



## APP Metrics for Intel® Microprocessors

Processor Group	Processor Name	GFOPS	APP	
Intel® Xeon® Processor E7 Family				
	Intel® Xeon® Processor E7-8894 v4 (60M Cache, 2.40 GHz)	E7-8894 V4	921.6	0.27648
	Intel® Xeon® Processor E7-8893 v4 (60M Cache, 3.20 GHz)	E7-8893 V4	204.8	0.06144
	Intel® Xeon® Processor E7-8891 v4 (60M Cache, 2.80 GHz)	E7-8891 V4	448	0.13440
	Intel® Xeon® Processor E7-8890 v4 (60M Cache, 2.20 GHz)	E7-8890 V4	844.8	0.25344
	Intel® Xeon® Processor E7-8880 v4 (55M Cache, 2.20 GHz)	E7-8880 V4	774.4	0.23232
	Intel® Xeon® Processor E7-8870 v4 (50M Cache, 2.10 GHz)	E7-8870 V4	672	0.20160
	Intel® Xeon® Processor E7-8867 v4 (45M Cache, 2.40 GHz)	E7-8867 V4	691.2	0.20736
	Intel® Xeon® Processor E7-8860 v4 (45M Cache, 2.20 GHz)	E7-8860 V4	633.6	0.19008
	Intel® Xeon® Processor E7-4850 v4 (40M Cache, 2.10 GHz)	E7-4850 V4	537.6	0.16128
	Intel® Xeon® Processor E7-4830 v4 (35M Cache, 2.00 GHz)	E7-4830 V4	448	0.13440
	Intel® Xeon® Processor E7-4820 v4 (25M Cache, 2.00 GHz)	E7-4820 V4	320	0.09600
	Intel® Xeon® Processor E7-4809 v4 (20M Cache, 2.10 GHz)	E7-4809 V4	268.8	0.08064
	Intel® Xeon® Processor E7-8893 v3 (45M Cache, 3.20 GHz)	E7-8893 V3	204.8	0.06144
	Intel® Xeon® Processor E7-8891 v3 (45M Cache, 2.80 GHz)	E7-8891 V3	448	0.13440
	Intel® Xeon® Processor E7-8890 v3 (45M Cache, 2.50 GHz)	E7-8890 V3	720	0.21600
	Intel® Xeon® Processor E7-8880L v3 (45M Cache, 2.00 GHz)	E7-8880L V3	576	0.17280
	Intel® Xeon® Processor E7-8880 v3 (45M Cache, 2.30 GHz)	E7-8880 V3	662.4	0.19872
	Intel® Xeon® Processor E7-8870 v3 (45M Cache, 2.10 GHz)	E7-8870 V3	604.8	0.18144
	Intel® Xeon® Processor E7-8867 v3 (45M Cache, 2.50 GHz)	E7-8867 V3	640	0.19200
	Intel® Xeon® Processor E7-8860 v3 (40M Cache, 2.20 GHz)	E7-8860 V3	563.2	0.16896
	Intel® Xeon® Processor E7-4850 v3 (35M Cache, 2.20 GHz)	E7-4850 V3	492.8	0.14784
	Intel® Xeon® Processor E7-4830 v3 (30M Cache, 2.10 GHz)	E7-4830 V3	403.2	0.12096
	Intel® Xeon® Processor E7-4820 v3 (25M Cache, 1.90 GHz)	E7-4820 V3	304	0.09120
	Intel® Xeon® Processor E7-4809 v3 (20M Cache, 2.00 GHz)	E7-4809 V3	256	0.07680
	Intel® Xeon® Processor E7-8850 v2 (24M Cache, 2.30 GHz)	E7-8850 V2	220.8	0.06624
	Intel® Xeon® Processor E7-8857 v2 (30M Cache, 3.00 GHz)	E7-8857 V2	288	0.08640
	Intel® Xeon® Processor E7-8870 v2 (30M Cache, 2.30 GHz)	E7-8870 V2	276	0.08280
	Intel® Xeon® Processor E7-8880 v2 (37.5M Cache, 2.50 GHz)	E7-8880 V2	300	0.09000
	Intel® Xeon® Processor E7-8880L v2 (37.5M Cache, 2.20 GHz)	E7-8880L V2	264	0.07920
	Intel® Xeon® Processor E7-8890 v2 (37.5M Cache, 2.80 GHz)	E7-8890 V2	336	0.10080
	Intel® Xeon® Processor E7-8891 v2 (37.5M Cache, 3.20 GHz)	E7-8891V2	256	0.07680
	Intel® Xeon® Processor E7-8893 v2 (37.5M Cache, 3.40 GHz)	E7-8893V2	163.2	0.04896
	Intel® Xeon® Processor E7-4890 v2 (37.5M Cache, 2.80 GHz)	E7-4890V2	336	0.10080
	Intel® Xeon® Processor E7-4880 v2 (37.5M Cache, 2.50 GHz)	E7-4880V2	300	0.09000
	Intel® Xeon® Processor E7-4870 v2 (30M Cache, 2.30 GHz)	E7-4870V2	276	0.08280
	Intel® Xeon® Processor E7-4860 v2 (30M Cache, 2.60 GHz)	E7-4860V2	249.6	0.07488
	Intel® Xeon® Processor E7-4850 v2 (24M Cache, 2.30 GHz)	E7-4850V2	220.8	0.06624
	Intel® Xeon® Processor E7-4830 v2 (20M Cache, 2.20 GHz)	E7-4830V2	176	0.05280
	Intel® Xeon® Processor E7-4820 v2 (16M Cache, 2.00 GHz)	E7-4820V2	128	0.03840
	Intel® Xeon® Processor E7-4809 v2 (12M Cache, 1.90 GHz)	E7-4809V2	91.2	0.02736
	Intel® Xeon® Processor E7-2890 v2 (37.5M Cache, 2.80 GHz)	E7-2890V2	336	0.10080
	Intel® Xeon® Processor E7-2880 v2 (37.5M Cache, 2.50 GHz)	E7-2880V2	300	0.09000
	Intel® Xeon® Processor E7-2870 v2 (30M Cache, 2.30 GHz)	E7-2870V2	276	0.08280
	Intel® Xeon® Processor E7-2850 v2 (24M Cache, 2.30 GHz)	E7-2850V2	220.8	0.06624
	Intel® Xeon® Processor E7-8870 (30M Cache, 2.40 GHz, 6.40 GT/s Intel® QPI)	E7-8870	96	0.02880



