

NatureDSP Signal for HiFi4

Digital Signal Processing

Performance data

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API Revision 4.30

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General Settings and Requirements

Library might be built with different memory modeling options. This is controlled by makefile variable `MEM_MODEL`.

memory modeling	memory map	ISS options	Memory simulation	Location of data	Memory simulation
<code>MEM_MODEL=0</code>		not required	not done	not done	not done
<code>MEM_MODEL=1</code>	sim-local	<code>--mem-model</code>	DRAM	DRAM	DRAM
<code>MEM_MODEL=2</code>	sim	<code>--mem-model</code>	SRAM	SRAM	DRAM, SRAM, cache

Detailed information about memory maps, ISS memory modeling options might be found in the ISS and linker guides. For performance testing, the target system should have enough DRAM to be built with `MEM_MODEL=1`.

If your target core does not have enough DRAM for the whole test framework, then building the code with `MEM_MODEL=1` will fail. You may still proceed with functional validation using `MEM_MODEL=2` or `MEM_MODEL=0`, but the cycle measurements in this mode will be inaccurate,

NOTE: this does not mean that the library code is limited to use in such systems - it just means that whole test harness with full library do not fit into the memory of particular core.

In case of xws package imported in Xtensa Xplorer, the user needs to select proper target configuration, memory modeling options and memory maps from the "Target" dropdown. Default value of Target is with `MEM_MODEL=2`. If you are looking for cycle measurement, then select a target with `MEM_MODEL=1`. With `MEM_MODEL=2`, cycle measurements are taken with warmed up Caches, i.e., the required library function is executed once before starting execution for cycles measurement for that library function, so that Cache will have the partial code and data already in Cache.

In case, user wants to execute without warmup, then add a command line argument "`-nowarmup`", it invalidates cache before each cycle measurement.

All data presented below are given with memory modeling (build with `MEM_MODEL=1` and run simulator with `--mem-model`). This performance measurement is done using the Xtensa Xplorer and Tools version RI-2020.4 using xcc compiler. Core used is HiFi4 + VFPU (bd5) with xclib configurations

Performance Briefs

This chapter collects brief performance data for library functions.

