

Speed per Dollar Ratios for Fixed-Point Packaged Processors (Single-Core Scores)

Updated November 2013

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See page 2 for details.



ADI ADSP-218x	8–31
ADI ADSP-219x	9–30
ADI ADSP-BF5xx (Blackfin)	n/a
ADI ADSP-BF60x (Blackfin)	n/a
ADI ADSP-TS201S (TigerSHARC)	16–23
ADI ADSP-TS202S/203S (TigerSHARC)	24–28
Freescale B4860 (SC3900)	n/a
Freescale DSP563xx ¹	n/a
Freescale DSP5672x ¹	n/a
Freescale DSP5685x/56F8xxx (56800E)	n/a
Freescale DSP56F8xx (56800)	n/a
Freescale MSC71xx (SC1400)	60–78
Freescale MSC814x (SC3400)	n/a
Freescale MSC815x/825x (SC3850)	n/a
Freescale MSC815x/825x (SC3850) ²	n/a
Freescale MSC81xx (SC140)	n/a
Marvell PXA255	n/a
Marvell PXA27x	n/a
Microchip dsPIC3x	12–111
NEC µPD77050 (SPXK5)	n/a
Qualcomm Hexagon V2 (1 thread) ³	n/a
Qualcomm Hexagon V2 (6 threads) ³	n/a
Qualcomm Hexagon V4 (1 thread) ³	n/a
Qualcomm Hexagon V4 (3 threads) ³	n/a
Qualcomm Hexagon V5 (1 thread) ³	n/a
Qualcomm Hexagon V5 (3 threads) ³	n/a
Texas Instruments C55x+ ²	n/a
Texas Instruments OMAP35x ⁴	n/a
Texas Instruments TMS320C54x	n/a
Texas Instruments TMS320C55x	49–302
Texas Instruments TMS320C62x	n/a
Texas Instruments TMS320C64x	45–198
Texas Instruments TMS320C64x+	n/a
Texas Instruments TMS320C66x	n/a
VeriSilicon VSI40x	n/a

¹ Benchmarked with 24-bit fixed-point data; all other processors benchmarked with 16-bit fixed-point data

² Not available to the general market

BDTI^{mark}2000™/\$

BDTI^{sim}Mark2000™/\$

BDTI^{sim}Mark2000™ scores may be based on projected clock speeds. For information, see www.BDTI.com/Services/Benchmarks

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Processor Family	Clock Rate (min-max)	BDTImark2000™, BDTIsimMark2000™ (min-max)	Cost 1K units (min-max)	BDTImark2000™/\$, BDTIsimMark2000™/\$ (min-max)
ADI ADSP-218x	80 MHz	240	\$8-31	8-31
ADI ADSP-219x	100-160 MHz	250-410	\$13-33	9-30
ADI ADSP-BF5xx (Blackfin)	200-600 MHz	1120-3360	\$4-43	n/a
ADI ADSP-BF60x (Blackfin)	400-500 MHz	5260-6580	\$15-22	n/a
ADI ADSP-TS201S (TigerSHARC)	500-600 MHz	5330-6400	\$252-339	16-23
ADI ADSP-TS202S/203S (TigerSHARC)	500 MHz	5130	\$184-210	24-28
Freescale B4860 (SC3900)	1200 MHz	37460	\$164-295	n/a
Freescale DSP563xx ¹	150-275 MHz	450-820	\$6-46	n/a
Freescale DSP5672x ¹	200-250 MHz	590-740	\$6-11	n/a
Freescale DSP5685x/56F8xxx (56800E)	32-120 MHz	90-340	n/a	n/a
Freescale DSP56F8xx (56800)	60-80 MHz	80-110	n/a	n/a
Freescale MSC71xx (SC1400)	200-300 MHz	2240-3370	\$37-43	60-78
Freescale MSC814x (SC3400)	800-1000 MHz	9520-11900	\$122-147	n/a
Freescale MSC815x/825x (SC3850)	1000 MHz	15420	\$68-157	n/a
Freescale MSC815x/825x (SC3850) ²	1200 MHz	18500	n/a	n/a
Freescale MSC81xx (SC140)	300-500 MHz	3370-5610	\$78-121	n/a
Marvell PXA255	200-400 MHz	470-930	n/a	n/a
Marvell PXA27x	312-624 MHz	1070-2140	n/a	n/a
Microchip dsPIC3x	16-70 MHz	50-220	\$2-8	12-111
NEC μPD77050 (SPXK5)	250 MHz	1770	n/a	n/a
Qualcomm Hexagon V2 (1 thread) ³	67-100 MHz	1040-1550	n/a	n/a
Qualcomm Hexagon V2 (6 threads) ³	67-100 MHz	6240-9300	n/a	n/a
Qualcomm Hexagon V4 (1 thread) ³	100-233 MHz	1810-4220	n/a	n/a
Qualcomm Hexagon V4 (3 threads) ³	100-233 MHz	5430-12660	n/a	n/a
Texas Instruments C55x+ ²	400-500 MHz	2530-3160	n/a	n/a
Texas Instruments OMAP35x ⁴	600-720 MHz	4540-5450	\$23-38	n/a
Texas Instruments TMS320C54x	50-160 MHz	150-500	\$4-134	n/a
Texas Instruments TMS320C55x	50-300 MHz	240-1460	\$2-18	49-302
Texas Instruments TMS320C62x	150-300 MHz	960-1920	n/a	n/a
Texas Instruments TMS320C64x	400-1000 MHz	3650-9130	\$18-202	45-198
Texas Instruments TMS320C64x+	400-1200 MHz	4390-13170	\$10-216	n/a
Texas Instruments TMS320C66x	850-1500 MHz	11350-20030	\$34-399	n/a
VeriSilicon VSI40x	120-200 MHz	560-940	n/a	n/a

¹ Benchmarked with 24-bit fixed-point data; all other processors benchmarked with 16-bit fixed-point data

² Not available to the general market

BDTImark2000™, BDTIsimMark2000™: The BDTImark2000™ and BDTIsimMark2000™ provide a summary measure of signal processing speed. BDTIsimMark2000™ scores may be based on projected clock speeds. For information see www.bdti.com/Services/Benchmarks

Note: In general, BDTImark2000™/\$ and BDTIsimMark2000™/\$ scores cannot be computed from the speed and pricing data presented here. For example, the fastest processors are not always the most expensive processors. Therefore, it is not always possible to calculate a speed per dollar ratio by dividing the maximum speed for a family by the maximum price for the family.