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<b>Intel® Xeon® Processor</b>			
<b>Processor Group</b>	<b>Processor Name</b>	<b>GLFOPS</b>	<b>APP</b>
Intel® Xeon® Processor E7-8867L (30M Cache, 2.13 GHz, 6.40 GT/s Intel® QPI)	E7-8867L	85.32	0.02560
Intel® Xeon® Processor E7-8860 (24M Cache, 2.26 GHz, 6.40 GT/s Intel® QPI)	E7-8860	90.64	0.02719
Intel® Xeon® Processor E7-8850 (24M Cache, 2.00 GHz, 6.40 GT/s Intel® QPI)	E7-8850	85.312	0.02400
Intel® Xeon® Processor E7-8837 (24M Cache, 2.66 GHz, 6.40 GT/s Intel® QPI)	E7-8837	68.256	0.02559
Intel® Xeon® Processor E7-8830 (24M Cache, 2.13 GHz, 6.40 GT/s Intel® QPI)	E7-8830	90.64	0.02048
Intel® Xeon® Processor E7-4870 (30M Cache, 2.40 GHz, 6.40 GT/s Intel® QPI)	E7-4870	68.256	0.02880
Intel® Xeon® Processor E7-4860 (24M Cache, 2.26 GHz, 6.40 GT/s Intel® QPI)	E7-4860	44.784	0.02719
Intel® Xeon® Processor E7-4850 (24M Cache, 2.00 GHz, 6.40 GT/s Intel® QPI)	E7-4850	90.64	0.02400
Intel® Xeon® Processor E7-4830 (24M Cache, 2.13 GHz, 6.40 GT/s Intel® QPI)	E7-4830	68.256	0.02048
Intel® Xeon® Processor E7-4820 (18M Cache, 2.00 GHz, 5.86 GT/s Intel® QPI)	E7-4820	41.592	0.01920
Intel® Xeon® Processor E7-4807 (18M Cache, 1.86 GHz, 4.80 GT/s Intel® QPI)	E7-4807	44.784	0.01344
Intel® Xeon® Processor E7-2870 (30M Cache, 2.40 GHz, 6.40 GT/s Intel® QPI)	E7-2870	90.64	0.02880
Intel® Xeon® Processor E7-2860 (24M Cache, 2.26 GHz, 6.40 GT/s Intel® QPI)	E7-2860	68.256	0.02719
Intel® Xeon® Processor E7-2850 (24M Cache, 2.00 GHz, 6.40 GT/s Intel® QPI)	E7-2850	41.592	0.02400
Intel® Xeon® Processor E7-2830 (24M Cache, 2.13 GHz, 6.40 GT/s Intel® QPI)	E7-2830	68.256	0.02048
Intel® Xeon® Processor E7-2820 (18M Cache, 2.00 GHz, 5.86 GT/s Intel® QPI)	E7-2820	41.592	0.01920
Intel® Xeon® Processor E7-2803 (18M Cache, 1.73 GHz, 4.80 GT/s Intel® QPI)	E7-2803	41.592	0.01248
<b>Intel® Xeon® Processor E5 Family</b>			
Intel® Xeon® Processor E5-4669 v4 (55M Cache, 2.20 GHz)	E5-4669V4	774.4	0.23232
Intel® Xeon® Processor E5-4667 v4 (45M Cache, 2.20 GHz)	E5-4667V4	633.6	0.19008
Intel® Xeon® Processor E5-4660 v4 (40M Cache, 2.20 GHz)	E5-4660V4	563.2	0.16896
Intel® Xeon® Processor E5-4655 v4 (30M Cache, 2.50 GHz)	E5-4655V4	320	0.09600
Intel® Xeon® Processor E5-4650 v4 (35M Cache, 2.20 GHz)	E5-4650V4	492.8	0.14784
Intel® Xeon® Processor E5-4640 v4 (30M Cache, 2.10 GHz)	E5-4640V4	403.2	0.12096
Intel® Xeon® Processor E5-4628L v4 (35M Cache, 1.80 GHz)	E5-4628LV4	403.2	0.12096
Intel® Xeon® Processor E5-4627 v4 (25M Cache, 2.60 GHz)	E5-4627V4	416	0.12480
Intel® Xeon® Processor E5-4620 v4 (25M Cache, 2.10 GHz)	E5-4620V4	336	0.10080
Intel® Xeon® Processor E5-4610 v4 (25M Cache, 1.80 GHz)	E5-4610V4	288	0.08640
Intel® Xeon® Processor E5-2699A v4 (55M Cache, 2.40 GHz)	E5-2699AV4	844.8	0.25344
Intel® Xeon® Processor E5-2699R v4 (55M Cache, 2.20 GHz)	E5-2699RV4	774.4	0.23232
Intel® Xeon® Processor E5-2699 v4 (55M Cache, 2.20 GHz)	E5-2699V4	774.4	0.23232
Intel® Xeon® Processor E5-2698 v4 (50M Cache, 2.20 GHz)	E5-2698V4	704	0.21120
Intel® Xeon® Processor E5-2697 v4 (45M Cache, 2.30 GHz)	E5-2697V4	662.4	0.19872
Intel® Xeon® Processor E5-2697A v4 (40M Cache, 2.60 GHz)	E5-2697AV4	665.6	0.19968
Intel® Xeon® Processor E5-2695 v4 (45M Cache, 2.10 GHz)	E5-2695V4	604.8	0.18144
Intel® Xeon® Processor E5-2690 v4 (35M Cache, 2.60 GHz)	E5-2690V4	582.4	0.17472
Intel® Xeon® Processor E5-2687W v4 (30M Cache, 3.00 GHz)	E5-2687WV4	576	0.17280
Intel® Xeon® Processor E5-2683 v4 (40M Cache, 2.10 GHz)	E5-2683V4	537.6	0.16128
Intel® Xeon® Processor E5-2680 v4 (35M Cache, 2.40 GHz)	E5-2680V4	537.6	0.16128
Intel® Xeon® Processor E5-2667 v4 (25M Cache, 3.20 GHz)	E5-2667V4	409.6	0.12288
Intel® Xeon® Processor E5-2660 v4 (35M Cache, 2.00 GHz)	E5-2660V4	448	0.13440
Intel® Xeon® Processor E5-2658 v4 (35M Cache, 2.30 GHz)	E5-2658V4	515.2	0.15456
Intel® Xeon® Processor E5-2650 v4 (30M Cache, 2.20 GHz)	E5-2650V4	422.4	0.12672
Intel® Xeon® Processor E5-2650L v4 (35M Cache, 1.70 GHz)	E5-2650LV4	380.8	0.11424
Intel® Xeon® Processor E5-2648L v4 (35M Cache, 1.80 GHz)	E5-2648LV4	403.2	0.12096
Intel® Xeon® Processor E5-2643 v4 (20M Cache, 3.40 GHz)	E5-2643V4	326.4	0.09792



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Intel® Xeon® Processor E5-2640 v4 (25M Cache, 2.40 GHz)	E5-2640V4	384	0.11520
Intel® Xeon® Processor E5-2637 v4 (15M Cache, 3.50 GHz)	E5-2637V4	224	0.06720
Intel® Xeon® Processor E5-2630 v4 (25M Cache, 2.20 GHz)	E5-2630V4	352	0.10560
Intel® Xeon® Processor E5-2630L v4 (25M Cache, 1.80 GHz)	E5-2630LV4	288	0.08640
Intel® Xeon® Processor E5-2628L v4 (30M Cache, 1.90 GHz)	E5-2628LV4	364.8	0.10944
Intel® Xeon® Processor E5-2623 v4 (10M Cache, 2.60 GHz)	E5-2623V4	166.4	0.04992
Intel® Xeon® Processor E5-2620 v4 (20M Cache, 2.10 GHz)	E5-2620V4	268.8	0.08064
Intel® Xeon® Processor E5-2618L v4 (25M Cache, 2.20 GHz)	E5-2618LV4	352	0.10560
Intel® Xeon® Processor E5-2609 v4 (20M Cache, 1.70 GHz)	E5-2609V4	217.6	0.06528
Intel® Xeon® Processor E5-2608L v4 (20M Cache, 1.60 GHz)	E5-2608LV4	204.8	0.06144
Intel® Xeon® Processor E5-2603 v4 (15M Cache, 1.70 GHz)	E5-2603V4	163.2	0.04896
Intel® Xeon® Processor E5-1680 v4 (20M Cache, 3.40 GHz)	E5-1680V4	435.2	0.13056
Intel® Xeon® Processor E5-1660 v4 (20M Cache, 3.20 GHz)	E5-1660V4	409.6	0.12288
Intel® Xeon® Processor E5-1650 v4 (15M Cache, 3.60 GHz)	E5-1650V4	345.6	0.10368
Intel® Xeon® Processor E5-1630 v4 (10M Cache, 3.70 GHz)	E5-1630V4	236.8	0.07104
Intel® Xeon® Processor E5-1620 v4 (10M Cache, 3.50 GHz)	E5-1620V4	224	0.06720
Intel® Xeon® Processor E5-1603 v4 (10M Cache, 2.80 GHz)	E5-1603V4	179.2	0.05376
Intel® Xeon® Processor E5-2699 v3 (45M Cache, 2.30 GHz)	E5-2699V3	662.4	0.19872
Intel® Xeon® Processor E5-1428L v3 (20M Cache, 2.00 GHz)	E5-1428LV3	256	0.07680
Intel® Xeon® Processor E5-2438L v3 (25M Cache, 1.80 GHz)	E5-2438LV3	288	0.08640
Intel® Xeon® Processor E5-4669 v3 (45M Cache, 2.10 GHz)	E5-4669V3	604.8	0.18144
Intel® Xeon® Processor E5-2428L v3 (20M Cache, 1.80 GHz)	E5-2428LV3	230.4	0.06912
Intel® Xeon® Processor E5-4667 v3 (40M Cache, 2.00 GHz)	E5-4667V3	512	0.15360
Intel® Xeon® Processor E5-1620 v3 (10M Cache, 3.50 GHz)	E5-1620V3	224	0.06720
Intel® Xeon® Processor E5-2418L v3 (15M Cache, 2.00 GHz)	E5-2418LV3	192	0.05760
Intel® Xeon® Processor E5-4660 v3 (35M Cache, 2.10 GHz)	E5-4660V3	470.4	0.14112
Intel® Xeon® Processor E5-2698 v3 (40M Cache, 2.30 GHz)	E5-2698V3	588.8	0.17664
Intel® Xeon® Processor E5-1630 v3 (10M Cache, 3.70 GHz)	E5-1630V3	236.8	0.07104
Intel® Xeon® Processor E5-2408L v3 (10M Cache, 1.80 GHz)	E5-2408LV3	115.2	0.03456
Intel® Xeon® Processor E5-4655 v3 (30M Cache, 2.90 GHz)	E5-4655V3	278.4	0.08352
Intel® Xeon® Processor E5-2697 v3 (35M Cache, 2.60 GHz)	E5-2697V3	582.4	0.17472
Intel® Xeon® Processor E5-1650 v3 (15M Cache, 3.50 GHz)	E5-1650V3	336	0.10080
Intel® Xeon® Processor E5-4650 v3 (30M Cache, 2.10 GHz)	E5-4650V3	403.2	0.12096
Intel® Xeon® Processor E5-1660 v3 (20M Cache, 3.00 GHz)	E5-1660V3	384	0.11520
Intel® Xeon® Processor E5-4648 v3 (30M Cache, 1.70 GHz)	E5-4648V3	326.4	0.09792
Intel® Xeon® Processor E5-2695 v3 (35M Cache, 2.30 GHz)	E5-2695V3	515.2	0.15456
Intel® Xeon® Processor E5-1680 v3 (20M Cache, 3.20 GHz)	E5-1680V3	409.6	0.12288
Intel® Xeon® Processor E5-4640 v3 (30M Cache, 1.90 GHz)	E5-4640V3	364.8	0.10944
Intel® Xeon® Processor E5-2690 v3 (30M Cache, 2.60 GHz)	E5-2690V3	499.2	0.14976
Intel® Xeon® Processor E5-4627 v3 (25M Cache, 2.60 GHz)	E5-4627V3	416	0.12480
Intel® Xeon® Processor E5-2687W v3 (25M Cache, 3.10 GHz)	E5-2687WV3	496	0.14880
Intel® Xeon® Processor E5-4620 v3 (25M Cache, 2.00 GHz)	E5-4620V3	320	0.09600
Intel® Xeon® Processor E5-4610 v3 (25M Cache, 1.70 GHz)	E5-4610V3	272	0.08160
Intel® Xeon® Processor E5-2683 v3 (35M Cache, 2.00 GHz)	E5-2683V3	448	0.13440
Intel® Xeon® Processor E5-2680 v3 (30M Cache, 2.50 GHz)	E5-2680V3	480	0.14400
Intel® Xeon® Processor E5-2670 v3 (30M Cache, 2.30 GHz)	E5-2670V3	441.6	0.13248



