

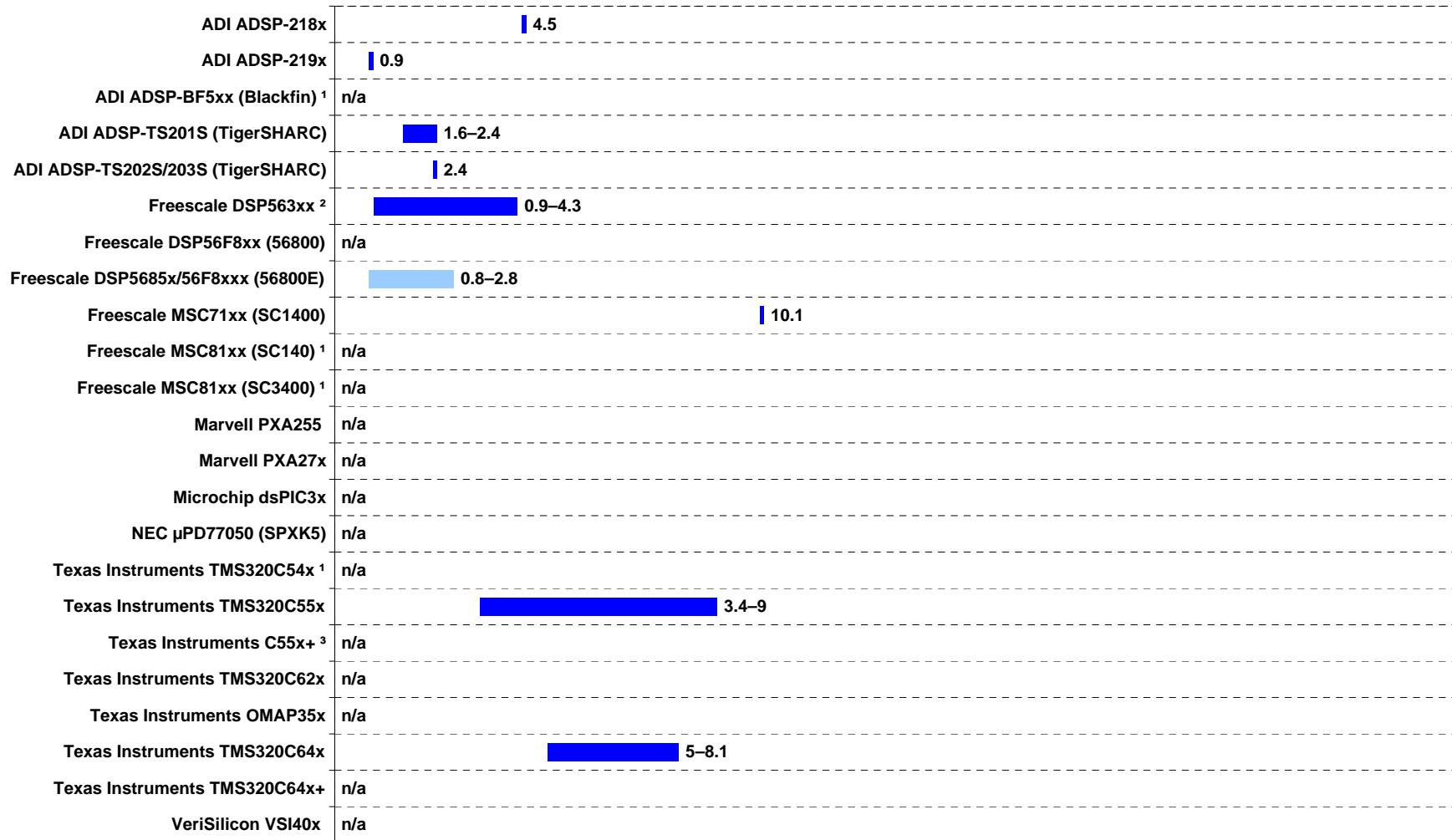
# Speed per Milliwatt Ratios for Fixed-Point Packaged Processors

Updated April 2009

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See page 2 for details.



