## Speed Scores for Fixed-Point Licensable Cores (130 nm)

BDT

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ARM ARM1136 (330 MHz)		1160			
ARM ARM1176 ( 335MHz)		1200			
ARM ARM7 (145 MHz)	160				
ARM ARM9 (255 MHz)	320				
ARM ARM9E (265 MHz)	550				
ARM Cortex-A8		7.6 per MHz	Clock speed una	vailable	
ARM Cortex-R4		3.8 per MHz	Clock speed una	vailable	
CEVA CEVA-X1620 (330 MHz)				2660	
CEVA Teaklite-III (335 MHz)			2140		
Coreworks Sideworks.				2440	
ITRI PAC DSP		8.8 per MHz	Clock speed una	vailable	
MIPS MIPS32 24KE (335 MHz)		1000			
Tensilica ConnX 545CK (245 MHz)					4070
Toshiba Venezia	-	7.9 per MHz	Clock speed una	vailable	
VeriSilicon ZSP400 (165 MHz)		780			
VeriSilicon ZSP500 (205 MHz)			1620		
				BDTImark2000 <sup>™</sup> BDTIsimMark2	2000™

All processors benchmarked with 16-bit fixed-point data. All scores use worst-case clock speeds for the TSMC CL013G process and ARM Artisan SAGE-X library. Vendors can choose different speed/area/power trade-offs; to understand the trade-offs, please view all BDTI metrics for each core. BDTIsimMark2000<sup>™</sup> scores may be based on projected clock speeds. For information, see www.BDTI.com/Services/Benchmarks. <sup>1</sup>Coreworks scores include both a customized SideWorks DSP engine and the FireWorks 32-bit RISC processor. The SideWorks core used to implement the BDTI DSP Kernel Benchmarks includes four 16-bit multiplier units, six 32-bit ALUs, five shift units, six data multiplexing units, two data de-multiplexing units, two bit-reverse units, a bit unpack unit, and 6K bytes of memory. Different versions of the SideWorks core will yield different performance, power consumption, and die size figures than those reported here.