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Intel® Xeon® Processor E5-2667 v3 (20M Cache, 3.20 GHz)	E5-2667V3	409.6	0.12288
Intel® Xeon® Processor E5-2660 v3 (25M Cache, 2.60 GHz)	E5-2660V3	416	0.12480
Intel® Xeon® Processor E5-2658A v3 (30M Cache, 2.20 GHz)	E5-2658AV3	422.4	0.12672
Intel® Xeon® Processor E5-2658 v3 (30M Cache, 2.20 GHz)	E5-2658V3	422.4	0.12672
Intel® Xeon® Processor E5-2650L v3 (30M Cache, 1.80 GHz)	E5-2650LV3	345.6	0.10368
Intel® Xeon® Processor E5-2650 v3 (25M Cache, 2.30 GHz)	E5-2650V3	368	0.11040
Intel® Xeon® Processor E5-2648L v3 (30M Cache, 1.80 GHz)	E5-2648LV3	345.6	0.10368
Intel® Xeon® Processor E5-2643 v3 (20M Cache, 3.40 GHz)	E5-2643V3	326.4	0.09792
Intel® Xeon® Processor E5-2640 v3 (20M Cache, 2.60 GHz)	E5-2640V3	332.8	0.09984
Intel® Xeon® Processor E5-2637 v3 (15M Cache, 3.50 GHz)	E5-2637V3	224	0.06720
Intel® Xeon® Processor E5-2630L v3 (20M Cache, 1.80 GHz)	E5-2630LV3	230.4	0.06912
Intel® Xeon® Processor E5-2630 v3 (20M Cache, 2.40 GHz)	E5-2630V3	307.2	0.09216
Intel® Xeon® Processor E5-2628L v3 (25M Cache, 2.00 GHz)	E5-2628LV3	320	0.09600
Intel® Xeon® Processor E5-2623 v3 (10M Cache, 3.00 GHz)	E5-2623V3	192	0.05760
Intel® Xeon® Processor E5-2620 v3 (15M Cache, 2.40 GHz)	E5-2620V3	230.4	0.06912
Intel® Xeon® Processor E5-2618L v3 (20M Cache, 2.30 GHz)	E5-2618LV3	294.4	0.08832
Intel® Xeon® Processor E5-2609 v3 (15M Cache, 1.90 GHz)	E5-2609V3	182.4	0.05472
Intel® Xeon® Processor E5-2608L v3 (15M Cache, 2.00 GHz)	E5-2608LV3	192	0.05760
Intel® Xeon® Processor E5-2603 v3 (15M Cache, 1.60 GHz)	E5-2603V3	153.6	0.04608
Intel® Xeon® Processor E5-4603 v2 (10M Cache, 2.20 GHz)	E5-4603V2	70.4	0.02112
Intel® Xeon® Processor E5-2403 v2 (10M Cache, 1.80 GHz)	E5-2403V2	57.6	0.01728
Intel® Xeon® Processor E5-2603 v2 (10M Cache, 1.80 GHz)	E5-2603V2	57.6	0.01728
Intel® Xeon® Processor E5-1428L v2 (15M Cache, 2.20 GHz)	E5-1428LV2	105.6	0.03168
Intel® Xeon® Processor E5-1620 v2 (10M Cache, 3.70 GHz)	E5-1620V2	118.4	0.03552
Intel® Xeon® Processor E5-2407 v2 (10M Cache, 2.40 GHz)	E5-2407V2	76.8	0.02304
Intel® Xeon® Processor E5-2609 v2 (10M Cache, 2.50 GHz)	E5-2609V2	80	0.02400
Intel® Xeon® Processor E5-4607 v2 (15M Cache, 2.60 GHz)	E5-4607V2	124.8	0.03744
Intel® Xeon® Processor E5-4610 v2 (16M Cache, 2.30 GHz)	E5-4610V2	147.2	0.04416
Intel® Xeon® Processor E5-1650 v2 (12M Cache, 3.50 GHz)	E5-1650V2	168	0.05040
Intel® Xeon® Processor E5-2418L v2 (15M Cache, 2.00 GHz)	E5-2418LV2	96	0.02880
Intel® Xeon® Processor E5-2618L v2 (15M Cache, 2.00 GHz)	E5-2618LV2	96	0.02880
Intel® Xeon® Processor E5-4620 v2 (20M Cache, 2.60 GHz)	E5-4620V2	166.4	0.04992
Intel® Xeon® Processor E5-1660 v2 (15M Cache, 3.70 GHz)	E5-1660V2	177.6	0.05328
Intel® Xeon® Processor E5-2420 v2 (15M Cache, 2.20 GHz)	E5-2420V2	105.6	0.03168
Intel® Xeon® Processor E5-2620 v2 (15M Cache, 2.10 GHz)	E5-2620V2	100.8	0.03024
Intel® Xeon® Processor E5-2428L v2 (20M Cache, 1.80 GHz)	E5-2428LV2	115.2	0.03456
Intel® Xeon® Processor E5-2628L v2 (20M Cache, 1.90 GHz)	E5-2628LV2	121.6	0.03648
Intel® Xeon® Processor E5-4624L v2 (25M Cache, 1.90 GHz)	E5-4624LV2	152	0.04560
Intel® Xeon® Processor E5-4627 v2 (16M Cache, 3.30 GHz)	E5-4627V2	211.2	0.06336
Intel® Xeon® Processor E5-2430 v2 (15M Cache, 2.50 GHz)	E5-2430V2	120	0.03600
Intel® Xeon® Processor E5-2630 v2 (15M Cache, 2.60 GHz)	E5-2630V2	124.8	0.03744
Intel® Xeon® Processor E5-4640 v2 (20M Cache, 2.20 GHz)	E5-4640V2	176	0.05280
Intel® Xeon® Processor E5-2430L v2 (15M Cache, 2.40 GHz)	E5-2430LV2	115.2	0.03456
Intel® Xeon® Processor E5-2630L v2 (15M Cache, 2.40 GHz)	E5-2630LV2	115.2	0.03456
Intel® Xeon® Processor E5-2440 v2 (20M Cache, 1.90 GHz)	E5-2440V2	121.6	0.03648
Intel® Xeon® Processor E5-4650 v2 (25M Cache, 2.40 GHz)	E5-4650V2	192	0.05760