<sup>1</sup> For one core

<sup>2</sup> Benchmarked with 24-bit fixed-point data; all other processors benchmarked with 16-bit fixed-point data

<sup>3</sup> 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](http://www.BDTI.com/benchmarks.html)

■ BDTImark2000™/mW  
 ■ BDTIsimMark2000™/m

# Speed per Milliwatt Ratios for Fixed-Point Packaged Processors

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Processor Family	Clock Rate (min-max)	BDTI <sup>mark</sup> 2000™, BDTI <sup>sim</sup> Mark2000™ (min-max)	Power (min-max)	BDTI <sup>mark</sup> 2000™/mW, BDTI <sup>sim</sup> Mark2000™/mW (min-max)
ADI ADSP-218x	80 MHz	<b>240</b>	54 mW	<b>4.5</b>
ADI ADSP-219x	100–160 MHz	<b>250–410</b>	460 mW	<b>0.9</b>
ADI ADSP-BF5xx (Blackfin) <sup>1</sup>	200–750 MHz	<b>1120–4190</b>	n/a	n/a
ADI ADSP-TS201S (TigerSHARC)	500–600 MHz	<b>5330–6400</b>	2583–3907 mW	<b>1.6–2.4</b>
ADI ADSP-TS202S/203S (TigerSHARC)	500 MHz	<b>5130</b>	2583 mW	<b>2.4</b>
Freescale DSP563xx <sup>2</sup>	80–275 MHz	<b>240–820</b>	n/a	<b>0.9–4.3</b>
Freescale DSP56F8xx (56800)	60–80 MHz	<b>80–110</b>	n/a	n/a
<i>Freescale DSP5685x/56F8xxx (56800E)</i>	32–120 MHz	<i>90–340</i>	n/a	<i>0.8–2.8</i>
Freescale MSC71xx (SC1400)	200–300 MHz	<b>2240–3370</b>	222–333 mW	<b>10.1</b>
Freescale MSC81xx (SC140) <sup>1</sup>	200–500 MHz	<b>2240–5610</b>	n/a	n/a
Freescale MSC81xx (SC3400) <sup>1</sup>	800–1000 MHz	<b>9520–11900</b>	n/a	n/a
Marvell PXA255	200–400 MHz	<b>470–930</b>	n/a	n/a
Marvell PXA27x	312–624 MHz	<b>1070–2140</b>	n/a	n/a
Microchip dsPIC3x	30–40 MHz	<i>90–130</i>	n/a	n/a
NEC μPD77050 (SPXK5)	250 MHz	<i>1770</i>	n/a	n/a
Texas Instruments TMS320C54x <sup>1</sup>	50–160 MHz	<b>150–500</b>	n/a	n/a
Texas Instruments TMS320C55x	108–300 MHz	<b>520–1460</b>	58–300 mW	<b>3.4–9</b>
<i>Texas Instruments C55x+ <sup>3</sup></i>	400–500 MHz	<i>2530–3160</i>	n/a	n/a
Texas Instruments TMS320C62x	150–300 MHz	<b>960–1920</b>	n/a	n/a
<i>Texas Instruments OMAP35x</i>	600 MHz	<i>4540</i>	n/a	n/a
Texas Instruments TMS320C64x	400–1000 MHz	<b>3650–9130</b>	654–1303 mW	<b>5–8.1</b>
Texas Instruments TMS320C64x+	300–1200 MHz	<b>3290–13170</b>	n/a	n/a
VeriSilicon VSI40x	120–200 MHz	<b>560–940</b>	n/a	n/a

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**BDTI<sup>mark</sup>2000™, BDTI<sup>sim</sup>Mark2000™:** The BDTI<sup>mark</sup>2000™ and BDTI<sup>sim</sup>Mark2000™ provide a summary measure of signal processing speed. BDTI<sup>sim</sup>Mark2000™ scores may be based on projected clock speeds. For information see [www.BDTI.com/benchmarks.html](http://www.BDTI.com/benchmarks.html).

Note: In general, BDTI<sup>mark</sup>2000™/mW and BDTI<sup>sim</sup>Mark2000™/mW scores cannot be computed from the speed and power data presented here. For example, the fastest processors are not always the highest-power processors. Therefore, it is not always possible to calculate a speed per milliwatt ratio by dividing the maximum speed for a family by the maximum power for the family.