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
FIR Filters			
Filtering			
<code>bkfir16x16_process</code>	Fast Real FIR filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 80; M: 256	2909 (7.0 MACs/cycle)
<code>bkfir16x16_process</code>	Real FIR filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 80; M: 256	2981 (6.9 MACs/cycle)
<code>bkfir24x24p_process</code>	Fast Real FIR filter (24-bit data, 24-bit packed internal delay line buffer and internal coefficients storage)	N: 80; M: 256	5438 (3.8 MACs/cycle)
<code>bkfir32x16_process</code>	Fast Real FIR filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 80; M: 256	3628 (5.6 MACs/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
bkfir32x32_process	Fast Real FIR filter (32-bit data, 32-bit coefficients, 32-bit outputs)	N: 80; M: 256	5396 (3.8 MACs/cycle)
bkfir32x32ep_processes	Fast Real FIR filter (32-bit data, 32-bit coefficients, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 80; M: 256	5580 (3.7 MACs/cycle)
bkfira32x16_process	Real FIR filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 80; M: 256	4259 (4.8 MACs/cycle)
bkfira32x32_process	Real FIR filter (32-bit data, 32-bit coefficients, 32-bit outputs)	N: 80; M: 256	5608 (3.7 MACs/cycle)
bkfira32x32ep_processes	Real FIR filter (32-bit data, 32-bit coefficients, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 80; M: 256	5768 (3.6 MACs/cycle)
cxfir16x16_process	Fast Complex Block FIR Filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 80; M: 128	6855 (6.0 MACs/cycle)
cxfir32x16_process	Fast Complex Block FIR Filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 80; M: 128	10838 (3.8 MACs/cycle)
cxfir32x32_process	Fast Complex Block FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs)	N: 80; M: 128	10817 (3.8 MACs/cycle)
cxfir32x32ep_processes	Fast Complex Block FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 80; M: 128	10918 (3.8 MACs/cycle)
stereo_bkfir16x16_process	Fast Real FIR Stereo filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 80; M: 256	6112 (6.7 MACs/cycle)
stereo_bkfir32x32_process	Fast Real FIR Stereo filter (32-bit data, 32-bit coefficients, 32-bit outputs)	N: 80; M: 256	10884 (3.8 MACs/cycle)
bkfiraf_process	Real FIR filter (floating point data)	N: 512; M: 32	7454 (2.2 MACs/cycle)
bkfirf_process	Fast Real FIR filter (floating point data)	N: 512; M: 32	7693 (2.1 MACs/cycle)
stereo_bkfirf_processes	Fast Real FIR Stereo filter (floating point data)	N: 512; M: 32	17957 (1.8 MACs/cycle)
cxfirf_process	Fast Complex Block FIR Filter (floating point data)	N: 512; M: 32	19083 (3.4 MACs/cycle)
Decimation			
firdec16x16_process	Decimating Block Real FIR Filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 1024; M: 256; D: 2	46109 (5.7 MACs/cycle)
firdec16x16_process	Decimating Block Real FIR Filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 1024; M: 256; D: 3	59741 (4.4 MACs/cycle)
firdec16x16_process	Decimating Block Real FIR Filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 1024; M: 256; D: 4	39199 (6.7 MACs/cycle)
firdec32x16_process	Decimating Block Real FIR Filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 2	38949 (6.7 MACs/cycle)
firdec32x16_process	Decimating Block Real FIR Filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 3	50067 (5.2 MACs/cycle)
firdec32x16_process	Decimating Block Real FIR Filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 4	43045 (6.1 MACs/cycle)
firdec32x32_process	Decimating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 2	71711 (3.7 MACs/cycle)
firdec32x32_process	Decimating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 3	73896 (3.5 MACs/cycle)
firdec32x32_process	Decimating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 4	74271 (3.5 MACs/cycle)
firdec32x32ep_processes	Decimating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 1024; M: 256; D: 2	72609 (3.6 MACs/cycle)
firdec32x32ep_processes	Decimating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 1024; M: 256; D: 3	74279 (3.5 MACs/cycle)
firdec32x32ep_processes	Decimating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 1024; M: 256; D: 4	74020 (3.5 MACs/cycle)
firdecf_process	Decimating Block Real FIR Filter (floating point data)	N: 1024; M: 256; D: 2	71703 (3.7 MACs/cycle)
firdecf_process	Decimating Block Real FIR Filter (floating point data)	N: 1024; M: 256; D: 3	99354 (2.6 MACs/cycle)
firdecf_process	Decimating Block Real FIR Filter (floating point data)	N: 1024; M: 256; D: 4	114714 (2.3 MACs/cycle)
Interpolation			
firinterp16x16_process	Interpolating Block Real FIR Filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 1024; M: 256; D: 2	80539 (6.5 MACs/cycle)
firinterp16x16_process	Interpolating Block Real FIR Filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 1024; M: 256; D: 3	121957 (6.4 MACs/cycle)
firinterp16x16_process	Interpolating Block Real FIR Filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 1024; M: 256; D: 4	161445 (6.5 MACs/cycle)
firinterp32x16_process	Interpolating Block Real FIR Filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 2	77992 (6.7 MACs/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
firinterp32x16_process	Interpolating Block Real FIR Filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 3	116911 (6.7 MACs/cycle)
firinterp32x16_process	Interpolating Block Real FIR Filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 4	155948 (6.7 MACs/cycle)
firinterp32x32_process	Interpolating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 2	139816 (3.7 MACs/cycle)
firinterp32x32_process	Interpolating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 3	216361 (3.6 MACs/cycle)
firinterp32x32_process	Interpolating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 4	287017 (3.7 MACs/cycle)
firinterp32x32ep_process	Interpolating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 1024; M: 256; D: 2	142116 (3.7 MACs/cycle)
firinterp32x32ep_process	Interpolating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 1024; M: 256; D: 3	219562 (3.6 MACs/cycle)
firinterp32x32ep_process	Interpolating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 1024; M: 256; D: 4	292392 (3.6 MACs/cycle)
firinterp32x32ep_process	Interpolating Block Real FIR Filter (floating point data)	N: 1024; M: 256; D: 2	134295 (3.9 MACs/cycle)
firinterp32x32ep_process	Interpolating Block Real FIR Filter (floating point data)	N: 1024; M: 256; D: 3	221465 (3.6 MACs/cycle)
firinterp32x32ep_process	Interpolating Block Real FIR Filter (floating point data)	N: 1024; M: 256; D: 4	269082 (3.9 MACs/cycle)
Correlation, Convolution, Despreading, LMS			
fir_convoll16x16	Fast Circular Convolution (16x16-bit data, 16-bit outputs)	N: 256; M: 80	3519 (5.8 MACs/cycle)
fir_convoll32x16	Fast Circular Convolution (32x16-bit data, 32-bit outputs)	N: 256; M: 80	3735 (5.5 MACs/cycle)
fir_convoll32x32	Fast Circular Convolution (32x32-bit data, 32-bit outputs)	N: 256; M: 80	5594 (3.7 MACs/cycle)
fir_convoll32x32ep	Fast Circular Convolution (32x32-bit data, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 256; M: 80	6418 (3.2 MACs/cycle)
fir_convolla16x16	Circular Convolution (16x16-bit data, 16-bit outputs)	N=256; M=80	3867 (5.3 MACs/cycle)
fir_convolla32x16	Circular Convolution (32x16-bit data, 32-bit outputs)	N: 256; M: 80	4003 (5.1 MACs/cycle)
fir_convolla32x32	Circular Convolution (32x32-bit data, 32-bit outputs)	N=256; M=80	5905 (3.5 MACs/cycle)
fir_convolla32x32ep	Circular Convolution (32x32-bit data, 32-bit outputs) using 72-bit accumulator for intermediate computations	N=256; M=80	6580 (3.1 MACs/cycle)
cxfir_convoll32x16	Fast Circular Convolution (32x16-bit complex data, 32-bit complex outputs)	N: 256; M: 80	16456 (5.0 MACs/cycle)
cxfir_convolla32x16	Circular Convolution (32x16-bit complex data, 32-bit complex outputs)	N: 256; M: 80	17091 (4.8 MACs/cycle)
fir_lconvolla16x16	Linear Convolution (16x16-bit data, 16-bit outputs)	N=256; M=80	4213 (4.9 MACs/cycle)
fir_lconvolla32x32	Linear Convolution (32x32-bit data, 32-bit outputs)	N=256; M=80	11912 (1.7 MACs/cycle)
fir_xcorrll16x16	Fast Circular Correlation (16x16-bit data, 16-bit outputs)	N: 256; M: 80	3662 (5.6 MACs/cycle)
fir_xcorrll32x16	Fast Circular Correlation (32x16-bit data, 32-bit outputs)	N: 256; M: 80	3561 (5.8 MACs/cycle)
fir_xcorrll32x32	Fast Circular Correlation (32x32-bit data, 32-bit outputs)	N: 256; M: 80	5578 (3.7 MACs/cycle)
fir_xcorrll32x32ep	Fast Circular Correlation (32x32-bit data, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 256; M: 80	6471 (3.2 MACs/cycle)
cxfir_xcorrll32x32	Fast Circular Correlation (32x32-bit complex data, 32-bit complex outputs)	N: 256; M: 80	21251 (3.9 MACs/cycle)
fir_xcorrlla16x16	Circular Correlation (16x16-bit data, 16-bit outputs)	N: 256; M: 80	3869 (5.3 MACs/cycle)
fir_xcorrlla32x16	Circular Correlation (32x16-bit data, 32-bit outputs)	N: 256; M: 80	4037 (5.1 MACs/cycle)
fir_xcorrlla32x32	Circular Correlation (32x32-bit data, 32-bit outputs)	N: 256; M: 80	5974 (3.4 MACs/cycle)
fir_xcorrlla32x32ep	Circular Correlation (32x32-bit data, 32-bit outputs) using 72-bit accumulator for	N: 256; M: 80	6644 (3.1 MACs/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
	intermediate computations		
fir_lxcorral6x16	Linear Correlation (16x16-bit data, 16-bit outputs)	N=256; M=80	4212 (4.9 MACs/cycle)
fir_lxcorra32x32	Linear Correlation (32x32-bit data, 32-bit outputs)	N=256; M=80	11912 (1.7 MACs/cycle)
fir_acorrl6x16	Fast Circular Autocorrelation (16-bit data, 16-bit outputs)	N: 256	9947 (6.6 MACs/cycle)
fir_acorr32x32	Fast Circular Autocorrelation (32-bit data, 32-bit outputs)	N: 256	16853 (3.9 MACs/cycle)
fir_acorr32x32ep	Fast Circular Autocorrelation (32-bit data, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 256	17607 (3.7 MACs/cycle)
fir_acorral6x16	Circular Autocorrelation (16-bit data, 16-bit outputs)	N=256	9633 (6.8 MACs/cycle)
fir_acorra32x32	Circular Autocorrelation (32-bit data, 32-bit outputs)	N: 256	17063 (3.8 MACs/cycle)
fir_acorra32x32ep	Circular Autocorrelation (32-bit data, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 256	17732 (3.7 MACs/cycle)
fir_lacorral6x16	Linear Autocorrelation (16-bit data, 16-bit outputs)	N=256	5259 (6.2 MACs/cycle)
fir_lacorra32x32	Linear Autocorrelation (32-bit data, 32-bit outputs)	N=256	17886 (1.8 MACs/cycle)
fir_blms16x16	Blockwise Adaptive LMS Algorithm for Real Data (16-bit coefficients, 16-bit data, 16-bit output)	N: 80; M: 128	3732 (5.5 MACs/cycle)
fir_blms16x32	Blockwise Adaptive LMS Algorithm for Real Data (32-bit coefficients, 16-bit data, 16-bit output)	N: 80; M: 128	3598 (5.7 MACs/cycle)
fir_blms32x32	Blockwise Adaptive LMS Algorithm for Real Data (32-bit coefficients, 32-bit data, 32-bit output)	N: 80; M: 128	5684 (3.6 MACs/cycle)
fir_blms32x32ep	Blockwise Adaptive LMS Algorithm for Real Data (32-bit coefficients, 32-bit data, 32-bit output) using 72-bit accumulator for intermediate computations	N: 80; M: 128	6217 (3.3 MACs/cycle)
cxfir_blms32x32	Blockwise Adaptive LMS Algorithm for Complex Data (32-bit coefficients, 32-bit data, 32-bit output)	N: 80; M: 128	21932 (3.7 MACs/cycle)
fir_convolf	Fast Circular Convolution (floating point data)	N: 256; M: 80	6917 (3.0 MACs/cycle)
fir_convola	Circular Convolution (floating point data)	N: 256; M: 80	7460 (2.7 MACs/cycle)
fir_xcorr	Fast Circular Correlation (floating point data)	N: 256; M: 80	6600 (3.1 MACs/cycle)
cxfir_xcorr	Circular Correlation (complex floating point data)	N: 256; M: 80	21637 (3.8 MACs/cycle)
fir_xcorra	Circular Correlation (floating point data)	N: 256; M: 80	7507 (2.7 MACs/cycle)
cxfir_xcorra	Circular Correlation (complex floating point data)	N: 256; M: 80	21643 (3.8 MACs/cycle)
fir_acorr	Fast Circular Autocorrelation (floating point data)	N: 256	17871 (3.7 MACs/cycle)
fir_acorra	Circular Autocorrelation (floating point data)	N: 256	19340 (3.4 MACs/cycle)
fir_blms	Blockwise Adaptive LMS Algorithm for Real Data (floating point data)	N: 80; M: 128	6598 (3.1 MACs/cycle)
cxfir_blms	Blockwise Adaptive LMS Algorithm for Complex Data (floating point data)	N: 80; M: 128	21562 (3.8 MACs/cycle)
2D convolution			
conv2d 3x3 8x8	2D Convolution (3x3 8-bit kernel, 8-bit data)	M=3,N=3,P=256, Q=256	173167 (3.4 MACs/cycle)
conv2d 5x5 8x8	2D Convolution (5x5 8-bit kernel, 8-bit data)	M=5,N=5,P=256, Q=256	494918 (3.3 MACs/cycle)
conv2d 11x7 8x8	2D Convolution (11x7 8-bit kernel, 8-bit data)	M=11,N=7,P=256, Q=256	900612 (5.6 MACs/cycle)
conv2d 3x3 8x16	2D Convolution (3x3 8-bit kernel, 16-bit data)	M=3,N=3,P=256, Q=256	139893 (4.2 MACs/cycle)
conv2d 5x5 8x16	2D Convolution (5x5 8-bit kernel, 16-bit data)	M=5,N=5,P=256, Q=256	483476 (3.4 MACs/cycle)
conv2d 11x7 8x16	2D Convolution (11x7 8-bit kernel, 16-bit data)	M=11,N=7,P=256, Q=256	849330 (5.9 MACs/cycle)
conv2d 3x3 16x16	2D Convolution (3x3 16-bit kernel, 16-bit data)	M=3,N=3,P=256, Q=256	139874 (4.2 MACs/cycle)
conv2d 5x5 16x16	2D Convolution (5x5 16-bit kernel, 16-bit data)	M=5,N=5,P=256, Q=256	483186 (3.4 MACs/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
conv2d 11x7 16x16	2D Convolution (11x7 16-bit kernel, 16-bit data)	M=11,N=7,P=256,Q=256	849272 (5.9 MACs/cycle)
conv2d 3x3f	2D Convolution (3x3 kernel, floating point data)	M=3,N=3,P=128,Q=256	169992 (1.7 MACs/cycle)
conv2d 5x5f	2D Convolution (5x5 kernel, floating point data)	M=5,N=5,P=128,Q=256	406588 (2.0 MACs/cycle)
conv2d 11x7f	2D Convolution (11x7 kernel, floating point data)	M=11,N=7,P=128,Q=256	920055 (2.7 MACs/cycle)
IIR Filters			
Biquad Filters			
bqriir16x16_df1	Bi-quad Real Block IIR, DFI (16-bit data, 16-bit coefficients, 16-bit intermediate stage outputs)	N=256, M=8, gain=1	4890 (2.4 cycles/(biquad*pts)
bqriir16x16_df2	Bi-quad Real Block IIR, DFII (16-bit data, 16-bit coefficients, 16-bit intermediate stage outputs)	N=256, M=8, gain=1	4896 (2.4 cycles/(biquad*pts)
bqriir32x16_df1	Bi-quad Real Block IIR, DFI (32-bit data, 16-bit coefficients, 32-bit intermediate stage outputs)	N=256, M=8, gain=1	3461 (1.7 cycles/(biquad*pts)
bqriir32x16_df2	Bi-quad Real Block IIR, DFII (32-bit data, 16-bit coefficients, 32-bit intermediate stage outputs)	N=256, M=8, gain=1	3933 (1.9 cycles/(biquad*pts)
bqriir32x32_df1	Bi-quad Real Block IIR, DFI (32-bit data, 32-bit coefficients, 32-bit intermediate stage outputs)	N=256, M=8, gain=1	3396 (1.7 cycles/(biquad*pts)
bqriir32x32_df2	Bi-quad Real Block IIR, DFII (32-bit data, 32-bit coefficients, 32-bit intermediate stage outputs)	N=256, M=8, gain=1	5923 (2.9 cycles/(biquad*pts)
stereo_bqriir16x16_df1	Bi-quad Stereo Block Stereo IIR, DFI (16-bit data, 16-bit coefficients, 16-bit intermediate stage outputs)	N=256, M=8, gain=1	10596 (5.2 cycles/(biquad*pts)
stereo_bqriir32x16_df1	Bi-quad Stereo Block Stereo IIR, DFI (32-bit data, 16-bit coefficients, 32-bit intermediate stage outputs)	N=256, M=8, gain=1	9631 (4.7 cycles/(biquad*pts)
stereo_bqriir32x32_df1	Bi-quad Stereo Block Stereo IIR, DFI (32-bit data, 32-bit coefficients, 32-bit intermediate stage outputs)	N=256, M=8, gain=1	8425 (4.1 cycles/(biquad*pts)
bqriirf_df1	Bi-quad Real Block IIR, DFI (floating point data)	N=512, M=16	22090 (2.7 cycles/(biquad*pts)
bqriirf_df2	Bi-quad Real Block IIR, DFII (floating point data)	N=512, M=16	19919 (2.4 cycles/(biquad*pts)
bqriirf_df2t	Bi-quad Real Block IIR, DFII (floating point data)	N=512, M=16	18464 (2.3 cycles/(biquad*pts)
bqciirf_df1	Bi-quad Real Block IIR, DFI (complex floating point data)	N=512, M=16	36798 (4.5 cycles/(biquad*pts)
stereo_bqriirf_df1	Bi-quad Real Block Stereo IIR, DFI (floating point data)	N=512, M=16	38514 (4.7 cycles/(biquad*pts)
Biquad Filters, no delay			
bqriir16x16_df1_nd	Bi-quad Real Block IIR, DFI (16-bit data, 16-bit coefficients, 16-bit intermediate stage outputs), no delay version	N=256, M=8, gain=1	4960 (2.4 cycles/(biquad*pts)
bqriir16x16_df2_nd	Bi-quad Real Block IIR, DFII (16-bit data, 16-bit coefficients, 16-bit intermediate stage outputs), no delay version	N=256, M=8, gain=1	5284 (2.6 cycles/(biquad*pts)
bqriir32x16_df1_nd	Bi-quad Real Block IIR, DFI (32-bit data, 16-bit coefficients, 32-bit intermediate stage outputs), no delay version	N=256, M=8, gain=1	3451 (1.7 cycles/(biquad*pts)
bqriir32x16_df2_nd	Bi-quad Real Block IIR, DFII (32-bit data, 16-bit coefficients, 32-bit intermediate stage outputs), no delay version	N=256, M=8, gain=1	3922 (1.9 cycles/(biquad*pts)
bqriir32x32_df1_nd	Bi-quad Real Block IIR, DFI (32-bit data, 32-bit coefficients, 32-bit intermediate stage outputs), no delay version	N=256, M=8, gain=1	3386 (1.7 cycles/(biquad*pts)
bqriir32x32_df2_nd	Bi-quad Real Block IIR, DFII (32-bit data, 32-bit coefficients, 32-bit intermediate stage outputs), no delay version	N=256, M=8, gain=1	5913 (2.9 cycles/(biquad*pts)
stereo_bqriir16x16_df1_nd	Bi-quad Stereo Block Stereo IIR, DFI (16-bit data, 16-bit coefficients, 16-bit intermediate stage outputs) no delay version	N=256, M=8, gain=1	10880 (5.3 cycles/(biquad*pts)
stereo_bqriir32x16_df1_nd	Bi-quad Stereo Block Stereo IIR, DFI (32-bit data, 16-bit coefficients, 32-bit intermediate stage outputs) no delay version	N=256, M=8, gain=1	9624 (4.7 cycles/(biquad*pts)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
stereo_bqriir32x32_dfl_nd	Bi-quad Stereo Block Stereo IIR, DFI (32-bit data, 32-bit coefficients, 32-bit intermediate stage outputs) no delay version	N=256, M=8, gain=1	8417 (4.1 cycles/(biquad*pts)
bqriirf_dfl_nd	Bi-quad Real Block IIR, DFI (floating point data) no delay version	N=512, M=16	36637 (4.5 cycles/(biquad*pts)
bqriirf_df2_nd	Bi-quad Real Block IIR, DFII (floating point data) no delay version	N=512, M=16	33577 (4.1 cycles/(biquad*pts)
bqriirf_df2t_nd	Bi-quad Real Block IIR, DFIIIt (floating point data) no delay version	N=512, M=16	33212 (4.1 cycles/(biquad*pts)
bqciirf_dfl_nd	Bi-quad Real Block IIR, DFI (complex floating point data) no delay version	N=512, M=16	41208 (5.0 cycles/(biquad*pts)
stereo_bqriirf_dfl_nd	Bi-quad Real Block Stereo IIR, DFI (floating point data) no delay version	N=512, M=16	46578 (5.7 cycles/(biquad*pts)
Lattice Filters			
latr16x16_process	Lattice Block Real IIR (16-bit data, 16-bit coefficients)	N=256, M=8	2599 (1.3 cycles/(sample*M)
latr32x16_process	Lattice Block Real IIR (32-bit data, 16-bit coefficients)	N=256, M=8	2591 (1.3 cycles/(sample*M)
latr32x32_process	Lattice Block Real IIR (32-bit data, 32-bit coefficients)	N=256, M=8	3099 (1.5 cycles/(sample*M)
latrf_process	Lattice Block Real IIR (floating point data)	N=256, M=8	6401 (3.1 cycles/(sample*M)
Math Functions			
Vectorized Math			
vec_recip16x16	Vector Reciprocal (16-bit data)	N=200	2016 (10.1 cycles/pts)
vec_recip32x32	Vector Reciprocal (32-bit data)	N=200	2632 (13.2 cycles/pts)
vec_recip64x64	Vector Reciprocal (64-bit data)	N=200	4333 (21.7 cycles/pts)
vec_divide64x32i	Vector Division (64-bit nominator, 32-bit denominator, 32-bit output)	N=200	4333 (21.7 cycles/pts)
vec_divide64x64	Vector Division (64-bit data)	N=200	6194 (31.0 cycles/pts)
vec_log2_32x32	Vector Base-2 Logarithm (32-bit data)	N=200	925 (4.6 cycles/pts)
vec_logn_32x32	Vector Natural Logarithm (32-bit data)	N=200	1029 (5.1 cycles/pts)
vec_log10_32x32	Vector Base-10 Logarithm (32-bit data)	N=200	1029 (5.1 cycles/pts)
vec_antilog2_32x32	Vector Base-2 Antilogarithm, (32-bit data)	N=200	582 (2.9 cycles/pts)
vec_antilogn_32x32	Vector Natural Antilogarithm, (32-bit data)	N=200	742 (3.7 cycles/pts)
vec_antilog10_32x32	Vector Base-10 Antilogarithm, (32-bit data)	N=200	742 (3.7 cycles/pts)
vec_pow_32x32	Vector Power Function, (32-bit data)	N=200	9230 (46.1 cycles/pts)
vec_tan32x32	Vector Tangent (32-bit data)	N=200	2899 (14.5 cycles/pts)
vec_atan32x32	Vector Arctangent (32-bit data)	N=200	1030 (5.2 cycles/pts)
vec_sqrt16x16	Vector Square Root (16-bit inputs, 16-bit output)	N=200	1152 (5.8 cycles/pts)
vec_sqrt32x16	Vector Square Root (32-bit inputs, 16-bit output)	N=200	1560 (7.8 cycles/pts)
vec_sqrt64x32	Vector Square Root (64-bit inputs, 32-bit output)	N=200	1244 (6.2 cycles/pts)
vec_rsqrt16x16	Vector Reciprocal Square Root (16-bit data)	N=200	2296 (11.5 cycles/pts)
vec_rsqrt32x32	Vector Reciprocal Square Root (32-bit data)	N=200	2951 (14.8 cycles/pts)
vec_sigmoid32x32	Vector Sigmoid (32-bit data)	N=200	1168 (5.8 cycles/pts)
vec_softmax32x32	Vector Softmax (32-bit data)	N=200	1080 (5.4 cycles/pts)
vec_tanh32x32	Vector Hyperbolic Tangent (32-bit data)	N=200	1163 (5.8 cycles/pts)
vec_relu32x32	Vector Rectifier Function (32-bit data)	N=200	218 (1.1 cycles/pts)
vec_int2float	Integer to Floating Value Vector Conversion	N=200	229 (1.1 cycles/pts)
vec_float2int	Integer to Floating Value Vector Conversion	N=200	225 (1.1 cycles/pts)
vec_sinef	Sine (floating point data)	N=200	2995 (15.0 cycles/pts)
vec_cosinef	Cosine (floating point data)	N=200	2949 (14.7 cycles/pts)
vec_tanf	Vector Tangent (floating point data)	N=200	3702 (18.5 cycles/pts)
vec_log2f	Vector Base-2 Logarithm (floating point data)	N=200	2544 (12.7 cycles/pts)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
vec_log10f	Vector Base-10 Logarithm (floating point data)	N=200	2504 (12.5 cycles/pts)
vec_lognf	Vector Natural Logarithm (floating point data)	N=200	2361 (11.8 cycles/pts)
vec_antilog2f	Vector Base-2 Antilogarithm, (floating point data)	N=200	1144 (5.7 cycles/pts)
vec_antilognf	Vector Natural Antilogarithm, (floating point data)	N=200	1148 (5.7 cycles/pts)
vec_antilog10f	Vector Base-10 Antilogarithm, (floating point data)	N=200	1337 (6.7 cycles/pts)
vec_powf	Vector Power Function, (floating point data)	N=200	11927 (59.6 cycles/pts)
vec_atanf	Vector Arctangent (floating point data)	N=200	2443 (12.2 cycles/pts)
vec_atan2f	Vector Full-Quadrant Arctangent (floating point data)	N=200	3516 (17.6 cycles/pts)
vec_sigmoidf	Vector Sigmoid (floating point data)	N=200	3332 (16.7 cycles/pts)
vec_softmaxf	Vector Softmax (floating point data)	N=200	1670 (8.3 cycles/pts)
vec_tanhf	Vector Hyperbolic Tangent (floating point data)	N=200	4271 (21.4 cycles/pts)
vec_relu	Vector Rectifier Function (floating point data)	N=200	214 (1.1 cycles/pts)
Vectorized Fast Math			
vec_divide16x16_fast	Fast Vector Division (16-bit data)	N=200	1143 (5.7 cycles/pts)
vec_divide32x32_fast	Fast Vector Division (32-bit data)	N=200	1632 (8.2 cycles/pts)
vec_sine32x32_fast	Fast Vector Sine (32-bit data)	N=200	728 (3.6 cycles/pts)
vec_cosine32x32_fast	Fast Vector Cosine (32-bit data)	N=200	728 (3.6 cycles/pts)
vec_sqrt32x32_fast	Fast Vector Square Root (32-bit inputs, 32-bit output)	N=200	1172 (5.9 cycles/pts)
Scalar Math			
Complex Functions			
Vectorized Complex Math			
vec_complex2mag	Vector Complex Magnitude (floating point data)	N=200	3415 (17.1 cycles/pts)
vec_complex2invmag	Vector Reciprocal Complex Magnitude (floating point data)	N=200	2567 (12.8 cycles/pts)
Scalar Complex Math			
Vector Operations			
vec_dot16x16_fast	Fast Vector Dot product (16x16-bit data, 32-bit output)	N=200	65 (0.3 cycles/pts)
vec_dot32x16_fast	Fast Vector Dot product (32x16-bit data, 64-bit output)	N=200	86 (0.4 cycles/pts)
vec_dot32x32_fast	Fast Vector Dot product (32x32-bit data, 64-bit output)	N=200	110 (0.6 cycles/pts)
vec_dot64x32_fast	Fast Vector Dot product (64x32-bit data, 64-bit output)	N=200	214 (1.1 cycles/pts)
vec_dot64x64_fast	Fast Vector Dot product (64x64-bit data, 64-bit output)	N=200	215 (1.1 cycles/pts)
vec_dot64x64i_fast	Fast Vector Dot product (64x64-bit data, 64-bit output (low 64 bit of integer multiply))	N=200	211 (1.1 cycles/pts)
vec_dot_batch8x8	Vector Dot product, batch mode (8x8-bit data, 16-bit output)	N=200, M=16	1637 (0.5 cycles/pts)
vec_dot_batch8x16	Vector Dot product, batch mode (8x16-bit data, 16-bit output)	N=200, M=16	1339 (0.4 cycles/pts)
vec_dot_batch16x16	Vector Dot product, batch mode (16x16-bit data, 32-bit output)	N=200, M=16	1389 (0.4 cycles/pts)
vec_dot_batch8x8_fast	Vector Dot product, batch mode (8x8-bit data, 16-bit output), fast	N=200, M=16	586 (0.2 cycles/pts)
vec_dot_batch8x16_fast	Vector Dot product, batch mode (8x16-bit data, 16-bit output), fast	N=200, M=16	674 (0.2 cycles/pts)
vec_dot_batch16x16_fast	Vector Dot product, batch mode (16x16-bit data, 32-bit output), fast	N=200, M=16	586 (0.2 cycles/pts)
vec_add16x16_fast	Fast Vector Sum (16-bit data)	N=200	89 (0.4 cycles/pts)
vec_add32x32_fast	Fast Vector Sum (32-bit data)	N=200	159 (0.8 cycles/pts)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
vec_power16x16_fast	Fast Power of a Vector (16x16-bit data, 64-bit output)	N=200	40 (0.2 cycles/pts)
vec_power32x32_fast	Fast Power of a Vector (32x32-bit data, 64-bit output)	N=200	59 (0.3 cycles/pts)
vec_shift16x16_fast	Fast Vector Shift with Saturation (16-bit data)	shift>0, N=200	104 (0.5 cycles/pts)
vec_shift16x16_fast	Fast Vector Shift with Saturation (16-bit data)	shift<0, N=200	72 (0.4 cycles/pts)
vec_shift32x32_fast	Fast Vector Shift with Saturation (32-bit data)	N=200	114 (0.6 cycles/pts)
vec_scale16x16_fast	Fast Vector Scaling with Saturation (16-bit input, 16-bit output)	N=200	63 (0.3 cycles/pts)
vec_scale32x32_fast	Fast Vector Scaling with Saturation (32-bit input, 32-bit output)	N=200	113 (0.6 cycles/pts)
vec_max16x16_fast	Fast Vector Maximum Value (16-bit data)	N=200	67 (0.3 cycles/pts)
vec_min16x16_fast	Fast Vector Minimum Value (16-bit data)	N=200	66 (0.3 cycles/pts)
vec_max32x32_fast	Fast Vector Maximum Value (32-bit data)	N=200	87 (0.4 cycles/pts)
vec_min32x32_fast	Fast Vector Minimum Value (32-bit data)	N=200	86 (0.4 cycles/pts)
vec_bexp16	Common Exponent (16-bit input data)	N=200	121 (0.6 cycles/pts)
vec_bexp32	Common Exponent (32-bit input data)	N=200	119 (0.6 cycles/pts)
vec_bexp16_fast	Fast Common Exponent (16-bit input data)	N=200	99 (0.5 cycles/pts)
vec_bexp32_fast	Fast Common Exponent (32-bit input data)	N=200	96 (0.5 cycles/pts)
scl_bexp16	Exponent (16-bit input data)		7 (cycles)
scl_bexp32	Exponent (32-bit input data)		5 (cycles)
vec_dotf	Vector Dot product (floating point data)	N=200	238 (1.2 cycles/pts)
vec_dot_batchf	Vector Dot product, batch mode (floating point data)	N=200, M=16	1761 (0.6 cycles/pts)
vec_dot_batchf_fast	Vector Dot product, batch mode (floating point data), fast	N=200, M=16	1711 (0.5 cycles/pts)
vec_addf	Vector Sum (floating point data)	N=200	222 (1.1 cycles/pts)
vec_powerf	Power of a Vector (floating point data)	N=200	114 (0.6 cycles/pts)
vec_shiftf	Vector Shift with Saturation (floating point data)	N=200	140 (0.7 cycles/pts)
vec_scalef	Vector Scaling with Saturation (floating point data)	N=200	127 (0.6 cycles/pts)
vec_scale_sf	Vector Scaling with Saturation (floating point data)	N=200	230 (1.1 cycles/pts)
vec_minf	Vector Minimum Value (floating point data)	N=200	116 (0.6 cycles/pts)
vec_maxf	Vector Maximum Value (floating point data)	N=200	112 (0.6 cycles/pts)
vec_bexpf	Common Exponent (floating point input data)	N=200	127 (0.6 cycles/pts)
scl_bexpf	Exponent (floating point input data)		7 (cycles)
Emulated Floating Point Operations			
vec_add_32x16ef	Vector Addition (emulated floating point)	N=200	1451 (7.3 cycles/pts)
vec_mul_32x16ef	Vector Multiply (emulated floating point)	N=200	1033 (5.2 cycles/pts)
vec_mac_32x16ef	Vector Multiply-Accumulate (emulated floating point)	N=200	2027 (10.1 cycles/pts)
vec_dot_32x16ef	Vector Dot product (emulated floating point)	N=200	1070 (5.3 cycles/pts)
scl_add_32x16ef	Scalar Addition (emulated floating point)		23 (cycles)
scl_mul_32x16ef	Scalar Multiply (emulated floating point)		15 (cycles)
scl_mac_32x16ef	Scalar Multiply-Accumulate (emulated floating point)		29 (cycles)
Matrix Operations			
mtx_mpy8x8	Matrix Multiply (8-bit data)	16x16 x 16x16	4282 (1.0 MACs/cycle)
mtx_mpy8x8	Matrix Multiply (8-bit data)	32x32 x 32x32	28194 (1.2 MACs/cycle)
mtx_mpy8x8_fast	Fast Matrix Multiply (8-bit data)	16x16 x 16x16	1901 (2.2 MACs/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
mtx_mpy8x8_fast	Fast Matrix Multiply (8-bit data)	32x32 x 32x32	12093 (2.7 MACs/cycle)
mtx_mpy8x8_fast	Fast Matrix Multiply (8-bit data)	8x80 x 80x4	751 (3.4 MACs/cycle)
mtx_mpyt8x8	Matrix Multiply Transpose (8-bit data)	16x16 x 16x16	4557 (0.9 MACs/cycle)
mtx_mpyt8x8	Matrix Multiply Transpose (8-bit data)	32x32 x 32x32	28998 (1.1 MACs/cycle)
mtx_mpyt8x8_fast	Fast Matrix Multiply Transpose (8-bit data)	16x16 x 16x16	1606 (2.6 MACs/cycle)
mtx_mpyt8x8_fast	Fast Matrix Multiply Transpose (8-bit data)	32x32 x 32x32	10262 (3.2 MACs/cycle)
mtx_mpyt8x8_fast	Fast Matrix Multiply Transpose (8-bit data)	8x80 x 80x4	619 (4.1 MACs/cycle)
mtx_mpy8x16	Matrix Multiply (8/16-bit data)	16x16 x 16x16	3114 (1.3 MACs/cycle)
mtx_mpy8x16	Matrix Multiply (8/16-bit data)	32x32 x 32x32	17659 (1.9 MACs/cycle)
mtx_mpy8x16_fast	Fast Matrix Multiply (8/16-bit data)	16x16 x 16x16	1679 (2.4 MACs/cycle)
mtx_mpy8x16_fast	Fast Matrix Multiply (8/16-bit data)	32x32 x 32x32	10575 (3.1 MACs/cycle)
mtx_mpy8x16_fast	Fast Matrix Multiply (8/16-bit data)	8x80 x 80x4	588 (4.4 MACs/cycle)
mtx_mpyt8x16	Matrix Multiply Transpose (8/16-bit data)	16x16 x 16x16	3176 (1.3 MACs/cycle)
mtx_mpyt8x16	Matrix Multiply Transpose (8/16-bit data)	32x32 x 32x32	13440 (2.4 MACs/cycle)
mtx_mpyt8x16_fast	Fast Matrix Multiply Transpose (8/16-bit data)	16x16 x 16x16	1428 (2.9 MACs/cycle)
mtx_mpyt8x16_fast	Fast Matrix Multiply Transpose (8/16-bit data)	32x32 x 32x32	8160 (4.0 MACs/cycle)
mtx_mpyt8x16_fast	Fast Matrix Multiply Transpose (8/16-bit data)	8x80 x 80x4	526 (4.9 MACs/cycle)
mtx_mpy16x16	Matrix Multiply (16-bit data)	16x16 x 16x16	1697 (2.4 MACs/cycle)
mtx_mpy16x16	Matrix Multiply (16-bit data)	32x32 x 32x32	8389 (3.9 MACs/cycle)
mtx_mpy16x16_fast	Fast Matrix Multiply (16-bit data)	16x16 x 16x16	1679 (2.4 MACs/cycle)
mtx_mpy16x16_fast	Fast Matrix Multiply (16-bit data)	32x32 x 32x32	10575 (3.1 MACs/cycle)
mtx_mpy16x16_fast	Fast Matrix Multiply (16-bit data)	8x80 x 80x4	587 (4.4 MACs/cycle)
mtx_mpyt16x16	Matrix Multiply Transpose (16-bit data)	16x16 x 16x16	1542 (2.7 MACs/cycle)
mtx_mpyt16x16	Matrix Multiply Transpose (16-bit data)	32x32 x 32x32	7806 (4.2 MACs/cycle)
mtx_mpyt16x16_fast	Fast Matrix Multiply Transpose (16-bit data)	16x16 x 16x16	1460 (2.8 MACs/cycle)
mtx_mpyt16x16_fast	Fast Matrix Multiply Transpose (16-bit data)	32x32 x 32x32	7776 (4.2 MACs/cycle)
mtx_mpyt16x16_fast	Fast Matrix Multiply Transpose (16-bit data)	8x80 x 80x4	465 (5.5 MACs/cycle)
mtx_mpy32x32	Matrix Multiply (32-bit data)	16x16 x 16x16	2838 (1.4 MACs/cycle)
mtx_mpy32x32	Matrix Multiply (32-bit data)	32x32 x 32x32	14710 (2.2 MACs/cycle)
mtx_mpy32x32_fast	Fast Matrix Multiply (32-bit data)	16x16 x 16x16	1815 (2.3 MACs/cycle)
mtx_mpy32x32_fast	Fast Matrix Multiply (32-bit data)	32x32 x 32x32	11726 (2.8 MACs/cycle)
mtx_mpy32x32_fast	Fast Matrix Multiply (32-bit data)	8x80 x 80x4	819 (3.1 MACs/cycle)
mtx_mpyt32x32	Matrix Multiply Transpose (32-bit data)	16x16 x 16x16	3261 (1.3 MACs/cycle)
mtx_mpyt32x32	Matrix Multiply Transpose (32-bit data)	32x32 x 32x32	17588 (1.9 MACs/cycle)
mtx_mpyt32x32_fast	Fast Matrix Multiply Transpose (32-bit data)	16x16 x 16x16	1712 (2.4 MACs/cycle)
mtx_mpyt32x32_fast	Fast Matrix Multiply Transpose (32-bit data)	32x32 x 32x32	10767 (3.0 MACs/cycle)
mtx_mpyt32x32_fast	Fast Matrix Multiply Transpose (32-bit data)	8x80 x 80x4	748 (3.4 MACs/cycle)
mtx_vecmpy8x8_fast	Fast Matrix by Vector Multiply (8-bit data)	16x104 x 104x1	352 (4.7 MACs/cycle)
mtx_vecmpy8x16_fast	Fast Matrix by Vector Multiply (8/16-bit data)	16x104 x 104x1	334 (5.0 MACs/cycle)
mtx_vecmpy16x16_fast	Fast Matrix by Vector Multiply (16-bit data)	16x104 x 104x1	326 (5.1 MACs/cycle)
mtx_vecmpy32x32_fast	Fast Matrix by Vector Multiply (32-bit data)	16x104 x 104x1	598 (2.8 MACs/cycle)
mtx_transpose8x8	Matrix transpose (8-bit data)	M=32,N=32	2277 (0.45 pts/cycle)
mtx_transpose8x8_fast	Fast Matrix transpose (8-bit data)	M=32,N=32	572 (1.79 pts/cycle)
mtx_transpose16x16	Matrix transpose (16-bit data)	M=32,N=32	1606 (0.64 pts/cycle)
mtx_transpose16x16_fast	Fast Matrix transpose (16-bit data)	M=32,N=32	547 (1.87 pts/cycle)
mtx_transpose32x32	Matrix transpose (32-bit data)	M=32,N=32	1396 (0.73 pts/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
mtx_transpose32x32_fast	Fast Matrix transpose (32-bit data)	M=32,N=32	776 (1.32 pts/cycle)
mtx_mpyf	Matrix Multiply (floating point data)	16x16 x 16x16	1727 (2.4 MACs/cycle)
mtx_mpyf	Matrix Multiply (floating point data)	32x32 x 32x32	11497 (2.9 MACs/cycle)
mtx_mpyf_fast	Fast Matrix Multiply (floating point data)	16x16 x 16x16	1956 (2.1 MACs/cycle)
mtx_mpyf_fast	Fast Matrix Multiply (floating point data)	32x32 x 32x32	12268 (2.7 MACs/cycle)
mtx_mpyf_fast	Fast Matrix Multiply (floating point data)	8x16 x 16x4	266 (1.9 MACs/cycle)
mtx_mpytf	Matrix Multiply Transpose (floating point data)	16x16 x 16x16	2022 (2.0 MACs/cycle)
mtx_mpytf	Matrix Multiply Transpose (floating point data)	32x32 x 32x32	11758 (2.8 MACs/cycle)
mtx_mpytf_fast	Fast Matrix Multiply Transpose (floating point data)	16x16 x 16x16	1973 (2.1 MACs/cycle)
mtx_mpytf_fast	Fast Matrix Multiply Transpose (floating point data)	32x32 x 32x32	11805 (2.8 MACs/cycle)
mtx_mpytf_fast	Fast Matrix Multiply Transpose (floating point data)	8x16 x 16x4	267 (1.9 MACs/cycle)
mtx_vecmpyf_fast	Fast Matrix by Vector Multiply (floating point data)	16x104 x 104x1	634 (2.6 MACs/cycle)
mtx_transposef	Matrix transpose (floating point data)	M=32,N=32	1404 (0.73 pts/cycle)
mtx_transposef_fast	Fast Matrix transpose (floating point data)	M=32,N=32	784 (1.31 pts/cycle)
Matrix Decomposition and Inversion			
Gauss-Jordan			
cmtx_inv2x2_32x32	Gauss-Jordan matrix inversion (complex 32-bit fixed-point data)		358 (358.0 cycles/matrix)
cmtx_inv4x4_32x32	Gauss-Jordan matrix inversion (complex 32-bit fixed-point data)		1165 (1165.0 cycles/matrix)
cmtx_inv8x8_32x32	Gauss-Jordan matrix inversion (complex 32-bit fixed-point data)		5650 (5650.0 cycles/matrix)
mtx_inv2x2_32x32	Gauss-Jordan matrix inversion (32-bit fixed-point data)		38 (38.0 cycles/matrix)
mtx_inv4x4_32x32	Gauss-Jordan matrix inversion (32-bit fixed-point data)		638 (638.0 cycles/matrix)
mtx_inv8x8_32x32	Gauss-Jordan matrix inversion (32-bit fixed-point data)		2923 (2923.0 cycles/matrix)
cmtx_gjelim2x2_32x32	Gauss-Jordan linear equations solver (complex 32-bit fixed-point data)		318 (318.0 cycles/matrix)
cmtx_gjelim4x4_32x32	Gauss-Jordan linear equations solver (complex 32-bit fixed-point data)		977 (977.0 cycles/matrix)
cmtx_gjelim8x8_32x32	Gauss-Jordan linear equations solver (complex 32-bit fixed-point data)		3700 (3700.0 cycles/matrix)
mtx_gjelim2x2_32x32	Gauss-Jordan linear equations solver (32-bit fixed-point data)		38 (38.0 cycles/matrix)
mtx_gjelim4x4_32x32	Gauss-Jordan linear equations solver (32-bit fixed-point data)		584 (584.0 cycles/matrix)
mtx_gjelim8x8_32x32	Gauss-Jordan linear equations solver (32-bit fixed-point data)		2370 (2370.0 cycles/matrix)
mtx_inv2x2f	Gauss-Jordan matrix inversion (floating point data)		32 (32.0 cycles/matrix)
mtx_inv4x4f	Gauss-Jordan matrix inversion (floating point data)		272 (272.0 cycles/matrix)
mtx_inv8x8f	Gauss-Jordan matrix inversion (floating point data)		1492 (1492.0 cycles/matrix)
Cholesky			
cmatcholdecomp10x10_32x32	Cholesky decomposition (single matrix complex 32-bit data)	10x10	3376 (3376.0 cycles/matrix)
cmatcholfwdsubst10x10_32x32	Cholesky forward substitution (single matrix complex 32-bit data)	10x10x1	469 (469.0 cycles/matrix)
cmatcholbkwsbst10x10_32x32	Cholesky back substitution (single matrix complex 32-bit data)	10x1	289 (289.0 cycles/matrix)
cmatcholmmse10x10_32x32	Cholesky MMSE (single matrix complex 32-bit data)	10x10x1	4199 (4199.0 cycles/matrix)
cmatcholpreprocess10x10_32x32	Cholesky Preprocessing (single matrix complex 32-bit data)	10x10	1350 (1350.0 cycles/matrix)
cmatcholpseudoinv10x10_32x32	Matrix (Pseudo) Inversion (single matrix complex 32-bit data)	10x10	9563 (9563.0 cycles/matrix)
matcholdecomp10x10	Cholesky decomposition (single matrix real 32-	10x10	2667 (2667.0 cycles/matrix)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
32x32	bit data)		
matcholfdsubst10x10_32x32	Cholesky forward substitution (single matrix real 32-bit data)	10x10x1	325 (325.0 cycles/matrix)
matcholbksubst10x10_32x32	Cholesky back substitution (single matrix real 32-bit data)	10x1	235 (235.0 cycles/matrix)
matcholmmesolver10x10_32x32	Cholesky MMSE (single matrix real 32-bit data)	10x10x1	3304 (3304.0 cycles/matrix)
matcholpreprocess10x10_32x32	Cholesky Preprocessing (single matrix real 32-bit data)	10x10	695 (695.0 cycles/matrix)
matcholpseudoinv10x10_32x32	Matrix (Pseudo) Inversion (single matrix real 32-bit data)	10x10	7058 (7058.0 cycles/matrix)
cmatcholdecomp10x10f	Cholesky decomposition (single matrix complex floating-point data)	10x10	2429 (2429.0 cycles/matrix)
cmatcholfdsubst10x10f	Cholesky forward substitution (single matrix complex floating-point data)	10x10x1	267 (267.0 cycles/matrix)
cmatcholbksubst10x10f	Cholesky back substitution (single matrix complex floating-point data)	10x1	123 (123.0 cycles/matrix)
cmatcholmmesolver10x10f	Cholesky MMSE (single matrix complex floating-point data)	10x10x1	2901 (2901.0 cycles/matrix)
cmatcholpreprocess10x10f	Cholesky Preprocessing (single matrix complex floating-point data)	10x10	943 (943.0 cycles/matrix)
cmatcholpseudoinv10x10f	Matrix (Pseudo) Inversion (single matrix complex floating-point data)	10x10	4392 (4392.0 cycles/matrix)
matcholdecomp10x10f	Cholesky decomposition (single matrix real floating-point data)	10x10	1681 (1681.0 cycles/matrix)
matcholfdsubst10x10f	Cholesky forward substitution (single matrix real floating-point data)	10x10x1	165 (165.0 cycles/matrix)
matcholbksubst10x10f	Cholesky back substitution (single matrix real floating-point data)	10x1	83 (83.0 cycles/matrix)
matcholmmesolver10x10f	Cholesky MMSE (single matrix real floating-point data)	10x10x1	1992 (1992.0 cycles/matrix)
matcholpreprocess10x10f	Cholesky Preprocessing (single matrix real floating-point data)	10x10	428 (428.0 cycles/matrix)
matcholpseudoinv10x10f	Matrix (Pseudo) Inversion (single matrix real floating-point data)	10x10	2671 (2671.0 cycles/matrix)
Fitting and Interpolation			
Polynomial Fitting			
vec_poly4_32x32	Polynomial approximation (32-bit data)	N=200	376 (1.9 cycles/pts)
vec_poly8_32x32	Polynomial approximation (32-bit data)	N=200	624 (3.1 cycles/pts)
vec_poly4f	Polynomial approximation (floating point data)	N=200	407 (2.0 cycles/pts)
vec_poly8f	Polynomial approximation (floating point data)	N=200	787 (3.9 cycles/pts)
FFT Routines			
Complex FFT			
fft_cplx16x16	FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	37849 (0.108 pts/cycle)
fft_cplx16x16	FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	45207 (0.091 pts/cycle)
fft_cplx32x16	FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	35831 (0.114 pts/cycle)
fft_cplx32x16	FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	38839 (0.105 pts/cycle)
fft_cplx32x32	FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=4096, scaling=3	31985 (0.128 pts/cycle)
fft_cplx32x32	FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=4096, scaling=2	35624 (0.115 pts/cycle)
ifft_cplx16x16	Inverse FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	37986 (0.108 pts/cycle)
ifft_cplx16x16	Inverse FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	45224 (0.091 pts/cycle)
ifft_cplx32x16	Inverse FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	35827 (0.114 pts/cycle)
ifft_cplx32x16	Inverse FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	39367 (0.104 pts/cycle)
ifft_cplx32x32	Inverse FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=4096, scaling=3	32732 (0.125 pts/cycle)
ifft_cplx32x32	Inverse FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=4096, scaling=2	35617 (0.115 pts/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
Real FFT			
fft_real16x16	FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	22161 (0.185 pts/cycle)
fft_real16x16	FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	25479 (0.161 pts/cycle)
fft_real32x16	FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	19837 (0.206 pts/cycle)
fft_real32x16	FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	21290 (0.192 pts/cycle)
fft_real32x32	FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=8192, scaling=3	38183 (0.215 pts/cycle)
fft_real32x32	FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=8192, scaling=2	42858 (0.191 pts/cycle)
ifft_real16x16	Inverse FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	22249 (0.184 pts/cycle)
ifft_real16x16	Inverse FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	27050 (0.151 pts/cycle)
ifft_real32x16	Inverse FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	20812 (0.197 pts/cycle)
ifft_real32x16	Inverse FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	23052 (0.178 pts/cycle)
ifft_real32x32	Inverse FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=8192, scaling=3	40986 (0.200 pts/cycle)
ifft_real32x32	Inverse FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=8192, scaling=2	44903 (0.182 pts/cycle)
Mixed Radix Complex FFT			
fft_cplx32x32	FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=3	8509 (0.113 pts/cycle)
fft_cplx32x32	FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=2	10081 (0.095 pts/cycle)
ifft_cplx32x32	Inverse FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=3	8672 (0.111 pts/cycle)
ifft_cplx32x32	Inverse FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=2	10079 (0.095 pts/cycle)