## APP Metrics for Intel® Microprocessors

Processor Group	Processor Name	GFLOPS	APP
Intel® Xeon® Processor E5-2637 v2 (15M Cache, 3.50 GHz)	E5-2637V2	112	0.03360
Intel® Xeon® Processor E5-2640 v2 (20M Cache, 2.00 GHz)	E5-2640V2	128	0.03840
Intel® Xeon® Processor E5-4657L v2 (30M Cache, 2.40 GHz)	E5-4657LV2	230.4	0.06912
Intel® Xeon® Processor E5-2448L v2 (25M Cache, 1.80 GHz)	E5-2448LV2	144	0.04320
Intel® Xeon® Processor E5-2450 v2 (20M Cache, 2.50 GHz)	E5-2450V2	160	0.04800
Intel® Xeon® Processor E5-2643 v2 (25M Cache, 3.50 GHz)	E5-2643V2	168	0.05040
Intel® Xeon® Processor E5-2450L v2 (25M Cache, 1.70 GHz)	E5-2450LV2	136	0.04080
Intel® Xeon® Processor E5-2648L v2 (25M Cache, 1.90 GHz)	E5-2648LV2	152	0.04560
Intel® Xeon® Processor E5-2470 v2 (25M Cache, 2.40 GHz)	E5-2470V2	192	0.05760
Intel® Xeon® Processor E5-2650 v2 (20M Cache, 2.60 GHz)	E5-2650V2	166.4	0.04992
Intel® Xeon® Processor E5-2650L v2 (25M Cache, 1.70 GHz)	E5-2650LV2	136	0.04080
Intel® Xeon® Processor E5-2658 v2 (25M Cache, 2.40 GHz)	E5-2658V2	192	0.05760
Intel® Xeon® Processor E5-2660 v2 (25M Cache, 2.20 GHz)	E5-2660V2	176	0.05280
Intel® Xeon® Processor E5-2667 v2 (25M Cache, 3.30 GHz)	E5-2667V2	211.2	0.06336
Intel® Xeon® Processor E5-2670 v2 (25M Cache, 2.50 GHz)	E5-2670V2	200	0.06000
Intel® Xeon® Processor E5-2680 v2 (25M Cache, 2.80 GHz)	E5-2680V2	224	0.06720
Intel® Xeon® Processor E5-2687W v2 (25M Cache, 3.40 GHz)	E5-2687WV2	217.6	0.06528
Intel® Xeon® Processor E5-2690 v2 (25M Cache, 3.00 GHz)	E5-2690V2	240	0.07200
Intel® Xeon® Processor E5-2695 v2 (30M Cache, 2.40 GHz)	E5-2695V2	230.4	0.06912
Intel® Xeon® Processor E5-2697 v2 (30M Cache, 2.70 GHz)	E5-2697V2	259.2	0.07776
Intel® Xeon® Processor E5-2603 (10M Cache, 1.80 GHz, 6.40 GT/s Intel® QPI)	E5-2603	57.6	0.01728
Intel® Xeon® Processor E5-4603 (10M Cache, 2.00 GHz, 6.40 GT/s Intel® QPI)	E5-4603	64	0.01920
Intel® Xeon® Processor E5-2403 (10M Cache, 1.80 GHz, 6.40 GT/s Intel® QPI)	E5-2403	57.6	0.01728
Intel® Xeon® Processor E5-4607 (12M Cache, 2.20 GHz, 6.40 GT/s Intel® QPI)	E5-4607	105.6	0.03168
Intel® Xeon® Processor E5-2407 (10M Cache, 2.20 GHz, 6.40 GT/s Intel® QPI)	E5-2407	70.4	0.02112
Intel® Xeon® Processor E5-2609 (10M Cache, 2.40 GHz, 6.40 GT/s Intel® QPI)	E5-2609	76.8	0.02304
Intel® Xeon® Processor E5-4610 (15M Cache, 2.40 GHz, 7.20 GT/s Intel® QPI)	E5-4610	115.2	0.03456
Intel® Xeon® Processor E5-1620 (10M Cache, 3.60 GHz, 0.0 GT/s Intel® QPI)	E5-1620	115.2	0.03456
Intel® Xeon® Processor E5-1428L (15M Cache, 1.8 GHz)	E5-1428L	86.4	0.02592
Intel® Xeon® Processor E5-2418L (10M, 2.0 GHz, 6.4 GT/s Intel® QPI)	E5-2418L	64	0.01920
Intel® Xeon® Processor E5-4617 (15M Cache, 2.90 GHz, 7.20 GT/s Intel® QPI)	E5-4617	139.2	0.04176
Intel® Xeon® Processor E5-2420 (15M Cache, 1.90 GHz, 7.20 GT/s Intel® QPI)	E5-2420	91.2	0.02736
Intel® Xeon® Processor E5-2620 (15M Cache, 2.00 GHz, 7.20 GT/s Intel® QPI)	E5-2620	96	0.02880
Intel® Xeon® Processor E5-1650 (12M Cache, 3.20 GHz, 0.0 GT/s Intel® QPI)	E5-1650	153.6	0.04608
Intel® Xeon® Processor E5-4620 (16M Cache, 2.20 GHz, 7.20 GT/s Intel® QPI)	E5-4620	140.8	0.04224
Intel® Xeon® Processor E5-2428L (15M, 1.8 GHz, 7.2 GT/s Intel® QPI)	E5-2428L	86.4	0.02592
Intel® Xeon® Processor E5-4640 (20M Cache, 2.40 GHz, 8.00 GT/s Intel® QPI)	E5-4640	153.6	0.04608
Intel® Xeon® Processor E5-2430 (15M Cache, 2.20 GHz, 7.20 GT/s Intel® QPI)	E5-2430	105.6	0.03168
Intel® Xeon® Processor E5-1660 (15M Cache, 3.30 GHz, 0.0 GT/s Intel® QPI)	E5-1660	158.4	0.04752
Intel® Xeon® Processor E5-2430L (15M Cache, 2.00 GHz, 7.20 GT/s Intel® QPI)	E5-2430L	96	0.02880
Intel® Xeon® Processor E5-2630 (15M Cache, 2.30 GHz, 7.20 GT/s Intel® QPI)	E5-2630	110.4	0.03312
Intel® Xeon® Processor E5-2440 (15M Cache, 2.40 GHz, 7.20 GT/s Intel® QPI)	E5-2440	115.2	0.03456
Intel® Xeon® Processor E5-4650 (20M Cache, 2.70 GHz, 8.00 GT/s Intel® QPI)	E5-4650	172.8	0.05184
Intel® Xeon® Processor E5-2630L (15M Cache, 2.00 GHz, 7.20 GT/s Intel® QPI)	E5-2630L	96	0.02880
Intel® Xeon® Processor E5-4650L (20M Cache, 2.60 GHz, 8.00 GT/s Intel® QPI)	E5-4650L	166.4	0.04992
Intel® Xeon® Processor E5-2448L (20M, 1.8 GHz, 8.0 GT/s Intel® QPI)	E5-2448L	115.2	0.03456



## APP Metrics for Intel® Microprocessors

<b>Intel® Xeon® Processor</b>			
<b>Processor Group</b>	<b>Processor Name</b>	<b>GLFOPS</b>	<b>APP</b>
Intel® Xeon® Processor E5-2637 (5M Cache, 3.00 GHz, 8.00 GT/s Intel® QPI)	E5-2637	48	0.01440
Intel® Xeon® Processor E5-2450 (20M Cache, 2.10 GHz, 8.00 GT/s Intel® QPI)	E5-2450	134.4	0.04032
Intel® Xeon® Processor E5-2640 (15M Cache, 2.50 GHz, 7.20 GT/s Intel® QPI)	E5-2640	120	0.03600
Intel® Xeon® Processor E5-2450L (20M Cache, 1.80 GHz, 8.00 GT/s Intel® QP)	E5-2450L	115.2	0.03456
Intel® Xeon® Processor E5-2470 (20M Cache, 2.30 GHz, 8.00 GT/s Intel® QPI)	E5-2470	147.2	0.04416
Intel® Xeon® Processor E5-2643 (10M Cache, 3.30 GHz, 8.00 GT/s Intel® QPI)	E5-2643	105.6	0.03168
Intel® Xeon® Processor E5-2648L (20M, 1.80 GHz, 8.0 GT/s Intel® QPI)	E5-2648L	115.2	0.03456
Intel® Xeon® Processor E5-2650 (20M Cache, 2.00 GHz, 8.00 GT/s Intel® QPI)	E5-2650	128	0.03840
Intel® Xeon® Processor E5-2650L (20M Cache, 1.80 GHz, 8.00 GT/s Intel® QP)	E5-2650L	115.2	0.03456
Intel® Xeon® Processor E5-2658 (20M, 2.10 GHz, 8.0 GT/s Intel® QPI)	E5-2658	134.4	0.04032
Intel® Xeon® Processor E5-2660 (20M Cache, 2.20 GHz, 8.00 GT/s Intel® QPI)	E5-2660	140.8	0.04224
Intel® Xeon® Processor E5-2665 (20M Cache, 2.40 GHz, 8.00 GT/s Intel® QPI)	E5-2665	153.6	0.04608
Intel® Xeon® Processor E5-2667 (15M Cache, 2.90 GHz, 8.00 GT/s Intel® QPI)	E5-2667	139.2	0.04176
Intel® Xeon® Processor E5-2670 (20M Cache, 2.60 GHz, 8.00 GT/s Intel® QPI)	E5-2670	166.4	0.04992
Intel® Xeon® Processor E5-2680 (20M Cache, 2.70 GHz, 8.00 GT/s Intel® QPI)	E5-2680	172.8	0.05184
Intel® Xeon® Processor E5-2687W (20M Cache, 3.10 GHz, 8.00 GT/s Intel® Q)	E5-2687W	198.4	0.05952
Intel® Xeon® Processor E5-2690 (20M Cache, 2.90 GHz, 8.00 GT/s Intel® QPI)	E5-2690	185.6	0.05568
<b>intel® Xeon® Processor E3 Family</b>			
Intel® Xeon® Processor E3-1535M v6 (8M Cache, 3.10 GHz)	E3-1535MV6	198.4	0.05952
Intel® Xeon® Processor E3-1505M v6 (8M Cache, 3.00 GHz)	E3-1505MV6	192	0.05760
Intel® Xeon® Processor E3-1505L v6 (8M Cache, 2.20 GHz)	E3-1505LV6	140.8	0.04224
Intel® Xeon® Processor E3-1501L v6 (6M Cache, up to 2.90 GHz)	E3-1501LV6	134.4	0.04032
Intel® Xeon® Processor E3-1501M v6 (6M Cache, up to 3.60 GHz)	E3-1501MV6	185.6	0.05568
Intel® Xeon® Processor E3-1285 v6 (8M Cache, 4.10 GHz)	E3-1285V6	262.4	0.07872
Intel® Xeon® Processor E3-1280 v6 (8M Cache, 3.90 GHz)	E3-1280V6	249.6	0.07488
Intel® Xeon® Processor E3-1275 v6 (8M Cache, 3.80 GHz)	E3-1275V6	243.2	0.07296
Intel® Xeon® Processor E3-1270 v6 (8M Cache, 3.80 GHz)	E3-1270V6	243.2	0.07296
Intel® Xeon® Processor E3-1245 v6 (8M Cache, 3.70 GHz)	E3-1245V6	236.8	0.07104
Intel® Xeon® Processor E3-1240 v6 (8M Cache, 3.70 GHz)	E3-1240V6	236.8	0.07104
Intel® Xeon® Processor E3-1230 v6 (8M Cache, 3.50 GHz)	E3-1230V6	224	0.06720
Intel® Xeon® Processor E3-1225 v6 (8M Cache, 3.30 GHz)	E3-1225V6	211.2	0.06336
Intel® Xeon® Processor E3-1220 v6 (8M Cache, 3.00 GHz)	E3-1220V6	192	0.05760
Intel® Xeon® Processor E3-1205 v6 (8M Cache, 3.00 GHz)	E3-1205V6	192	0.05760
Intel® Xeon® Processor E3-1585 v5 (8M Cache, 3.50 GHz)	E3-1585V5	256	0.07680
Intel® Xeon® Processor E3-1585L v5 (8M Cache, 3.00 GHz)	E3-1585LV5	102.4	0.03072
Intel® Xeon® Processor E3-1578L v5 (8M Cache, 2.00 GHz)	E3-1578LV5	70.4	0.02112
Intel® Xeon® Processor E3-1575M v5 (8M Cache, 3.00 GHz)	E3-1575MV5	204.8	0.06144
Intel® Xeon® Processor E3-1565L v5 (8M Cache, 2.50 GHz)	E3-1565LV5	89.6	0.02688
Intel® Xeon® Processor E3-1558L v5 (8M Cache, 1.90 GHz)	E3-1558LV5	105.6	0.03168
Intel® Xeon® Processor E3-1545M v5 (8M Cache, 2.90 GHz)	E3-1545MV5	118.4	0.03552
Intel® Xeon® Processor E3-1535M v5 (8M Cache, 2.90 GHz)	E3-1535MV5	124.8	0.03744
Intel® Xeon® Processor E3-1515M v5 (8M Cache, 2.80 GHz)	E3-1515MV5	147.2	0.04416
Intel® Xeon® Processor E3-1505M v5 (8M Cache, 2.80 GHz)	E3-1505MV5	172.8	0.05184
Intel® Xeon® Processor E3-1505L v5 (8M Cache, 2.00 GHz)	E3-1505LV5	192	0.05760
Intel® Xeon® Processor E3-1280 v5 (8M Cache, 3.70 GHz)	E3-1280V5	179.2	0.05376
Intel® Xeon® Processor E3-1275 v5 (8M Cache, 3.60 GHz)	E3-1275V5	92.8	0.02784



