

Speed per Dollar Ratios for Fixed-Point Packaged Processors

Updated July 2010

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See page 2 for details.



ADI ADSP-218x	9-41
ADI ADSP-219x	10-35
ADI ADSP-BF5xx (Blackfin) ¹	43-498
ADI ADSP-TS201S (TigerSHARC)	23-26
ADI ADSP-TS202S/203S (TigerSHARC)	34-39
Freescale DSP563xx ²	n/a
Freescale DSP5672x ²	n/a
Freescale DSP56F8xx (56800)	9-26
Freescale DSP5685x/56F8xxx (56800E)	8-77
Freescale MSC71xx (SC1400)	69-90
Freescale MSC81xx (SC140) ¹	n/a
Freescale MSC814x (SC3400) ¹	n/a
Freescale MSC815x/825x (SC3850) ¹	n/a
Marvell PXA255	n/a
Marvell PXA27x	n/a
Microchip dsPIC3x	14-68
NEC μPD77050 (SPXK5)	n/a
Texas Instruments TMS320C54x ¹	17-64
Texas Instruments TMS320C55x	61-364
Texas Instruments C55x+ ³	n/a
Texas Instruments TMS320C62x	n/a
Texas Instruments OMAP35x	109-201
Texas Instruments TMS320C64x	51-261
Texas Instruments TMS320C64x+	41-535
VeriSilicon VSI40x	n/a

¹ For one core

² Benchmarked with 24-bit fixed-point data; all other processors benchmarked with 16-bit fixed-point data

³ The C55x+ is only available in custom wireless handset products

BDTIsimMark2000™ scores may be based on projected clock speeds. For information, see www.BDTI.com/benchmarks.html

■ BDTImark2000™/\$
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Processor Family	Clock Rate (min-max)	BDTImark2000™, BDTIsimMark2000™ (min-max)	Cost ¹ (min-max)	BDTImark2000™/\$, BDTIsimMark2000™/\$ (min-max)
ADI ADSP-218x	80 MHz	240	\$6-27	9-41
ADI ADSP-219x	100-160 MHz	250-410	\$12-30	10-35
ADI ADSP-BF5xx (Blackfin) ²	200-600 MHz	1120-3360	\$4.50-32	43-498
ADI ADSP-TS201S (TigerSHARC)	500-600 MHz	5330-6400	\$228-248	23-26
ADI ADSP-TS202S/203S (TigerSHARC)	500 MHz	5130	\$133-151	34-39
Freescale DSP563xx ³	80-275 MHz	240-820	\$4-43	n/a
Freescale DSP5672x ³	200-250 MHz	590-740	\$6-11	n/a
Freescale DSP56F8xx (56800)	60-80 MHz	80-110	\$3-13	9-26
Freescale DSP5685x/56F8xxx (56800E)	32-120 MHz	90-340	\$2-20	8-77
Freescale MSC71xx (SC1400)	200-300 MHz	2240-3370	\$32-38	69-90
Freescale MSC81xx (SC140) ²	300-500 MHz	3370-5610	\$52-115	n/a
Freescale MSC814x (SC3400) ²	800-1000 MHz	9520-11900	\$111-156	n/a
Freescale MSC815x/825x (SC3850) ²	800-1000 MHz	12330-15420	\$75-174	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	30-40 MHz	90-130	\$2-7	14-68
NEC μPD77050 (SPXK5)	250 MHz	1770	n/a	n/a
Texas Instruments TMS320C54x ²	50-160 MHz	150-500	\$3-24	17-64
Texas Instruments TMS320C55x	100-300 MHz	490-1460	\$4-15	61-364
Texas Instruments C55x+ ⁴	400-500 MHz	2530-3160	n/a	n/a
Texas Instruments TMS320C62x	150-300 MHz	960-1920	n/a	n/a
Texas Instruments OMAP35x ⁵	600-720 MHz	4540-5450	\$23-50 ⁵	109-201
Texas Instruments TMS320C64x	400-1000 MHz	3650-9130	\$14-179	51-261
Texas Instruments TMS320C64x+	400-1200 MHz	4390-13170	\$8-191	41-535
VeriSilicon VSI40x	120-200 MHz	560-940	n/a	n/a

¹ Cost is based on vendors' quotations for 10,000 units, except where noted

² For one core

³ Benchmarked with 24-bit fixed-point data; all other processors benchmarked with 16-bit fixed-point data

⁴ The C55x+ is only available in custom wireless handset products

⁵ Cost for Quantity 1K

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/benchmarks.html

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.