fft_cplx32x16	FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	4403 (0.109 pts/cycle)
fft_cplx32x16	FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	4924 (0.097 pts/cycle)
ifft_cplx32x16	Inverse FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	4257 (0.113 pts/cycle)
ifft_cplx32x16	Inverse FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	4928 (0.097 pts/cycle)
fft_cplx16x16	FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	4168 (0.115 pts/cycle)
fft_cplx16x16	FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	5243 (0.092 pts/cycle)
ifft_cplx16x16	Inverse FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	4243 (0.113 pts/cycle)
ifft_cplx16x16	Inverse FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	5281 (0.091 pts/cycle)
Mixed Radix Real FFT			
fft_real32x32	FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=3	5848 (0.164 pts/cycle)
fft_real32x32	FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=2	6900 (0.139 pts/cycle)
ifft_real32x32	Inverse FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=3	6136 (0.156 pts/cycle)
ifft_real32x32	Inverse FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=2	7077 (0.136 pts/cycle)
fft_real32x16	FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	2535 (0.189 pts/cycle)
fft_real32x16	FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	2832 (0.169 pts/cycle)
ifft_real32x16	Inverse FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	2542 (0.189 pts/cycle)
ifft_real32x16	Inverse FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	2972 (0.162 pts/cycle)
fft_real16x16	FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	2712 (0.177 pts/cycle)
fft_real16x16	FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	3181 (0.151 pts/cycle)
ifft_real16x16	Inverse FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	2771 (0.173 pts/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
ifft real16x16	Inverse FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	3417 (0.140 pts/cycle)
Complex FFT with Optimized Memory			
fft cplx16x16 ie	FFT on Complex Data with Optimized Memory Usage (16-bit input/outputs, 16-bit twiddles)	N=1024	10209 (0.100 pts/cycle)
fft cplx32x16 ie	FFT on Complex Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=3	9305 (0.110 pts/cycle)
fft cplx32x16 ie	FFT on Complex Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=2	10221 (0.100 pts/cycle)
fft cplx32x32 ie	FFT on Complex Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=3	6969 (0.147 pts/cycle)
fft cplx32x32 ie	FFT on Complex Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=2	8179 (0.125 pts/cycle)
ifft cplx16x16 ie	Inverse FFT on Complex Data with Optimized Memory Usage (16-bit input/outputs, 16-bit twiddles)	N=1024	10210 (0.100 pts/cycle)
ifft cplx32x16 ie	Inverse FFT on Complex Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=3	9811 (0.104 pts/cycle)
ifft cplx32x16 ie	Inverse FFT on Complex Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=2	11522 (0.089 pts/cycle)
ifft cplx32x32 ie	Inverse FFT on Complex Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=3	7147 (0.143 pts/cycle)
ifft cplx32x32 ie	Inverse FFT on Complex Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=2	8180 (0.125 pts/cycle)
stereo_fft_cplx16x16 ie	FFT on Stereo Complex Data with Optimized Memory Usage (16-bit input/outputs, 16-bit twiddles)	N=1024	17238 (0.059 pts/cycle)
stereo_fft_cplx32x16 ie	FFT on Stereo Complex Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=3	14059 (0.073 pts/cycle)
stereo_fft_cplx32x16 ie	FFT on Stereo Complex Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=2	16875 (0.061 pts/cycle)
stereo_fft_cplx32x32 ie	FFT on Stereo Complex Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=3	15403 (0.066 pts/cycle)
stereo_fft_cplx32x32 ie	FFT on Stereo Complex Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=2	17823 (0.057 pts/cycle)
stereo_ifft_cplx16x16 ie	Inverse FFT on Stereo Complex Data with Optimized Memory Usage (16-bit input/outputs, 16-bit twiddles)	N=1024	17215 (0.059 pts/cycle)
stereo_ifft_cplx32x16 ie	Inverse FFT on Stereo Complex Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=3	13717 (0.075 pts/cycle)
stereo_ifft_cplx32x16 ie	Inverse FFT on Stereo Complex Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=2	16639 (0.062 pts/cycle)
stereo_ifft_cplx32x32 ie	Inverse FFT on Stereo Complex Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=3	15661 (0.065 pts/cycle)
stereo_ifft_cplx32x32 ie	Inverse FFT on Stereo Complex Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=2	18220 (0.056 pts/cycle)
fft cplx16 ie	FFT on Complex Data with Optimized Memory Usage (floating point data)	N=4096	61685 (0.066 pts/cycle)
ifft cplx16 ie	Inverse FFT on Complex Data with Optimized Memory Usage (floating point data)	N=4096	62965 (0.065 pts/cycle)
stereo_fft_cplx16 ie	FFT on Stereo Complex Data with Optimized Memory Usage (floating point data)	N=4096	114931 (0.036 pts/cycle)
stereo_ifft_cplx16 ie	Inverse FFT on Stereo Complex Data with Optimized Memory Usage (floating point data)	N=4096	116976 (0.035 pts/cycle)
Real FFT with Optimized Memory			
fft real16x16 ie	FFT on Real Data with Optimized Memory Usage (16-bit input/outputs, 16-bit twiddles)	N=1024	6337 (0.162 pts/cycle)
fft real32x16 ie	FFT on Real Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=3	5676 (0.180 pts/cycle)
fft real32x16 ie	FFT on Real Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=2	6155 (0.166 pts/cycle)
fft real32x32 ie	FFT on Real Data with Optimized Memory Usage	N=1024,	4786 (0.214 pts/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
	(32-bit input/outputs, 32-bit twiddles)	scaling=3	
fft_real32x32_ie	FFT on Real Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=2	5979 (0.171 pts/cycle)
ifft_real16x16_ie	Inverse FFT on Real Data with Optimized Memory Usage (16-bit input/outputs, 16-bit twiddles)	N=1024	6605 (0.155 pts/cycle)
ifft_real32x16_ie	Inverse FFT on Real Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=3	5887 (0.174 pts/cycle)
ifft_real32x16_ie	Inverse FFT on Real Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=2	7343 (0.139 pts/cycle)
ifft_real32x32_ie	Inverse FFT on Real Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=3	4829 (0.212 pts/cycle)
ifft_real32x32_ie	Inverse FFT on Real Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=2	5940 (0.172 pts/cycle)
fft_realf_ie	FFT on Real Data with Optimized Memory Usage (floating point data)	N=4096	31340 (0.131 pts/cycle)
ifft_realf_ie	Inverse FFT on Real Data with Optimized Memory Usage (floating point data)	N=4096	31403 (0.130 pts/cycle)
DCT			
dct_32x16	Discrete Cosine Transform, Type II (32-bit input/outputs, 16-bit twiddles)	N=32, scalingOpt=3	152 (cycles)
dct_32x32	Discrete Cosine Transform, Type II (32-bit input/outputs, 32-bit twiddles)	N=32, scalingOpt=3	176 (cycles)
dct_16x16	Discrete Cosine Transform, Type II (16-bit input/outputs, 16-bit twiddles)	N=32, scalingOpt=3	214 (cycles)
dct4_32x16	Discrete Cosine Transform, Type IV (32-bit input/outputs, 16-bit twiddles)	N=32, scalingOpt=3	234 (cycles)
dct4_32x32	Discrete Cosine Transform, Type IV (32-bit input/outputs, 32-bit twiddles)	N=32, scalingOpt=3	263 (cycles)
mdct_32x16	Modified Discrete Cosine Transform (32-bit input/outputs, 16-bit twiddles)	N=32, scalingOpt=3	328 (cycles)
mdct_32x32	Modified Discrete Cosine Transform (32-bit input/outputs, 32-bit twiddles)	N=32, scalingOpt=3	360 (cycles)
imdct_32x16	Inverse Modified Discrete Cosine Transform (32-bit input/outputs, 16-bit twiddles)	N=32, scalingOpt=3	334 (cycles)
imdct_32x32	Inverse Modified Discrete Cosine Transform (32-bit input/outputs, 32-bit twiddles)	N=32, scalingOpt=3	364 (cycles)
dct2d_8x16	2-D Discrete Cosine Transform (8-bit unsigned input, 16-bit signed output)	N=8, L=1024, scalingOpt=0	263180 (257.0 cycles/block)
idct2d_16x8	2-D Inverse Discrete Cosine Transform (16-bit signed input, 8-bit unsigned output)	N=8, L=1024, scalingOpt=0	259087 (253.0 cycles/block)
dctf	Discrete Cosine Transform, Type II (floating point data)	N=64	470 (cycles)
FFT power spectrum functions			
fft_spectrum16x32	FFT Power Spectrum (complex 16-bit data)	N=1024[mode=0 bexp=-1]	9873 (0.10 pts/cycle)
fft_spectrum32x32	FFT Power Spectrum (complex 32-bit data)	N=1024[mode=0 bexp=-1]	12459 (0.08 pts/cycle)
fft_spectrumf	FFT Power Spectrum (complex floating-point data, single precision)	N=1024[mode=0]	18256 (0.06 pts/cycle)
MFCC features extraction			
logmel32x32_process	Compute log mel filterbank energies (32-bit fixed-point input/output data)	Fs: 16000; fftSize: 512; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	2765 (cycles per STFT hop)
logmel32x32_process	Compute log mel filterbank energies (32-bit fixed-point input/output data)	Fs: 16000; fftSize: 512; Range: 133.3-6853.8 Hz; Bands: 40; Flavor: AUDITORY	3429 (cycles per STFT hop)
mfcc32x32_process	Compute Mel-Frequency Cepstrum Coefficients (32-bit fixed-point input/output data)	Fs: 16000; fftSize: 512; Win: 25 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 20; Ceps: 13; Flavor: HTK	7569 (cycles per STFT hop)
mfcc32x32_process	Compute Mel-Frequency Cepstrum Coefficients (32-bit fixed-point input/output data)	Fs: 16000; fftSize: 512;	7493 (cycles per STFT hop)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
		Win: 16 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 40; Ceps: 13; Flavor: AUDITORY	
logmelf_process	Compute log mel filterbank energies (single precision floating-point input/output data)	Fs: 16000; fftSize: 512; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	3913 (cycles per STFT hop)
logmelf_process	Compute log mel filterbank energies (single precision floating-point input/output data)	Fs: 16000; fftSize: 512; Range: 133.3-6853.8 Hz; Bands: 40; Flavor: AUDITORY	4907 (cycles per STFT hop)
mfccf_process	Compute Mel-Frequency Cepstrum Coefficients (single precision floating-point input/output data)	Fs: 16000; fftSize: 512; Win: 25 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 20; Ceps: 13; Flavor: HTK	10314 (cycles per STFT hop)
mfccf_process	Compute Mel-Frequency Cepstrum Coefficients (single precision floating-point input/output data)	Fs: 16000; fftSize: 512; Win: 16 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 40; Ceps: 13; Flavor: AUDITORY	9633 (cycles per STFT hop)
image processing functions			
image rotation			
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	SQCIF(128x96) 0 degrees	8918 (cycles)
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	SQCIF(128x96) 90 degrees	22230 (cycles)
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	SQCIF(128x96) 45 degrees	201250 (cycles)
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	QCIF(176x144) 0 degrees	15326 (cycles)
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	QCIF(176x144) 90 degrees	44503 (cycles)
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	QCIF(176x144) 45 degrees	393901 (cycles)
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	CIF(352x288) 0 degrees	45622 (cycles)
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	CIF(352x288) 90 degrees	171223 (cycles)
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	CIF(352x288) 45 degrees	1457764 (cycles)
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	QVGA(320x240) 0 degrees	35833 (cycles)
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	QVGA(320x240) 90 degrees	130232 (cycles)
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	QVGA(320x240) 45 degrees	1121136 (cycles)
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	VGA(640x480) 0 degrees	116979 (cycles)
imgrotate_gu8_process	Image rotation (8-bit unsigned grayscale)	VGA(640x480) 90 degrees	509912 (cycles)
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	SQCIF(128x96) 0 degrees	2638 (cycles)
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	SQCIF(128x96) 90 degrees	5788 (cycles)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	SQCIF(128x96) 45 degrees	187160 (cycles)
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	QCIF(176x144) 0 degrees	4750 (cycles)
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	QCIF(176x144) 90 degrees	10654 (cycles)
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	QCIF(176x144) 45 degrees	364614 (cycles)
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	CIF(352x288) 0 degrees	15694 (cycles)
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	CIF(352x288) 90 degrees	43216 (cycles)
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	CIF(352x288) 45 degrees	1350220 (cycles)
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	QVGA(320x240) 0 degrees	12142 (cycles)
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	QVGA(320x240) 90 degrees	32919 (cycles)
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	QVGA(320x240) 45 degrees	1037981 (cycles)
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	VGA(640x480) 0 degrees	43342 (cycles)
imgfastrotate_gu8_process	Image rotation, fast (8-bit unsigned grayscale)	VGA(640x480) 90 degrees	128069 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	SQCIF(128x96) 0 degrees	8919 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	SQCIF(128x96) 90 degrees	22230 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	SQCIF(128x96) 45 degrees	202234 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	QCIF(176x144) 0 degrees	15324 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	QCIF(176x144) 90 degrees	44502 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	QCIF(176x144) 45 degrees	397271 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	CIF(352x288) 0 degrees	45621 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	CIF(352x288) 90 degrees	171223 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	CIF(352x288) 45 degrees	1471423 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	QVGA(320x240) 0 degrees	35833 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	QVGA(320x240) 90 degrees	130230 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	QVGA(320x240) 45 degrees	1130719 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	VGA(640x480) 0 degrees	116980 (cycles)
imgrotate_gs8_process	Image rotation (8-bit signed grayscale)	VGA(640x480) 90 degrees	509910 (cycles)
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	SQCIF(128x96) 0 degrees	2638 (cycles)
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	SQCIF(128x96) 90 degrees	5788 (cycles)
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	SQCIF(128x96) 45 degrees	189607 (cycles)
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	QCIF(176x144) 0 degrees	4750 (cycles)
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	QCIF(176x144) 90 degrees	10653 (cycles)
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	QCIF(176x144) 45 degrees	369840 (cycles)
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	CIF(352x288) 0 degrees	15694 (cycles)
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	CIF(352x288) 90 degrees	43214 (cycles)
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	CIF(352x288) 45 degrees	1374550 (cycles)
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	QVGA(320x240) 0 degrees	12142 (cycles)
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	QVGA(320x240) 90 degrees	32916 (cycles)
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	QVGA(320x240) 45 degrees	1055783 (cycles)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	VGA (640x480) 0 degrees	43343 (cycles)
imgfastrotate_gs8_process	Image rotation, fast (8-bit signed grayscale)	VGA (640x480) 90 degrees	128066 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	SQCIF (128x96) 0 degrees	5545 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	SQCIF (128x96) 90 degrees	12258 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	SQCIF (128x96) 45 degrees	189834 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	QCIF (176x144) 0 degrees	10405 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	QCIF (176x144) 90 degrees	24057 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	QCIF (176x144) 45 degrees	361130 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	CIF (352x288) 0 degrees	36507 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	CIF (352x288) 90 degrees	91520 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	CIF (352x288) 45 degrees	1343435 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	QVGA (320x240) 0 degrees	28045 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	QVGA (320x240) 90 degrees	70014 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	QVGA (320x240) 45 degrees	1026351 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	VGA (640x480) 0 degrees	103945 (cycles)
imgrotate_gs16_process	Image rotation (16-bit grayscale)	VGA (640x480) 90 degrees	271876 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	SQCIF (128x96) 0 degrees	4076 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	SQCIF (128x96) 90 degrees	5175 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	SQCIF (128x96) 45 degrees	178421 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	QCIF (176x144) 0 degrees	7772 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	QCIF (176x144) 90 degrees	9833 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	QCIF (176x144) 45 degrees	345079 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	CIF (352x288) 0 degrees	28077 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	CIF (352x288) 90 degrees	35329 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	CIF (352x288) 45 degrees	1275474 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	QVGA (320x240) 0 degrees	21500 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	QVGA (320x240) 90 degrees	27070 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	QVGA (320x240) 45 degrees	982647 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	VGA (640x480) 0 degrees	81260 (cycles)
imgfastrotate_gs16_process	Image rotation, fast (16-bit grayscale)	VGA (640x480) 90 degrees	101965 (cycles)
image_resize			
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	SQCIF (128x96) -> QCIF (176x144), nearest	58272 (cycles)
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	QCIF (176x144) -> SQCIF (128x96), nearest	38988 (cycles)
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	CIF (352x288) -> SQCIF (128x96), nearest	56195 (cycles)
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	QVGA (320x240) -> SQCIF (128x96), nearest	53077 (cycles)
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	VGA (640x480) -> SQCIF (128x96)	84276 (cycles)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
		, nearest	
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	SQCIF(128x96) -> QCIF(176x144), nearest	28720 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	QCIF(176x144) -> SQCIF(128x96), nearest	19011 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	CIF (352x288) -> SQCIF(128x96), nearest	28324 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	QVGA(320x240) -> SQCIF(128x96), nearest	26693 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	VGA (640x480) -> SQCIF(128x96), nearest	43012 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	SQCIF(128x96) -> QCIF(176x144), nearest	58272 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	QCIF(176x144) -> SQCIF(128x96), nearest	38987 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	CIF (352x288) -> SQCIF(128x96), nearest	56194 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	QVGA(320x240) -> SQCIF(128x96), nearest	53077 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	VGA (640x480) -> SQCIF(128x96), nearest	84274 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	SQCIF(128x96) -> QCIF(176x144), nearest	28721 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	QCIF(176x144) -> SQCIF(128x96), nearest	19011 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	CIF (352x288) -> SQCIF(128x96), nearest	28324 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	QVGA(320x240) -> SQCIF(128x96), nearest	26691 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	VGA (640x480) -> SQCIF(128x96), nearest	43012 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	SQCIF(128x96) -> QCIF(176x144), nearest	38216 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	QCIF(176x144) -> SQCIF(128x96), nearest	27820 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	CIF (352x288) -> SQCIF(128x96), nearest	45243 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	QVGA(320x240) -> SQCIF(128x96), nearest	42076 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	VGA (640x480) -> SQCIF(128x96), nearest	73756 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	SQCIF(128x96) -> QCIF(176x144), nearest	30680 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	QCIF(176x144) -> SQCIF(128x96), nearest	20375 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	CIF (352x288) -> SQCIF(128x96), nearest	31728 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	QVGA(320x240) -> SQCIF(128x96), nearest	29351 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	VGA (640x480) -> SQCIF(128x96), nearest	49680 (cycles)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	SQCIF(128x96) -> QCIF(176x144), bilinear	84453 (cycles)
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	QCIF(176x144) -> SQCIF(128x96), bilinear	99951 (cycles)
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	CIF (352x288) -> SQCIF(128x96), bilinear	211297 (cycles)
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	QVGA(320x240) -> SQCIF(128x96), bilinear	179592 (cycles)
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	VGA (640x480) -> SQCIF(128x96), bilinear	500133 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	SQCIF(128x96) -> QCIF(176x144), bilinear	74145 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	QCIF(176x144) -> SQCIF(128x96), bilinear	90952 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	CIF (352x288) -> SQCIF(128x96), bilinear	197519 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	QVGA(320x240) -> SQCIF(128x96), bilinear	167439 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	VGA (640x480) -> SQCIF(128x96), bilinear	479887 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	SQCIF(128x96) -> QCIF(176x144), bilinear	86879 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	QCIF(176x144) -> SQCIF(128x96), bilinear	101681 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	CIF (352x288) -> SQCIF(128x96), bilinear	213746 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	QVGA(320x240) -> SQCIF(128x96), bilinear	181811 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	VGA (640x480) -> SQCIF(128x96), bilinear	503542 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	SQCIF(128x96) -> QCIF(176x144), bilinear	75635 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	QCIF(176x144) -> SQCIF(128x96), bilinear	91842 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	CIF (352x288) -> SQCIF(128x96), bilinear	198481 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	QVGA(320x240) -> SQCIF(128x96), bilinear	168304 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	VGA (640x480) -> SQCIF(128x96), bilinear	481233 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	SQCIF(128x96) -> QCIF(176x144), bilinear	72885 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	QCIF(176x144) -> SQCIF(128x96), bilinear	95239 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	CIF (352x288) -> SQCIF(128x96), bilinear	217860 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	QVGA(320x240) -> SQCIF(128x96), bilinear	182549 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	VGA (640x480) -> SQCIF(128x96), bilinear	541317 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	SQCIF(128x96) -> QCIF(176x144)	70739 (cycles)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
		, bilinear	
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	QCIF (176x144) -> SQCIF (128x96), bilinear	92849 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	CIF (352x288) -> SQCIF (128x96), bilinear	213744 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	QVGA (320x240) -> SQCIF (128x96), bilinear	179007 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	VGA (640x480) -> SQCIF (128x96), bilinear	534896 (cycles)
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	SQCIF (128x96) -> QCIF (176x144), bicubic	112319 (cycles)
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	QCIF (176x144) -> SQCIF (128x96), bicubic	134518 (cycles)
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	CIF (352x288) -> SQCIF (128x96), bicubic	309605 (cycles)
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	QVGA (320x240) -> SQCIF (128x96), bicubic	260354 (cycles)
imgresize_gu8_process	Image resize (8-bit unsigned grayscale)	VGA (640x480) -> SQCIF (128x96), bicubic	792560 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	SQCIF (128x96) -> QCIF (176x144), bicubic	102010 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	QCIF (176x144) -> SQCIF (128x96), bicubic	125520 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	CIF (352x288) -> SQCIF (128x96), bicubic	295827 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	QVGA (320x240) -> SQCIF (128x96), bicubic	248202 (cycles)
imgfastresize_gu8_process	Image resize, fast (8-bit unsigned grayscale)	VGA (640x480) -> SQCIF (128x96), bicubic	772313 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	SQCIF (128x96) -> QCIF (176x144), bicubic	114747 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	QCIF (176x144) -> SQCIF (128x96), bicubic	136250 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	CIF (352x288) -> SQCIF (128x96), bicubic	312055 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	QVGA (320x240) -> SQCIF (128x96), bicubic	262572 (cycles)
imgresize_gs8_process	Image resize (8-bit signed grayscale)	VGA (640x480) -> SQCIF (128x96), bicubic	795970 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	SQCIF (128x96) -> QCIF (176x144), bicubic	103501 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	QCIF (176x144) -> SQCIF (128x96), bicubic	126410 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	CIF (352x288) -> SQCIF (128x96), bicubic	296788 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	QVGA (320x240) -> SQCIF (128x96), bicubic	249069 (cycles)
imgfastresize_gs8_process	Image resize, fast (8-bit signed grayscale)	VGA (640x480) -> SQCIF (128x96), bicubic	773660 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	SQCIF (128x96) -> QCIF (176x144), bicubic	100753 (cycles)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
imgresize_gs16_process	Image resize (16-bit grayscale)	QCIF (176x144) -> SQCIF (128x96), bicubic	129807 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	CIF (352x288) -> SQCIF (128x96), bicubic	316168 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	QVGA (320x240) -> SQCIF (128x96), bicubic	263312 (cycles)
imgresize_gs16_process	Image resize (16-bit grayscale)	VGA (640x480) -> SQCIF (128x96), bicubic	833744 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	SQCIF (128x96) -> QCIF (176x144), bicubic	98603 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	QCIF (176x144) -> SQCIF (128x96), bicubic	127418 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	CIF (352x288) -> SQCIF (128x96), bicubic	312051 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	QVGA (320x240) -> SQCIF (128x96), bicubic	259773 (cycles)
imgfastresize_gs16_process	Image resize, fast (16-bit grayscale)	VGA (640x480) -> SQCIF (128x96), bicubic	827324 (cycles)
miscellaneous image processing			
imghist_gu8	Image histogram (8-bit unsigned grayscale)	SQCIF (128x96)	52146 (cycles)
imghist_gu8	Image histogram (8-bit unsigned grayscale)	QCIF (176x144)	100577 (cycles)
imghist_gu8	Image histogram (8-bit unsigned grayscale)	CIF (352x288)	365682 (cycles)
imghist_gu8	Image histogram (8-bit unsigned grayscale)	QVGA (320x240)	279809 (cycles)
imghist_gu8	Image histogram (8-bit unsigned grayscale)	VGA (640x480)	1058612 (cycles)
imgfasthist_gu8	Image histogram, fast (8-bit unsigned grayscale)	SQCIF (128x96)	44380 (cycles)
imgfasthist_gu8	Image histogram, fast (8-bit unsigned grayscale)	QCIF (176x144)	88925 (cycles)
imgfasthist_gu8	Image histogram, fast (8-bit unsigned grayscale)	CIF (352x288)	342365 (cycles)
imgfasthist_gu8	Image histogram, fast (8-bit unsigned grayscale)	QVGA (320x240)	260381 (cycles)
imgfasthist_gu8	Image histogram, fast (8-bit unsigned grayscale)	VGA (640x480)	1019741 (cycles)
imghist_gs8	Image histogram (8-bit signed grayscale)	SQCIF (128x96)	54335 (cycles)
imghist_gs8	Image histogram (8-bit signed grayscale)	QCIF (176x144)	103856 (cycles)
imghist_gs8	Image histogram (8-bit signed grayscale)	CIF (352x288)	372238 (cycles)
imghist_gs8	Image histogram (8-bit signed grayscale)	QVGA (320x240)	285273 (cycles)
imghist_gs8	Image histogram (8-bit signed grayscale)	VGA (640x480)	1069533 (cycles)
imgfasthist_gs8	Image histogram, fast (8-bit signed grayscale)	SQCIF (128x96)	45235 (cycles)
imgfasthist_gs8	Image histogram, fast (8-bit signed grayscale)	QCIF (176x144)	90210 (cycles)
imgfasthist_gs8	Image histogram, fast (8-bit signed grayscale)	CIF (352x288)	344947 (cycles)
imgfasthist_gs8	Image histogram, fast (8-bit signed grayscale)	QVGA (320x240)	262530 (cycles)
imgfasthist_gs8	Image histogram, fast (8-bit signed grayscale)	VGA (640x480)	1024051 (cycles)
imghist_gs16	Image histogram (16-bit grayscale)	SQCIF (128x96)	44034 (cycles)
imghist_gs16	Image histogram (16-bit grayscale)	QCIF (176x144)	88395 (cycles)
imghist_gs16	Image histogram (16-bit grayscale)	CIF (352x288)	341295 (cycles)
imghist_gs16	Image histogram (16-bit grayscale)	QVGA (320x240)	259490 (cycles)
imghist_gs16	Image histogram (16-bit grayscale)	VGA (640x480)	1017951 (cycles)
imgfasthist_gs16	Image histogram, fast (16-bit grayscale)	SQCIF (128x96)	42946 (cycles)
imgfasthist_gs16	Image histogram, fast (16-bit grayscale)	QCIF (176x144)	85906 (cycles)
imgfasthist_gs16	Image histogram, fast (16-bit grayscale)	CIF (352x288)	329986 (cycles)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
imgfasthist_gs16	Image histogram, fast (16-bit grayscale)	QVGA(320x240)	251027 (cycles)
imgfasthist_gs16	Image histogram, fast (16-bit grayscale)	VGA (640x480)	981827 (cycles)
imgnorm_gu8	Image normalization (8-bit unsigned grayscale)	SQCIF(128x96)	39612 (cycles)
imgnorm_gu8	Image normalization (8-bit unsigned grayscale)	QCIF(176x144)	71904 (cycles)
imgnorm_gu8	Image normalization (8-bit unsigned grayscale)	CIF (352x288)	235596 (cycles)
imgnorm_gu8	Image normalization (8-bit unsigned grayscale)	QVGA(320x240)	182424 (cycles)
imgnorm_gu8	Image normalization (8-bit unsigned grayscale)	VGA (640x480)	643164 (cycles)
imgfastnorm_gu8	Image normalization, fast (8-bit unsigned grayscale)	SQCIF(128x96)	25136 (cycles)
imgfastnorm_gu8	Image normalization, fast (8-bit unsigned grayscale)	QCIF(176x144)	49328 (cycles)
imgfastnorm_gu8	Image normalization, fast (8-bit unsigned grayscale)	CIF (352x288)	184110 (cycles)
imgfastnorm_gu8	Image normalization, fast (8-bit unsigned grayscale)	QVGA(320x240)	140478 (cycles)
imgfastnorm_gu8	Image normalization, fast (8-bit unsigned grayscale)	VGA (640x480)	540078 (cycles)
imgnorm_gs8	Image normalization (8-bit signed grayscale)	SQCIF(128x96)	35100 (cycles)
imgnorm_gs8	Image normalization (8-bit signed grayscale)	QCIF(176x144)	63840 (cycles)
imgnorm_gs8	Image normalization (8-bit signed grayscale)	CIF (352x288)	209964 (cycles)
imgnorm_gs8	Image normalization (8-bit signed grayscale)	QVGA(320x240)	162500 (cycles)
imgnorm_gs8	Image normalization (8-bit signed grayscale)	VGA (640x480)	574524 (cycles)
imgfastnorm_gs8	Image normalization, fast (8-bit signed grayscale)	SQCIF(128x96)	23599 (cycles)
imgfastnorm_gs8	Image normalization, fast (8-bit signed grayscale)	QCIF(176x144)	46161 (cycles)
imgfastnorm_gs8	Image normalization, fast (8-bit signed grayscale)	CIF (352x288)	171439 (cycles)
imgfastnorm_gs8	Image normalization, fast (8-bit signed grayscale)	QVGA(320x240)	130879 (cycles)
imgfastnorm_gs8	Image normalization, fast (8-bit signed grayscale)	VGA (640x480)	501679 (cycles)
imgnorm_gs16	Image normalization (16-bit grayscale)	SQCIF(128x96)	24507 (cycles)
imgnorm_gs16	Image normalization (16-bit grayscale)	QCIF(176x144)	47955 (cycles)
imgnorm_gs16	Image normalization (16-bit grayscale)	CIF (352x288)	178204 (cycles)
imgnorm_gs16	Image normalization (16-bit grayscale)	QVGA(320x240)	136037 (cycles)
imgnorm_gs16	Image normalization (16-bit grayscale)	VGA (640x480)	521595 (cycles)
imgfastnorm_gs16	Image normalization, fast (16-bit grayscale)	SQCIF(128x96)	18533 (cycles)
imgfastnorm_gs16	Image normalization, fast (16-bit grayscale)	QCIF(176x144)	36215 (cycles)
imgfastnorm_gs16	Image normalization, fast (16-bit grayscale)	CIF (352x288)	135705 (cycles)
imgfastnorm_gs16	Image normalization, fast (16-bit grayscale)	QVGA(320x240)	103806 (cycles)
imgfastnorm_gs16	Image normalization, fast (16-bit grayscale)	VGA (640x480)	399525 (cycles)
imgnorm_gu8_nonlinear	Image normalization, nonlinear (8-bit unsigned grayscale)	SQCIF(128x96)	54500 (cycles)
imgnorm_gu8_nonlinear	Image normalization, nonlinear (8-bit unsigned grayscale)	QCIF(176x144)	105932 (cycles)
imgnorm_gu8_nonlinear	Image normalization, nonlinear (8-bit unsigned grayscale)	CIF (352x288)	389253 (cycles)
imgnorm_gu8_nonlinear	Image normalization, nonlinear (8-bit unsigned grayscale)	QVGA(320x240)	297500 (cycles)
imgnorm_gu8_nonlinear	Image normalization, nonlinear (8-bit unsigned grayscale)	VGA (640x480)	1132580 (cycles)
imgfastnorm_gu8_nonlinear	Image normalization, fast, nonlinear (8-bit unsigned grayscale)	SQCIF(128x96)	49264 (cycles)
imgfastnorm_gu8_nonlinear	Image normalization, fast, nonlinear (8-bit unsigned grayscale)	QCIF(176x144)	98081 (cycles)
imgfastnorm_gu8_nonlinear	Image normalization, fast, nonlinear (8-bit unsigned grayscale)	CIF (352x288)	373554 (cycles)
imgfastnorm_gu8_nonlinear	Image normalization, fast, nonlinear (8-bit unsigned grayscale)	QVGA(320x240)	284417 (cycles)
imgfastnorm_gu8_nonlinear	Image normalization, fast, nonlinear (8-bit unsigned grayscale)	VGA (640x480)	1106418 (cycles)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
imgnorm_gs8_nonlinear	Image normalization, nonlinear (8-bit signed grayscale)	SQCIF(128x96)	58100 (cycles)
imgnorm_gs8_nonlinear	Image normalization, nonlinear (8-bit signed grayscale)	QCIF(176x144)	113056 (cycles)
imgnorm_gs8_nonlinear	Image normalization, nonlinear (8-bit signed grayscale)	CIF (352x288)	416323 (cycles)
imgnorm_gs8_nonlinear	Image normalization, nonlinear (8-bit signed grayscale)	QVGA(320x240)	318012 (cycles)
imgnorm_gs8_nonlinear	Image normalization, nonlinear (8-bit signed grayscale)	VGA (640x480)	1212020 (cycles)
imgfastnorm_gs8_nonlinear	Image normalization, fast, nonlinear (8-bit signed grayscale)	SQCIF(128x96)	48786 (cycles)
imgfastnorm_gs8_nonlinear	Image normalization, fast, nonlinear (8-bit signed grayscale)	QCIF(176x144)	97361 (cycles)
imgfastnorm_gs8_nonlinear	Image normalization, fast, nonlinear (8-bit signed grayscale)	CIF (352x288)	372115 (cycles)
imgfastnorm_gs8_nonlinear	Image normalization, fast, nonlinear (8-bit signed grayscale)	QVGA(320x240)	283217 (cycles)
imgfastnorm_gs8_nonlinear	Image normalization, fast, nonlinear (8-bit signed grayscale)	VGA (640x480)	1104019 (cycles)
imgnorm_gsl6_nonlinear	Image normalization, nonlinear (16-bit grayscale)	SQCIF(128x96)	38989 (cycles)
imgnorm_gsl6_nonlinear	Image normalization, nonlinear (16-bit grayscale)	QCIF(176x144)	77485 (cycles)
imgnorm_gsl6_nonlinear	Image normalization, nonlinear (16-bit grayscale)	CIF (352x288)	294351 (cycles)
imgnorm_gsl6_nonlinear	Image normalization, nonlinear (16-bit grayscale)	QVGA(320x240)	224173 (cycles)
imgnorm_gsl6_nonlinear	Image normalization, nonlinear (16-bit grayscale)	VGA (640x480)	870733 (cycles)
imgfastnorm_gsl6_nonlinear	Image normalization, fast, nonlinear (16-bit grayscale)	SQCIF(128x96)	35534 (cycles)
imgfastnorm_gsl6_nonlinear	Image normalization, fast, nonlinear (16-bit grayscale)	QCIF(176x144)	70575 (cycles)
imgfastnorm_gsl6_nonlinear	Image normalization, fast, nonlinear (16-bit grayscale)	CIF (352x288)	267854 (cycles)
imgfastnorm_gsl6_nonlinear	Image normalization, fast, nonlinear (16-bit grayscale)	QVGA(320x240)	204015 (cycles)
imgfastnorm_gsl6_nonlinear	Image normalization, fast, nonlinear (16-bit grayscale)	VGA (640x480)	792014 (cycles)
imginterleave	Image interleave (8-bit)	CIF (352x288)	401269 (cycles)
imginterleave16	Image interleave (16-bit)	CIF (352x288)	158708 (cycles)
imgfastinterleave	Image interleave, fast (8-bit)	CIF (352x288)	194705 (cycles)
imgfastinterleave16	Image interleave, fast (16-bit)	CIF (352x288)	146611 (cycles)
imgdeinterleave	Image deinterleave (8-bit)	CIF (352x288)	409817 (cycles)
imgdeinterleave16	Image deinterleave (16-bit)	CIF (352x288)	160493 (cycles)
imgfastdeinterleave	Image deinterleave, fast (8-bit)	CIF(352x288)	106291 (cycles)
imgfastdeinterleave16	Image deinterleave, fast (16-bit)	CIF (352x288)	144883 (cycles)
imgconvert_rgbyuv	Image RGB->YUV conversion (8-bit unsigned)	CIF (352x288)	985240 (cycles)
imgconvert_rgbyuv16	Image RGB->YUV conversion (16-bit signed)	CIF (352x288)	609038 (cycles)
imgfastconvert_rgbyuv	Image RGB->YUV conversion, fast (8-bit unsigned)	CIF (352x288)	571166 (cycles)
imgfastconvert_rgbyuv16	Image RGB->YUV conversion, fast (16-bit signed)	CIF (352x288)	390007 (cycles)
imgconvert_yuvrgb	Image YUV->RGB conversion (8-bit unsigned)	CIF (352x288)	1032940 (cycles)
imgconvert_yuvrgb16	Image YUV->RGB conversion (16-bit signed)	CIF (352x288)	668255 (cycles)
imgfastconvert_yuvrgb	Image YUV->RGB conversion, fast (8-bit unsigned)	CIF (352x288)	556171 (cycles)
imgfastconvert_yuvrgb16	Image YUV->RGB conversion, fast (16-bit signed)	CIF (352x288)	390573 (cycles)
imgpad_gu8	Image padding/cropping (8-bit unsigned grayscale)	padding, SQCIF(128x96)->QCIF(176x144)	30637 (cycles)
imgpad_gs8	Image padding/cropping (8-bit signed grayscale)	padding, SQCIF(128x96)->QCIF(176x144)	30677 (cycles)
imgpad_gsl6	Image padding/cropping (16-bit grayscale)	padding, SQCIF(128x96)-	15102 (cycles)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
		>QCIF (176x144)	
imgfastpad_gu8	Image padding/cropping, fast (8-bit unsigned grayscale)	padding, SQCIF (128x96) - >QCIF (176x144)	7709 (cycles)
imgfastpad_gs8	Image padding/cropping, fast (8-bit signed grayscale)	padding, SQCIF (128x96) - >QCIF (176x144)	7744 (cycles)
imgfastpad_gs16	Image padding/cropping, fast (16-bit grayscale)	padding, SQCIF (128x96) - >QCIF (176x144)	11754 (cycles)
imgpad_gu8	Image padding/cropping (8-bit unsigned grayscale)	cropping, QCIF (176x144) - >SQCIF (128x96)	18260 (cycles)
imgpad_gu8	Image padding/cropping (8-bit unsigned grayscale)	cropping, CIF (352x288) - >SQCIF (128x96)	17493 (cycles)
imgpad_gu8	Image padding/cropping (8-bit unsigned grayscale)	cropping, CIF (352x288) - >QCIF (176x144)	29373 (cycles)
imgpad_gu8	Image padding/cropping (8-bit unsigned grayscale)	cropping, VGA (640x480) - >QCIF (176x144)	34052 (cycles)
imgpad_gs8	Image padding/cropping (8-bit signed grayscale)	cropping, QCIF (176x144) - >SQCIF (128x96)	18300 (cycles)
imgpad_gs8	Image padding/cropping (8-bit signed grayscale)	cropping, CIF (352x288) - >SQCIF (128x96)	17529 (cycles)
imgpad_gs8	Image padding/cropping (8-bit signed grayscale)	cropping, CIF (352x288) - >QCIF (176x144)	29412 (cycles)
imgpad_gs8	Image padding/cropping (8-bit signed grayscale)	cropping, VGA (640x480) - >QCIF (176x144)	34089 (cycles)
imgpad_gs16	Image padding/cropping (16-bit grayscale)	cropping, QCIF (176x144) - >SQCIF (128x96)	8754 (cycles)
imgpad_gs16	Image padding/cropping (16-bit grayscale)	cropping, CIF (352x288) - >SQCIF (128x96)	9098 (cycles)
imgpad_gs16	Image padding/cropping (16-bit grayscale)	cropping, CIF (352x288) - >QCIF (176x144)	14898 (cycles)
imgpad_gs16	Image padding/cropping (16-bit grayscale)	cropping, VGA (640x480) - >QCIF (176x144)	17979 (cycles)
imgfastpad_gu8	Image padding/cropping, fast (8-bit unsigned grayscale)	cropping, QCIF (176x144) - >SQCIF (128x96)	4671 (cycles)
imgfastpad_gu8	Image padding/cropping, fast (8-bit unsigned grayscale)	cropping, CIF (352x288) - >SQCIF (128x96)	4734 (cycles)
imgfastpad_gu8	Image padding/cropping, fast (8-bit unsigned grayscale)	cropping, CIF (352x288) - >QCIF (176x144)	7740 (cycles)
imgfastpad_gu8	Image padding/cropping, fast (8-bit unsigned grayscale)	cropping, VGA (640x480) - >QCIF (176x144)	8975 (cycles)
imgfastpad_gs8	Image padding/cropping, fast (8-bit signed grayscale)	cropping, QCIF (176x144) - >SQCIF (128x96)	4707 (cycles)
imgfastpad_gs8	Image padding/cropping, fast (8-bit signed grayscale)	cropping, CIF (352x288) - >SQCIF (128x96)	4773 (cycles)
imgfastpad_gs8	Image padding/cropping, fast (8-bit signed grayscale)	cropping, CIF (352x288) - >QCIF (176x144)	7773 (cycles)
imgfastpad_gs8	Image padding/cropping, fast (8-bit signed grayscale)	cropping, VGA (640x480) - >QCIF (176x144)	9014 (cycles)
imgfastpad_gs16	Image padding/cropping, fast (16-bit grayscale)	cropping, QCIF (176x144) - >SQCIF (128x96)	6611 (cycles)
imgfastpad_gs16	Image padding/cropping, fast (16-bit grayscale)	cropping, CIF (352x288) - >SQCIF (128x96)	7469 (cycles)