## APP Metrics for Intel® Microprocessors

Intel® Xeon® Processor			
Processor Group	Processor Name	GFLOPS	APP
Intel® Xeon® Processor E3-1270 v5 (8M Cache, 3.60 GHz)	E3-1270V5	124.8	0.03744
Intel® Xeon® Processor E3-1268L v5 (8M Cache, 2.40 GHz)	E3-1268LV5	112	0.03360
Intel® Xeon® Processor E3-1260L v5 (8M Cache, 2.90 GHz)	E3-1260LV5	89.6	0.02688
Intel® Xeon® Processor E3-1245 v5 (8M Cache, 3.50 GHz)	E3-1245V5	105.6	0.03168
Intel® Xeon® Processor E3-1240L v5 (8M Cache, 2.10 GHz)	E3-1240LV5	92.8	0.02784
Intel® Xeon® Processor E3-1240 v5 (8M Cache, 3.50 GHz)	E3-1240V5	105.6	0.03168
Intel® Xeon® Processor E3-1235L v5 (8M Cache, 2.00 GHz)	E3-1235LV5	96	0.02880
Intel® Xeon® Processor E3-1230 v5 (8M Cache, 3.40 GHz)	E3-1230V5	112	0.03360
Intel® Xeon® Processor E3-1225 v5 (8M Cache, 3.30 GHz)	E3-1225V5	64	0.01920
Intel® Xeon® Processor E3-1220 v5 (8M Cache, 3.00 GHz)	E3-1220V5	86.4	0.02592
Intel® Xeon® Processor E3-1285L v4 (6M Cache, 3.40 GHz)	E3-1285LV4	217.6	0.06528
Intel® Xeon® Processor E3-1285 v4 (6M Cache, 3.50 GHz)	E3-1285V4	224	0.06720
Intel® Xeon® Processor E3-1278L v4 (6M Cache, 2.00 GHz)	E3-1278LV4	128	0.03840
Intel® Xeon® Processor E3-1265L v4 (6M Cache, 2.30 GHz)	E3-1265LV4	147.2	0.04416
Intel® Xeon® Processor E3-1258L v4 (6M Cache, 1.80 GHz)	E3-1258LV4	115.2	0.03456
Intel® Xeon® Processor E3-1286L v3 (8M Cache, 3.20 GHz)	E3-1286LV3	204.8	0.06144
Intel® Xeon® Processor E3-1286 v3 (8M Cache, 3.70 GHz)	E3-1286V3	236.8	0.07104
Intel® Xeon® Processor E3-1285L v3 (8M Cache, 3.10 GHz)	E3-1285LV3	198.4	0.05952
Intel® Xeon® Processor E3-1285 v3 (8M Cache, 3.60 GHz)	E3-1285V3	230.4	0.06912
Intel® Xeon® Processor E3-1281 v3 (8M Cache, 3.70 GHz)	E3-1281V3	236.8	0.07104
Intel® Xeon® Processor E3-1280 v3 (8M Cache, 3.60 GHz)	E3-1280V3	230.4	0.06912
Intel® Xeon® Processor E3-1276 v3 (8M Cache, 3.60 GHz)	E3-1276V3	230.4	0.06912
Intel® Xeon® Processor E3-1275L v3 (8M Cache, 2.70 GHz)	E3-1275LV3	172.8	0.05184
Intel® Xeon® Processor E3-1270 v3 (8M Cache, 3.50 GHz)	E3-1270V3	224	0.06720
Intel® Xeon® Processor E3-1268L v3 (8M Cache, 2.30 GHz)	E3-1268LV3	147.2	0.04416
Intel® Xeon® Processor E3-1271 v3 (8M Cache, 3.60 GHz)	E3-1271V3	230.4	0.06912
Intel® Xeon® Processor E3-1275 v3 (8M Cache, 3.50 GHz)	E3-1275V3	224	0.06720
Intel® Xeon® Processor E3-1265L v3 (8M Cache, 2.50 GHz)	E3-1265LV3	160	0.04800
Intel® Xeon® Processor E3-1246 v3 (8M Cache, 3.50 GHz)	E3-1246V3	224	0.06720
Intel® Xeon® Processor E3-1245 v3 (8M Cache, 3.40 GHz)	E3-1245V3	217.6	0.06528
Intel® Xeon® Processor E3-1241 v3 (8M Cache, 3.50 GHz)	E3-1241V3	224	0.06720
Intel® Xeon® Processor E3-1240L v3 (8M Cache, 2.00 GHz)	E3-1240LV3	128	0.03840
Intel® Xeon® Processor E3-1240 v3 (8M Cache, 3.40 GHz)	E3-1240V3	217.6	0.06528
Intel® Xeon® Processor E3-1231 v3 (8M Cache, 3.40 GHz)	E3-1231V3	217.6	0.06528
Intel® Xeon® Processor E3-1230L v3 (8M Cache, 1.80 GHz)	E3-1230LV3	115.2	0.03456
Intel® Xeon® Processor E3-1230 v3 (8M Cache, 3.30 GHz)	E3-1230V3	211.2	0.06336
Intel® Xeon® Processor E3-1226 v3 (8M Cache, 3.30 GHz)	E3-1226V3	211.2	0.06336
Intel® Xeon® Processor E3-1225 v3 (8M Cache, 3.20 GHz)	E3-1225V3	204.8	0.06144
Intel® Xeon® Processor E3-1220L v3 (4M Cache, 1.10 GHz)	E3-1220LV3	35.2	0.01056
Intel® Xeon® Processor E3-1220 v3 (8M Cache, 3.10 GHz)	E3-1220V3	198.4	0.05952
Intel® Xeon® Processor E3-1290 v2 (8M Cache, 3.70 GHz)	E3-1290V2	118.4	0.03552
Intel® Xeon® Processor E3-1280 v2 (8M Cache, 3.60 GHz)	E3-1280V2	115.2	0.03456
Intel® Xeon® Processor E3-1275 v2 (8M Cache, 3.50 GHz)	E3-1275V2	112	0.03360
Intel® Xeon® Processor E3-1270 v2 (8M Cache, 3.50 GHz)	E3-1270V2	112	0.03360
Intel® Xeon® Processor E3-1265L v2 (8M Cache, 2.50 GHz)	E3-1265LV2	80	0.02400
Intel® Xeon® Processor E3-1245 v2 (8M Cache, 3.40 GHz)	E3-1245V2	108.8	0.03264



