LLC cache
- 8.0GT/s QPI
- DDR4-1866
- Intel® Hyper-Threading
- Intel® Turbo boost

Workstation Only
- 25MB LLC cache
- 8.0GT/s QPI
- DDR4-2133
- Intel® Hyper-Threading
- Intel® Turbo boost

10C 2S 3.1 GHz	160W	E5-2687W v3

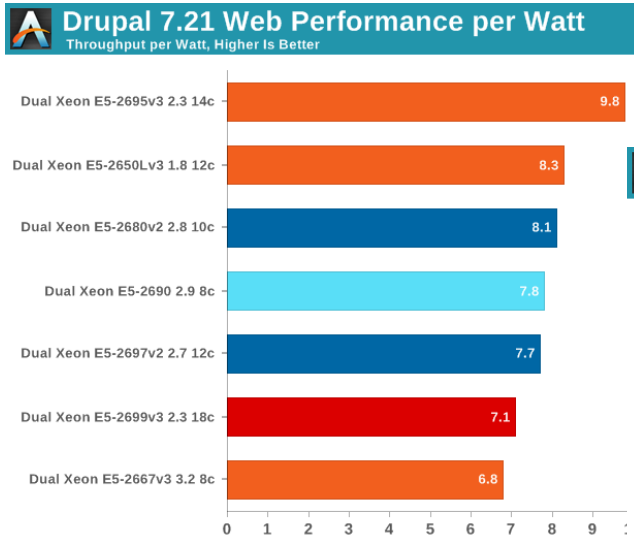
Low Power
- 20-30 MB LLC Cache
- 9.6 GT/s QPI
- DDR4-1866
- Intel® Hyper-Threading
- Intel® Turbo boost

12C 1.8 GHz	65W	E5-2650L v3
8C 1.8 GHz	55W	E5-2630L v3



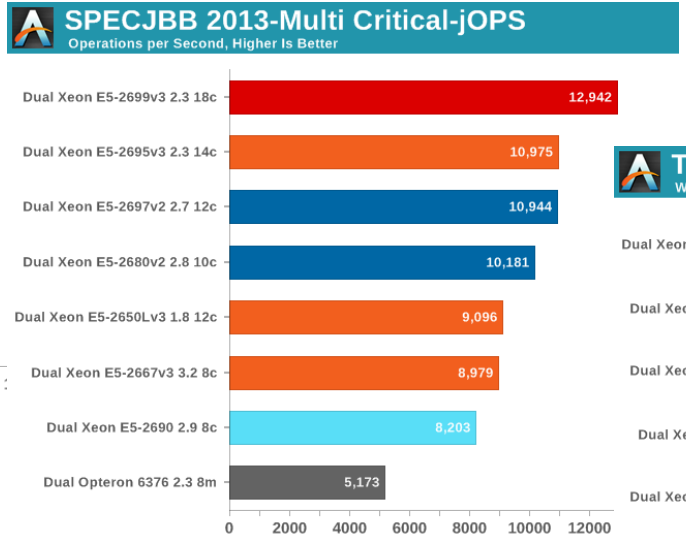
Source: TechReport

Benchmarks

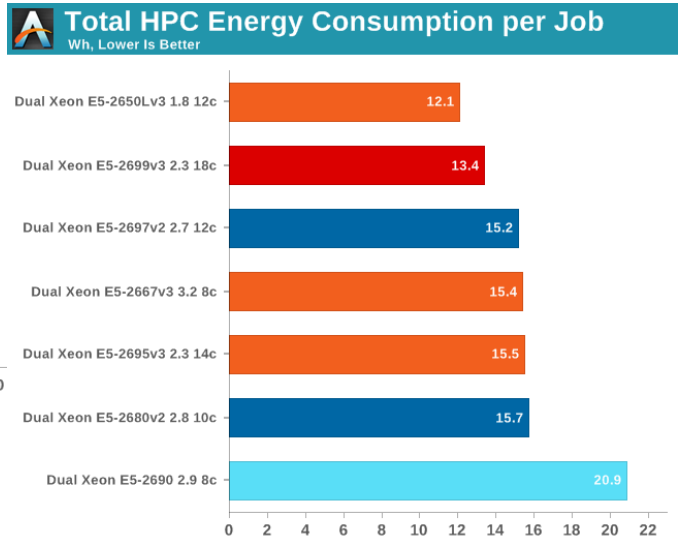


Drupal (LAMP stack)

Java server/VM (supermarket/IT model)



OpenFoam (Fluid Dynamics + AVX)



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