Function Name	Description	Invocation parameters	Cycles Measurements
			RI2020.4, HiFi4 with VFPU, bd5
imgfastpad_gs16	Image padding/cropping, fast (16-bit grayscale)	cropping, CIF (352x288)->QCIF(176x144)	11997 (cycles)
imgfastpad_gs16	Image padding/cropping, fast (16-bit grayscale)	cropping, VGA (640x480)->QCIF(176x144)	15063 (cycles)
2D FFT for image data			
imgfft_gu8	Image 2D FFT (8-bit unsigned grayscale)	64x64	63021 (cycles)
imgfft_gu8	Image 2D FFT (8-bit unsigned grayscale)	512x512	3575264 (cycles)
imgfft_gu8	Image 2D FFT (8-bit unsigned grayscale)	CIF (352x288)	1888859 (cycles)
imgfft_gu8	Image 2D FFT (8-bit unsigned grayscale)	VGA (640x480)	4740125 (cycles)
imgfft_gs8	Image 2D FFT (8-bit signed grayscale)	64x64	63726 (cycles)
imgfft_gs8	Image 2D FFT (8-bit signed grayscale)	512x512	3603169 (cycles)
imgfft_gs8	Image 2D FFT (8-bit signed grayscale)	CIF (352x288)	1900334 (cycles)
imgfft_gs8	Image 2D FFT (8-bit signed grayscale)	VGA (640x480)	4772607 (cycles)
imgfft_gs16	Image 2D FFT (16-bit grayscale)	64x64	62955 (cycles)
imgfft_gs16	Image 2D FFT (16-bit grayscale)	512x512	3619294 (cycles)
imgfft_gs16	Image 2D FFT (16-bit grayscale)	CIF (352x288)	1904986 (cycles)
imgfft_gs16	Image 2D FFT (16-bit grayscale)	VGA (640x480)	4792925 (cycles)
imgifft_gu8	Image 2D IFFT (8-bit unsigned grayscale)	64x64	66970 (cycles)
imgifft_gu8	Image 2D IFFT (8-bit unsigned grayscale)	512x512	3651001 (cycles)
imgifft_gu8	Image 2D IFFT (8-bit unsigned grayscale)	CIF (352x288)	1930247 (cycles)
imgifft_gu8	Image 2D IFFT (8-bit unsigned grayscale)	VGA (640x480)	4842634 (cycles)
imgifft_gs8	Image 2D IFFT (8-bit signed grayscale)	64x64	66652 (cycles)
imgifft_gs8	Image 2D IFFT (8-bit signed grayscale)	512x512	3677118 (cycles)
imgifft_gs8	Image 2D IFFT (8-bit signed grayscale)	CIF (352x288)	1939178 (cycles)
imgifft_gs8	Image 2D IFFT (8-bit signed grayscale)	VGA (640x480)	4874797 (cycles)
imgifft_gs16	Image 2D IFFT (16-bit grayscale)	64x64	64471 (cycles)
imgifft_gs16	Image 2D IFFT (16-bit grayscale)	512x512	3545015 (cycles)
imgifft_gs16	Image 2D IFFT (16-bit grayscale)	CIF (352x288)	1887909 (cycles)
imgifft_gs16	Image 2D IFFT (16-bit grayscale)	VGA (640x480)	4720232 (cycles)

Functions Performance

This chapter collects detailed performance data for all library functions.