## APP Metrics for Intel® Microprocessors

<b>Intel® Xeon® Processor</b>			
<b>Processor Group</b>	<b>Processor Name</b>	<b>GFOPS</b>	<b>APP</b>
Intel® Xeon® Processor E3-1240 v2 (8M Cache, 3.40 GHz)	E3-1240V2	108.8	0.03264
Intel® Xeon® Processor E3-1230 v2 (8M Cache, 3.30 GHz)	E3-1230V2	105.6	0.03168
Intel® Xeon® Processor E3-1225 v2 (8M Cache, 3.20 GHz)	E3-1225V2	102.4	0.03072
Intel® Xeon® Processor E3-1220 v2 (8M Cache, 3.10 GHz)	E3-1220V2	99.2	0.02976
Intel® Xeon® Processor E3-1220L v2 (3M Cache, 2.30 GHz)	E3-1220LV2	36.8	0.01104
Intel® Xeon® Processor E3-1125C v2 (8M Cache, 2.50 GHz)	E3-1125CV2	80	0.02400
Intel® Xeon® Processor E3-1105C v2 (8M Cache, 1.80 GHz)	E3-1105CV2	57.6	0.01728
Intel® Xeon® Processor E3-1290 (8M Cache, 3.60 GHz)	E3-1290	115.2	0.03456
Intel® Xeon® Processor E3-1280 (8M Cache, 3.50 GHz)	E3-1280	112	0.03360
Intel® Xeon® Processor E3-1275 (8M Cache, 3.40 GHz)	E3-1275	108.8	0.03264
Intel® Xeon® Processor E3-1270 (8M Cache, 3.40 GHz)	E3-1270	108.8	0.03264
Intel® Xeon® Processor E3-1260L (8M Cache, 2.40 GHz)	E3-1260L	76.8	0.02304
Intel® Xeon® Processor E3-1245 (8M Cache, 3.30 GHz)	E3-1245	105.6	0.03168
Intel® Xeon® Processor E3-1240 (8M Cache, 3.30 GHz)	E3-1240	105.6	0.03168
Intel® Xeon® Processor E3-1235 (8M Cache, 3.20 GHz)	E3-1235	102.4	0.03072
Intel® Xeon® Processor E3-1230 (8M Cache, 3.20 GHz)	E3-1230	102.4	0.03072
Intel® Xeon® Processor E3-1225 (6M Cache, 3.10 GHz)	E3-1225	99.2	0.02976
Intel® Xeon® Processor E3-1220L (3M Cache, 2.20 GHz)	E3-1220L	35.2	0.01056
Intel® Xeon® Processor E3-1220 (8M Cache, 3.10 GHz)	E3-1220	99.2	0.02976
Intel® Xeon® Processor E3-1125C (8M Cache, 2.00 GHz)	E3-1125C	64	0.01920
Intel® Xeon® Processor E3-1105C (6M Cache, 1.00 GHz)	E3-1105C	32	0.00960
<b>Intel® Xeon® E Processor</b>			
<a href="#">Intel® Xeon® E-2278GE Processor (16M Cache, 3.30 GHz)</a>	E-2278GE	422.4	0.12672
<a href="#">Intel® Xeon® E-2278GEL Processor (16M Cache, 2.00 GHz)</a>	E-2278GEL	256	0.07680
<a href="#">Intel® Xeon® E-2276ME Processor (12M Cache, 2.80 GHz)</a>	E-2276ME	268.8	0.08064
<a href="#">Intel® Xeon® E-2276ML Processor (12M Cache, 2.00 GHz)</a>	E-2276ML	192	0.05760
<a href="#">Intel® Xeon® E-2254ML Processor (8M Cache, 1.70 GHz)</a>	E-2254ML	108.8	0.03264
Intel® Xeon® E-2186M Processor (12M Cache, up to 4.60 GHz)	E-2186M	278.4	0.08352
Intel® Xeon® E-2186G Processor (12M Cache, up to 4.70 GHz)	E-2186G	364.8	0.10944
Intel® Xeon® E-2176M Processor (12M Cache, up to 4.40 GHz)	E-2176M	259.2	0.07776
Intel® Xeon® E-2176G Processor (12M Cache, up to 4.70 GHz)	E-2176G	355.2	0.10656
Intel® Xeon® E-2174G Processor (8M Cache, up to 4.70 GHz)	E-2174G	243.2	0.07296
Intel® Xeon® E-2146G Processor (12M Cache, up to 4.50 GHz)	E-2146G	336	0.10080
Intel® Xeon® E-2144G Processor (8M Cache, up to 4.50 GHz)	E-2144G	230.4	0.06912
Intel® Xeon® E-2136 Processor (12M Cache, up to 4.50 GHz)	E-2136	316.8	0.09504
Intel® Xeon® E-2134 Processor (8M Cache, up to 4.50 GHz)	E-2134	224	0.06720
Intel® Xeon® E-2126G Processor (12M Cache, up to 4.50 GHz)	E-2126G	316.8	0.09504
Intel® Xeon® E-2124G Processor (8M Cache, up to 4.50 GHz)	E-2124G	217.6	0.06528
Intel® Xeon® E-2124 Processor (8M Cache, up to 4.30 GHz)	E-2124	211.2	0.06336
Intel® Xeon® E-2104G Processor (8M Cache, 3.20 GHz)	E-2104G	204.8	0.00960
<b>Intel® Xeon® D Processor</b>			
Intel® Xeon® D-2187NT Processor (22M Cache, 2.00 GHz)	D-2187NT	870.4	0.26112
Intel® Xeon® D-2183IT Processor (22M Cache, 2.20 GHz)	D-2183IT	921.6	0.27648
Intel® Xeon® D-2177NT Processor (19.25M Cache, 1.90 GHz)	D-2177NT	716.8	0.21504
Intel® Xeon® D-2173IT Processor (19.25M Cache, 1.70 GHz)	D-2173IT	627.2	0.18816
Intel® Xeon® D-2166NT Processor (16.5M Cache, 2.00 GHz)	D-2166NT	537.6	0.16128





## APP Metrics for Intel® Microprocessors

<b>Intel® Xeon® Processor</b>			
<b>Processor Group</b>	<b>Processor Name</b>	<b>GLFOPS</b>	<b>APP</b>
Intel® Xeon® D-2163IT Processor (16.5M Cache, 2.10 GHz)	D-2163IT	691.2	0.20736
Intel® Xeon® D-2161I Processor (16.5M Cache, 2.20 GHz)	D-2161I	576	0.17280
Intel® Xeon® D-2146NT Processor (11M Cache, 2.30 GHz)	D-2146NT	435.2	0.13056
Intel® Xeon® D-2145NT Processor (11M Cache, 1.90 GHz)	D-2145NT	384	0.11520
Intel® Xeon® D-2143IT Processor (11M Cache, 2.20 GHz)	D-2143IT	460.8	0.13824
Intel® Xeon® D-2142IT Processor (11M Cache, 1.90 GHz)	D-2142IT	384	0.11520
Intel® Xeon® D-2141I Processor (11M Cache, 2.20 GHz)	D-2141I	358.4	0.10752
Intel® Xeon® D-2123IT Processor (8.25M Cache, 2.20 GHz)	D-2123IT	217.6	0.06528
Intel® Xeon® Processor D-1587 (24M Cache, 1.70 GHz)	D-1587	435.2	0.13056
Intel® Xeon® Processor D-1577 (24M Cache, 1.30 GHz)	D-1577	332.8	0.09984
Intel® Xeon® Processor D-1571 (24M Cache, 1.30 GHz)	D-1571	332.8	0.09984
Intel® Xeon® Processor D-1567 (18M Cache, 2.10 GHz)	D-1567	403.2	0.12096
Intel® Xeon® Processor D-1559 (18M Cache, 1.50 GHz)	D-1559	288	0.08640
Intel® Xeon® Processor D-1557 (18M Cache, 1.50 GHz)	D-1557	288	0.08640
Intel® Xeon® Processor D-1553N (12M Cache, 2.30 GHz)	D-1553N	294.4	0.08832
Intel® Xeon® Processor D-1548 (12M Cache, 2.00 GHz)	D-1548	256	0.07680
Intel® Xeon® Processor D-1543N (12M Cache, 1.90 GHz)	D-1543N	243.2	0.07296
Intel® Xeon® Processor D-1541 (12M Cache, 2.10 GHz)	D-1541	268.8	0.08064
Intel® Xeon® Processor D-1540 (12M Cache, 2.00 GHz)	D-1540	256	0.07680
Intel® Xeon® Processor D-1539 (12M Cache, 1.60 GHz)	D-1539	204.8	0.06144
Intel® Xeon® Processor D-1537 (12M Cache, 1.70 GHz)	D-1537	217.6	0.06528
Intel® Xeon® Processor D-1533N (9M Cache, 2.10 GHz)	D-1533N	201.6	0.06048
Intel® Xeon® Processor D-1531 (9M Cache, 2.20 GHz)	D-1531	211.2	0.06336
Intel® Xeon® Processor D-1529 (6M Cache, 1.30 GHz)	D-1529	83.2	0.02496
Intel® Xeon® Processor D-1528 (9M Cache, 1.90 GHz)	D-1528	182.4	0.05472
Intel® Xeon® Processor D-1527 (6M Cache, 2.20 GHz)	D-1527	140.8	0.04224
Intel® Xeon® Processor D-1523N (6M Cache, 2.00 GHz)	D-1523N	128	0.03840
Intel® Xeon® Processor D-1521 (6M Cache, 2.40 GHz)	D-1521	153.6	0.04608
Intel® Xeon® Processor D-1520 (6M Cache, 2.20 GHz)	D-1520	140.8	0.04224
Intel® Xeon® Processor D-1518 (6M Cache, 2.20 GHz)	D-1518	140.8	0.04224
Intel® Xeon® Processor D-1513N (6M Cache, 1.60 GHz)	D-1513N	102.4	0.03072
<b>Intel® Xeon® W Processor</b>			
<a href="#">Intel® Xeon® W-2295 Processor (24.75M Cache, 3.00 GHz)</a>	W-2295	1209.6	0.36288
<a href="#">Intel® Xeon® W-2275 Processor (19.25M Cache, 3.50 GHz)</a>	W-2275	1075.2	0.32256
<a href="#">Intel® Xeon® W-2265 Processor (19.25M Cache, 3.50 GHz)</a>	W-2265	921.6	0.27648
<a href="#">Intel® Xeon® W-2255 Processor (19.25M Cache, 3.70 GHz)</a>	W-2255	864	0.25920
<a href="#">Intel® Xeon® W-2245 Processor (16.5M Cache, 3.90 GHz)</a>	W-2245	742.4	0.22272
<a href="#">Intel® Xeon® W-2235 Processor (8.25M Cache, 3.80 GHz)</a>	W-2235	576	0.17280
<a href="#">Intel® Xeon® W-2225 Processor (8.25M Cache, 4.10 GHz)</a>	W-2225	409.6	0.12288
<a href="#">Intel® Xeon® W-2223 Processor (8.25M Cache, 3.60 GHz)</a>	W-2223	371.2	0.11136
<a href="#">Intel® Xeon® W-3175X Processor (38.5M Cache, 3.10 GHz)</a>	W-3175X	1523.2	0.45696
Intel® Xeon® W-2123 Processor (8.25M Cache, 3.60 GHz)	W-2123	371.2	0.11136
Intel® Xeon® W-2125 Processor (8.25M Cache, 4.00 GHz)	W-2125	409.6	0.12288
Intel® Xeon® W-2133 Processor (8.25M Cache, 3.60 GHz)	W-2133	537.6	0.16128
Intel® Xeon® W-2135 Processor (8.25M Cache, 3.70 GHz)	W-2135	556.8	0.16704
Intel® Xeon® W-2145 Processor (11M Cache, 3.70 GHz)	W-2145	742.4	0.22272



