

HEPSPEC Benchmarks

Daniel Traynor from WWW and V3 from Matt Rásó-Barnett

V3

E5-2670	V3 2.13GHz	HT on:	48 threads:	510	or	10.6 /thread
E5-2670	V3 2.13GHz	HT off:	24 threads:	410	or	17.1 /thread
E5-2640	V3 2.6GHz	HT on:	32 threads:	367	or	11.5 /thread
E5-2640	V3 2.6GHz	HT off:	16 threads	295	or	18.45 /thread
E5-2660	V3 2.6GHz	HT on:	40 threads	448	or	11.2 /thread
E5-2660	V3 2.6GHz	HT off:	20 threads	370	or	18.5 /thread

Benchmarks run thanks to Jamie Wilcox at the

High Performance Computing Platform and Technology Enabling Group
EMEA Intel Corporation (UK) Ltd
Pipers Way
Swindon SN3 1RJ

V2

E5-2650 V2, 2.6GHz, HT on: 32 threads:	357.24	or	11.16 /thread	
E5-2650 V2, 2.6GHz, HT on: 32 threads:	360.41	or	11.25 /thread	
E5-2650 V2, 2.6GHz HT on: 32 threads	337.00	or	10.53 /thread	(sussex)
E5-2650 V2, 2.6GHz, HT on: 32 threads:	362	or	11.31 /thread	
E5-2650 V2, 2.6GHz, HT off: 16 threads:	273.6	or	17.43 /thread	
E5-2650 V2 2.6GHz HT off: 16 threads:	261.5	or	16.34 /thread	(sussex)
E5-2640 V2, 2.0GHz, HT off: 16 threads:	214.9	or	13.43 /thread	
E5-2670 V2 2.5GHz, HT on: 40 threads	328.77	or	8.22 /thread	(sussex)
E5-2670 V2 2.5GHz, HT off: 20 threads	264.23	or	13.20 /thread	(sussex)

V1

E5-2670, 2.6GHz, HT on, 32 threads:	337.76	or	10.555 /thread
E5-2660, 2.2GHz, HT on, 32 threads:	256.32	or	8.0 /thread
E5-2660, 2.2GHz, HT off, 16 threads:	242	or	15.14 /thread
E5-2660, 2.2GHz, HT off, 16 threads:	256.8	or	16.05 /thread

others ...

X5650, 2.66GHz, HT on, 24 threads:	213.78	or	8.91/thread (QMUL)
X5660, 2.8GHz, HT on, 24 threads:	210.00	or	8.75/thread (RHUL)

Intel (SPEC CPU2006 fp_rate base) benchmarks show:

E5-2670 v3 (2.3GHz 6 core) is 226% faster than an X2650 Westmere (2.66GHz, 6 core).

Slightly more than the increase in number of cores.