Function name	Invocation parameters	Cycles Measurements
		RI2020.4, HiFi4 with VFPU, bd5
FIR Filters		
Filtering		
bkfir16x16_process	N: 80; M: 256	2909 (7.0 MACs/cycle)
bkfir16x16_process	N: 2048; M: 8	11027 (1.5 MACs/cycle)
bkfir16x16_process	N: 160; M: 8	880 (1.5 MACs/cycle)
bkfir16x16_process	N: 160; M: 16	993 (2.6 MACs/cycle)
bkfir16x16_process	N: 1024; M: 32	8390 (3.9 MACs/cycle)
bkfiral6x16_process	N: 80; M: 256	2981 (6.9 MACs/cycle)
bkfiral6x16_process	N: 2048; M: 8	12327 (1.3 MACs/cycle)
bkfiral6x16_process	N: 160; M: 8	999 (1.3 MACs/cycle)
bkfiral6x16_process	N: 160; M: 16	1118 (2.3 MACs/cycle)
bkfiral6x16_process	N: 1024; M: 32	9051 (3.6 MACs/cycle)
bkfir24x24p_process	N: 80; M: 256	5438 (3.8 MACs/cycle)
bkfir24x24p_process	N: 80; M: 512	10559 (3.9 MACs/cycle)
bkfir24x24p_process	N: 2048; M: 4	11543 (0.7 MACs/cycle)
bkfir24x24p_process	N: 2048; M: 8	11544 (1.4 MACs/cycle)
bkfir24x24p_process	N: 160; M: 8	921 (1.4 MACs/cycle)
bkfir24x24p_process	N: 160; M: 16	1263 (2.0 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
bkfir24x24p_process	N: 80; M: 16	639 (2.0 MACs/cycle)
bkfir24x24p_process	N: 512; M: 32	6045 (2.7 MACs/cycle)
bkfir24x24p_process	N: 1024; M: 32	12075 (2.7 MACs/cycle)
bkfir32x16_process	N: 80; M: 256	3628 (5.6 MACs/cycle)
bkfir32x16_process	N: 80; M: 512	6829 (6.0 MACs/cycle)
bkfir32x16_process	N: 2048; M: 4	7455 (1.1 MACs/cycle)
bkfir32x16_process	N: 2048; M: 8	9764 (1.7 MACs/cycle)
bkfir32x16_process	N: 160; M: 8	796 (1.6 MACs/cycle)
bkfir32x16_process	N: 160; M: 16	996 (2.6 MACs/cycle)
bkfir32x16_process	N: 80; M: 16	516 (2.5 MACs/cycle)
bkfir32x16_process	N: 512; M: 32	4388 (3.7 MACs/cycle)
bkfir32x16_process	N: 1024; M: 32	8742 (3.7 MACs/cycle)
bkfir32x32_process	N: 80; M: 256	5396 (3.8 MACs/cycle)
bkfir32x32_process	N: 80; M: 512	10518 (3.9 MACs/cycle)
bkfir32x32_process	N: 2048; M: 4	9233 (0.9 MACs/cycle)
bkfir32x32_process	N: 2048; M: 8	10512 (1.6 MACs/cycle)
bkfir32x32_process	N: 160; M: 8	837 (1.5 MACs/cycle)
bkfir32x32_process	N: 160; M: 16	1176 (2.2 MACs/cycle)
bkfir32x32_process	N: 80; M: 16	596 (2.1 MACs/cycle)
bkfir32x32_process	N: 512; M: 32	5777 (2.8 MACs/cycle)
bkfir32x32_process	N: 1024; M: 32	11536 (2.8 MACs/cycle)
bkfir32x32ep_process	N: 80; M: 256	5580 (3.7 MACs/cycle)
bkfir32x32ep_process	N: 80; M: 512	10700 (3.8 MACs/cycle)
bkfir32x32ep_process	N: 2048; M: 4	12820 (0.6 MACs/cycle)
bkfir32x32ep_process	N: 2048; M: 8	15380 (1.1 MACs/cycle)
bkfir32x32ep_process	N: 160; M: 8	1221 (1.0 MACs/cycle)
bkfir32x32ep_process	N: 160; M: 16	1540 (1.7 MACs/cycle)
bkfir32x32ep_process	N: 80; M: 16	780 (1.6 MACs/cycle)
bkfir32x32ep_process	N: 512; M: 32	6933 (2.4 MACs/cycle)
bkfir32x32ep_process	N: 1024; M: 32	13844 (2.4 MACs/cycle)
bkfira32x16_process	N: 80; M: 256	4259 (4.8 MACs/cycle)
bkfira32x16_process	N: 80; M: 512	8099 (5.1 MACs/cycle)
bkfira32x16_process	N: 2048; M: 4	11214 (0.7 MACs/cycle)
bkfira32x16_process	N: 2048; M: 8	13086 (1.3 MACs/cycle)
bkfira32x16_process	N: 160; M: 8	1049 (1.2 MACs/cycle)
bkfira32x16_process	N: 160; M: 16	1289 (2.0 MACs/cycle)
bkfira32x16_process	N: 80; M: 16	659 (1.9 MACs/cycle)
bkfira32x16_process	N: 512; M: 32	5597 (2.9 MACs/cycle)
bkfira32x16_process	N: 1024; M: 32	11165 (2.9 MACs/cycle)
bkfira32x32_process	N: 80; M: 256	5608 (3.7 MACs/cycle)
bkfira32x32_process	N: 80; M: 512	10729 (3.8 MACs/cycle)
bkfira32x32_process	N: 2048; M: 4	13346 (0.6 MACs/cycle)
bkfira32x32_process	N: 2048; M: 8	15901 (1.0 MACs/cycle)
bkfira32x32_process	N: 160; M: 8	1268 (1.0 MACs/cycle)
bkfira32x32_process	N: 160; M: 16	1588 (1.6 MACs/cycle)
bkfira32x32_process	N: 80; M: 16	808 (1.6 MACs/cycle)
bkfira32x32_process	N: 512; M: 32	7068 (2.3 MACs/cycle)
bkfira32x32_process	N: 1024; M: 32	14108 (2.3 MACs/cycle)
bkfira32x32ep_process	N: 80; M: 256	5768 (3.6 MACs/cycle)
bkfira32x32ep_process	N: 80; M: 512	10889 (3.8 MACs/cycle)
bkfira32x32ep_process	N: 2048; M: 4	17437 (0.5 MACs/cycle)
bkfira32x32ep_process	N: 2048; M: 8	19997 (0.8 MACs/cycle)
bkfira32x32ep_process	N: 160; M: 8	1588 (0.8 MACs/cycle)
bkfira32x32ep_process	N: 160; M: 16	1910 (1.3 MACs/cycle)
bkfira32x32ep_process	N: 80; M: 16	970 (1.3 MACs/cycle)
bkfira32x32ep_process	N: 512; M: 32	8094 (2.0 MACs/cycle)
bkfira32x32ep_process	N: 1024; M: 32	16156 (2.0 MACs/cycle)
cxfir16x16_process	N: 80; M: 128	6855 (6.0 MACs/cycle)
cxfir16x16_process	N: 2048; M: 8	22542 (2.9 MACs/cycle)
cxfir16x16_process	N: 160; M: 8	1776 (2.9 MACs/cycle)
cxfir16x16_process	N: 160; M: 16	2576 (4.0 MACs/cycle)
cxfir16x16_process	N: 1024; M: 32	26632 (4.9 MACs/cycle)
cxfir32x16_process	N: 80; M: 128	10838 (3.8 MACs/cycle)
cxfir32x16_process	N: 80; M: 512	41559 (3.9 MACs/cycle)
cxfir32x16_process	N: 2048; M: 4	22548 (1.5 MACs/cycle)
cxfir32x16_process	N: 2048; M: 8	31252 (2.1 MACs/cycle)
cxfir32x16_process	N: 160; M: 8	2458 (2.1 MACs/cycle)
cxfir32x16_process	N: 160; M: 16	3738 (2.7 MACs/cycle)
cxfir32x16_process	N: 80; M: 16	1878 (2.7 MACs/cycle)
cxfir32x16_process	N: 512; M: 32	20116 (3.3 MACs/cycle)
cxfir32x16_process	N: 1024; M: 32	40210 (3.3 MACs/cycle)
cxfir32x32_process	N: 80; M: 128	10817 (3.8 MACs/cycle)
cxfir32x32_process	N: 80; M: 512	41537 (3.9 MACs/cycle)
cxfir32x32_process	N: 2048; M: 4	23980 (1.4 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
cxfir32x32_process	N: 2048; M: 8	31079 (2.1 MACs/cycle)
cxfir32x32_process	N: 160; M: 8	2444 (2.1 MACs/cycle)
cxfir32x32_process	N: 160; M: 16	3721 (2.8 MACs/cycle)
cxfir32x32_process	N: 80; M: 16	1867 (2.7 MACs/cycle)
cxfir32x32_process	N: 512; M: 32	20053 (3.3 MACs/cycle)
cxfir32x32_process	N: 1024; M: 32	40091 (3.3 MACs/cycle)
cxfir32x32ep_process	N: 80; M: 128	10918 (3.8 MACs/cycle)
cxfir32x32ep_process	N: 80; M: 512	41638 (3.9 MACs/cycle)
cxfir32x32ep_process	N: 2048; M: 4	23979 (1.4 MACs/cycle)
cxfir32x32ep_process	N: 2048; M: 8	33127 (2.0 MACs/cycle)
cxfir32x32ep_process	N: 160; M: 8	2604 (2.0 MACs/cycle)
cxfir32x32ep_process	N: 160; M: 16	3882 (2.6 MACs/cycle)
cxfir32x32ep_process	N: 80; M: 16	1951 (2.6 MACs/cycle)
cxfir32x32ep_process	N: 512; M: 32	20569 (3.2 MACs/cycle)
cxfir32x32ep_process	N: 1024; M: 32	41123 (3.2 MACs/cycle)
stereo_bkfir16x16_process	N: 80; M: 256	6112 (6.7 MACs/cycle)
stereo_bkfir16x16_process	N: 2048; M: 8	28136 (1.2 MACs/cycle)
stereo_bkfir16x16_process	N: 160; M: 8	2259 (1.1 MACs/cycle)
stereo_bkfir16x16_process	N: 160; M: 16	2487 (2.1 MACs/cycle)
stereo_bkfir16x16_process	N: 1024; M: 32	19805 (3.3 MACs/cycle)
stereo_bkfir32x32_process	N: 80; M: 256	10884 (3.8 MACs/cycle)
stereo_bkfir32x32_process	N: 2048; M: 8	23823 (1.4 MACs/cycle)
stereo_bkfir32x32_process	N: 160; M: 8	1875 (1.4 MACs/cycle)
stereo_bkfir32x32_process	N: 160; M: 16	2555 (2.0 MACs/cycle)
stereo_bkfir32x32_process	N: 1024; M: 32	24462 (2.7 MACs/cycle)
bkfiraf_process	N: 512; M: 32	7454 (2.2 MACs/cycle)
bkfiraf_process	N: 1024; M: 32	14876 (2.2 MACs/cycle)
bkfiraf_process	N: 1024; M: 256	72220 (3.6 MACs/cycle)
bkfiraf_process	N: 1024; M: 512	137756 (3.8 MACs/cycle)
bkfirf_process	N: 512; M: 32	7693 (2.1 MACs/cycle)
bkfirf_process	N: 1024; M: 32	15373 (2.1 MACs/cycle)
bkfirf_process	N: 1024; M: 256	72717 (3.6 MACs/cycle)
bkfirf_process	N: 1024; M: 512	138253 (3.8 MACs/cycle)
stereo_bkfirf_process	N: 512; M: 32	17957 (1.8 MACs/cycle)
stereo_bkfirf_process	N: 1024; M: 32	35909 (1.8 MACs/cycle)
stereo_bkfirf_process	N: 1024; M: 256	150597 (3.5 MACs/cycle)
stereo_bkfirf_process	N: 1024; M: 512	281669 (3.7 MACs/cycle)
cxfirf_process	N: 512; M: 32	19083 (3.4 MACs/cycle)
cxfirf_process	N: 512; M: 256	133771 (3.9 MACs/cycle)
FIR Filters		
Decimation		
firdec16x16_process	N: 1024; M: 2; D: 2	6514 (0.3 MACs/cycle)
firdec16x16_process	N: 1024; M: 256; D: 2	46109 (5.7 MACs/cycle)
firdec16x16_process	N: 1024; M: 260; D: 2	47008 (5.7 MACs/cycle)
firdec16x16_process	N: 1024; M: 261; D: 2	47389 (5.6 MACs/cycle)
firdec16x16_process	N: 80; M: 256; D: 2	3629 (5.6 MACs/cycle)
firdec16x16_process	N: 1024; M: 2; D: 3	7073 (0.3 MACs/cycle)
firdec16x16_process	N: 1024; M: 256; D: 3	59741 (4.4 MACs/cycle)
firdec16x16_process	N: 1024; M: 260; D: 3	60577 (4.4 MACs/cycle)
firdec16x16_process	N: 1024; M: 261; D: 3	61420 (4.4 MACs/cycle)
firdec16x16_process	N: 1024; M: 2; D: 4	7300 (0.3 MACs/cycle)
firdec16x16_process	N: 1024; M: 256; D: 4	39199 (6.7 MACs/cycle)
firdec16x16_process	N: 1024; M: 260; D: 4	39525 (6.7 MACs/cycle)
firdec16x16_process	N: 1024; M: 261; D: 4	40102 (6.7 MACs/cycle)
firdec16x16_process	N: 1024; M: 256; D: 5	62675 (4.2 MACs/cycle)
firdec16x16_process	N: 1024; M: 260; D: 5	63357 (4.2 MACs/cycle)
firdec16x16_process	N: 1024; M: 256; D: 7	78713 (3.3 MACs/cycle)
firdec16x16_process	N: 1024; M: 260; D: 7	80544 (3.3 MACs/cycle)
firdec32x16_process	N: 1024; M: 2; D: 2	7290 (0.3 MACs/cycle)
firdec32x16_process	N: 1024; M: 4; D: 2	7290 (0.6 MACs/cycle)
firdec32x16_process	N: 1024; M: 8; D: 2	7717 (1.1 MACs/cycle)
firdec32x16_process	N: 1024; M: 16; D: 2	7978 (2.1 MACs/cycle)
firdec32x16_process	N: 1024; M: 32; D: 2	10277 (3.2 MACs/cycle)
firdec32x16_process	N: 1024; M: 256; D: 2	38949 (6.7 MACs/cycle)
firdec32x16_process	N: 1024; M: 260; D: 2	39581 (6.7 MACs/cycle)
firdec32x16_process	N: 1024; M: 261; D: 2	39973 (6.7 MACs/cycle)
firdec32x16_process	N: 80; M: 256; D: 2	3077 (6.7 MACs/cycle)
firdec32x16_process	N: 1024; M: 2; D: 3	9635 (0.2 MACs/cycle)
firdec32x16_process	N: 1024; M: 4; D: 3	9635 (0.4 MACs/cycle)
firdec32x16_process	N: 1024; M: 8; D: 3	10429 (0.8 MACs/cycle)
firdec32x16_process	N: 1024; M: 16; D: 3	11268 (1.5 MACs/cycle)
firdec32x16_process	N: 1024; M: 256; D: 3	50067 (5.2 MACs/cycle)
firdec32x16_process	N: 1024; M: 260; D: 3	50339 (5.3 MACs/cycle)
firdec32x16_process	N: 1024; M: 261; D: 3	51335 (5.2 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
firdec32x16_process	N: 1024; M: 2; D: 4	9355 (0.2 MACs/cycle)
firdec32x16_process	N: 1024; M: 4; D: 4	9355 (0.4 MACs/cycle)
firdec32x16_process	N: 1024; M: 8; D: 4	10021 (0.8 MACs/cycle)
firdec32x16_process	N: 1024; M: 256; D: 4	43045 (6.1 MACs/cycle)
firdec32x16_process	N: 1024; M: 260; D: 4	43417 (6.1 MACs/cycle)
firdec32x16_process	N: 1024; M: 261; D: 4	44069 (6.1 MACs/cycle)
firdec32x16_process	N: 1024; M: 256; D: 5	96135 (2.7 MACs/cycle)
firdec32x16_process	N: 1024; M: 260; D: 5	97186 (2.7 MACs/cycle)
firdec32x16_process	N: 1024; M: 256; D: 6	96674 (2.7 MACs/cycle)
firdec32x16_process	N: 1024; M: 260; D: 6	98047 (2.7 MACs/cycle)
firdec32x16_process	N: 1024; M: 256; D: 7	112614 (2.3 MACs/cycle)
firdec32x16_process	N: 1024; M: 260; D: 7	114850 (2.3 MACs/cycle)
firdec32x16_process	N: 80; M: 256; D: 2	3077 (6.7 MACs/cycle)
firdec32x32_process	N: 1024; M: 2; D: 2	6943 (0.3 MACs/cycle)
firdec32x32_process	N: 1024; M: 4; D: 2	6943 (0.6 MACs/cycle)
firdec32x32_process	N: 1024; M: 8; D: 2	8223 (1.0 MACs/cycle)
firdec32x32_process	N: 1024; M: 16; D: 2	10271 (1.6 MACs/cycle)
firdec32x32_process	N: 1024; M: 32; D: 2	14367 (2.3 MACs/cycle)
firdec32x32_process	N: 1024; M: 256; D: 2	71711 (3.7 MACs/cycle)
firdec32x32_process	N: 1024; M: 260; D: 2	72735 (3.7 MACs/cycle)
firdec32x32_process	N: 1024; M: 261; D: 2	73759 (3.6 MACs/cycle)
firdec32x32_process	N: 1024; M: 2; D: 3	9634 (0.2 MACs/cycle)
firdec32x32_process	N: 1024; M: 4; D: 3	9636 (0.4 MACs/cycle)
firdec32x32_process	N: 1024; M: 8; D: 3	10735 (0.8 MACs/cycle)
firdec32x32_process	N: 1024; M: 16; D: 3	12255 (1.3 MACs/cycle)
firdec32x32_process	N: 1024; M: 256; D: 3	73896 (3.5 MACs/cycle)
firdec32x32_process	N: 1024; M: 260; D: 3	74914 (3.6 MACs/cycle)
firdec32x32_process	N: 1024; M: 261; D: 3	75944 (3.5 MACs/cycle)
firdec32x32_process	N: 1024; M: 2; D: 4	10271 (0.2 MACs/cycle)
firdec32x32_process	N: 1024; M: 4; D: 4	10271 (0.4 MACs/cycle)
firdec32x32_process	N: 1024; M: 8; D: 4	11297 (0.7 MACs/cycle)
firdec32x32_process	N: 1024; M: 256; D: 4	74271 (3.5 MACs/cycle)
firdec32x32_process	N: 1024; M: 260; D: 4	75295 (3.5 MACs/cycle)
firdec32x32_process	N: 1024; M: 261; D: 4	76320 (3.5 MACs/cycle)
firdec32x32_process	N: 1024; M: 256; D: 5	115915 (2.3 MACs/cycle)
firdec32x32_process	N: 1024; M: 260; D: 5	118561 (2.2 MACs/cycle)
firdec32x32_process	N: 1024; M: 256; D: 6	92579 (2.8 MACs/cycle)
firdec32x32_process	N: 1024; M: 260; D: 6	110285 (2.4 MACs/cycle)
firdec32x32_process	N: 1024; M: 256; D: 7	125201 (2.1 MACs/cycle)
firdec32x32_process	N: 1024; M: 260; D: 7	127905 (2.1 MACs/cycle)
firdec32x32_process	N: 80; M: 256; D: 2	5631 (3.6 MACs/cycle)
firdec32x32ep_process	N: 80; M: 256; D: 2	5703 (3.6 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 2; D: 2	7755 (0.3 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 4; D: 2	7755 (0.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 8; D: 2	9121 (0.9 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 16; D: 2	11169 (1.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 32; D: 2	15267 (2.1 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 256; D: 2	72609 (3.6 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 260; D: 2	73757 (3.6 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 261; D: 2	74658 (3.6 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 2; D: 3	10275 (0.2 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 4; D: 3	10275 (0.4 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 8; D: 3	11096 (0.7 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 16; D: 3	12616 (1.3 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 256; D: 3	74279 (3.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 260; D: 3	75555 (3.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 261; D: 3	76323 (3.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 2; D: 4	9457 (0.2 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 4; D: 4	9457 (0.4 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 8; D: 4	10532 (0.8 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 256; D: 4	74020 (3.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 260; D: 4	75058 (3.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 261; D: 4	76068 (3.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 256; D: 5	117070 (2.2 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 260; D: 5	119716 (2.2 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 256; D: 6	93732 (2.8 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 260; D: 6	95012 (2.8 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 256; D: 7	126338 (2.1 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 260; D: 7	129061 (2.1 MACs/cycle)
firdec32x32ep_process	N: 80; M: 256; D: 2	5705 (3.6 MACs/cycle)
firdecf_process	N: 1024; M: 256; D: 2	71703 (3.7 MACs/cycle)
firdecf_process	N: 1024; M: 512; D: 2	137242 (3.8 MACs/cycle)
firdecf_process	N: 1024; M: 256; D: 3	99354 (2.6 MACs/cycle)
firdecf_process	N: 1024; M: 512; D: 3	189467 (2.8 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
firdecf_process	N: 1024; M: 256; D: 4	114714 (2.3 MACs/cycle)
firdecf_process	N: 1024; M: 512; D: 4	213018 (2.5 MACs/cycle)
firdecf_process	N: 1024; M: 256; D: 8	177179 (1.5 MACs/cycle)
firdecf_process	N: 1024; M: 512; D: 8	308249 (1.7 MACs/cycle)
firdecf_process	N: 1024; M: 256; D: 11	211993 (1.2 MACs/cycle)
firdecf_process	N: 1024; M: 512; D: 11	375833 (1.4 MACs/cycle)
firdecf_process	N: 1024; M: 256; D: 23	224281 (1.2 MACs/cycle)
firdecf_process	N: 1024; M: 512; D: 23	388120 (1.4 MACs/cycle)
FIR Filters		
Interpolation		
firinterp16x16_process	N: 1024; M: 4; D: 2	7519 (1.1 MACs/cycle)
firinterp16x16_process	N: 1024; M: 256; D: 2	80539 (6.5 MACs/cycle)
firinterp16x16_process	N: 1024; M: 260; D: 2	81440 (6.5 MACs/cycle)
firinterp16x16_process	N: 1024; M: 4; D: 3	12706 (1.0 MACs/cycle)
firinterp16x16_process	N: 1024; M: 256; D: 3	121957 (6.4 MACs/cycle)
firinterp16x16_process	N: 1024; M: 260; D: 3	123690 (6.5 MACs/cycle)
firinterp16x16_process	N: 1024; M: 4; D: 4	15653 (1.0 MACs/cycle)
firinterp16x16_process	N: 1024; M: 256; D: 4	161445 (6.5 MACs/cycle)
firinterp16x16_process	N: 1024; M: 260; D: 4	163744 (6.5 MACs/cycle)
firinterp16x16_process	N: 1024; M: 256; D: 5	202963 (6.5 MACs/cycle)
firinterp16x16_process	N: 1024; M: 260; D: 5	206295 (6.5 MACs/cycle)
firinterp16x16_process	N: 1024; M: 256; D: 7	284045 (6.5 MACs/cycle)
firinterp16x16_process	N: 1024; M: 260; D: 7	287910 (6.5 MACs/cycle)
firinterp16x16_process	N: 80; M: 204; D: 2	5131 (6.4 MACs/cycle)
firinterp32x16_process	N: 1024; M: 4; D: 2	8487 (1.0 MACs/cycle)
firinterp32x16_process	N: 1024; M: 8; D: 2	10194 (1.6 MACs/cycle)
firinterp32x16_process	N: 1024; M: 16; D: 2	12838 (2.6 MACs/cycle)
firinterp32x16_process	N: 1024; M: 32; D: 2	18215 (3.6 MACs/cycle)
firinterp32x16_process	N: 1024; M: 256; D: 2	77992 (6.7 MACs/cycle)
firinterp32x16_process	N: 1024; M: 260; D: 2	79017 (6.7 MACs/cycle)
firinterp32x16_process	N: 1024; M: 4; D: 3	16291 (0.8 MACs/cycle)
firinterp32x16_process	N: 1024; M: 8; D: 3	17788 (1.4 MACs/cycle)
firinterp32x16_process	N: 1024; M: 16; D: 3	20447 (2.4 MACs/cycle)
firinterp32x16_process	N: 1024; M: 256; D: 3	116911 (6.7 MACs/cycle)
firinterp32x16_process	N: 1024; M: 260; D: 3	119211 (6.7 MACs/cycle)
firinterp32x16_process	N: 1024; M: 4; D: 4	19883 (0.8 MACs/cycle)
firinterp32x16_process	N: 1024; M: 8; D: 4	21589 (1.5 MACs/cycle)
firinterp32x16_process	N: 1024; M: 256; D: 4	155948 (6.7 MACs/cycle)
firinterp32x16_process	N: 1024; M: 260; D: 4	158635 (6.7 MACs/cycle)
firinterp32x16_process	N: 1024; M: 256; D: 5	222121 (5.9 MACs/cycle)
firinterp32x16_process	N: 1024; M: 260; D: 5	223147 (6.0 MACs/cycle)
firinterp32x16_process	N: 1024; M: 256; D: 6	264749 (5.9 MACs/cycle)
firinterp32x16_process	N: 1024; M: 260; D: 6	267179 (6.0 MACs/cycle)
firinterp32x16_process	N: 1024; M: 256; D: 7	309161 (5.9 MACs/cycle)
firinterp32x16_process	N: 1024; M: 260; D: 7	310827 (6.0 MACs/cycle)
firinterp32x16_process	N: 80; M: 204; D: 8	22703 (5.8 MACs/cycle)
firinterp32x32_process	N: 1024; M: 4; D: 2	10792 (0.8 MACs/cycle)
firinterp32x32_process	N: 1024; M: 8; D: 2	12841 (1.3 MACs/cycle)
firinterp32x32_process	N: 1024; M: 16; D: 2	16936 (1.9 MACs/cycle)
firinterp32x32_process	N: 1024; M: 32; D: 2	25128 (2.6 MACs/cycle)
firinterp32x32_process	N: 1024; M: 256; D: 2	139816 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 260; D: 2	142122 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 4; D: 3	22057 (0.6 MACs/cycle)
firinterp32x32_process	N: 1024; M: 8; D: 3	25897 (0.9 MACs/cycle)
firinterp32x32_process	N: 1024; M: 16; D: 3	32041 (1.5 MACs/cycle)
firinterp32x32_process	N: 1024; M: 256; D: 3	216361 (3.6 MACs/cycle)
firinterp32x32_process	N: 1024; M: 260; D: 3	219433 (3.6 MACs/cycle)
firinterp32x32_process	N: 1024; M: 4; D: 4	27945 (0.6 MACs/cycle)
firinterp32x32_process	N: 1024; M: 8; D: 4	33067 (1.0 MACs/cycle)
firinterp32x32_process	N: 1024; M: 256; D: 4	287017 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 260; D: 4	291113 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 256; D: 5	358953 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 260; D: 5	364073 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 256; D: 6	429867 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 260; D: 6	436009 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 256; D: 7	500777 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 260; D: 7	507945 (3.7 MACs/cycle)
firinterp32x32_process	N: 80; M: 204; D: 8	36381 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 80; M: 204; D: 2	9056 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 4; D: 2	12585 (0.7 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 8; D: 2	15140 (1.1 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 16; D: 2	19236 (1.7 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 32; D: 2	27428 (2.4 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 2	142116 (3.7 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
firinterp32x32ep_process	N: 1024; M: 260; D: 2	144164 (3.7 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 4; D: 3	25261 (0.5 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 8; D: 3	29141 (0.8 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 16; D: 3	35266 (1.4 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 3	219562 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 260; D: 3	222632 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 4; D: 4	33325 (0.5 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 8; D: 4	38442 (0.9 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 4	292392 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 260; D: 4	296488 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 5	367658 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 260; D: 5	372778 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 6	440362 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 260; D: 6	446506 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 7	513066 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 260; D: 7	520234 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 80; M: 204; D: 8	37482 (3.5 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 2	134295 (3.9 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 512; D: 2	265369 (4.0 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 3	221465 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 512; D: 3	418072 (3.8 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 4	269082 (3.9 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 512; D: 4	531224 (3.9 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 8	590619 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 512; D: 8	1114906 (3.8 MACs/cycle)
FIR Filters		
Correlation, Convolution, Despreading, LMS		
fir_convoll6x16	N: 80; M: 56	870 (5.1 MACs/cycle)
fir_convoll6x16	N: 80; M: 60	911 (5.3 MACs/cycle)
fir_convoll6x16	N: 256; M: 80	3519 (5.8 MACs/cycle)
fir_convoll6x16	N: 256; M: 84	3648 (5.9 MACs/cycle)
fir_convoll32x16	N: 80; M: 56	943 (4.8 MACs/cycle)
fir_convoll32x16	N: 80; M: 60	948 (5.1 MACs/cycle)
fir_convoll32x16	N: 256; M: 80	3735 (5.5 MACs/cycle)
fir_convoll32x16	N: 256; M: 84	3804 (5.7 MACs/cycle)
fir_convoll32x32	N: 80; M: 56	1286 (3.5 MACs/cycle)
fir_convoll32x32	N: 256; M: 80	5594 (3.7 MACs/cycle)
fir_convoll32x32ep	N: 80; M: 56	1538 (2.9 MACs/cycle)
fir_convoll32x32ep	N: 256; M: 80	6418 (3.2 MACs/cycle)
fir_convolla16x16	N=80; M=56	1038 (4.3 MACs/cycle)
fir_convolla16x16	N=256; M=80	3867 (5.3 MACs/cycle)
fir_convolla32x16	N: 80; M: 56	1099 (4.1 MACs/cycle)
fir_convolla32x16	N: 80; M: 60	1182 (4.1 MACs/cycle)
fir_convolla32x16	N: 256; M: 80	4003 (5.1 MACs/cycle)
fir_convolla32x16	N: 256; M: 84	4262 (5.0 MACs/cycle)
fir_convolla32x32	N=80; M=56	1440 (3.1 MACs/cycle)
fir_convolla32x32	N=256; M=80	5905 (3.5 MACs/cycle)
fir_convolla32x32ep	N=80; M=56	1656 (2.7 MACs/cycle)
fir_convolla32x32ep	N=256; M=80	6580 (3.1 MACs/cycle)
cxfir_convoll32x16	N: 80; M: 56	3707 (4.8 MACs/cycle)
cxfir_convoll32x16	N: 256; M: 80	16456 (5.0 MACs/cycle)
cxfir_convolla32x16	N: 80; M: 56	3994 (4.5 MACs/cycle)
cxfir_convolla32x16	N: 256; M: 80	17091 (4.8 MACs/cycle)
fir_lconvolla16x16	N=80; M=56	1308 (3.4 MACs/cycle)
fir_lconvolla16x16	N=256; M=80	4213 (4.9 MACs/cycle)
fir_lconvolla32x32	N=80; M=56	3071 (1.5 MACs/cycle)
fir_lconvolla32x32	N=256; M=80	11912 (1.7 MACs/cycle)
fir_xcorr16x16	N: 80; M: 56	884 (5.1 MACs/cycle)
fir_xcorr16x16	N: 256; M: 80	3662 (5.6 MACs/cycle)
fir_xcorr32x16	N: 80; M: 56	879 (5.1 MACs/cycle)
fir_xcorr32x16	N: 80; M: 60	973 (4.9 MACs/cycle)
fir_xcorr32x16	N: 256; M: 80	3561 (5.8 MACs/cycle)
fir_xcorr32x16	N: 256; M: 84	3854 (5.6 MACs/cycle)
fir_xcorr32x32	N: 80; M: 56	1270 (3.5 MACs/cycle)
fir_xcorr32x32	N: 256; M: 80	5578 (3.7 MACs/cycle)
fir_xcorr32x32ep	N: 80; M: 56	1547 (2.9 MACs/cycle)
fir_xcorr32x32ep	N: 256; M: 80	6471 (3.2 MACs/cycle)
cxfir_xcorr32x32	N: 80; M: 56	4723 (3.8 MACs/cycle)
cxfir_xcorr32x32	N: 256; M: 80	21251 (3.9 MACs/cycle)
fir_xcorra16x16	N: 80; M: 56	1037 (4.3 MACs/cycle)
fir_xcorra16x16	N: 256; M: 80	3869 (5.3 MACs/cycle)
fir_xcorra32x16	N: 80; M: 56	1121 (4.0 MACs/cycle)
fir_xcorra32x16	N: 80; M: 60	1206 (4.0 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
fir xcorra32x16	N: 256; M: 80	4037 (5.1 MACs/cycle)
fir xcorra32x16	N: 256; M: 84	4298 (5.0 MACs/cycle)
fir xcorra32x32	N: 80; M: 56	1485 (3.0 MACs/cycle)
fir xcorra32x32	N: 256; M: 80	5974 (3.4 MACs/cycle)
fir xcorra32x32ep	N: 80; M: 56	1696 (2.6 MACs/cycle)
fir xcorra32x32ep	N: 256; M: 80	6644 (3.1 MACs/cycle)
fir lxcorra16x16	N=80; M=56	1308 (3.4 MACs/cycle)
fir lxcorra16x16	N=256; M=80	4212 (4.9 MACs/cycle)
fir lxcorra32x32	N=80; M=56	3071 (1.5 MACs/cycle)
fir lxcorra32x32	N=256; M=80	11912 (1.7 MACs/cycle)
fir acorr16x16	N: 80	1148 (5.6 MACs/cycle)
fir acorr16x16	N: 256	9947 (6.6 MACs/cycle)
fir acorr32x32	N: 80	1759 (3.6 MACs/cycle)
fir acorr32x32	N: 256	16853 (3.9 MACs/cycle)
fir acorr32x32ep	N: 80	1985 (3.2 MACs/cycle)
fir acorr32x32ep	N: 256	17607 (3.7 MACs/cycle)
fir acorra16x16	N=80	1295 (4.9 MACs/cycle)
fir acorra16x16	N=256	9633 (6.8 MACs/cycle)
fir acorra32x32	N: 80	1839 (3.5 MACs/cycle)
fir acorra32x32	N: 256	17063 (3.8 MACs/cycle)
fir acorra32x32ep	N: 80	2047 (3.1 MACs/cycle)
fir acorra32x32ep	N: 256	17732 (3.7 MACs/cycle)
fir lacorra16x16	N=80	803 (4.0 MACs/cycle)
fir lacorra16x16	N=256	5259 (6.2 MACs/cycle)
fir lacorra32x32	N=80	2090 (1.5 MACs/cycle)
fir lacorra32x32	N=256	17886 (1.8 MACs/cycle)
fir blms16x16	N: 80; M: 16	841 (3.0 MACs/cycle)
fir blms16x16	N: 64; M: 16	704 (2.9 MACs/cycle)
fir blms16x16	N: 64; M: 64	1757 (4.7 MACs/cycle)
fir blms16x16	N: 80; M: 64	2085 (4.9 MACs/cycle)
fir blms16x16	N: 80; M: 128	3732 (5.5 MACs/cycle)
fir blms16x16	N: 64; M: 128	3148 (5.2 MACs/cycle)
fir blms16x32	N: 80; M: 16	849 (3.0 MACs/cycle)
fir blms16x32	N: 64; M: 16	707 (2.9 MACs/cycle)
fir blms16x32	N: 64; M: 64	1683 (4.9 MACs/cycle)
fir blms16x32	N: 80; M: 64	2011 (5.1 MACs/cycle)
fir blms16x32	N: 80; M: 128	3598 (5.7 MACs/cycle)
fir blms16x32	N: 64; M: 128	3016 (5.4 MACs/cycle)
fir blms32x32	N: 80; M: 16	910 (2.8 MACs/cycle)
fir blms32x32	N: 64; M: 16	749 (2.7 MACs/cycle)
fir blms32x32	N: 64; M: 64	2411 (3.4 MACs/cycle)
fir blms32x32	N: 80; M: 64	2957 (3.5 MACs/cycle)
fir blms32x32	N: 80; M: 128	5684 (3.6 MACs/cycle)
fir blms32x32	N: 64; M: 128	4628 (3.5 MACs/cycle)
fir blms32x32ep	N: 80; M: 16	1149 (2.2 MACs/cycle)
fir blms32x32ep	N: 64; M: 16	946 (2.2 MACs/cycle)
fir blms32x32ep	N: 64; M: 64	2734 (3.0 MACs/cycle)
fir blms32x32ep	N: 80; M: 64	3322 (3.1 MACs/cycle)
fir blms32x32ep	N: 80; M: 128	6217 (3.3 MACs/cycle)
fir blms32x32ep	N: 64; M: 128	5119 (3.2 MACs/cycle)
cxfir blms32x32	N: 80; M: 16	3200 (3.2 MACs/cycle)
cxfir blms32x32	N: 64; M: 16	2592 (3.2 MACs/cycle)
cxfir blms32x32	N: 64; M: 64	9084 (3.6 MACs/cycle)
cxfir blms32x32	N: 80; M: 64	11228 (3.6 MACs/cycle)
cxfir blms32x32	N: 80; M: 128	21932 (3.7 MACs/cycle)
cxfir blms32x32	N: 64; M: 128	17741 (3.7 MACs/cycle)
fir convolf	N: 80; M: 56	1684 (2.7 MACs/cycle)
fir convolf	N: 256; M: 80	6917 (3.0 MACs/cycle)
fir convolaf	N: 80; M: 56	1993 (2.2 MACs/cycle)
fir convolaf	N: 256; M: 80	7460 (2.7 MACs/cycle)
fir xcorrff	N: 80; M: 56	1587 (2.8 MACs/cycle)
fir xcorrff	N: 256; M: 80	6600 (3.1 MACs/cycle)
cxfir xcorrff	N: 80; M: 56	4844 (3.7 MACs/cycle)
cxfir xcorrff	N: 256; M: 80	21637 (3.8 MACs/cycle)
fir xcorraf	N: 80; M: 56	2027 (2.2 MACs/cycle)
fir xcorraf	N: 256; M: 80	7507 (2.7 MACs/cycle)
cxfir xcorraf	N: 80; M: 56	4852 (3.7 MACs/cycle)
cxfir xcorraf	N: 256; M: 80	21643 (3.8 MACs/cycle)
fir acorrff	N: 80	2074 (3.1 MACs/cycle)
fir acorrff	N: 256	17871 (3.7 MACs/cycle)
fir acorraf	N: 80	2621 (2.4 MACs/cycle)
fir acorraf	N: 256	19340 (3.4 MACs/cycle)
fir blmsf	N: 80; M: 16	1375 (1.9 MACs/cycle)
fir blmsf	N: 64; M: 16	1128 (1.8 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
fir blmsf	N: 64; M: 64	2982 (2.7 MACs/cycle)
fir blmsf	N: 80; M: 64	3614 (2.8 MACs/cycle)
fir blmsf	N: 80; M: 128	6598 (3.1 MACs/cycle)
fir blmsf	N: 64; M: 128	5454 (3.0 MACs/cycle)
cxfir blmsf	N: 80; M: 16	3053 (3.4 MACs/cycle)
cxfir blmsf	N: 64; M: 16	2467 (3.3 MACs/cycle)
cxfir blmsf	N: 64; M: 64	8862 (3.7 MACs/cycle)
cxfir blmsf	N: 80; M: 64	10986 (3.7 MACs/cycle)
cxfir blmsf	N: 80; M: 128	21562 (3.8 MACs/cycle)
cxfir blmsf	N: 64; M: 128	17390 (3.8 MACs/cycle)
FIR Filters		
2D convolution		
conv2d 3x3 8x8	M=3,N=3,P=256,Q=512	338287 (3.5 MACs/cycle)
conv2d 5x5 8x8	M=5,N=5,P=256,Q=512	977478 (3.4 MACs/cycle)
conv2d 11x7 8x8	M=11,N=7,P=256,Q=512	1781108 (5.7 MACs/cycle)
conv2d 3x3 8x8	M=3,N=3,P=256,Q=256	173167 (3.4 MACs/cycle)
conv2d 5x5 8x8	M=5,N=5,P=256,Q=256	494918 (3.3 MACs/cycle)
conv2d 11x7 8x8	M=11,N=7,P=256,Q=256	900612 (5.6 MACs/cycle)
conv2d 3x3 8x8	M=3,N=3,P=64,Q=64	12656 (2.9 MACs/cycle)
conv2d 5x5 8x8	M=5,N=5,P=64,Q=64	34887 (2.9 MACs/cycle)
conv2d 11x7 8x8	M=11,N=7,P=64,Q=64	61680 (5.1 MACs/cycle)
conv2d 3x3 8x16	M=3,N=3,P=256,Q=512	271989 (4.3 MACs/cycle)
conv2d 5x5 8x16	M=5,N=5,P=256,Q=512	953556 (3.4 MACs/cycle)
conv2d 11x7 8x16	M=11,N=7,P=256,Q=512	1680946 (6.0 MACs/cycle)
conv2d 3x3 8x16	M=3,N=3,P=256,Q=256	139893 (4.2 MACs/cycle)
conv2d 5x5 8x16	M=5,N=5,P=256,Q=256	483476 (3.4 MACs/cycle)
conv2d 11x7 8x16	M=11,N=7,P=256,Q=256	849330 (5.9 MACs/cycle)
conv2d 3x3 8x16	M=3,N=3,P=64,Q=64	10485 (3.5 MACs/cycle)
conv2d 5x5 8x16	M=5,N=5,P=64,Q=64	34340 (3.0 MACs/cycle)
conv2d 11x7 8x16	M=11,N=7,P=64,Q=64	57618 (5.5 MACs/cycle)
conv2d 3x3 16x16	M=3,N=3,P=256,Q=512	271970 (4.3 MACs/cycle)
conv2d 5x5 16x16	M=5,N=5,P=256,Q=512	953266 (3.4 MACs/cycle)
conv2d 11x7 16x16	M=11,N=7,P=256,Q=512	1680888 (6.0 MACs/cycle)
conv2d 3x3 16x16	M=3,N=3,P=256,Q=256	139874 (4.2 MACs/cycle)
conv2d 5x5 16x16	M=5,N=5,P=256,Q=256	483186 (3.4 MACs/cycle)
conv2d 11x7 16x16	M=11,N=7,P=256,Q=256	849272 (5.9 MACs/cycle)
conv2d 3x3 16x16	M=3,N=3,P=64,Q=64	10466 (3.5 MACs/cycle)
conv2d 5x5 16x16	M=5,N=5,P=64,Q=64	34242 (3.0 MACs/cycle)
conv2d 11x7 16x16	M=11,N=7,P=64,Q=64	57560 (5.5 MACs/cycle)
conv2d 3x3f	M=3,N=3,P=256,Q=256	339849 (1.7 MACs/cycle)
conv2d 5x5f	M=5,N=5,P=256,Q=256	811323 (2.0 MACs/cycle)
conv2d 11x7f	M=11,N=7,P=256,Q=256	1826486 (2.8 MACs/cycle)
conv2d 3x3f	M=3,N=3,P=128,Q=256	169992 (1.7 MACs/cycle)
conv2d 5x5f	M=5,N=5,P=128,Q=256	406588 (2.0 MACs/cycle)
conv2d 11x7f	M=11,N=7,P=128,Q=256	920055 (2.7 MACs/cycle)
conv2d 3x3f	M=3,N=3,P=64,Q=64	26744 (1.4 MACs/cycle)
conv2d 5x5f	M=5,N=5,P=64,Q=64	68619 (1.5 MACs/cycle)
conv2d 11x7f	M=11,N=7,P=64,Q=64	122005 (2.6 MACs/cycle)
IIR Filters		
Biquad Filters		
bqriir16x16 df1	N=256, M=1, gain=0	814 (3.2 cycles/(biquad*pts)
bqriir16x16 df1	N=256, M=2, gain=1	1311 (2.6 cycles/(biquad*pts)
bqriir16x16 df1	N=256, M=3, gain=0	2007 (2.6 cycles/(biquad*pts)
bqriir16x16 df1	N=256, M=4, gain=1	2507 (2.4 cycles/(biquad*pts)
bqriir16x16 df1	N=256, M=5, gain=0	3200 (2.5 cycles/(biquad*pts)
bqriir16x16 df1	N=256, M=6, gain=1	3696 (2.4 cycles/(biquad*pts)
bqriir16x16 df1	N=256, M=7, gain=0	4385 (2.4 cycles/(biquad*pts)
bqriir16x16 df1	N=256, M=8, gain=1	4890 (2.4 cycles/(biquad*pts)
bqriir16x16 df1	N=80, M=5, gain=0	1086 (2.7 cycles/(biquad*pts)
bqriir16x16 df1	N=80, M=5, gain=1	1086 (2.7 cycles/(biquad*pts)
bqriir16x16 df2	N=256, M=1, gain=0	796 (3.1 cycles/(biquad*pts)
bqriir16x16 df2	N=256, M=2, gain=1	1316 (2.6 cycles/(biquad*pts)
bqriir16x16 df2	N=256, M=3, gain=0	1988 (2.6 cycles/(biquad*pts)
bqriir16x16 df2	N=256, M=4, gain=1	2511 (2.5 cycles/(biquad*pts)
bqriir16x16 df2	N=256, M=5, gain=0	3181 (2.5 cycles/(biquad*pts)
bqriir16x16 df2	N=256, M=6, gain=1	3702 (2.4 cycles/(biquad*pts)
bqriir16x16 df2	N=256, M=7, gain=0	4378 (2.4 cycles/(biquad*pts)
bqriir16x16 df2	N=256, M=8, gain=1	4896 (2.4 cycles/(biquad*pts)
bqriir16x16 df2	N=80, M=5, gain=0	1069 (2.7 cycles/(biquad*pts)
bqriir16x16 df2	N=80, M=5, gain=1	1068 (2.7 cycles/(biquad*pts)
bqriir32x16 df1	N=256, M=1, gain=0	819 (3.2 cycles/(biquad*pts)
bqriir32x16 df1	N=256, M=2, gain=1	993 (1.9 cycles/(biquad*pts)
bqriir32x16 df1	N=256, M=3, gain=0	1641 (2.1 cycles/(biquad*pts)
bqriir32x16 df1	N=256, M=4, gain=1	1817 (1.8 cycles/(biquad*pts)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
bqriir32x16 df1	N=256, M=5, gain=0	2462 (1.9 cycles/(biquad*pts))
bqriir32x16 df1	N=256, M=6, gain=1	2638 (1.7 cycles/(biquad*pts))
bqriir32x16 df1	N=256, M=7, gain=0	3285 (1.8 cycles/(biquad*pts))
bqriir32x16 df1	N=256, M=8, gain=1	3461 (1.7 cycles/(biquad*pts))
bqriir32x16 df1	N=80, M=5, gain=0	877 (2.2 cycles/(biquad*pts))
bqriir32x16 df1	N=80, M=5, gain=1	934 (2.3 cycles/(biquad*pts))
bqriir32x16 df2	N=256, M=1, gain=0	812 (3.2 cycles/(biquad*pts))
bqriir32x16 df2	N=256, M=2, gain=1	1114 (2.2 cycles/(biquad*pts))
bqriir32x16 df2	N=256, M=3, gain=0	1754 (2.3 cycles/(biquad*pts))
bqriir32x16 df2	N=256, M=4, gain=1	2054 (2.0 cycles/(biquad*pts))
bqriir32x16 df2	N=256, M=5, gain=0	2694 (2.1 cycles/(biquad*pts))
bqriir32x16 df2	N=256, M=6, gain=1	2993 (1.9 cycles/(biquad*pts))
bqriir32x16 df2	N=256, M=7, gain=0	3634 (2.0 cycles/(biquad*pts))
bqriir32x16 df2	N=256, M=8, gain=1	3933 (1.9 cycles/(biquad*pts))
bqriir32x16 df2	N=80, M=5, gain=0	934 (2.3 cycles/(biquad*pts))
bqriir32x16 df2	N=80, M=5, gain=1	990 (2.5 cycles/(biquad*pts))
bqriir32x32 df1	N=256, M=1, gain=0	806 (3.1 cycles/(biquad*pts))
bqriir32x32 df1	N=256, M=2, gain=1	986 (1.9 cycles/(biquad*pts))
bqriir32x32 df1	N=256, M=3, gain=0	1616 (2.1 cycles/(biquad*pts))
bqriir32x32 df1	N=256, M=4, gain=1	1792 (1.8 cycles/(biquad*pts))
bqriir32x32 df1	N=256, M=5, gain=0	2420 (1.9 cycles/(biquad*pts))
bqriir32x32 df1	N=256, M=6, gain=1	2591 (1.7 cycles/(biquad*pts))
bqriir32x32 df1	N=256, M=7, gain=0	3223 (1.8 cycles/(biquad*pts))
bqriir32x32 df1	N=256, M=8, gain=1	3396 (1.7 cycles/(biquad*pts))
bqriir32x32 df1	N=80, M=5, gain=0	835 (2.1 cycles/(biquad*pts))
bqriir32x32 df1	N=80, M=5, gain=1	895 (2.2 cycles/(biquad*pts))
bqriir32x32 df2	N=256, M=1, gain=0	810 (3.2 cycles/(biquad*pts))
bqriir32x32 df2	N=256, M=2, gain=1	1611 (3.1 cycles/(biquad*pts))
bqriir32x32 df2	N=256, M=3, gain=0	2250 (2.9 cycles/(biquad*pts))
bqriir32x32 df2	N=256, M=4, gain=1	3049 (3.0 cycles/(biquad*pts))
bqriir32x32 df2	N=256, M=5, gain=0	3688 (2.9 cycles/(biquad*pts))
bqriir32x32 df2	N=256, M=6, gain=1	4486 (2.9 cycles/(biquad*pts))
bqriir32x32 df2	N=256, M=7, gain=0	5127 (2.9 cycles/(biquad*pts))
bqriir32x32 df2	N=256, M=8, gain=1	5923 (2.9 cycles/(biquad*pts))
bqriir32x32 df2	N=80, M=5, gain=0	1223 (3.1 cycles/(biquad*pts))
bqriir32x32 df2	N=80, M=5, gain=1	1280 (3.2 cycles/(biquad*pts))
stereo bqriir16x16 df1	N=256, M=1, gain=0	2225 (8.7 cycles/(biquad*pts))
stereo bqriir16x16 df1	N=256, M=2, gain=1	3196 (6.2 cycles/(biquad*pts))
stereo bqriir16x16 df1	N=256, M=3, gain=0	4702 (6.1 cycles/(biquad*pts))
stereo bqriir16x16 df1	N=256, M=4, gain=1	5674 (5.5 cycles/(biquad*pts))
stereo bqriir16x16 df1	N=256, M=5, gain=0	7164 (5.6 cycles/(biquad*pts))
stereo bqriir16x16 df1	N=256, M=6, gain=1	8140 (5.3 cycles/(biquad*pts))
stereo bqriir16x16 df1	N=256, M=7, gain=0	9619 (5.4 cycles/(biquad*pts))
stereo bqriir16x16 df1	N=256, M=8, gain=1	10596 (5.2 cycles/(biquad*pts))
stereo bqriir16x16 df1	N=80, M=5, gain=0	2368 (5.9 cycles/(biquad*pts))
stereo bqriir16x16 df1	N=80, M=5, gain=1	2369 (5.9 cycles/(biquad*pts))
stereo bqriir32x16 df1	N=256, M=1, gain=0	1606 (6.3 cycles/(biquad*pts))
stereo bqriir32x16 df1	N=256, M=2, gain=1	3204 (6.3 cycles/(biquad*pts))
stereo bqriir32x16 df1	N=256, M=3, gain=0	3745 (4.9 cycles/(biquad*pts))
stereo bqriir32x16 df1	N=256, M=4, gain=1	5347 (5.2 cycles/(biquad*pts))
stereo bqriir32x16 df1	N=256, M=5, gain=0	5887 (4.6 cycles/(biquad*pts))
stereo bqriir32x16 df1	N=256, M=6, gain=1	7488 (4.9 cycles/(biquad*pts))
stereo bqriir32x16 df1	N=256, M=7, gain=0	8029 (4.5 cycles/(biquad*pts))
stereo bqriir32x16 df1	N=256, M=8, gain=1	9631 (4.7 cycles/(biquad*pts))
stereo bqriir32x16 df1	N=80, M=5, gain=0	2016 (5.0 cycles/(biquad*pts))
stereo bqriir32x16 df1	N=80, M=5, gain=1	2343 (5.9 cycles/(biquad*pts))
stereo bqriir32x32 df1	N=256, M=1, gain=0	1586 (6.2 cycles/(biquad*pts))
stereo bqriir32x32 df1	N=256, M=2, gain=1	2905 (5.7 cycles/(biquad*pts))
stereo bqriir32x32 df1	N=256, M=3, gain=0	3424 (4.5 cycles/(biquad*pts))
stereo bqriir32x32 df1	N=256, M=4, gain=1	4746 (4.6 cycles/(biquad*pts))
stereo bqriir32x32 df1	N=256, M=5, gain=0	5266 (4.1 cycles/(biquad*pts))
stereo bqriir32x32 df1	N=256, M=6, gain=1	6587 (4.3 cycles/(biquad*pts))
stereo bqriir32x32 df1	N=256, M=7, gain=0	7103 (4.0 cycles/(biquad*pts))
stereo bqriir32x32 df1	N=256, M=8, gain=1	8425 (4.1 cycles/(biquad*pts))
stereo bqriir32x32 df1	N=80, M=5, gain=0	1746 (4.4 cycles/(biquad*pts))
stereo bqriir32x32 df1	N=80, M=5, gain=1	2076 (5.2 cycles/(biquad*pts))
bqriirf df1	N=512, M=1	3416 (6.7 cycles/(biquad*pts))
bqriirf df1	N=512, M=2	4696 (4.6 cycles/(biquad*pts))
bqriirf df1	N=512, M=3	7797 (5.1 cycles/(biquad*pts))
bqriirf df1	N=512, M=4	5723 (2.8 cycles/(biquad*pts))
bqriirf df1	N=512, M=8	11201 (2.7 cycles/(biquad*pts))
bqriirf df1	N=512, M=12	16613 (2.7 cycles/(biquad*pts))
bqriirf df1	N=512, M=16	22090 (2.7 cycles/(biquad*pts))
bqriirf df2	N=512, M=1	2386 (4.7 cycles/(biquad*pts))