## APP Metrics for Intel® Microprocessors

<b>Intel® Xeon® Processor</b>			
<b>Processor Group</b>	<b>Processor Name</b>	<b>GFOPS</b>	<b>APP</b>
Intel® Xeon® W-2155 Processor (13.75M Cache, 3.30 GHz)	W-2155	800	0.24000
Intel® Xeon™ W-2175 Processor (19.25M Cache, 2.50 GHz)	W-2175	806.4	0.24192
Intel® Xeon® W-2195 Processor (24.75M Cache, 2.30 GHz)	W-2195	979.2	0.29376
Intel® Xeon® W-2104 Processor (8.25M Cache, 2.90 GHz)	W-2104	691.2	0.20736
Intel® Xeon® W-2102 Processor (8.25M Cache, 2.90 GHz)	W-2102	800	0.24000
<b>Intel® Xeon® Scalable Processors</b>			
Intel® Xeon® Platinum 9222 Processor (71.5M Cache, 2.30 GHz)	9222	1536	0.46080
Intel® Xeon® Platinum 9221 Processor (71.5M Cache, 2.30 GHz)	9221	1536	0.46080
Intel® Xeon® Platinum 8280M Processor (38.5M Cache, 2.70 GHz)	8280M	1612.8	0.48384
Intel® Xeon® Platinum 8280L Processor (38.5M Cache, 2.70 GHz)	8280L	1612.8	0.48384
Intel® Xeon® Platinum 8280 Processor (38.5M Cache, 2.70 GHz)	8280	1612.8	0.48384
Intel® Xeon® Platinum 8276M Processor (38.5M Cache, 2.20 GHz)	8276M	1164.8	0.34944
Intel® Xeon® Platinum 8276L Processor (38.5M Cache, 2.20 GHz)	8276L	1164.8	0.34944
Intel® Xeon® Platinum 8276 Processor (38.5M Cache, 2.20 GHz)	8276	1164.8	0.34944
Intel® Xeon® Platinum 8270 Processor (35.75M Cache, 2.70 GHz)	8270	1497.6	0.44928
Intel® Xeon® Platinum 8268 Processor (35.75M Cache, 2.90 GHz)	8268	1459.2	0.43776
Intel® Xeon® Platinum 8260Y Processor (35.75M Cache, 2.40 GHz)	8260Y	1152	0.34560
Intel® Xeon® Platinum 8260M Processor (35.75M Cache, 2.40 GHz)	8260M	1152	0.34560
Intel® Xeon® Platinum 8260L Processor (35.75M Cache, 2.40 GHz)	8260L	1152	0.34560
Intel® Xeon® Platinum 8260 Processor (35.75M Cache, 2.40 GHz)	8260	1152	0.34560
Intel® Xeon® Platinum 8256 Processor (16.5M Cache, 3.80 GHz)	8256	345.6	0.10368
Intel® Xeon® Platinum 8253 Processor (22M Cache, 2.20 GHz)	8253	614.4	0.18432
Intel® Xeon® Gold 6262V Processor (33M Cache, 1.90 GHz)	6262V	844.8	0.25344
Intel® Xeon® Gold 6254 Processor (24.75M Cache, 3.10 GHz)	6254	1267.2	0.38016
Intel® Xeon® Gold 6252N Processor (35.75M Cache, 2.30 GHz)	6252N	1075.2	0.32256
Intel® Xeon® Gold 6252 Processor (35.75M Cache, 2.10 GHz)	6252	998.4	0.29952
Intel® Xeon® Gold 6248 Processor (27.5M Cache, 2.50 GHz)	6248	1024	0.30720
Intel® Xeon® Gold 6246 Processor (24.75M Cache, 3.30 GHz)	6246	921.6	0.27648
Intel® Xeon® Gold 6244 Processor (24.75M Cache, 3.60 GHz)	6244	665.6	0.19968
Intel® Xeon® Gold 6242 Processor (22M Cache, 2.80 GHz)	6242	972.8	0.29184
Intel® Xeon® Gold 6240Y Processor (24.75M Cache, 2.60 GHz)	6240Y	921.6	0.27648
Intel® Xeon® Gold 6240M Processor (24.75M Cache, 2.60 GHz)	6240M	921.6	0.27648
Intel® Xeon® Gold 6240L Processor (24.75M Cache, 2.60 GHz)	6240L	921.6	0.27648
Intel® Xeon® Gold 6240 Processor (24.75M Cache, 2.60 GHz)	6240	921.6	0.27648
Intel® Xeon® Gold 6238T Processor (30.25M Cache, 1.90 GHz)	6238T	774.4	0.23232
Intel® Xeon® Gold 6238M Processor (30.25M Cache, 2.10 GHz)	6238M	915.2	0.27456
Intel® Xeon® Gold 6238L Processor (30.25M Cache, 2.10 GHz)	6238L	915.2	0.27456
Intel® Xeon® Gold 6238 Processor (30.25M Cache, 2.10 GHz)	6238	915.2	0.27456
Intel® Xeon® Gold 6234 Processor (24.75M Cache, 3.30 GHz)	6234	588.8	0.17664
Intel® Xeon® Gold 6230T Processor (27.5M Cache, 2.10 GHz)	6230T	704	0.21120
Intel® Xeon® Gold 6230N Processor (27.5M Cache, 2.30 GHz)	6230N	768	0.23040
Intel® Xeon® Gold 6230 Processor (27.5M Cache, 2.10 GHz)	6230	704	0.21120
Intel® Xeon® Gold 6226 Processor (19.25M Cache, 2.70 GHz)	6226	729.6	0.21888
Intel® Xeon® Gold 6222V Processor (27.5M Cache, 1.80 GHz)	6222V	704	0.21120
Intel® Xeon® Gold 6212U Processor (35.75M Cache, 2.40 GHz)	6212U	921.6	0.27648
Intel® Xeon® Gold 6210U Processor (27.5M Cache, 2.50 GHz)	6210U	800	0.24000



## APP Metrics for Intel® Microprocessors

Intel® Xeon® Processor			
Processor Group	Processor Name	GFOPS	APP
Intel® Xeon® Gold 6209U Processor (27.5M Cache, 2.10 GHz)	6209U	672	0.20160
Intel® Xeon® Gold 5222 Processor (16.5M Cache, 3.80 GHz)	5222	345.6	0.10368
Intel® Xeon® Gold 5220T Processor (24.75M Cache, 1.90 GHz)	5220T	633.6	0.19008
Intel® Xeon® Gold 5220S Processor (24.75M Cache, 2.70 GHz)	5220S	806.4	0.24192
Intel® Xeon® Gold 5220 Processor (24.75M Cache, 2.20 GHz)	5220	806.4	0.24192
Intel® Xeon® Gold 5218T Processor (22M Cache, 2.10 GHz)	5218T	665.6	0.19968
Intel® Xeon® Gold 5218N Processor (22M Cache, 2.30 GHz)	5218N	716.8	0.21504
Intel® Xeon® Gold 5218B Processor (22M Cache, 2.30 GHz)	5218B	768	0.23040
Intel® Xeon® Gold 5218 Processor (22M Cache, 2.30 GHz)	5218	768	0.23040
Intel® Xeon® Gold 5217 Processor (11M Cache, 3.00 GHz)	5217	614.4	0.18432
Intel® Xeon® Gold 5215M Processor (13.75M Cache, 2.50 GHz)	5215M	448	0.13440
Intel® Xeon® Gold 5215L Processor (13.75M Cache, 2.50 GHz)	5215L	448	0.13440
Intel® Xeon® Gold 5215 Processor (13.75M Cache, 2.50 GHz)	5215	448	0.13440
Intel® Xeon® Silver 4216 Processor (22M Cache, 2.10 GHz)	4216	563.2	0.16896
Intel® Xeon® Silver 4215 Processor (11M Cache, 2.50 GHz)	4215	435.2	0.13056
Intel® Xeon® Silver 4214Y Processor (16.5M Cache, 2.20 GHz)	4214Y	499.2	0.14976
Intel® Xeon® Silver 4214 Processor (16.5M Cache, 2.20 GHz)	4214	499.2	0.14976
Intel® Xeon® Silver 4210 Processor (13.75M Cache, 2.20 GHz)	4210	384	0.11520
Intel® Xeon® Silver 4209T Processor (11M Cache, 2.20 GHz)	4209T	307.2	0.09216
Intel® Xeon® Silver 4208 Processor (11M Cache, 2.10 GHz)	4208	281.6	0.08448
Intel® Xeon® Bronze 3204 Processor (8.25M Cache, 1.90 GHz)	3204	182.4	0.05472
Intel® Xeon® Platinum 8180M Processor (38.5M Cache, 2.50 GHz)	8180M	1523.2	0.45696
Intel® Xeon® Platinum 8180 Processor (38.5M Cache, 2.50 GHz)	8180	1523.2	0.45696
Intel® Xeon® Platinum 8176M Processor (38.5M Cache, 2.10 GHz)	8176M	1164.8	0.34944
Intel® Xeon® Platinum 8176F Processor (38.5M Cache, 2.10 GHz)	8176F	1164.8	0.34944
Intel® Xeon® Platinum 8176 Processor (38.5M Cache, 2.10 GHz)	8176	1164.8	0.34944
Intel® Xeon® Platinum 8170M Processor (35.75M Cache, 2.10 GHz)	8170M	1081.6	0.32448
Intel® Xeon® Platinum 8170 Processor (35.75M Cache, 2.10 GHz)	8170	1081.6	0.32448
Intel® Xeon® Platinum 8168 Processor (33M Cache, 2.70 GHz)	8168	1459.2	0.43776
Intel® Xeon® Platinum 8164 Processor (35.75M Cache, 2.00 GHz)	8164	998.4	0.29952
Intel® Xeon® Platinum 8160T Processor (33M Cache, 2.10 GHz)	8160T	1075.2	0.32256
Intel® Xeon® Platinum 8160M Processor (33M Cache, 2.10 GHz)	8160M	1075.2	0.32256
Intel® Xeon® Platinum 8160F Processor (33M Cache, 2.10 GHz)	8160F	1075.2	0.32256
Intel® Xeon® Platinum 8160 Processor (33M Cache, 2.10 GHz)	8160	1075.2	0.32256
Intel® Xeon® Platinum 8158 Processor (24.75M Cache, 3.00 GHz)	8158	806.4	0.24192
Intel® Xeon® Platinum 8156 Processor (16.5M Cache, 3.60 GHz)	8156	345.6	0.10368
Intel® Xeon® Platinum 8153 Processor (22M Cache, 2.00 GHz)	8153	614.4	0.18432
Intel® Xeon® Gold 6154 Processor (24.75M Cache, 3.00 GHz)	6154	1209.6	0.36288
Intel® Xeon® Gold 6152 Processor (30.25M Cache, 2.10 GHz)	6152	985.6	0.29568
Intel® Xeon® Gold 6150 Processor (24.75M Cache, 2.70 GHz)	6150	1094.4	0.32832
Intel® Xeon® Gold 6148F Processor (27.5M Cache, 2.40 GHz)	6148F	1024	0.30720
Intel® Xeon® Gold 6148 Processor (27.5M Cache, 2.40 GHz)	6148	1024	0.30720
Intel® Xeon® Gold 6146 Processor (24.75M Cache, 3.20 GHz)	6146	806.4	0.24192
Intel® Xeon® Gold 6144 Processor (24.75M Cache, 3.50 GHz)	6144	563.2	0.16896
Intel® Xeon® Gold 6142M Processor (22M Cache, 2.60 GHz)	6142M	819.2	0.24576
Intel® Xeon® Gold 6142F Processor (22M Cache, 2.60 GHz)	6142F	819.2	0.24576



## APP Metrics for Intel® Microprocessors

Intel® Xeon® Processor			
Processor Group	Processor Name	GFLOPS	APP
Intel® Xeon® Gold 6142 Processor (22M Cache, 2.60 GHz)	6142	819.2	0.24576
Intel® Xeon® Gold 6140M Processor (24.75M Cache, 2.30 GHz)	6140M	864	0.25920
Intel® Xeon® Gold 6140 Processor (24.75M Cache, 2.30 GHz)	6140	864	0.25920
Intel® Xeon® Gold 6138T Processor (27.5M Cache, 2.00 GHz)	6138T	768	0.23040
Intel® Xeon® Gold 6138P Processor (27.5M Cache, 2.00 GHz)	6138P	832	0.24960
Intel® Xeon® Gold 6138F Processor (27.5M Cache, 2.00 GHz)	6138F	832	0.24960
Intel® Xeon® Gold 6138 Processor (27.5M Cache, 2.00 GHz)	6138	832	0.24960
Intel® Xeon® Gold 6136 Processor (24.75M Cache, 3.00 GHz)	6136	806.4	0.24192
Intel® Xeon® Gold 6134M Processor (24.75M Cache, 3.20 GHz)	6134M	537.6	0.16128
Intel® Xeon® Gold 6134 Processor (24.75M Cache, 3.20 GHz)	6134	537.6	0.16128
Intel® Xeon® Gold 6132 Processor (19.25M Cache, 2.60 GHz)	6132	761.6	0.22848
Intel® Xeon® Gold 6130T Processor (22M Cache, 2.10 GHz)	6130T	665.6	0.19968
Intel® Xeon® Gold 6130F Processor (22M Cache, 2.10 GHz)	6130F	665.6	0.19968
Intel® Xeon® Gold 6130 Processor (22M Cache, 2.10 GHz)	6130	665.6	0.19968
Intel® Xeon® Gold 6128 Processor (19.25M Cache, 3.40 GHz)	6128	441.6	0.13248
Intel® Xeon® Gold 6126T Processor (19.25M Cache, 2.60 GHz)	6126T	652.8	0.19584
Intel® Xeon® Gold 6126F Processor (19.25M Cache, 2.60 GHz)	6126F	652.8	0.19584
Intel® Xeon® Gold 6126 Processor (19.25M Cache, 2.60 GHz)	6126	652.8	0.19584
Intel® Xeon® Gold 5122 Processor (16.5M Cache, 3.60 GHz)	5122	345.6	0.10368
Intel® Xeon® Gold 5120T Processor (19.25M Cache, 2.20 GHz)	5120T	537.6	0.16128
Intel® Xeon® Gold 5120 Processor (19.25M Cache, 2.20 GHz)	5120	14.9	0.00446
Intel® Xeon® Gold 5119T Processor (19.25M Cache, 1.90 GHz)	5119T	448	0.13440
Intel® Xeon® Gold 5118 Processor (16.5M Cache, 2.30 GHz)	5118	460.8	0.13824
Intel® Xeon® Gold 5117F Processor (19.25M Cache, 2.00 GHz)	5117F	492.8	0.14784
Intel® Xeon® Gold 5115 Processor (13.75M Cache, 2.40 GHz)	5115	384	0.11520
Intel® Xeon® Silver 4116T Processor (16.5M cache, 2.10 GHz)	4116T	422.4	0.12672
Intel® Xeon® Silver 4116 Processor (16.5M Cache, 2.10 GHz)	4116	422.4	0.12672
Intel® Xeon® Silver 4114T Processor (13.75M Cache, 2.20 GHz)	4114T	352	0.10560
Intel® Xeon® Silver 4114 Processor (13.75M Cache, 2.20 GHz)	4114	352	0.10560
Intel® Xeon® Silver 4112 Processor (8.25M Cache, 2.60 GHz)	4112	140.8	0.04224
Intel® Xeon® Silver 4110 Processor (11M Cache, 2.10 GHz)	4110	256	0.07680
Intel® Xeon® Silver 4109T Processor (11M Cache, 2.00 GHz)	4109T	256	0.07680
Intel® Xeon® Silver 4108 Processor (11M Cache, 1.80 GHz)	4108	230.4	0.06912
Intel® Xeon® Bronze 3106 Processor (11M Cache, 1.70 GHz)	3106	204.8	0.06144
Intel® Xeon® Bronze 3104 Processor (8.25M Cache, 1.70 GHz)	3104	153.6	0.04608

Intel Corporation is providing the Export Compliance Product Matrix which contains the information necessary to complete an export assessment against the US Export Administration Regulations and local country export regulations such as Giga Floating Point operations per Second (GFLOPS) and Adjusted Peak Performance (APP) in Weighted Teraflops (WT). All information provided in the Export Compliance Product Matrix is strictly a recommendation to the user, and should be used in conjunction with the US Export Administration Regulations (EAR) and local country export regulations when assessing export requirements for the US and local export country. All the information contained herein are based on Intel product specifications and are subject to change without notice. Intel makes no representation or warranty as to the accuracy or reliability of such specifications. These calculations are provided "AS IS" with no warranties whatsoever, including any warranty of merchantability, non-infringement, fitness for any particular purpose or any warranty otherwise arising out of any proposal, specification or sample. Intel disclaims all liability, including liability for infringement of any proprietary rights, relating to use of information in these calculations. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted herein.