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
bqriirf df2	N=512, M=2	4466 (4.4 cycles/(biquad*pts))
bqriirf df2	N=512, M=3	6546 (4.3 cycles/(biquad*pts))
bqriirf df2	N=512, M=4	5211 (2.5 cycles/(biquad*pts))
bqriirf df2	N=512, M=8	10113 (2.5 cycles/(biquad*pts))
bqriirf df2	N=512, M=12	15016 (2.4 cycles/(biquad*pts))
bqriirf df2	N=512, M=16	19919 (2.4 cycles/(biquad*pts))
bqriirf df2t	N=512, M=1	4703 (9.2 cycles/(biquad*pts))
bqriirf df2t	N=512, M=2	4425 (4.3 cycles/(biquad*pts))
bqriirf df2t	N=512, M=3	8815 (5.7 cycles/(biquad*pts))
bqriirf df2t	N=512, M=4	4849 (2.4 cycles/(biquad*pts))
bqriirf df2t	N=512, M=8	9387 (2.3 cycles/(biquad*pts))
bqriirf df2t	N=512, M=12	13925 (2.3 cycles/(biquad*pts))
bqriirf df2t	N=512, M=16	18464 (2.3 cycles/(biquad*pts))
bqciirf df1	N=512, M=1	3132 (6.1 cycles/(biquad*pts))
bqciirf df1	N=512, M=2	4955 (4.8 cycles/(biquad*pts))
bqciirf df1	N=512, M=3	7535 (4.9 cycles/(biquad*pts))
bqciirf df1	N=512, M=4	9360 (4.6 cycles/(biquad*pts))
bqciirf df1	N=512, M=8	18674 (4.6 cycles/(biquad*pts))
bqciirf df1	N=512, M=12	26981 (4.4 cycles/(biquad*pts))
bqciirf df1	N=512, M=16	36798 (4.5 cycles/(biquad*pts))
stereo bqriirf df1	N=512, M=1	3135 (6.1 cycles/(biquad*pts))
stereo bqriirf df1	N=512, M=2	5735 (5.6 cycles/(biquad*pts))
stereo bqriirf df1	N=512, M=3	7820 (5.1 cycles/(biquad*pts))
stereo bqriirf df1	N=512, M=4	10418 (5.1 cycles/(biquad*pts))
stereo bqriirf df1	N=512, M=8	19784 (4.8 cycles/(biquad*pts))
stereo bqriirf df1	N=512, M=12	29150 (4.7 cycles/(biquad*pts))
stereo bqriirf df1	N=512, M=16	38514 (4.7 cycles/(biquad*pts))
IIR Filters		
Biquad Filters, no delay		
bqriir16x16 df1 nd	N=256, M=1, gain=0	811 (3.2 cycles/(biquad*pts))
bqriir16x16 df1 nd	N=256, M=2, gain=1	1323 (2.6 cycles/(biquad*pts))
bqriir16x16 df1 nd	N=256, M=3, gain=0	2023 (2.6 cycles/(biquad*pts))
bqriir16x16 df1 nd	N=256, M=4, gain=1	2538 (2.5 cycles/(biquad*pts))
bqriir16x16 df1 nd	N=256, M=5, gain=0	3236 (2.5 cycles/(biquad*pts))
bqriir16x16 df1 nd	N=256, M=6, gain=1	3749 (2.4 cycles/(biquad*pts))
bqriir16x16 df1 nd	N=256, M=7, gain=0	4443 (2.5 cycles/(biquad*pts))
bqriir16x16 df1 nd	N=256, M=8, gain=1	4960 (2.4 cycles/(biquad*pts))
bqriir16x16 df1 nd	N=80, M=5, gain=0	1124 (2.8 cycles/(biquad*pts))
bqriir16x16 df1 nd	N=80, M=5, gain=1	1124 (2.8 cycles/(biquad*pts))
bqriir16x16 df2 nd	N=256, M=1, gain=0	795 (3.1 cycles/(biquad*pts))
bqriir16x16 df2 nd	N=256, M=2, gain=1	1321 (2.6 cycles/(biquad*pts))
bqriir16x16 df2 nd	N=256, M=3, gain=0	2115 (2.8 cycles/(biquad*pts))
bqriir16x16 df2 nd	N=256, M=4, gain=1	2640 (2.6 cycles/(biquad*pts))
bqriir16x16 df2 nd	N=256, M=5, gain=0	3439 (2.7 cycles/(biquad*pts))
bqriir16x16 df2 nd	N=256, M=6, gain=1	3962 (2.6 cycles/(biquad*pts))
bqriir16x16 df2 nd	N=256, M=7, gain=0	4760 (2.7 cycles/(biquad*pts))
bqriir16x16 df2 nd	N=256, M=8, gain=1	5284 (2.6 cycles/(biquad*pts))
bqriir16x16 df2 nd	N=80, M=5, gain=0	1150 (2.9 cycles/(biquad*pts))
bqriir16x16 df2 nd	N=80, M=5, gain=1	1150 (2.9 cycles/(biquad*pts))
bqriir32x16 df1 nd	N=256, M=1, gain=0	811 (3.2 cycles/(biquad*pts))
bqriir32x16 df1 nd	N=256, M=2, gain=1	985 (1.9 cycles/(biquad*pts))
bqriir32x16 df1 nd	N=256, M=3, gain=0	1633 (2.1 cycles/(biquad*pts))
bqriir32x16 df1 nd	N=256, M=4, gain=1	1809 (1.8 cycles/(biquad*pts))
bqriir32x16 df1 nd	N=256, M=5, gain=0	2454 (1.9 cycles/(biquad*pts))
bqriir32x16 df1 nd	N=256, M=6, gain=1	2628 (1.7 cycles/(biquad*pts))
bqriir32x16 df1 nd	N=256, M=7, gain=0	3275 (1.8 cycles/(biquad*pts))
bqriir32x16 df1 nd	N=256, M=8, gain=1	3451 (1.7 cycles/(biquad*pts))
bqriir32x16 df1 nd	N=80, M=5, gain=0	867 (2.2 cycles/(biquad*pts))
bqriir32x16 df1 nd	N=80, M=5, gain=1	924 (2.3 cycles/(biquad*pts))
bqriir32x16 df2 nd	N=256, M=1, gain=0	803 (3.1 cycles/(biquad*pts))
bqriir32x16 df2 nd	N=256, M=2, gain=1	1104 (2.2 cycles/(biquad*pts))
bqriir32x16 df2 nd	N=256, M=3, gain=0	1744 (2.3 cycles/(biquad*pts))
bqriir32x16 df2 nd	N=256, M=4, gain=1	2044 (2.0 cycles/(biquad*pts))
bqriir32x16 df2 nd	N=256, M=5, gain=0	2684 (2.1 cycles/(biquad*pts))
bqriir32x16 df2 nd	N=256, M=6, gain=1	2983 (1.9 cycles/(biquad*pts))
bqriir32x16 df2 nd	N=256, M=7, gain=0	3624 (2.0 cycles/(biquad*pts))
bqriir32x16 df2 nd	N=256, M=8, gain=1	3922 (1.9 cycles/(biquad*pts))
bqriir32x16 df2 nd	N=80, M=5, gain=0	923 (2.3 cycles/(biquad*pts))
bqriir32x16 df2 nd	N=80, M=5, gain=1	982 (2.5 cycles/(biquad*pts))
bqriir32x32 df1 nd	N=256, M=1, gain=0	796 (3.1 cycles/(biquad*pts))
bqriir32x32 df1 nd	N=256, M=2, gain=1	976 (1.9 cycles/(biquad*pts))
bqriir32x32 df1 nd	N=256, M=3, gain=0	1606 (2.1 cycles/(biquad*pts))
bqriir32x32 df1 nd	N=256, M=4, gain=1	1782 (1.7 cycles/(biquad*pts))
bqriir32x32 df1 nd	N=256, M=5, gain=0	2412 (1.9 cycles/(biquad*pts))

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
bqriir32x32 df1 nd	N=256, M=6, gain=1	2581 (1.7 cycles/(biquad*pts))
bqriir32x32 df1 nd	N=256, M=7, gain=0	3213 (1.8 cycles/(biquad*pts))
bqriir32x32 df1 nd	N=256, M=8, gain=1	3386 (1.7 cycles/(biquad*pts))
bqriir32x32 df1 nd	N=80, M=5, gain=0	827 (2.1 cycles/(biquad*pts))
bqriir32x32 df1 nd	N=80, M=5, gain=1	886 (2.2 cycles/(biquad*pts))
bqriir32x32 df2 nd	N=256, M=1, gain=0	800 (3.1 cycles/(biquad*pts))
bqriir32x32 df2 nd	N=256, M=2, gain=1	1601 (3.1 cycles/(biquad*pts))
bqriir32x32 df2 nd	N=256, M=3, gain=0	2240 (2.9 cycles/(biquad*pts))
bqriir32x32 df2 nd	N=256, M=4, gain=1	3039 (3.0 cycles/(biquad*pts))
bqriir32x32 df2 nd	N=256, M=5, gain=0	3680 (2.9 cycles/(biquad*pts))
bqriir32x32 df2 nd	N=256, M=6, gain=1	4476 (2.9 cycles/(biquad*pts))
bqriir32x32 df2 nd	N=256, M=7, gain=0	5116 (2.9 cycles/(biquad*pts))
bqriir32x32 df2 nd	N=256, M=8, gain=1	5913 (2.9 cycles/(biquad*pts))
bqriir32x32 df2 nd	N=80, M=5, gain=0	1213 (3.0 cycles/(biquad*pts))
bqriir32x32 df2 nd	N=80, M=5, gain=1	1270 (3.2 cycles/(biquad*pts))
stereo bqriir16x16 df1 nd	N=256, M=1, gain=0	2220 (8.7 cycles/(biquad*pts))
stereo bqriir16x16 df1 nd	N=256, M=2, gain=1	3248 (6.3 cycles/(biquad*pts))
stereo bqriir16x16 df1 nd	N=256, M=3, gain=0	4774 (6.2 cycles/(biquad*pts))
stereo bqriir16x16 df1 nd	N=256, M=4, gain=1	5802 (5.7 cycles/(biquad*pts))
stereo bqriir16x16 df1 nd	N=256, M=5, gain=0	7317 (5.7 cycles/(biquad*pts))
stereo bqriir16x16 df1 nd	N=256, M=6, gain=1	8344 (5.4 cycles/(biquad*pts))
stereo bqriir16x16 df1 nd	N=256, M=7, gain=0	9851 (5.5 cycles/(biquad*pts))
stereo bqriir16x16 df1 nd	N=256, M=8, gain=1	10880 (5.3 cycles/(biquad*pts))
stereo bqriir16x16 df1 nd	N=80, M=5, gain=0	2444 (6.1 cycles/(biquad*pts))
stereo bqriir16x16 df1 nd	N=80, M=5, gain=1	2444 (6.1 cycles/(biquad*pts))
stereo bqriir32x16 df1 nd	N=256, M=1, gain=0	1597 (6.2 cycles/(biquad*pts))
stereo bqriir32x16 df1 nd	N=256, M=2, gain=1	3197 (6.2 cycles/(biquad*pts))
stereo bqriir32x16 df1 nd	N=256, M=3, gain=0	3738 (4.9 cycles/(biquad*pts))
stereo bqriir32x16 df1 nd	N=256, M=4, gain=1	5338 (5.2 cycles/(biquad*pts))
stereo bqriir32x16 df1 nd	N=256, M=5, gain=0	5879 (4.6 cycles/(biquad*pts))
stereo bqriir32x16 df1 nd	N=256, M=6, gain=1	7481 (4.9 cycles/(biquad*pts))
stereo bqriir32x16 df1 nd	N=256, M=7, gain=0	8021 (4.5 cycles/(biquad*pts))
stereo bqriir32x16 df1 nd	N=256, M=8, gain=1	9624 (4.7 cycles/(biquad*pts))
stereo bqriir32x16 df1 nd	N=80, M=5, gain=0	2007 (5.0 cycles/(biquad*pts))
stereo bqriir32x16 df1 nd	N=80, M=5, gain=1	2336 (5.8 cycles/(biquad*pts))
stereo bqriir32x32 df1 nd	N=256, M=1, gain=0	1577 (6.2 cycles/(biquad*pts))
stereo bqriir32x32 df1 nd	N=256, M=2, gain=1	2898 (5.7 cycles/(biquad*pts))
stereo bqriir32x32 df1 nd	N=256, M=3, gain=0	3415 (4.4 cycles/(biquad*pts))
stereo bqriir32x32 df1 nd	N=256, M=4, gain=1	4737 (4.6 cycles/(biquad*pts))
stereo bqriir32x32 df1 nd	N=256, M=5, gain=0	5259 (4.1 cycles/(biquad*pts))
stereo bqriir32x32 df1 nd	N=256, M=6, gain=1	6578 (4.3 cycles/(biquad*pts))
stereo bqriir32x32 df1 nd	N=256, M=7, gain=0	7096 (4.0 cycles/(biquad*pts))
stereo bqriir32x32 df1 nd	N=256, M=8, gain=1	8417 (4.1 cycles/(biquad*pts))
stereo bqriir32x32 df1 nd	N=80, M=5, gain=0	1738 (4.3 cycles/(biquad*pts))
stereo bqriir32x32 df1 nd	N=80, M=5, gain=1	2067 (5.2 cycles/(biquad*pts))
bqriirf df1 nd	N=512, M=1	3413 (6.7 cycles/(biquad*pts))
bqriirf df1 nd	N=512, M=2	6518 (6.4 cycles/(biquad*pts))
bqriirf df1 nd	N=512, M=3	9628 (6.3 cycles/(biquad*pts))
bqriirf df1 nd	N=512, M=4	9381 (4.6 cycles/(biquad*pts))
bqriirf df1 nd	N=512, M=8	18466 (4.5 cycles/(biquad*pts))
bqriirf df1 nd	N=512, M=12	27551 (4.5 cycles/(biquad*pts))
bqriirf df1 nd	N=512, M=16	36637 (4.5 cycles/(biquad*pts))
bqriirf df2 nd	N=512, M=1	2375 (4.6 cycles/(biquad*pts))
bqriirf df2 nd	N=512, M=2	4454 (4.3 cycles/(biquad*pts))
bqriirf df2 nd	N=512, M=3	6536 (4.3 cycles/(biquad*pts))
bqriirf df2 nd	N=512, M=4	8613 (4.2 cycles/(biquad*pts))
bqriirf df2 nd	N=512, M=8	16935 (4.1 cycles/(biquad*pts))
bqriirf df2 nd	N=512, M=12	25255 (4.1 cycles/(biquad*pts))
bqriirf df2 nd	N=512, M=16	33577 (4.1 cycles/(biquad*pts))
bqriirf df2t nd	N=512, M=1	4684 (9.1 cycles/(biquad*pts))
bqriirf df2t nd	N=512, M=2	7751 (7.6 cycles/(biquad*pts))
bqriirf df2t nd	N=512, M=3	12125 (7.9 cycles/(biquad*pts))
bqriirf df2t nd	N=512, M=4	8534 (4.2 cycles/(biquad*pts))
bqriirf df2t nd	N=512, M=8	16760 (4.1 cycles/(biquad*pts))
bqriirf df2t nd	N=512, M=12	24988 (4.1 cycles/(biquad*pts))
bqriirf df2t nd	N=512, M=16	33212 (4.1 cycles/(biquad*pts))
bqciirf df1 nd	N=512, M=1	3128 (6.1 cycles/(biquad*pts))
bqciirf df1 nd	N=512, M=2	5597 (5.5 cycles/(biquad*pts))
bqciirf df1 nd	N=512, M=3	8177 (5.3 cycles/(biquad*pts))
bqciirf df1 nd	N=512, M=4	10648 (5.2 cycles/(biquad*pts))
bqciirf df1 nd	N=512, M=8	20877 (5.1 cycles/(biquad*pts))
bqciirf df1 nd	N=512, M=12	30852 (5.0 cycles/(biquad*pts))
bqciirf df1 nd	N=512, M=16	41208 (5.0 cycles/(biquad*pts))
stereo bqriirf df1 nd	N=512, M=1	3131 (6.1 cycles/(biquad*pts))

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
stereo bqriirf df1 nd	N=512, M=2	6742 (6.6 cycles/(biquad*pts)
stereo bqriirf df1 nd	N=512, M=3	8824 (5.7 cycles/(biquad*pts)
stereo bqriirf df1 nd	N=512, M=4	12433 (6.1 cycles/(biquad*pts)
stereo bqriirf df1 nd	N=512, M=8	23815 (5.8 cycles/(biquad*pts)
stereo bqriirf df1 nd	N=512, M=12	35198 (5.7 cycles/(biquad*pts)
stereo bqriirf df1 nd	N=512, M=16	46578 (5.7 cycles/(biquad*pts)
IIR Filters		
Lattice Filters		
latr16x16 process	N=256, M=1	791 (3.1 cycles/(sample*M)
latr16x16 process	N=256, M=2	1564 (3.1 cycles/(sample*M)
latr16x16 process	N=256, M=3	1572 (2.0 cycles/(sample*M)
latr16x16 process	N=256, M=4	1955 (1.9 cycles/(sample*M)
latr16x16 process	N=256, M=5	2089 (1.6 cycles/(sample*M)
latr16x16 process	N=256, M=6	2077 (1.4 cycles/(sample*M)
latr16x16 process	N=256, M=7	2087 (1.2 cycles/(sample*M)
latr16x16 process	N=256, M=8	2599 (1.3 cycles/(sample*M)
latr16x16 process	N=256, M=9	11022 (4.8 cycles/(sample*M)
latr16x16 process	N=80, M=6	671 (1.4 cycles/(sample*M)
latr32x16 process	N=256, M=1	785 (3.1 cycles/(sample*M)
latr32x16 process	N=256, M=2	1040 (2.0 cycles/(sample*M)
latr32x16 process	N=256, M=3	1303 (1.7 cycles/(sample*M)
latr32x16 process	N=256, M=4	1811 (1.8 cycles/(sample*M)
latr32x16 process	N=256, M=5	1813 (1.4 cycles/(sample*M)
latr32x16 process	N=256, M=6	2067 (1.3 cycles/(sample*M)
latr32x16 process	N=256, M=7	2202 (1.2 cycles/(sample*M)
latr32x16 process	N=256, M=8	2591 (1.3 cycles/(sample*M)
latr32x16 process	N=256, M=9	8978 (3.9 cycles/(sample*M)
latr32x16 process	N=80, M=6	661 (1.4 cycles/(sample*M)
latr32x32 process	N=256, M=1	792 (3.1 cycles/(sample*M)
latr32x32 process	N=256, M=2	1298 (2.5 cycles/(sample*M)
latr32x32 process	N=256, M=3	1813 (2.4 cycles/(sample*M)
latr32x32 process	N=256, M=4	1822 (1.8 cycles/(sample*M)
latr32x32 process	N=256, M=5	2070 (1.6 cycles/(sample*M)
latr32x32 process	N=256, M=6	2336 (1.5 cycles/(sample*M)
latr32x32 process	N=256, M=7	2851 (1.6 cycles/(sample*M)
latr32x32 process	N=256, M=8	3099 (1.5 cycles/(sample*M)
latr32x32 process	N=256, M=9	9809 (4.3 cycles/(sample*M)
latrf process	N=256, M=1	1050 (4.1 cycles/(sample*M)
latrf process	N=256, M=2	2082 (4.1 cycles/(sample*M)
latrf process	N=256, M=3	3108 (4.0 cycles/(sample*M)
latrf process	N=256, M=4	3365 (3.3 cycles/(sample*M)
latrf process	N=256, M=5	3311 (2.6 cycles/(sample*M)
latrf process	N=256, M=6	3761 (2.4 cycles/(sample*M)
latrf process	N=256, M=7	5374 (3.0 cycles/(sample*M)
latrf process	N=256, M=8	6401 (3.1 cycles/(sample*M)
latrf process	N=256, M=9	13158 (5.7 cycles/(sample*M)
latrf process	N=80, M=6	1209 (2.5 cycles/(sample*M)
Math Functions		
Vectorized Math		
vec recip16x16	N=200	2016 (10.1 cycles/pts)
vec recip32x32	N=200	2632 (13.2 cycles/pts)
vec recip64x64	N=200	4333 (21.7 cycles/pts)
vec divide16x16	N=200	2019 (10.1 cycles/pts)
vec divide32x32	N=200	1495 (7.5 cycles/pts)
vec divide64x32i	N=200	4333 (21.7 cycles/pts)
vec divide64x64	N=200	6194 (31.0 cycles/pts)
vec log2 32x32	N=200	925 (4.6 cycles/pts)
vec logn 32x32	N=200	1029 (5.1 cycles/pts)
vec log10 32x32	N=200	1029 (5.1 cycles/pts)
vec antilog2 32x32	N=200	582 (2.9 cycles/pts)
vec antilogn 32x32	N=200	742 (3.7 cycles/pts)
vec antilog10 32x32	N=200	742 (3.7 cycles/pts)
vec pow 32x32	N=200	9230 (46.1 cycles/pts)
vec sine32x32	N=200	739 (3.7 cycles/pts)
vec cosine32x32	N=200	730 (3.6 cycles/pts)
vec tan32x32	N=200	2899 (14.5 cycles/pts)
vec atan32x32	N=200	1030 (5.2 cycles/pts)
vec sqrt16x16	N=200	1152 (5.8 cycles/pts)
vec sqrt32x16	N=200	1560 (7.8 cycles/pts)
vec sqrt32x32	N=200	1251 (6.3 cycles/pts)
vec sqrt64x32	N=200	1244 (6.2 cycles/pts)
vec rsqrt16x16	N=200	2296 (11.5 cycles/pts)
vec rsqrt32x32	N=200	2951 (14.8 cycles/pts)
vec sigmoid32x32	N=200	1168 (5.8 cycles/pts)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
vec softmax32x32	N=200	1080 (5.4 cycles/pts)
vec tanh32x32	N=200	1163 (5.8 cycles/pts)
vec relu32x32	N=200	218 (1.1 cycles/pts)
vec int2float	N=200	229 (1.1 cycles/pts)
vec float2int	N=200	225 (1.1 cycles/pts)
vec sinef	N=200	2995 (15.0 cycles/pts)
vec cosinef	N=200	2949 (14.7 cycles/pts)
vec tanf	N=200	3702 (18.5 cycles/pts)
vec log2f	N=200	2544 (12.7 cycles/pts)
vec log10f	N=200	2504 (12.5 cycles/pts)
vec lognf	N=200	2361 (11.8 cycles/pts)
vec antilog2f	N=200	1144 (5.7 cycles/pts)
vec antilognf	N=200	1148 (5.7 cycles/pts)
vec antilog10f	N=200	1337 (6.7 cycles/pts)
vec powf	N=200	11927 (59.6 cycles/pts)
vec atanf	N=200	2443 (12.2 cycles/pts)
vec atan2f	N=200	3516 (17.6 cycles/pts)
vec sigmoidf	N=200	3332 (16.7 cycles/pts)
vec softmaxf	N=200	1670 (8.3 cycles/pts)
vec tanhf	N=200	4271 (21.4 cycles/pts)
vec reluf	N=200	214 (1.1 cycles/pts)
Math Functions		
Vectorized Fast Math		
vec divide16x16 fast	N=200	1143 (5.7 cycles/pts)
vec divide32x32 fast	N=200	1632 (8.2 cycles/pts)
vec sine32x32 fast	N=200	728 (3.6 cycles/pts)
vec cosine32x32 fast	N=200	728 (3.6 cycles/pts)
vec sqrt32x32 fast	N=200	1172 (5.9 cycles/pts)
Math Functions		
Scalar Math		
scl recip16x16		27 (cycles)
scl recip32x32		30 (cycles)
scl recip64x64		53 (cycles)
scl divide16x16		33 (cycles)
scl divide32x32		27 (cycles)
scl divide64x32		42 (cycles)
scl divide64x64		60 (cycles)
scl log2 32x32		17 (cycles)
scl logn 32x32		21 (cycles)
scl log10 32x32		21 (cycles)
scl antilog2 32x32		15 (cycles)
scl antilogn 32x32		18 (cycles)
scl antilog10 32x32		18 (cycles)
scl sqrt16x16		25 (cycles)
scl sqrt32x16		27 (cycles)
scl sqrt32x32		20 (cycles)
scl sqrt64x32		32 (cycles)
scl sine32x32		16 (cycles)
scl cosine32x32		16 (cycles)
scl tan32x32		44 (cycles)
scl atan32x32		21 (cycles)
scl rsqrt16x16		34 (cycles)
scl rsqrt32x32		42 (cycles)
scl sigmoid32x32		30 (cycles)
scl tanh32x32		30 (cycles)
scl relu32x32		4 (cycles)
scl int2float		2 (cycles)
scl float2int		7 (cycles)
scl sinef		82 (cycles)
scl cosinef		81 (cycles)
scl tanf	x=0.4	82 (cycles)
scl tanf	x=1.2	99 (cycles)
scl log2f		61 (cycles)
scl log10f		61 (cycles)
scl lognf		62 (cycles)
scl antilog2f		36 (cycles)
scl antilog10f		36 (cycles)
scl antilognf		35 (cycles)
scl powf	x=1 y=1	85 (cycles)
scl powf	x=1.25 y=0.75	225 (cycles)
scl atanf	x=0.7	45 (cycles)
scl atanf	x=1.3	62 (cycles)
scl atan2f		80 (cycles)
scl sigmoidf		75 (cycles)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
scl tanhf		87 (cycles)
scl reluf		5 (cycles)
Complex Functions		
Vectorized Complex Math		
vec_complex2mag	N=200	3415 (17.1 cycles/pts)
vec_complex2invmag	N=200	2567 (12.8 cycles/pts)
Complex Functions		
Scalar Complex Math		
scl_complex2mag		67 (cycles)
scl_complex2invmag		63 (cycles)
Vector Operations		
vec_dot16x16	N=200	120 (0.6 cycles/pts)
vec_dot32x16	x aligned, N=200	117 (0.6 cycles/pts)
vec_dot32x16	x unaligned, N=200	119 (0.6 cycles/pts)
vec_dot32x32	x aligned, N=200	122 (0.6 cycles/pts)
vec_dot32x32	x unaligned, N=200	120 (0.6 cycles/pts)
vec_dot64x32	N=200	221 (1.1 cycles/pts)
vec_dot64x64	N=200	218 (1.1 cycles/pts)
vec_dot64x64i	N=200	212 (1.1 cycles/pts)
vec_dot16x16 fast	N=200	65 (0.3 cycles/pts)
vec_dot32x16 fast	N=200	86 (0.4 cycles/pts)
vec_dot32x32 fast	N=200	110 (0.6 cycles/pts)
vec_dot64x32 fast	N=200	214 (1.1 cycles/pts)
vec_dot64x64 fast	N=200	215 (1.1 cycles/pts)
vec_dot64x64i fast	N=200	211 (1.1 cycles/pts)
vec_dot_batch8x8	N=200, M=16	1637 (0.5 cycles/pts)
vec_dot_batch8x16	N=200, M=16	1339 (0.4 cycles/pts)
vec_dot_batch16x16	N=200, M=16	1389 (0.4 cycles/pts)
vec_dot_batch8x8 fast	N=200, M=16	586 (0.2 cycles/pts)
vec_dot_batch8x16 fast	N=200, M=16	674 (0.2 cycles/pts)
vec_dot_batch16x16 fast	N=200, M=16	586 (0.2 cycles/pts)
vec_add16x16	x aligned, N=200	125 (0.6 cycles/pts)
vec_add16x16	x unaligned, N=200	132 (0.7 cycles/pts)
vec_add32x32	x aligned, N=200	213 (1.1 cycles/pts)
vec_add32x32	x unaligned, N=200	211 (1.1 cycles/pts)
vec_add16x16 fast	N=200	89 (0.4 cycles/pts)
vec_add32x32 fast	N=200	159 (0.8 cycles/pts)
vec_power16x16	x aligned, N=200	42 (0.2 cycles/pts)
vec_power16x16	x unaligned, N=200	56 (0.3 cycles/pts)
vec_power32x32	x aligned, N=200	70 (0.3 cycles/pts)
vec_power32x32	x unaligned, N=200	70 (0.3 cycles/pts)
vec_power16x16 fast	N=200	40 (0.2 cycles/pts)
vec_power32x32 fast	N=200	59 (0.3 cycles/pts)
vec_shift16x16	shift>0, x aligned, N=200	123 (0.6 cycles/pts)
vec_shift16x16	shift>0, x unaligned, N=200	123 (0.6 cycles/pts)
vec_shift16x16	shift<0, x aligned, N=200	82 (0.4 cycles/pts)
vec_shift16x16	shift<0, x unaligned, N=200	93 (0.5 cycles/pts)
vec_shift32x32	x aligned, N=200	215 (1.1 cycles/pts)
vec_shift32x32	x unaligned, N=200	122 (0.6 cycles/pts)
vec_scale16x16	x aligned, N=200	79 (0.4 cycles/pts)
vec_scale16x16	x unaligned, N=200	89 (0.4 cycles/pts)
vec_scale32x32	x aligned, N=200	121 (0.6 cycles/pts)
vec_scale32x32	x unaligned, N=200	123 (0.6 cycles/pts)
vec_shift16x16 fast	shift>0, N=200	104 (0.5 cycles/pts)
vec_shift16x16 fast	shift<0, N=200	72 (0.4 cycles/pts)
vec_shift32x32 fast	N=200	114 (0.6 cycles/pts)
vec_scale16x16 fast	N=200	63 (0.3 cycles/pts)
vec_scale32x32 fast	N=200	113 (0.6 cycles/pts)
vec_max16x16	x aligned, N=200	124 (0.6 cycles/pts)
vec_max16x16	x unaligned, N=200	125 (0.6 cycles/pts)
vec_min16x16	x aligned, N=200	124 (0.6 cycles/pts)
vec_min16x16	x unaligned, N=200	124 (0.6 cycles/pts)
vec_max32x32	N=200	124 (0.6 cycles/pts)
vec_min32x32	N=200	124 (0.6 cycles/pts)
vec_max16x16 fast	N=200	67 (0.3 cycles/pts)
vec_min16x16 fast	N=200	66 (0.3 cycles/pts)
vec_max32x32 fast	N=200	87 (0.4 cycles/pts)
vec_min32x32 fast	N=200	86 (0.4 cycles/pts)
vec_bexp16	N=200	121 (0.6 cycles/pts)
vec_bexp32	N=200	119 (0.6 cycles/pts)
vec_bexp16 fast	N=200	99 (0.5 cycles/pts)
vec_bexp32 fast	N=200	96 (0.5 cycles/pts)
scl_bexp16		7 (cycles)
scl_bexp32		5 (cycles)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
vec dotf	N=200	238 (1.2 cycles/pts)
vec dot batchf	N=200, M=16	1761 (0.6 cycles/pts)
vec dot batchf fast	N=200, M=16	1711 (0.5 cycles/pts)
vec addf	N=200	222 (1.1 cycles/pts)
vec powerf	N=200	114 (0.6 cycles/pts)
vec shiftf	N=200	140 (0.7 cycles/pts)
vec scalef	N=200	127 (0.6 cycles/pts)
vec scale_sf	N=200	230 (1.1 cycles/pts)
vec minf	N=200	116 (0.6 cycles/pts)
vec maxf	N=200	112 (0.6 cycles/pts)
vec bexpf	N=200	127 (0.6 cycles/pts)
scl bexpf		7 (cycles)
Emulated Floating Point Operations		
vec add 32x16ef	N=200	1451 (7.3 cycles/pts)
vec mul 32x16ef	N=200	1033 (5.2 cycles/pts)
vec mac 32x16ef	N=200	2027 (10.1 cycles/pts)
vec dot 32x16ef	N=200	1070 (5.3 cycles/pts)
scl add 32x16ef		23 (cycles)
scl mul 32x16ef		15 (cycles)
scl mac 32x16ef		29 (cycles)
Matrix Operations		
mtx mpy8x8	16x16 x 16x16	4282 (1.0 MACs/cycle)
mtx mpy8x8	32x32 x 32x32	28194 (1.2 MACs/cycle)
mtx mpy8x8	40x80 x 80x8	19298 (1.3 MACs/cycle)
mtx mpy8x8	40x81 x 81x8	20138 (1.3 MACs/cycle)
mtx mpy8x8	40x82 x 82x8	19739 (1.3 MACs/cycle)
mtx mpy8x8	40x83 x 83x8	20578 (1.3 MACs/cycle)
mtx mpy8x8	2x100 x 100x8	1299 (1.2 MACs/cycle)
mtx mpy8x8	8x80 x 80x2	1119 (1.1 MACs/cycle)
mtx mpy8x8	8x4 x 4x2	288 (0.2 MACs/cycle)
mtx mpy8x8	8x16 x 16x2	415 (0.6 MACs/cycle)
mtx mpy8x8	8x32 x 32x2	592 (0.9 MACs/cycle)
mtx mpy8x8 fast	16x16 x 16x16	1901 (2.2 MACs/cycle)
mtx mpy8x8 fast	32x32 x 32x32	12093 (2.7 MACs/cycle)
mtx mpy8x8 fast	8x80 x 80x4	751 (3.4 MACs/cycle)
mtx mpy8x8 fast	8x84 x 84x4	821 (3.3 MACs/cycle)
mtx mpy8x8 fast	8x4 x 4x4	204 (0.6 MACs/cycle)
mtx mpy8x8 fast	8x16 x 16x4	287 (1.8 MACs/cycle)
mtx mpy8x8 fast	8x32 x 32x4	434 (2.4 MACs/cycle)
mtx mpyt8x8	16x16 x 16x16	4557 (0.9 MACs/cycle)
mtx mpyt8x8	32x32 x 32x32	28998 (1.1 MACs/cycle)
mtx mpyt8x8	40x80 x 80x8	19637 (1.3 MACs/cycle)
mtx mpyt8x8	40x81 x 81x8	20325 (1.3 MACs/cycle)
mtx mpyt8x8	40x82 x 82x8	20197 (1.3 MACs/cycle)
mtx mpyt8x8	40x83 x 83x8	20886 (1.3 MACs/cycle)
mtx mpyt8x8	2x100 x 100x8	1333 (1.2 MACs/cycle)
mtx mpyt8x8	8x80 x 80x2	1121 (1.1 MACs/cycle)
mtx mpyt8x8	8x4 x 4x2	286 (0.2 MACs/cycle)
mtx mpyt8x8	8x16 x 16x2	417 (0.6 MACs/cycle)
mtx mpyt8x8	8x32 x 32x2	592 (0.9 MACs/cycle)
mtx mpyt8x8 fast	16x16 x 16x16	1606 (2.6 MACs/cycle)
mtx mpyt8x8 fast	32x32 x 32x32	10262 (3.2 MACs/cycle)
mtx mpyt8x8 fast	8x80 x 80x4	619 (4.1 MACs/cycle)
mtx mpyt8x8 fast	8x84 x 84x4	518 (5.2 MACs/cycle)
mtx mpyt8x8 fast	8x4 x 4x4	162 (0.8 MACs/cycle)
mtx mpyt8x8 fast	8x16 x 16x4	235 (2.2 MACs/cycle)
mtx mpyt8x8 fast	8x32 x 32x4	362 (2.8 MACs/cycle)
mtx mpy8x16	16x16 x 16x16	3114 (1.3 MACs/cycle)
mtx mpy8x16	32x32 x 32x32	17659 (1.9 MACs/cycle)
mtx mpy8x16	40x80 x 80x8	11091 (2.3 MACs/cycle)
mtx mpy8x16	40x81 x 81x8	11314 (2.3 MACs/cycle)
mtx mpy8x16	40x82 x 82x8	11364 (2.3 MACs/cycle)
mtx mpy8x16	40x83 x 83x8	11579 (2.3 MACs/cycle)
mtx mpy8x16	2x100 x 100x8	1530 (1.0 MACs/cycle)
mtx mpy8x16	8x80 x 80x2	1169 (1.1 MACs/cycle)
mtx mpy8x16	8x4 x 4x2	254 (0.3 MACs/cycle)
mtx mpy8x16	8x16 x 16x2	401 (0.6 MACs/cycle)
mtx mpy8x16	8x32 x 32x2	594 (0.9 MACs/cycle)
mtx mpy8x16 fast	16x16 x 16x16	1679 (2.4 MACs/cycle)
mtx mpy8x16 fast	32x32 x 32x32	10575 (3.1 MACs/cycle)
mtx mpy8x16 fast	8x80 x 80x4	588 (4.4 MACs/cycle)
mtx mpy8x16 fast	8x84 x 84x4	533 (5.0 MACs/cycle)
mtx mpy8x16 fast	8x4 x 4x4	137 (0.9 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
mtx mpy8x16 fast	8x16 x 16x4	204 (2.5 MACs/cycle)
mtx mpy8x16 fast	8x32 x 32x4	299 (3.4 MACs/cycle)
mtx mpyt8x16	16x16 x 16x16	3176 (1.3 MACs/cycle)
mtx mpyt8x16	32x32 x 32x32	13440 (2.4 MACs/cycle)
mtx mpyt8x16	40x80 x 80x8	9224 (2.8 MACs/cycle)
mtx mpyt8x16	40x81 x 81x8	9596 (2.7 MACs/cycle)
mtx mpyt8x16	40x82 x 82x8	9638 (2.7 MACs/cycle)
mtx mpyt8x16	40x83 x 83x8	10047 (2.6 MACs/cycle)
mtx mpyt8x16	2x100 x 100x8	888 (1.8 MACs/cycle)
mtx mpyt8x16	8x80 x 80x2	1120 (1.1 MACs/cycle)
mtx mpyt8x16	8x4 x 4x2	365 (0.2 MACs/cycle)
mtx mpyt8x16	8x16 x 16x2	479 (0.5 MACs/cycle)
mtx mpyt8x16	8x32 x 32x2	641 (0.8 MACs/cycle)
mtx mpyt8x16 fast	16x16 x 16x16	1423 (2.9 MACs/cycle)
mtx mpyt8x16 fast	32x32 x 32x32	8160 (4.0 MACs/cycle)
mtx mpyt8x16 fast	8x80 x 80x4	526 (4.9 MACs/cycle)
mtx mpyt8x16 fast	8x84 x 84x4	537 (5.0 MACs/cycle)
mtx mpyt8x16 fast	8x4 x 4x4	140 (0.9 MACs/cycle)
mtx mpyt8x16 fast	8x16 x 16x4	201 (2.5 MACs/cycle)
mtx mpyt8x16 fast	8x32 x 32x4	285 (3.6 MACs/cycle)
mtx mpy16x16	16x16 x 16x16	1697 (2.4 MACs/cycle)
mtx mpy16x16	32x32 x 32x32	8389 (3.9 MACs/cycle)
mtx mpy16x16	40x80 x 80x8	4742 (5.4 MACs/cycle)
mtx mpy16x16	40x81 x 81x8	4938 (5.2 MACs/cycle)
mtx mpy16x16	40x82 x 82x8	4940 (5.3 MACs/cycle)
mtx mpy16x16	40x83 x 83x8	4952 (5.4 MACs/cycle)
mtx mpy16x16	40x84 x 84x8	4942 (5.4 MACs/cycle)
mtx mpy16x16	40x85 x 85x8	5116 (5.3 MACs/cycle)
mtx mpy16x16	40x86 x 86x8	5119 (5.4 MACs/cycle)
mtx mpy16x16	40x87 x 87x8	5140 (5.4 MACs/cycle)
mtx mpy16x16	40x88 x 88x8	5100 (5.5 MACs/cycle)
mtx mpy16x16	2x100 x 100x8	853 (1.9 MACs/cycle)
mtx mpy16x16	8x80 x 80x2	621 (2.1 MACs/cycle)
mtx mpy16x16	8x4 x 4x2	196 (0.3 MACs/cycle)
mtx mpy16x16	8x16 x 16x2	269 (1.0 MACs/cycle)
mtx mpy16x16	8x32 x 32x2	356 (1.4 MACs/cycle)
mtx mpy16x16 fast	16x16 x 16x16	1679 (2.4 MACs/cycle)
mtx mpy16x16 fast	32x32 x 32x32	10575 (3.1 MACs/cycle)
mtx mpy16x16 fast	8x80 x 80x4	587 (4.4 MACs/cycle)
mtx mpy16x16 fast	8x84 x 84x4	531 (5.1 MACs/cycle)
mtx mpy16x16 fast	8x4 x 4x4	135 (0.9 MACs/cycle)
mtx mpy16x16 fast	8x16 x 16x4	203 (2.5 MACs/cycle)
mtx mpy16x16 fast	8x32 x 32x4	299 (3.4 MACs/cycle)
mtx mpyt16x16	16x16 x 16x16	1542 (2.7 MACs/cycle)
mtx mpyt16x16	32x32 x 32x32	7806 (4.2 MACs/cycle)
mtx mpyt16x16	40x80 x 80x8	4474 (5.7 MACs/cycle)
mtx mpyt16x16	40x81 x 81x8	4618 (5.6 MACs/cycle)
mtx mpyt16x16	40x82 x 82x8	4619 (5.7 MACs/cycle)
mtx mpyt16x16	40x83 x 83x8	4625 (5.7 MACs/cycle)
mtx mpyt16x16	2x100 x 100x8	612 (2.6 MACs/cycle)
mtx mpyt16x16	8x80 x 80x2	531 (2.4 MACs/cycle)
mtx mpyt16x16	8x4 x 4x2	198 (0.3 MACs/cycle)
mtx mpyt16x16	8x16 x 16x2	247 (1.0 MACs/cycle)
mtx mpyt16x16	8x32 x 32x2	318 (1.6 MACs/cycle)
mtx mpyt16x16 fast	16x16 x 16x16	1455 (2.8 MACs/cycle)
mtx mpyt16x16 fast	32x32 x 32x32	7776 (4.2 MACs/cycle)
mtx mpyt16x16 fast	8x80 x 80x4	465 (5.5 MACs/cycle)
mtx mpyt16x16 fast	8x84 x 84x4	469 (5.7 MACs/cycle)
mtx mpyt16x16 fast	8x4 x 4x4	139 (0.9 MACs/cycle)
mtx mpyt16x16 fast	8x16 x 16x4	205 (2.5 MACs/cycle)
mtx mpyt16x16 fast	8x32 x 32x4	273 (3.8 MACs/cycle)
mtx mpy32x32	16x16 x 16x16	2838 (1.4 MACs/cycle)
mtx mpy32x32	32x32 x 32x32	14710 (2.2 MACs/cycle)
mtx mpy32x32	40x80 x 80x8	8994 (2.8 MACs/cycle)
mtx mpy32x32	40x81 x 81x8	9219 (2.8 MACs/cycle)
mtx mpy32x32	40x82 x 82x8	9207 (2.9 MACs/cycle)
mtx mpy32x32	40x83 x 83x8	9553 (2.8 MACs/cycle)
mtx mpy32x32	2x100 x 100x8	1389 (1.2 MACs/cycle)
mtx mpy32x32	8x80 x 80x2	809 (1.6 MACs/cycle)
mtx mpy32x32	8x4 x 4x2	158 (0.4 MACs/cycle)
mtx mpy32x32	8x16 x 16x2	265 (1.0 MACs/cycle)
mtx mpy32x32	8x32 x 32x2	401 (1.3 MACs/cycle)
mtx mpy32x32 fast	16x16 x 16x16	1815 (2.3 MACs/cycle)
mtx mpy32x32 fast	32x32 x 32x32	11726 (2.8 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
mtx mpy32x32_fast	8x80 x 80x4	819 (3.1 MACs/cycle)
mtx mpy32x32_fast	8x84 x 84x4	856 (3.1 MACs/cycle)
mtx mpy32x32_fast	8x4 x 4x4	140 (0.9 MACs/cycle)
mtx mpy32x32_fast	8x16 x 16x4	242 (2.1 MACs/cycle)
mtx mpy32x32_fast	8x32 x 32x4	386 (2.7 MACs/cycle)
mtx mpyt32x32	16x16 x 16x16	3261 (1.3 MACs/cycle)
mtx mpyt32x32	32x32 x 32x32	17588 (1.9 MACs/cycle)
mtx mpyt32x32	40x80 x 80x8	10493 (2.4 MACs/cycle)
mtx mpyt32x32	40x81 x 81x8	10646 (2.4 MACs/cycle)
mtx mpyt32x32	40x82 x 82x8	10620 (2.5 MACs/cycle)
mtx mpyt32x32	40x83 x 83x8	10892 (2.4 MACs/cycle)
mtx mpyt32x32	2x100 x 100x8	1249 (1.3 MACs/cycle)
mtx mpyt32x32	8x80 x 80x2	663 (1.9 MACs/cycle)
mtx mpyt32x32	8x4 x 4x2	195 (0.3 MACs/cycle)
mtx mpyt32x32	8x16 x 16x2	263 (1.0 MACs/cycle)
mtx mpyt32x32	8x32 x 32x2	363 (1.4 MACs/cycle)
mtx mpyt32x32_fast	16x16 x 16x16	1712 (2.4 MACs/cycle)
mtx mpyt32x32_fast	32x32 x 32x32	10767 (3.0 MACs/cycle)
mtx mpyt32x32_fast	8x80 x 80x4	748 (3.4 MACs/cycle)
mtx mpyt32x32_fast	8x84 x 84x4	767 (3.5 MACs/cycle)
mtx mpyt32x32_fast	8x4 x 4x4	131 (1.0 MACs/cycle)
mtx mpyt32x32_fast	8x16 x 16x4	235 (2.2 MACs/cycle)
mtx mpyt32x32_fast	8x32 x 32x4	362 (2.8 MACs/cycle)
mtx vecmpy8x8	16x100 x 100x1	2010 (0.8 MACs/cycle)
mtx vecmpy8x8	16x104 x 104x1	2082 (0.8 MACs/cycle)
mtx vecmpy8x8	40x40 x 40x1	2258 (0.7 MACs/cycle)
mtx vecmpy8x8_fast	16x100 x 100x1	386 (4.1 MACs/cycle)
mtx vecmpy8x8_fast	16x104 x 104x1	352 (4.7 MACs/cycle)
mtx vecmpy8x8_fast	40x40 x 40x1	450 (3.6 MACs/cycle)
mtx vecmpy8x16	16x100 x 100x1	1918 (0.8 MACs/cycle)
mtx vecmpy8x16	16x104 x 104x1	1982 (0.8 MACs/cycle)
mtx vecmpy8x16	40x40 x 40x1	2350 (0.7 MACs/cycle)
mtx vecmpy8x16_fast	16x100 x 100x1	347 (4.6 MACs/cycle)
mtx vecmpy8x16_fast	16x104 x 104x1	334 (5.0 MACs/cycle)
mtx vecmpy8x16_fast	40x40 x 40x1	407 (3.9 MACs/cycle)
mtx vecmpyl6x16	16x100 x 100x1	648 (2.5 MACs/cycle)
mtx vecmpyl6x16	16x104 x 104x1	695 (2.4 MACs/cycle)
mtx vecmpyl6x16	40x40 x 40x1	898 (1.8 MACs/cycle)
mtx vecmpyl6x16_fast	16x100 x 100x1	318 (5.0 MACs/cycle)
mtx vecmpyl6x16_fast	16x104 x 104x1	326 (5.1 MACs/cycle)
mtx vecmpyl6x16_fast	40x40 x 40x1	394 (4.1 MACs/cycle)
mtx vecmpy32x32	16x100 x 100x1	1389 (1.2 MACs/cycle)
mtx vecmpy32x32	16x101 x 101x1	1383 (1.2 MACs/cycle)
mtx vecmpy32x32	16x102 x 102x1	1401 (1.2 MACs/cycle)
mtx vecmpy32x32	16x103 x 103x1	1399 (1.2 MACs/cycle)
mtx vecmpy32x32	16x104 x 104x1	1429 (1.2 MACs/cycle)
mtx vecmpy32x32	40x40 x 40x1	1621 (1.0 MACs/cycle)
mtx vecmpy32x32_fast	16x100 x 100x1	578 (2.8 MACs/cycle)
mtx vecmpy32x32_fast	16x104 x 104x1	598 (2.8 MACs/cycle)
mtx vecmpy32x32_fast	40x40 x 40x1	674 (2.4 MACs/cycle)
mtx transpose8x8	M=16,N=16	629 (0.41 pts/cycle)
mtx transpose8x8	M=27,N=27	1653 (0.44 pts/cycle)
mtx transpose8x8	M=32,N=32	2277 (0.45 pts/cycle)
mtx transpose8x8	M=39,N=39	3320 (0.46 pts/cycle)
mtx transpose8x8	M=48,N=48	4949 (0.47 pts/cycle)
mtx transpose8x8_fast	M=8,N=8	70 (0.91 pts/cycle)
mtx transpose8x8_fast	M=16,N=16	183 (1.40 pts/cycle)
mtx transpose8x8_fast	M=32,N=32	572 (1.79 pts/cycle)
mtx transpose8x8_fast	M=48,N=48	1136 (2.03 pts/cycle)
mtx transpose16x16	M=16,N=16	530 (0.48 pts/cycle)
mtx transpose16x16	M=27,N=27	1300 (0.56 pts/cycle)
mtx transpose16x16	M=32,N=32	1606 (0.64 pts/cycle)
mtx transpose16x16	M=39,N=39	2337 (0.65 pts/cycle)
mtx transpose16x16	M=48,N=48	3218 (0.72 pts/cycle)
mtx transpose16x16_fast	M=8,N=8	61 (1.05 pts/cycle)
mtx transpose16x16_fast	M=16,N=16	196 (1.31 pts/cycle)
mtx transpose16x16_fast	M=32,N=32	547 (1.87 pts/cycle)
mtx transpose16x16_fast	M=48,N=48	1093 (2.11 pts/cycle)
mtx transpose32x32	M=16,N=16	416 (0.62 pts/cycle)
mtx transpose32x32	M=27,N=27	986 (0.74 pts/cycle)
mtx transpose32x32	M=32,N=32	1396 (0.73 pts/cycle)
mtx transpose32x32	M=39,N=39	1884 (0.81 pts/cycle)
mtx transpose32x32	M=48,N=48	2952 (0.78 pts/cycle)
mtx transpose32x32_fast	M=8,N=8	79 (0.81 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		Ri2020.4, HiFi4 with VFPU, bd5
mtx transpose32x32 fast	M=16,N=16	231 (1.11 pts/cycle)
mtx transpose32x32 fast	M=32,N=32	776 (1.32 pts/cycle)
mtx transpose32x32 fast	M=48,N=48	1642 (1.40 pts/cycle)
mtx mpyf	16x16 x 16x16	1727 (2.4 MACs/cycle)
mtx mpyf	32x32 x 32x32	11497 (2.9 MACs/cycle)
mtx mpyf	40x80 x 80x8	8333 (3.1 MACs/cycle)
mtx mpyf	40x81 x 81x8	8433 (3.1 MACs/cycle)
mtx mpyf	40x82 x 82x8	8513 (3.1 MACs/cycle)
mtx mpyf	40x83 x 83x8	8623 (3.1 MACs/cycle)
mtx mpyf	2x100 x 100x8	2519 (0.6 MACs/cycle)
mtx mpyf	8x80 x 80x2	844 (1.5 MACs/cycle)
mtx mpyf	8x4 x 4x2	152 (0.4 MACs/cycle)
mtx mpyf	8x16 x 16x2	268 (1.0 MACs/cycle)
mtx mpyf	8x32 x 32x2	412 (1.2 MACs/cycle)
mtx mpyf fast	16x16 x 16x16	1956 (2.1 MACs/cycle)
mtx mpyf fast	32x32 x 32x32	12268 (2.7 MACs/cycle)
mtx mpyf fast	8x80 x 80x4	842 (3.0 MACs/cycle)
mtx mpyf fast	8x84 x 84x4	874 (3.1 MACs/cycle)
mtx mpyf fast	8x4 x 4x4	150 (0.9 MACs/cycle)
mtx mpyf fast	8x16 x 16x4	266 (1.9 MACs/cycle)
mtx mpyf fast	8x32 x 32x4	410 (2.5 MACs/cycle)
mtx mpytf	16x16 x 16x16	2022 (2.0 MACs/cycle)
mtx mpytf	32x32 x 32x32	11758 (2.8 MACs/cycle)
mtx mpytf	40x80 x 80x8	7798 (3.3 MACs/cycle)
mtx mpytf	40x81 x 81x8	7883 (3.3 MACs/cycle)
mtx mpytf	40x82 x 82x8	7964 (3.3 MACs/cycle)
mtx mpytf	40x83 x 83x8	7990 (3.3 MACs/cycle)
mtx mpytf	2x100 x 100x8	1572 (1.0 MACs/cycle)
mtx mpytf	8x80 x 80x2	782 (1.6 MACs/cycle)
mtx mpytf	8x4 x 4x2	174 (0.4 MACs/cycle)
mtx mpytf	8x16 x 16x2	270 (0.9 MACs/cycle)
mtx mpytf	8x32 x 32x2	398 (1.3 MACs/cycle)
mtx mpytf fast	16x16 x 16x16	1973 (2.1 MACs/cycle)
mtx mpytf fast	32x32 x 32x32	11805 (2.8 MACs/cycle)
mtx mpytf fast	8x80 x 80x4	779 (3.3 MACs/cycle)
mtx mpytf fast	8x84 x 84x4	807 (3.3 MACs/cycle)
mtx mpytf fast	8x4 x 4x4	167 (0.8 MACs/cycle)
mtx mpytf fast	8x16 x 16x4	267 (1.9 MACs/cycle)
mtx mpytf fast	8x32 x 32x4	395 (2.6 MACs/cycle)
mtx vecmpyf	16x100 x 100x1	872 (1.8 MACs/cycle)
mtx vecmpyf	16x101 x 101x1	919 (1.8 MACs/cycle)
mtx vecmpyf	16x102 x 102x1	878 (1.9 MACs/cycle)
mtx vecmpyf	16x103 x 103x1	1034 (1.6 MACs/cycle)
mtx vecmpyf	16x104 x 104x1	1100 (1.5 MACs/cycle)
mtx vecmpyf	40x40 x 40x1	1262 (1.3 MACs/cycle)
mtx vecmpyf fast	16x100 x 100x1	605 (2.6 MACs/cycle)
mtx vecmpyf fast	16x104 x 104x1	634 (2.6 MACs/cycle)
mtx vecmpyf fast	40x40 x 40x1	769 (2.1 MACs/cycle)
mtx transposef	M=16,N=16	424 (0.60 pts/cycle)
mtx transposef	M=27,N=27	993 (0.73 pts/cycle)
mtx transposef	M=32,N=32	1404 (0.73 pts/cycle)
mtx transposef	M=39,N=39	1892 (0.80 pts/cycle)
mtx transposef	M=48,N=48	2960 (0.78 pts/cycle)
mtx transposef fast	M=8,N=8	87 (0.74 pts/cycle)
mtx transposef fast	M=16,N=16	238 (1.08 pts/cycle)
mtx transposef fast	M=32,N=32	784 (1.31 pts/cycle)
mtx transposef fast	M=48,N=48	1648 (1.40 pts/cycle)
Matrix Decomposition and Inversion		
Gauss-Jordan		
cmtx inv2x2 32x32		353 (353.0 cycles/matrix)
cmtx inv3x3 32x32		675 (675.0 cycles/matrix)
cmtx inv4x4 32x32		1165 (1165.0 cycles/matrix)
cmtx inv6x6 32x32		2957 (2957.0 cycles/matrix)
cmtx inv8x8 32x32		5650 (5650.0 cycles/matrix)
cmtx inv10x10 32x32		10264 (10264.0 cycles/matrix)
mtx inv2x2 32x32		38 (38.0 cycles/matrix)
mtx inv3x3 32x32		417 (417.0 cycles/matrix)
mtx inv4x4 32x32		638 (638.0 cycles/matrix)
mtx inv6x6 32x32		1640 (1640.0 cycles/matrix)
mtx inv8x8 32x32		2923 (2923.0 cycles/matrix)
mtx inv10x10 32x32		5487 (5487.0 cycles/matrix)
cmtx gjelim2x2 32x32		313 (313.0 cycles/matrix)
cmtx gjelim3x3 32x32		520 (520.0 cycles/matrix)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
cmtx_gjelim4x4_32x32		977 (977.0 cycles/matrix)
cmtx_gjelim6x6_32x32		2054 (2054.0 cycles/matrix)
cmtx_gjelim8x8_32x32		3692 (3692.0 cycles/matrix)
cmtx_gjelim10x10_32x32		5991 (5991.0 cycles/matrix)
mtx_gjelim2x2_32x32		38 (38.0 cycles/matrix)
mtx_gjelim3x3_32x32		408 (408.0 cycles/matrix)
mtx_gjelim4x4_32x32		584 (584.0 cycles/matrix)
mtx_gjelim6x6_32x32		1442 (1442.0 cycles/matrix)
mtx_gjelim8x8_32x32		2367 (2367.0 cycles/matrix)
mtx_gjelim10x10_32x32		3794 (3794.0 cycles/matrix)
mtx_inv2x2f		32 (32.0 cycles/matrix)
mtx_inv3x3f		178 (178.0 cycles/matrix)
mtx_inv4x4f		272 (272.0 cycles/matrix)
mtx_inv6x6f		798 (798.0 cycles/matrix)
mtx_inv8x8f		1492 (1492.0 cycles/matrix)
mtx_inv10x10f		2720 (2720.0 cycles/matrix)
Matrix Decomposition and Inversion Cholesky		
cmatcholdecomp4x4_32x32	4x4	652 (652.0 cycles/matrix)
cmatcholdecomp6x6_32x32	6x6	1238 (1238.0 cycles/matrix)
cmatcholdecomp8x8_32x32	8x8	2184 (2184.0 cycles/matrix)
cmatcholdecomp10x10_32x32	10x10	3376 (3376.0 cycles/matrix)
cmatcholfwdsubst4x4_32x32	4x4x1	126 (126.0 cycles/matrix)
cmatcholfwdsubst6x6_32x32	6x6x1	203 (203.0 cycles/matrix)
cmatcholfwdsubst8x8_32x32	8x8x1	310 (310.0 cycles/matrix)
cmatcholfwdsubst10x10_32x32	10x10x1	469 (469.0 cycles/matrix)
cmatcholbkwsbst4x4_32x32	4x1	121 (121.0 cycles/matrix)
cmatcholbkwsbst6x6_32x32	6x1	153 (153.0 cycles/matrix)
cmatcholbkwsbst8x8_32x32	8x1	215 (215.0 cycles/matrix)
cmatcholbkwsbst10x10_32x32	10x1	289 (289.0 cycles/matrix)
cmatcholmmesolver4x4_32x32	4x4x1	970 (970.0 cycles/matrix)
cmatcholmmesolver6x6_32x32	6x6x1	1670 (1670.0 cycles/matrix)
cmatcholmmesolver8x8_32x32	8x8x1	2785 (2785.0 cycles/matrix)
cmatcholmmesolver10x10_32x32	10x10x1	4199 (4199.0 cycles/matrix)
cmatcholpreprocess4x4_32x32	4x4	182 (182.0 cycles/matrix)
cmatcholpreprocess6x6_32x32	6x6	423 (423.0 cycles/matrix)
cmatcholpreprocess8x8_32x32	8x8	815 (815.0 cycles/matrix)
cmatcholpreprocess10x10_32x32	10x10	1350 (1350.0 cycles/matrix)
cmatcholpseudoinv4x4_32x32	4x4	1661 (1661.0 cycles/matrix)
cmatcholpseudoinv6x6_32x32	6x6	3390 (3390.0 cycles/matrix)
cmatcholpseudoinv8x8_32x32	8x8	6135 (6135.0 cycles/matrix)
cmatcholpseudoinv10x10_32x32	10x10	9563 (9563.0 cycles/matrix)
matcholdecomp4x4_32x32	4x4	633 (633.0 cycles/matrix)
matcholdecomp6x6_32x32	6x6	1137 (1137.0 cycles/matrix)
matcholdecomp8x8_32x32	8x8	1808 (1808.0 cycles/matrix)
matcholdecomp10x10_32x32	10x10	2667 (2667.0 cycles/matrix)
matcholfwdsubst4x4_32x32	4x4x1	119 (119.0 cycles/matrix)
matcholfwdsubst6x6_32x32	6x6x1	173 (173.0 cycles/matrix)
matcholfwdsubst8x8_32x32	8x8x1	256 (256.0 cycles/matrix)
matcholfwdsubst10x10_32x32	10x10x1	325 (325.0 cycles/matrix)
matcholbkwsbst4x4_32x32	4x1	84 (84.0 cycles/matrix)
matcholbkwsbst6x6_32x32	6x1	123 (123.0 cycles/matrix)
matcholbkwsbst8x8_32x32	8x1	182 (182.0 cycles/matrix)
matcholbkwsbst10x10_32x32	10x1	235 (235.0 cycles/matrix)
matcholmmesolver4x4_32x32	4x4x1	903 (903.0 cycles/matrix)
matcholmmesolver6x6_32x32	6x6x1	1502 (1502.0 cycles/matrix)

Function name	Invocation parameters	Cycles Measurements
		RI2020.4, HiFi4 with VFPU, bd5
matcholmmesolver8x8_32x32	8x8x1	2317 (2317.0 cycles/matrix)
matcholmmesolver10x10_32x32	10x10x1	3304 (3304.0 cycles/matrix)
matcholpreprocess4x4_32x32	4x4	111 (111.0 cycles/matrix)
matcholpreprocess6x6_32x32	6x6	232 (232.0 cycles/matrix)
matcholpreprocess8x8_32x32	8x8	420 (420.0 cycles/matrix)
matcholpreprocess10x10_32x32	10x10	695 (695.0 cycles/matrix)
matcholpseudoinv4x4_32x32	4x4	1368 (1368.0 cycles/matrix)
matcholpseudoinv6x6_32x32	6x6	2701 (2701.0 cycles/matrix)
matcholpseudoinv8x8_32x32	8x8	4578 (4578.0 cycles/matrix)
matcholpseudoinv10x10_32x32	10x10	7058 (7058.0 cycles/matrix)
cmatcholdecomp4x4f	4x4	522 (522.0 cycles/matrix)
cmatcholdecomp6x6f	6x6	1001 (1001.0 cycles/matrix)
cmatcholdecomp8x8f	8x8	1634 (1634.0 cycles/matrix)
cmatcholdecomp10x10f	10x10	2429 (2429.0 cycles/matrix)
cmatcholfwdsubst4x4f	4x4x1	93 (93.0 cycles/matrix)
cmatcholfwdsubst6x6f	6x6x1	145 (145.0 cycles/matrix)
cmatcholfwdsubst8x8f	8x8x1	207 (207.0 cycles/matrix)
cmatcholfwdsubst10x10f	10x10x1	267 (267.0 cycles/matrix)
cmatcholbkwsbst4x4f	4x1	44 (44.0 cycles/matrix)
cmatcholbkwsbst6x6f	6x1	70 (70.0 cycles/matrix)
cmatcholbkwsbst8x8f	8x1	100 (100.0 cycles/matrix)
cmatcholbkwsbst10x10f	10x1	123 (123.0 cycles/matrix)
cmatcholmmesolver4x4f	4x4x1	731 (731.0 cycles/matrix)
cmatcholmmesolver6x6f	6x6x1	1290 (1290.0 cycles/matrix)
cmatcholmmesolver8x8f	8x8x1	2009 (2009.0 cycles/matrix)
cmatcholmmesolver10x10f	10x10x1	2901 (2901.0 cycles/matrix)
cmatcholpreprocess4x4f	4x4	110 (110.0 cycles/matrix)
cmatcholpreprocess6x6f	6x6	297 (297.0 cycles/matrix)
cmatcholpreprocess8x8f	8x8	569 (569.0 cycles/matrix)
cmatcholpreprocess10x10f	10x10	943 (943.0 cycles/matrix)
cmatcholpseudoinv4x4f	4x4	864 (864.0 cycles/matrix)
cmatcholpseudoinv6x6f	6x6	1634 (1634.0 cycles/matrix)
cmatcholpseudoinv8x8f	8x8	2824 (2824.0 cycles/matrix)
cmatcholpseudoinv10x10f	10x10	4392 (4392.0 cycles/matrix)
matcholdecomp4x4f	4x4	407 (407.0 cycles/matrix)
matcholdecomp6x6f	6x6	762 (762.0 cycles/matrix)
matcholdecomp8x8f	8x8	1232 (1232.0 cycles/matrix)
matcholdecomp10x10f	10x10	1681 (1681.0 cycles/matrix)
matcholfwdsubst4x4f	4x4x1	72 (72.0 cycles/matrix)
matcholfwdsubst6x6f	6x6x1	98 (98.0 cycles/matrix)
matcholfwdsubst8x8f	8x8x1	129 (129.0 cycles/matrix)
matcholfwdsubst10x10f	10x10x1	160 (160.0 cycles/matrix)
matcholbkwsbst4x4f	4x1	34 (34.0 cycles/matrix)
matcholbkwsbst6x6f	6x1	52 (52.0 cycles/matrix)
matcholbkwsbst8x8f	8x1	67 (67.0 cycles/matrix)
matcholbkwsbst10x10f	10x1	83 (83.0 cycles/matrix)
matcholmmesolver4x4f	4x4x1	582 (582.0 cycles/matrix)
matcholmmesolver6x6f	6x6x1	980 (980.0 cycles/matrix)
matcholmmesolver8x8f	8x8x1	1496 (1496.0 cycles/matrix)
matcholmmesolver10x10f	10x10x1	1992 (1992.0 cycles/matrix)
matcholpreprocess4x4f	4x4	41 (41.0 cycles/matrix)
matcholpreprocess6x6f	6x6	140 (140.0 cycles/matrix)
matcholpreprocess8x8f	8x8	301 (301.0 cycles/matrix)
matcholpreprocess10x10f	10x10	428 (428.0 cycles/matrix)
matcholpseudoinv4x4f	4x4	668 (668.0 cycles/matrix)
matcholpseudoinv6x6f	6x6	1185 (1185.0 cycles/matrix)
matcholpseudoinv8x8f	8x8	1871 (1871.0 cycles/matrix)
matcholpseudoinv10x10f	10x10	2671 (2671.0 cycles/matrix)
Fitting and Interpolation		
Polynomial Fitting		
vec_poly4_32x32	N=200	376 (1.9 cycles/pts)
vec_poly8_32x32	N=200	624 (3.1 cycles/pts)
vec_poly4f	N=200	407 (2.0 cycles/pts)
vec_poly8f	N=200	787 (3.9 cycles/pts)
FFT Routines		
Complex FFT		
fft_cplx16x16	N=16, scaling=3	135 (0.119 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
fft cplx16x16	N=16, scaling=2	174 (0.092 pts/cycle)
fft cplx16x16	N=32, scaling=3	188 (0.170 pts/cycle)
fft cplx16x16	N=32, scaling=2	247 (0.130 pts/cycle)
fft cplx16x16	N=64, scaling=3	425 (0.151 pts/cycle)
fft cplx16x16	N=64, scaling=2	537 (0.119 pts/cycle)
fft cplx16x16	N=128, scaling=3	886 (0.144 pts/cycle)
fft cplx16x16	N=128, scaling=2	1082 (0.118 pts/cycle)
fft cplx16x16	N=256, scaling=3	1797 (0.142 pts/cycle)
fft cplx16x16	N=256, scaling=2	2205 (0.116 pts/cycle)
fft cplx16x16	N=512, scaling=3	3870 (0.132 pts/cycle)
fft cplx16x16	N=512, scaling=2	4638 (0.110 pts/cycle)
fft cplx16x16	N=1024, scaling=3	8085 (0.127 pts/cycle)
fft cplx16x16	N=1024, scaling=2	9769 (0.105 pts/cycle)
fft cplx16x16	N=2048, scaling=3	17979 (0.114 pts/cycle)
fft cplx16x16	N=2048, scaling=2	21293 (0.096 pts/cycle)
fft cplx16x16	N=4096, scaling=3	37849 (0.108 pts/cycle)
fft cplx16x16	N=4096, scaling=2	45207 (0.091 pts/cycle)
fft cplx32x16	N=16, scaling=3	139 (0.115 pts/cycle)
fft cplx32x16	N=16, scaling=2	191 (0.084 pts/cycle)
fft cplx32x16	N=32, scaling=3	205 (0.156 pts/cycle)
fft cplx32x16	N=32, scaling=2	262 (0.122 pts/cycle)
fft cplx32x16	N=64, scaling=3	406 (0.158 pts/cycle)
fft cplx32x16	N=64, scaling=2	507 (0.126 pts/cycle)
fft cplx32x16	N=128, scaling=3	788 (0.162 pts/cycle)
fft cplx32x16	N=128, scaling=2	924 (0.139 pts/cycle)
fft cplx32x16	N=256, scaling=3	1656 (0.155 pts/cycle)
fft cplx32x16	N=256, scaling=2	1904 (0.134 pts/cycle)
fft cplx32x16	N=512, scaling=3	3550 (0.144 pts/cycle)
fft cplx32x16	N=512, scaling=2	3954 (0.129 pts/cycle)
fft cplx32x16	N=1024, scaling=3	7631 (0.134 pts/cycle)
fft cplx32x16	N=1024, scaling=2	8434 (0.121 pts/cycle)
fft cplx32x16	N=2048, scaling=3	16686 (0.123 pts/cycle)
fft cplx32x16	N=2048, scaling=2	18140 (0.113 pts/cycle)
fft cplx32x16	N=4096, scaling=3	35831 (0.114 pts/cycle)
fft cplx32x16	N=4096, scaling=2	38839 (0.105 pts/cycle)
fft cplx32x32	N=16, scaling=3	156 (0.103 pts/cycle)
fft cplx32x32	N=16, scaling=2	186 (0.086 pts/cycle)
fft cplx32x32	N=32, scaling=3	209 (0.153 pts/cycle)
fft cplx32x32	N=32, scaling=2	321 (0.100 pts/cycle)
fft cplx32x32	N=64, scaling=3	429 (0.149 pts/cycle)
fft cplx32x32	N=64, scaling=2	512 (0.125 pts/cycle)
fft cplx32x32	N=128, scaling=3	745 (0.172 pts/cycle)
fft cplx32x32	N=128, scaling=2	958 (0.134 pts/cycle)
fft cplx32x32	N=256, scaling=3	1611 (0.159 pts/cycle)
fft cplx32x32	N=256, scaling=2	1904 (0.134 pts/cycle)
fft cplx32x32	N=512, scaling=3	3182 (0.161 pts/cycle)
fft cplx32x32	N=512, scaling=2	3788 (0.135 pts/cycle)
fft cplx32x32	N=1024, scaling=3	7011 (0.146 pts/cycle)
fft cplx32x32	N=1024, scaling=2	7953 (0.129 pts/cycle)
fft cplx32x32	N=2048, scaling=3	14883 (0.138 pts/cycle)
fft cplx32x32	N=2048, scaling=2	17289 (0.118 pts/cycle)
fft cplx32x32	N=4096, scaling=3	31985 (0.128 pts/cycle)
fft cplx32x32	N=4096, scaling=2	35624 (0.115 pts/cycle)
ifft cplx16x16	N=16, scaling=3	140 (0.114 pts/cycle)
ifft cplx16x16	N=16, scaling=2	191 (0.084 pts/cycle)
ifft cplx16x16	N=32, scaling=3	197 (0.162 pts/cycle)
ifft cplx16x16	N=32, scaling=2	265 (0.121 pts/cycle)
ifft cplx16x16	N=64, scaling=3	436 (0.147 pts/cycle)
ifft cplx16x16	N=64, scaling=2	554 (0.116 pts/cycle)
ifft cplx16x16	N=128, scaling=3	899 (0.142 pts/cycle)
ifft cplx16x16	N=128, scaling=2	1100 (0.116 pts/cycle)
ifft cplx16x16	N=256, scaling=3	1814 (0.141 pts/cycle)
ifft cplx16x16	N=256, scaling=2	2222 (0.115 pts/cycle)
ifft cplx16x16	N=512, scaling=3	3896 (0.131 pts/cycle)
ifft cplx16x16	N=512, scaling=2	4655 (0.110 pts/cycle)
ifft cplx16x16	N=1024, scaling=3	8126 (0.126 pts/cycle)
ifft cplx16x16	N=1024, scaling=2	9787 (0.105 pts/cycle)
ifft cplx16x16	N=2048, scaling=3	18052 (0.113 pts/cycle)
ifft cplx16x16	N=2048, scaling=2	21310 (0.096 pts/cycle)
ifft cplx16x16	N=4096, scaling=3	37986 (0.108 pts/cycle)
ifft cplx16x16	N=4096, scaling=2	45224 (0.091 pts/cycle)
ifft cplx32x16	N=16, scaling=3	138 (0.116 pts/cycle)
ifft cplx32x16	N=16, scaling=2	202 (0.079 pts/cycle)
ifft cplx32x16	N=32, scaling=3	200 (0.160 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
ifft cplx32x16	N=32, scaling=2	281 (0.114 pts/cycle)
ifft cplx32x16	N=64, scaling=3	402 (0.159 pts/cycle)
ifft cplx32x16	N=64, scaling=2	532 (0.120 pts/cycle)
ifft cplx32x16	N=128, scaling=3	784 (0.163 pts/cycle)
ifft cplx32x16	N=128, scaling=2	954 (0.134 pts/cycle)
ifft cplx32x16	N=256, scaling=3	1651 (0.155 pts/cycle)
ifft cplx32x16	N=256, scaling=2	1950 (0.131 pts/cycle)
ifft cplx32x16	N=512, scaling=3	3544 (0.144 pts/cycle)
ifft cplx32x16	N=512, scaling=2	4033 (0.127 pts/cycle)
ifft cplx32x16	N=1024, scaling=3	7623 (0.134 pts/cycle)
ifft cplx32x16	N=1024, scaling=2	8576 (0.119 pts/cycle)
ifft cplx32x16	N=2048, scaling=3	16681 (0.123 pts/cycle)
ifft cplx32x16	N=2048, scaling=2	18410 (0.111 pts/cycle)
ifft cplx32x16	N=4096, scaling=3	35827 (0.114 pts/cycle)
ifft cplx32x16	N=4096, scaling=2	39367 (0.104 pts/cycle)
ifft cplx32x32	N=16, scaling=3	142 (0.113 pts/cycle)
ifft cplx32x32	N=16, scaling=2	186 (0.086 pts/cycle)
ifft cplx32x32	N=32, scaling=3	203 (0.158 pts/cycle)
ifft cplx32x32	N=32, scaling=2	318 (0.101 pts/cycle)
ifft cplx32x32	N=64, scaling=3	426 (0.150 pts/cycle)
ifft cplx32x32	N=64, scaling=2	512 (0.125 pts/cycle)
ifft cplx32x32	N=128, scaling=3	755 (0.170 pts/cycle)
ifft cplx32x32	N=128, scaling=2	957 (0.134 pts/cycle)
ifft cplx32x32	N=256, scaling=3	1631 (0.157 pts/cycle)
ifft cplx32x32	N=256, scaling=2	1872 (0.137 pts/cycle)
ifft cplx32x32	N=512, scaling=3	3262 (0.157 pts/cycle)
ifft cplx32x32	N=512, scaling=2	3786 (0.135 pts/cycle)
ifft cplx32x32	N=1024, scaling=3	7186 (0.142 pts/cycle)
ifft cplx32x32	N=1024, scaling=2	7950 (0.129 pts/cycle)
ifft cplx32x32	N=2048, scaling=3	15126 (0.135 pts/cycle)
ifft cplx32x32	N=2048, scaling=2	17030 (0.120 pts/cycle)
ifft cplx32x32	N=4096, scaling=3	32732 (0.125 pts/cycle)
ifft cplx32x32	N=4096, scaling=2	35617 (0.115 pts/cycle)
FFT Routines		
Real FFT		
fft real16x16	N=32, scaling=3	257 (0.125 pts/cycle)
fft real16x16	N=32, scaling=2	300 (0.107 pts/cycle)
fft real16x16	N=64, scaling=3	338 (0.189 pts/cycle)
fft real16x16	N=64, scaling=2	401 (0.160 pts/cycle)
fft real16x16	N=128, scaling=3	639 (0.200 pts/cycle)
fft real16x16	N=128, scaling=2	755 (0.170 pts/cycle)
fft real16x16	N=256, scaling=3	1228 (0.208 pts/cycle)
fft real16x16	N=256, scaling=2	1428 (0.179 pts/cycle)
fft real16x16	N=512, scaling=3	2395 (0.214 pts/cycle)
fft real16x16	N=512, scaling=2	2807 (0.182 pts/cycle)
fft real16x16	N=1024, scaling=3	4980 (0.206 pts/cycle)
fft real16x16	N=1024, scaling=2	5752 (0.178 pts/cycle)
fft real16x16	N=2048, scaling=3	10220 (0.200 pts/cycle)
fft real16x16	N=2048, scaling=2	11908 (0.172 pts/cycle)
fft real16x16	N=4096, scaling=3	22161 (0.185 pts/cycle)
fft real16x16	N=4096, scaling=2	25479 (0.161 pts/cycle)
fft real16x16	N=8192, scaling=3	46127 (0.178 pts/cycle)
fft real16x16	N=8192, scaling=2	53489 (0.153 pts/cycle)
fft real32x16	N=32, scaling=3	244 (0.131 pts/cycle)
fft real32x16	N=32, scaling=2	295 (0.108 pts/cycle)
fft real32x16	N=64, scaling=3	334 (0.192 pts/cycle)
fft real32x16	N=64, scaling=2	390 (0.164 pts/cycle)
fft real32x16	N=128, scaling=3	583 (0.220 pts/cycle)
fft real32x16	N=128, scaling=2	683 (0.187 pts/cycle)
fft real32x16	N=256, scaling=3	1061 (0.241 pts/cycle)
fft real32x16	N=256, scaling=2	1196 (0.214 pts/cycle)
fft real32x16	N=512, scaling=3	2121 (0.241 pts/cycle)
fft real32x16	N=512, scaling=2	2368 (0.216 pts/cycle)
fft real32x16	N=1024, scaling=3	4399 (0.233 pts/cycle)
fft real32x16	N=1024, scaling=2	4802 (0.213 pts/cycle)
fft real32x16	N=2048, scaling=3	9248 (0.221 pts/cycle)
fft real32x16	N=2048, scaling=2	10050 (0.204 pts/cycle)
fft real32x16	N=4096, scaling=3	19837 (0.206 pts/cycle)
fft real32x16	N=4096, scaling=2	21290 (0.192 pts/cycle)
fft real32x16	N=8192, scaling=3	42056 (0.195 pts/cycle)
fft real32x16	N=8192, scaling=2	45063 (0.182 pts/cycle)
fft real32x32	N=32, scaling=3	235 (0.136 pts/cycle)
fft real32x32	N=32, scaling=2	280 (0.114 pts/cycle)
fft real32x32	N=64, scaling=3	313 (0.204 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		Ri2020.4, HiFi4 with VFPU, bd5
fft real32x32	N=64, scaling=2	443 (0.144 pts/cycle)
fft real32x32	N=128, scaling=3	578 (0.221 pts/cycle)
fft real32x32	N=128, scaling=2	690 (0.186 pts/cycle)
fft real32x32	N=256, scaling=3	991 (0.258 pts/cycle)
fft real32x32	N=256, scaling=2	1247 (0.205 pts/cycle)
fft real32x32	N=512, scaling=3	2050 (0.250 pts/cycle)
fft real32x32	N=512, scaling=2	2419 (0.212 pts/cycle)
fft real32x32	N=1024, scaling=3	4004 (0.256 pts/cycle)
fft real32x32	N=1024, scaling=2	4749 (0.216 pts/cycle)
fft real32x32	N=2048, scaling=3	8601 (0.238 pts/cycle)
fft real32x32	N=2048, scaling=2	9811 (0.209 pts/cycle)
fft real32x32	N=4096, scaling=3	18011 (0.227 pts/cycle)
fft real32x32	N=4096, scaling=2	20940 (0.196 pts/cycle)
fft real32x32	N=8192, scaling=3	38183 (0.215 pts/cycle)
fft real32x32	N=8192, scaling=2	42858 (0.191 pts/cycle)
ifft real16x16	N=32, scaling=3	274 (0.117 pts/cycle)
ifft real16x16	N=32, scaling=2	342 (0.094 pts/cycle)
ifft real16x16	N=64, scaling=3	362 (0.177 pts/cycle)
ifft real16x16	N=64, scaling=2	461 (0.139 pts/cycle)
ifft real16x16	N=128, scaling=3	665 (0.192 pts/cycle)
ifft real16x16	N=128, scaling=2	838 (0.153 pts/cycle)
ifft real16x16	N=256, scaling=3	1256 (0.204 pts/cycle)
ifft real16x16	N=256, scaling=2	1560 (0.164 pts/cycle)
ifft real16x16	N=512, scaling=3	2427 (0.211 pts/cycle)
ifft real16x16	N=512, scaling=2	3034 (0.169 pts/cycle)
ifft real16x16	N=1024, scaling=3	5021 (0.204 pts/cycle)
ifft real16x16	N=1024, scaling=2	6171 (0.166 pts/cycle)
ifft real16x16	N=2048, scaling=3	10275 (0.199 pts/cycle)
ifft real16x16	N=2048, scaling=2	12711 (0.161 pts/cycle)
ifft real16x16	N=4096, scaling=3	22249 (0.184 pts/cycle)
ifft real16x16	N=4096, scaling=2	27050 (0.151 pts/cycle)
ifft real16x16	N=8192, scaling=3	46279 (0.177 pts/cycle)
ifft real16x16	N=8192, scaling=2	56596 (0.145 pts/cycle)
ifft real32x16	N=32, scaling=3	205 (0.156 pts/cycle)
ifft real32x16	N=32, scaling=2	270 (0.119 pts/cycle)
ifft real32x16	N=64, scaling=3	297 (0.215 pts/cycle)
ifft real32x16	N=64, scaling=2	386 (0.166 pts/cycle)
ifft real32x16	N=128, scaling=3	565 (0.227 pts/cycle)
ifft real32x16	N=128, scaling=2	708 (0.181 pts/cycle)
ifft real32x16	N=256, scaling=3	1078 (0.237 pts/cycle)
ifft real32x16	N=256, scaling=2	1277 (0.200 pts/cycle)
ifft real32x16	N=512, scaling=3	2198 (0.233 pts/cycle)
ifft real32x16	N=512, scaling=2	2561 (0.200 pts/cycle)
ifft real32x16	N=1024, scaling=3	4606 (0.222 pts/cycle)
ifft real32x16	N=1024, scaling=2	5220 (0.196 pts/cycle)
ifft real32x16	N=2048, scaling=3	9708 (0.211 pts/cycle)
ifft real32x16	N=2048, scaling=2	10914 (0.188 pts/cycle)
ifft real32x16	N=4096, scaling=3	20812 (0.197 pts/cycle)
ifft real32x16	N=4096, scaling=2	23052 (0.178 pts/cycle)
ifft real32x16	N=8192, scaling=3	44058 (0.186 pts/cycle)
ifft real32x16	N=8192, scaling=2	48620 (0.168 pts/cycle)
ifft real32x32	N=32, scaling=3	230 (0.139 pts/cycle)
ifft real32x32	N=32, scaling=2	284 (0.113 pts/cycle)
ifft real32x32	N=64, scaling=3	321 (0.199 pts/cycle)
ifft real32x32	N=64, scaling=2	453 (0.141 pts/cycle)
ifft real32x32	N=128, scaling=3	610 (0.210 pts/cycle)
ifft real32x32	N=128, scaling=2	720 (0.178 pts/cycle)
ifft real32x32	N=256, scaling=3	1068 (0.240 pts/cycle)
ifft real32x32	N=256, scaling=2	1309 (0.196 pts/cycle)
ifft real32x32	N=512, scaling=3	2198 (0.233 pts/cycle)
ifft real32x32	N=512, scaling=2	2513 (0.204 pts/cycle)
ifft real32x32	N=1024, scaling=3	4345 (0.236 pts/cycle)
ifft real32x32	N=1024, scaling=2	5005 (0.205 pts/cycle)
ifft real32x32	N=2048, scaling=3	9296 (0.220 pts/cycle)
ifft real32x32	N=2048, scaling=2	10323 (0.198 pts/cycle)
ifft real32x32	N=4096, scaling=3	19279 (0.212 pts/cycle)
ifft real32x32	N=4096, scaling=2	21705 (0.189 pts/cycle)
ifft real32x32	N=8192, scaling=3	40986 (0.200 pts/cycle)
ifft real32x32	N=8192, scaling=2	44903 (0.182 pts/cycle)
FFT Routines		
Mixed Radix Complex FFT		
fft cplx32x32	N=12, scaling=3	206 (0.058 pts/cycle)
fft cplx32x32	N=12, scaling=2	239 (0.050 pts/cycle)
fft cplx32x32	N=24, scaling=3	269 (0.089 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
fft cplx32x32	N=24, scaling=2	463 (0.052 pts/cycle)
fft cplx32x32	N=36, scaling=3	474 (0.076 pts/cycle)
fft cplx32x32	N=36, scaling=2	608 (0.059 pts/cycle)
fft cplx32x32	N=48, scaling=3	451 (0.106 pts/cycle)
fft cplx32x32	N=48, scaling=2	525 (0.091 pts/cycle)
fft cplx32x32	N=60, scaling=3	655 (0.092 pts/cycle)
fft cplx32x32	N=60, scaling=2	818 (0.073 pts/cycle)
fft cplx32x32	N=72, scaling=3	846 (0.085 pts/cycle)
fft cplx32x32	N=72, scaling=2	1224 (0.059 pts/cycle)
fft cplx32x32	N=80, scaling=3	652 (0.123 pts/cycle)
fft cplx32x32	N=80, scaling=2	774 (0.103 pts/cycle)
fft cplx32x32	N=96, scaling=3	1120 (0.086 pts/cycle)
fft cplx32x32	N=96, scaling=2	1286 (0.075 pts/cycle)
fft cplx32x32	N=100, scaling=3	1094 (0.091 pts/cycle)
fft cplx32x32	N=100, scaling=2	1245 (0.080 pts/cycle)
fft cplx32x32	N=108, scaling=3	1214 (0.089 pts/cycle)
fft cplx32x32	N=108, scaling=2	1550 (0.070 pts/cycle)
fft cplx32x32	N=120, scaling=3	1514 (0.079 pts/cycle)
fft cplx32x32	N=120, scaling=2	1776 (0.068 pts/cycle)
fft cplx32x32	N=144, scaling=3	1279 (0.113 pts/cycle)
fft cplx32x32	N=144, scaling=2	1631 (0.088 pts/cycle)
fft cplx32x32	N=160, scaling=3	1384 (0.116 pts/cycle)
fft cplx32x32	N=160, scaling=2	1595 (0.100 pts/cycle)
fft cplx32x32	N=180, scaling=3	1919 (0.094 pts/cycle)
fft cplx32x32	N=180, scaling=2	2334 (0.077 pts/cycle)
fft cplx32x32	N=192, scaling=3	1691 (0.114 pts/cycle)
fft cplx32x32	N=192, scaling=2	2021 (0.095 pts/cycle)
fft cplx32x32	N=200, scaling=3	2377 (0.084 pts/cycle)
fft cplx32x32	N=200, scaling=2	2714 (0.074 pts/cycle)
fft cplx32x32	N=216, scaling=3	2497 (0.087 pts/cycle)
fft cplx32x32	N=216, scaling=2	3440 (0.063 pts/cycle)
fft cplx32x32	N=240, scaling=3	2267 (0.106 pts/cycle)
fft cplx32x32	N=240, scaling=2	2703 (0.089 pts/cycle)
fft cplx32x32	N=288, scaling=3	3040 (0.095 pts/cycle)
fft cplx32x32	N=288, scaling=2	3667 (0.079 pts/cycle)
fft cplx32x32	N=300, scaling=3	3221 (0.093 pts/cycle)
fft cplx32x32	N=300, scaling=2	3848 (0.078 pts/cycle)
fft cplx32x32	N=320, scaling=3	2935 (0.109 pts/cycle)
fft cplx32x32	N=320, scaling=2	3352 (0.095 pts/cycle)
fft cplx32x32	N=324, scaling=3	3764 (0.086 pts/cycle)
fft cplx32x32	N=324, scaling=2	4503 (0.072 pts/cycle)
fft cplx32x32	N=360, scaling=3	4154 (0.087 pts/cycle)
fft cplx32x32	N=360, scaling=2	4754 (0.076 pts/cycle)
fft cplx32x32	N=384, scaling=3	2943 (0.130 pts/cycle)
fft cplx32x32	N=384, scaling=2	3459 (0.111 pts/cycle)
fft cplx32x32	N=400, scaling=3	3821 (0.105 pts/cycle)
fft cplx32x32	N=400, scaling=2	4483 (0.089 pts/cycle)
fft cplx32x32	N=432, scaling=3	4224 (0.102 pts/cycle)
fft cplx32x32	N=432, scaling=2	5264 (0.082 pts/cycle)
fft cplx32x32	N=480, scaling=3	5072 (0.095 pts/cycle)
fft cplx32x32	N=480, scaling=2	5994 (0.080 pts/cycle)
fft cplx32x32	N=540, scaling=3	6382 (0.085 pts/cycle)
fft cplx32x32	N=540, scaling=2	7298 (0.074 pts/cycle)
fft cplx32x32	N=576, scaling=3	4814 (0.120 pts/cycle)
fft cplx32x32	N=576, scaling=2	5918 (0.097 pts/cycle)
fft cplx32x32	N=600, scaling=3	6417 (0.094 pts/cycle)
fft cplx32x32	N=600, scaling=2	7521 (0.080 pts/cycle)
fft cplx32x32	N=768, scaling=3	5593 (0.137 pts/cycle)
fft cplx32x32	N=768, scaling=2	6406 (0.120 pts/cycle)
fft cplx32x32	N=960, scaling=3	8509 (0.113 pts/cycle)
fft cplx32x32	N=960, scaling=2	10081 (0.095 pts/cycle)
ifft cplx32x32	N=12, scaling=3	222 (0.054 pts/cycle)
ifft cplx32x32	N=12, scaling=2	241 (0.050 pts/cycle)
ifft cplx32x32	N=24, scaling=3	277 (0.087 pts/cycle)
ifft cplx32x32	N=24, scaling=2	465 (0.052 pts/cycle)
ifft cplx32x32	N=36, scaling=3	470 (0.077 pts/cycle)
ifft cplx32x32	N=36, scaling=2	609 (0.059 pts/cycle)
ifft cplx32x32	N=48, scaling=3	446 (0.108 pts/cycle)
ifft cplx32x32	N=48, scaling=2	522 (0.092 pts/cycle)
ifft cplx32x32	N=60, scaling=3	648 (0.093 pts/cycle)
ifft cplx32x32	N=60, scaling=2	819 (0.073 pts/cycle)
ifft cplx32x32	N=72, scaling=3	838 (0.086 pts/cycle)
ifft cplx32x32	N=72, scaling=2	1217 (0.059 pts/cycle)
ifft cplx32x32	N=80, scaling=3	651 (0.123 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		RI2020.4, HiFi4 with VFPU, bd5
ifft cplx32x32	N=80, scaling=2	767 (0.104 pts/cycle)
ifft cplx32x32	N=96, scaling=3	1122 (0.086 pts/cycle)
ifft cplx32x32	N=96, scaling=2	1285 (0.075 pts/cycle)
ifft cplx32x32	N=100, scaling=3	1082 (0.092 pts/cycle)
ifft cplx32x32	N=100, scaling=2	1253 (0.080 pts/cycle)
ifft cplx32x32	N=108, scaling=3	1202 (0.090 pts/cycle)
ifft cplx32x32	N=108, scaling=2	1556 (0.069 pts/cycle)
ifft cplx32x32	N=120, scaling=3	1507 (0.080 pts/cycle)
ifft cplx32x32	N=120, scaling=2	1764 (0.068 pts/cycle)
ifft cplx32x32	N=144, scaling=3	1285 (0.112 pts/cycle)
ifft cplx32x32	N=144, scaling=2	1613 (0.089 pts/cycle)
ifft cplx32x32	N=160, scaling=3	1393 (0.115 pts/cycle)
ifft cplx32x32	N=160, scaling=2	1577 (0.101 pts/cycle)
ifft cplx32x32	N=180, scaling=3	1913 (0.094 pts/cycle)
ifft cplx32x32	N=180, scaling=2	2324 (0.077 pts/cycle)
ifft cplx32x32	N=192, scaling=3	1698 (0.113 pts/cycle)
ifft cplx32x32	N=192, scaling=2	2020 (0.095 pts/cycle)
ifft cplx32x32	N=200, scaling=3	2375 (0.084 pts/cycle)
ifft cplx32x32	N=200, scaling=2	2704 (0.074 pts/cycle)
ifft cplx32x32	N=216, scaling=3	2495 (0.087 pts/cycle)
ifft cplx32x32	N=216, scaling=2	3429 (0.063 pts/cycle)
ifft cplx32x32	N=240, scaling=3	2273 (0.106 pts/cycle)
ifft cplx32x32	N=240, scaling=2	2703 (0.089 pts/cycle)
ifft cplx32x32	N=288, scaling=3	3078 (0.094 pts/cycle)
ifft cplx32x32	N=288, scaling=2	3665 (0.079 pts/cycle)
ifft cplx32x32	N=300, scaling=3	3226 (0.093 pts/cycle)
ifft cplx32x32	N=300, scaling=2	3849 (0.078 pts/cycle)
ifft cplx32x32	N=320, scaling=3	2981 (0.107 pts/cycle)
ifft cplx32x32	N=320, scaling=2	3359 (0.095 pts/cycle)
ifft cplx32x32	N=324, scaling=3	3721 (0.087 pts/cycle)
ifft cplx32x32	N=324, scaling=2	4538 (0.071 pts/cycle)
ifft cplx32x32	N=360, scaling=3	4072 (0.088 pts/cycle)
ifft cplx32x32	N=360, scaling=2	4762 (0.076 pts/cycle)
ifft cplx32x32	N=384, scaling=3	2999 (0.128 pts/cycle)
ifft cplx32x32	N=384, scaling=2	3456 (0.111 pts/cycle)
ifft cplx32x32	N=400, scaling=3	3859 (0.104 pts/cycle)
ifft cplx32x32	N=400, scaling=2	4434 (0.090 pts/cycle)
ifft cplx32x32	N=432, scaling=3	4264 (0.101 pts/cycle)
ifft cplx32x32	N=432, scaling=2	5210 (0.083 pts/cycle)
ifft cplx32x32	N=480, scaling=3	5119 (0.094 pts/cycle)
ifft cplx32x32	N=480, scaling=2	5933 (0.081 pts/cycle)
ifft cplx32x32	N=540, scaling=3	6342 (0.085 pts/cycle)
ifft cplx32x32	N=540, scaling=2	7330 (0.074 pts/cycle)
ifft cplx32x32	N=576, scaling=3	4905 (0.117 pts/cycle)
ifft cplx32x32	N=576, scaling=2	5916 (0.097 pts/cycle)
ifft cplx32x32	N=600, scaling=3	6424 (0.093 pts/cycle)
ifft cplx32x32	N=600, scaling=2	7520 (0.080 pts/cycle)
ifft cplx32x32	N=768, scaling=3	5676 (0.135 pts/cycle)
ifft cplx32x32	N=768, scaling=2	6310 (0.122 pts/cycle)
ifft cplx32x32	N=960, scaling=3	8672 (0.111 pts/cycle)
ifft cplx32x32	N=960, scaling=2	10079 (0.095 pts/cycle)
fft cplx32x16	N=160, scaling=3	1285 (0.125 pts/cycle)
fft cplx32x16	N=160, scaling=2	1416 (0.113 pts/cycle)
fft cplx32x16	N=192, scaling=3	1490 (0.129 pts/cycle)
fft cplx32x16	N=192, scaling=2	1736 (0.111 pts/cycle)
fft cplx32x16	N=240, scaling=3	2092 (0.115 pts/cycle)
fft cplx32x16	N=240, scaling=2	2394 (0.100 pts/cycle)
fft cplx32x16	N=320, scaling=3	2495 (0.128 pts/cycle)
fft cplx32x16	N=320, scaling=2	2773 (0.115 pts/cycle)
fft cplx32x16	N=384, scaling=3	3214 (0.119 pts/cycle)
fft cplx32x16	N=384, scaling=2	3651 (0.105 pts/cycle)
fft cplx32x16	N=480, scaling=3	4403 (0.109 pts/cycle)
fft cplx32x16	N=480, scaling=2	4924 (0.097 pts/cycle)
ifft cplx32x16	N=160, scaling=3	1315 (0.122 pts/cycle)
ifft cplx32x16	N=160, scaling=2	1422 (0.113 pts/cycle)
ifft cplx32x16	N=192, scaling=3	1439 (0.133 pts/cycle)
ifft cplx32x16	N=192, scaling=2	1743 (0.110 pts/cycle)
ifft cplx32x16	N=240, scaling=3	2026 (0.118 pts/cycle)
ifft cplx32x16	N=240, scaling=2	2398 (0.100 pts/cycle)
ifft cplx32x16	N=320, scaling=3	2538 (0.126 pts/cycle)
ifft cplx32x16	N=320, scaling=2	2778 (0.115 pts/cycle)
ifft cplx32x16	N=384, scaling=3	3098 (0.124 pts/cycle)
ifft cplx32x16	N=384, scaling=2	3655 (0.105 pts/cycle)
ifft cplx32x16	N=480, scaling=3	4257 (0.113 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		Ri2020.4, HiFi4 with VFPU, bd5
ifft cplx32x16	N=480, scaling=2	4928 (0.097 pts/cycle)
fft cplx16x16	N=160, scaling=3	1357 (0.118 pts/cycle)
fft cplx16x16	N=160, scaling=2	1717 (0.093 pts/cycle)
fft cplx16x16	N=192, scaling=3	1701 (0.113 pts/cycle)
fft cplx16x16	N=192, scaling=2	2129 (0.090 pts/cycle)
fft cplx16x16	N=240, scaling=3	2140 (0.112 pts/cycle)
fft cplx16x16	N=240, scaling=2	2614 (0.092 pts/cycle)
fft cplx16x16	N=320, scaling=3	2686 (0.119 pts/cycle)
fft cplx16x16	N=320, scaling=2	3357 (0.095 pts/cycle)
fft cplx16x16	N=384, scaling=3	3293 (0.117 pts/cycle)
fft cplx16x16	N=384, scaling=2	4167 (0.092 pts/cycle)
fft cplx16x16	N=480, scaling=3	4168 (0.115 pts/cycle)
fft cplx16x16	N=480, scaling=2	5243 (0.092 pts/cycle)
ifft cplx16x16	N=160, scaling=3	1399 (0.114 pts/cycle)
ifft cplx16x16	N=160, scaling=2	1755 (0.091 pts/cycle)
ifft cplx16x16	N=192, scaling=3	1699 (0.113 pts/cycle)
ifft cplx16x16	N=192, scaling=2	2124 (0.090 pts/cycle)
ifft cplx16x16	N=240, scaling=3	2190 (0.110 pts/cycle)
ifft cplx16x16	N=240, scaling=2	2652 (0.090 pts/cycle)
ifft cplx16x16	N=320, scaling=3	2744 (0.117 pts/cycle)
ifft cplx16x16	N=320, scaling=2	3395 (0.094 pts/cycle)
ifft cplx16x16	N=384, scaling=3	3291 (0.117 pts/cycle)
ifft cplx16x16	N=384, scaling=2	4160 (0.092 pts/cycle)
ifft cplx16x16	N=480, scaling=3	4243 (0.113 pts/cycle)
ifft cplx16x16	N=480, scaling=2	5281 (0.091 pts/cycle)
FFT Routines		
Mixed Radix Real FFT		
fft real32x32	N=12, scaling=3	235 (0.051 pts/cycle)
fft real32x32	N=12, scaling=2	266 (0.045 pts/cycle)
fft real32x32	N=24, scaling=3	277 (0.087 pts/cycle)
fft real32x32	N=24, scaling=2	323 (0.074 pts/cycle)
fft real32x32	N=30, scaling=3	353 (0.085 pts/cycle)
fft real32x32	N=30, scaling=2	405 (0.074 pts/cycle)
fft real32x32	N=36, scaling=3	513 (0.070 pts/cycle)
fft real32x32	N=36, scaling=2	587 (0.061 pts/cycle)
fft real32x32	N=48, scaling=3	360 (0.133 pts/cycle)
fft real32x32	N=48, scaling=2	568 (0.085 pts/cycle)
fft real32x32	N=60, scaling=3	543 (0.110 pts/cycle)
fft real32x32	N=60, scaling=2	695 (0.086 pts/cycle)
fft real32x32	N=72, scaling=3	585 (0.123 pts/cycle)
fft real32x32	N=72, scaling=2	738 (0.098 pts/cycle)
fft real32x32	N=90, scaling=3	734 (0.123 pts/cycle)
fft real32x32	N=90, scaling=2	906 (0.099 pts/cycle)
fft real32x32	N=96, scaling=3	578 (0.166 pts/cycle)
fft real32x32	N=96, scaling=2	676 (0.142 pts/cycle)
fft real32x32	N=108, scaling=3	903 (0.120 pts/cycle)
fft real32x32	N=108, scaling=2	1173 (0.092 pts/cycle)
fft real32x32	N=120, scaling=3	798 (0.150 pts/cycle)
fft real32x32	N=120, scaling=2	990 (0.121 pts/cycle)
fft real32x32	N=144, scaling=3	1010 (0.143 pts/cycle)
fft real32x32	N=144, scaling=2	1416 (0.102 pts/cycle)
fft real32x32	N=160, scaling=3	830 (0.193 pts/cycle)
fft real32x32	N=160, scaling=2	980 (0.163 pts/cycle)
fft real32x32	N=180, scaling=3	1322 (0.136 pts/cycle)
fft real32x32	N=180, scaling=2	1619 (0.111 pts/cycle)
fft real32x32	N=192, scaling=3	1316 (0.146 pts/cycle)
fft real32x32	N=192, scaling=2	1518 (0.126 pts/cycle)
fft real32x32	N=216, scaling=3	1434 (0.151 pts/cycle)
fft real32x32	N=216, scaling=2	1806 (0.120 pts/cycle)
fft real32x32	N=240, scaling=3	1748 (0.137 pts/cycle)
fft real32x32	N=240, scaling=2	2054 (0.117 pts/cycle)
fft real32x32	N=288, scaling=3	1551 (0.186 pts/cycle)
fft real32x32	N=288, scaling=2	1949 (0.148 pts/cycle)
fft real32x32	N=300, scaling=3	2142 (0.140 pts/cycle)
fft real32x32	N=300, scaling=2	2496 (0.120 pts/cycle)
fft real32x32	N=320, scaling=3	1680 (0.190 pts/cycle)
fft real32x32	N=320, scaling=2	1943 (0.165 pts/cycle)
fft real32x32	N=324, scaling=3	2374 (0.136 pts/cycle)
fft real32x32	N=324, scaling=2	2848 (0.114 pts/cycle)
fft real32x32	N=360, scaling=3	2244 (0.160 pts/cycle)
fft real32x32	N=360, scaling=2	2714 (0.133 pts/cycle)
fft real32x32	N=384, scaling=3	2035 (0.189 pts/cycle)
fft real32x32	N=384, scaling=2	2423 (0.158 pts/cycle)
fft real32x32	N=432, scaling=3	2874 (0.150 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
fft real32x32	N=432, scaling=2	3883 (0.111 pts/cycle)
fft real32x32	N=480, scaling=3	2690 (0.178 pts/cycle)
fft real32x32	N=480, scaling=2	3186 (0.151 pts/cycle)
fft real32x32	N=540, scaling=3	3850 (0.140 pts/cycle)
fft real32x32	N=540, scaling=2	4404 (0.123 pts/cycle)
fft real32x32	N=576, scaling=3	3526 (0.163 pts/cycle)
fft real32x32	N=576, scaling=2	4236 (0.136 pts/cycle)
fft real32x32	N=720, scaling=3	4753 (0.151 pts/cycle)
fft real32x32	N=720, scaling=2	5450 (0.132 pts/cycle)
fft real32x32	N=768, scaling=3	4647 (0.165 pts/cycle)
fft real32x32	N=768, scaling=2	5316 (0.144 pts/cycle)
fft real32x32	N=960, scaling=3	5848 (0.164 pts/cycle)
fft real32x32	N=960, scaling=2	6900 (0.139 pts/cycle)
fft real32x32	N=1152, scaling=3	5731 (0.201 pts/cycle)
fft real32x32	N=1152, scaling=2	6991 (0.165 pts/cycle)
fft real32x32	N=1440, scaling=3	8482 (0.170 pts/cycle)
fft real32x32	N=1440, scaling=2	10044 (0.143 pts/cycle)
fft real32x32	N=1536, scaling=3	6801 (0.226 pts/cycle)
fft real32x32	N=1536, scaling=2	7819 (0.196 pts/cycle)
fft real32x32	N=1920, scaling=3	10002 (0.192 pts/cycle)
fft real32x32	N=1920, scaling=2	11826 (0.162 pts/cycle)
ifft real32x32	N=12, scaling=3	250 (0.048 pts/cycle)
ifft real32x32	N=12, scaling=2	286 (0.042 pts/cycle)
ifft real32x32	N=24, scaling=3	302 (0.079 pts/cycle)
ifft real32x32	N=24, scaling=2	329 (0.073 pts/cycle)
ifft real32x32	N=30, scaling=3	364 (0.082 pts/cycle)
ifft real32x32	N=30, scaling=2	412 (0.073 pts/cycle)
ifft real32x32	N=36, scaling=3	535 (0.067 pts/cycle)
ifft real32x32	N=36, scaling=2	602 (0.060 pts/cycle)
ifft real32x32	N=48, scaling=3	380 (0.126 pts/cycle)
ifft real32x32	N=48, scaling=2	578 (0.083 pts/cycle)
ifft real32x32	N=60, scaling=3	568 (0.106 pts/cycle)
ifft real32x32	N=60, scaling=2	714 (0.084 pts/cycle)
ifft real32x32	N=72, scaling=3	596 (0.121 pts/cycle)
ifft real32x32	N=72, scaling=2	754 (0.095 pts/cycle)
ifft real32x32	N=90, scaling=3	758 (0.119 pts/cycle)
ifft real32x32	N=90, scaling=2	921 (0.098 pts/cycle)
ifft real32x32	N=96, scaling=3	598 (0.161 pts/cycle)
ifft real32x32	N=96, scaling=2	695 (0.138 pts/cycle)
ifft real32x32	N=108, scaling=3	935 (0.116 pts/cycle)
ifft real32x32	N=108, scaling=2	1197 (0.090 pts/cycle)
ifft real32x32	N=120, scaling=3	824 (0.146 pts/cycle)
ifft real32x32	N=120, scaling=2	1017 (0.118 pts/cycle)
ifft real32x32	N=144, scaling=3	1040 (0.138 pts/cycle)
ifft real32x32	N=144, scaling=2	1447 (0.100 pts/cycle)
ifft real32x32	N=160, scaling=3	866 (0.185 pts/cycle)
ifft real32x32	N=160, scaling=2	1007 (0.159 pts/cycle)
ifft real32x32	N=180, scaling=3	1375 (0.131 pts/cycle)
ifft real32x32	N=180, scaling=2	1647 (0.109 pts/cycle)
ifft real32x32	N=192, scaling=3	1368 (0.140 pts/cycle)
ifft real32x32	N=192, scaling=2	1562 (0.123 pts/cycle)
ifft real32x32	N=216, scaling=3	1478 (0.146 pts/cycle)
ifft real32x32	N=216, scaling=2	1865 (0.116 pts/cycle)
ifft real32x32	N=240, scaling=3	1802 (0.133 pts/cycle)
ifft real32x32	N=240, scaling=2	2096 (0.115 pts/cycle)
ifft real32x32	N=288, scaling=3	1632 (0.176 pts/cycle)
ifft real32x32	N=288, scaling=2	2003 (0.144 pts/cycle)
ifft real32x32	N=300, scaling=3	2225 (0.135 pts/cycle)
ifft real32x32	N=300, scaling=2	2559 (0.117 pts/cycle)
ifft real32x32	N=320, scaling=3	1768 (0.181 pts/cycle)
ifft real32x32	N=320, scaling=2	1998 (0.160 pts/cycle)
ifft real32x32	N=324, scaling=3	2445 (0.133 pts/cycle)
ifft real32x32	N=324, scaling=2	2933 (0.110 pts/cycle)
ifft real32x32	N=360, scaling=3	2334 (0.154 pts/cycle)
ifft real32x32	N=360, scaling=2	2794 (0.129 pts/cycle)
ifft real32x32	N=384, scaling=3	2139 (0.180 pts/cycle)
ifft real32x32	N=384, scaling=2	2513 (0.153 pts/cycle)
ifft real32x32	N=432, scaling=3	2985 (0.145 pts/cycle)
ifft real32x32	N=432, scaling=2	3978 (0.109 pts/cycle)
ifft real32x32	N=480, scaling=3	2819 (0.170 pts/cycle)
ifft real32x32	N=480, scaling=2	3307 (0.145 pts/cycle)
ifft real32x32	N=540, scaling=3	3998 (0.135 pts/cycle)
ifft real32x32	N=540, scaling=2	4511 (0.120 pts/cycle)
ifft real32x32	N=576, scaling=3	3712 (0.155 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		Ri2020.4, HiFi4 with VFPU, bd5
ifft real32x32	N=576, scaling=2	4376 (0.132 pts/cycle)
ifft real32x32	N=720, scaling=3	4853 (0.148 pts/cycle)
ifft real32x32	N=720, scaling=2	5635 (0.128 pts/cycle)
ifft real32x32	N=768, scaling=3	4897 (0.157 pts/cycle)
ifft real32x32	N=768, scaling=2	5502 (0.140 pts/cycle)
ifft real32x32	N=960, scaling=3	6136 (0.156 pts/cycle)
ifft real32x32	N=960, scaling=2	7077 (0.136 pts/cycle)
ifft real32x32	N=1152, scaling=3	6114 (0.188 pts/cycle)
ifft real32x32	N=1152, scaling=2	7275 (0.158 pts/cycle)
ifft real32x32	N=1440, scaling=3	8920 (0.161 pts/cycle)
ifft real32x32	N=1440, scaling=2	10312 (0.140 pts/cycle)
ifft real32x32	N=1536, scaling=3	7273 (0.211 pts/cycle)
ifft real32x32	N=1536, scaling=2	8106 (0.189 pts/cycle)
ifft real32x32	N=1920, scaling=3	10652 (0.180 pts/cycle)
ifft real32x32	N=1920, scaling=2	12306 (0.156 pts/cycle)
fft real32x16	N=160, scaling=3	825 (0.194 pts/cycle)
fft real32x16	N=160, scaling=2	940 (0.170 pts/cycle)
fft real32x16	N=192, scaling=3	1042 (0.184 pts/cycle)
fft real32x16	N=192, scaling=2	1158 (0.166 pts/cycle)
fft real32x16	N=240, scaling=3	1478 (0.162 pts/cycle)
fft real32x16	N=240, scaling=2	1627 (0.148 pts/cycle)
fft real32x16	N=320, scaling=3	1607 (0.199 pts/cycle)
fft real32x16	N=320, scaling=2	1736 (0.184 pts/cycle)
fft real32x16	N=384, scaling=3	1861 (0.206 pts/cycle)
fft real32x16	N=384, scaling=2	2104 (0.183 pts/cycle)
fft real32x16	N=480, scaling=3	2535 (0.189 pts/cycle)
fft real32x16	N=480, scaling=2	2832 (0.169 pts/cycle)
ifft real32x16	N=160, scaling=3	839 (0.191 pts/cycle)
ifft real32x16	N=160, scaling=2	958 (0.167 pts/cycle)
ifft real32x16	N=192, scaling=3	1023 (0.188 pts/cycle)
ifft real32x16	N=192, scaling=2	1189 (0.161 pts/cycle)
ifft real32x16	N=240, scaling=3	1466 (0.164 pts/cycle)
ifft real32x16	N=240, scaling=2	1676 (0.143 pts/cycle)
ifft real32x16	N=320, scaling=3	1668 (0.192 pts/cycle)
ifft real32x16	N=320, scaling=2	1815 (0.176 pts/cycle)
ifft real32x16	N=384, scaling=3	1861 (0.206 pts/cycle)
ifft real32x16	N=384, scaling=2	2209 (0.174 pts/cycle)
ifft real32x16	N=480, scaling=3	2542 (0.189 pts/cycle)
ifft real32x16	N=480, scaling=2	2972 (0.162 pts/cycle)
fft real16x16	N=160, scaling=3	990 (0.162 pts/cycle)
fft real16x16	N=160, scaling=2	1169 (0.137 pts/cycle)
fft real16x16	N=192, scaling=3	1217 (0.158 pts/cycle)
fft real16x16	N=192, scaling=2	1456 (0.132 pts/cycle)
fft real16x16	N=240, scaling=3	1626 (0.148 pts/cycle)
fft real16x16	N=240, scaling=2	1893 (0.127 pts/cycle)
fft real16x16	N=320, scaling=3	1769 (0.181 pts/cycle)
fft real16x16	N=320, scaling=2	2125 (0.151 pts/cycle)
fft real16x16	N=384, scaling=3	2176 (0.176 pts/cycle)
fft real16x16	N=384, scaling=2	2601 (0.148 pts/cycle)
fft real16x16	N=480, scaling=3	2712 (0.177 pts/cycle)
fft real16x16	N=480, scaling=2	3181 (0.151 pts/cycle)
ifft real16x16	N=160, scaling=3	1033 (0.155 pts/cycle)
ifft real16x16	N=160, scaling=2	1284 (0.125 pts/cycle)
ifft real16x16	N=192, scaling=3	1226 (0.157 pts/cycle)
ifft real16x16	N=192, scaling=2	1540 (0.125 pts/cycle)
ifft real16x16	N=240, scaling=3	1673 (0.143 pts/cycle)
ifft real16x16	N=240, scaling=2	2038 (0.118 pts/cycle)
ifft real16x16	N=320, scaling=3	1821 (0.176 pts/cycle)
ifft real16x16	N=320, scaling=2	2302 (0.139 pts/cycle)
ifft real16x16	N=384, scaling=3	2185 (0.176 pts/cycle)
ifft real16x16	N=384, scaling=2	2758 (0.139 pts/cycle)
ifft real16x16	N=480, scaling=3	2771 (0.173 pts/cycle)
ifft real16x16	N=480, scaling=2	3417 (0.140 pts/cycle)
FFT Routines		
Complex FFT with Optimized Memory		
fft cplx16x16 ie	N=128	1347 (0.095 pts/cycle)
fft cplx16x16 ie	N=256	2436 (0.105 pts/cycle)
fft cplx16x16 ie	N=512	5110 (0.100 pts/cycle)
fft cplx16x16 ie	N=1024	10209 (0.100 pts/cycle)
fft cplx32x16 ie	N=256, scaling=3	1944 (0.132 pts/cycle)
fft cplx32x16 ie	N=256, scaling=2	2198 (0.116 pts/cycle)
fft cplx32x16 ie	N=512, scaling=3	4725 (0.108 pts/cycle)
fft cplx32x16 ie	N=512, scaling=2	5202 (0.098 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		Ri2020.4, HiFi4 with VFPU, bd5
fft cplx32x16 ie	N=1024, scaling=3	9305 (0.110 pts/cycle)
fft cplx32x16 ie	N=1024, scaling=2	10221 (0.100 pts/cycle)
fft cplx32x32 ie	N=128, scaling=3	894 (0.143 pts/cycle)
fft cplx32x32 ie	N=128, scaling=2	1087 (0.118 pts/cycle)
fft cplx32x32 ie	N=256, scaling=3	1582 (0.162 pts/cycle)
fft cplx32x32 ie	N=256, scaling=2	1919 (0.133 pts/cycle)
fft cplx32x32 ie	N=512, scaling=3	3677 (0.139 pts/cycle)
fft cplx32x32 ie	N=512, scaling=2	4311 (0.119 pts/cycle)
fft cplx32x32 ie	N=1024, scaling=3	6969 (0.147 pts/cycle)
fft cplx32x32 ie	N=1024, scaling=2	8179 (0.125 pts/cycle)
ifft cplx16x16 ie	N=128	1345 (0.095 pts/cycle)
ifft cplx16x16 ie	N=256	2435 (0.105 pts/cycle)
ifft cplx16x16 ie	N=512	5108 (0.100 pts/cycle)
ifft cplx16x16 ie	N=1024	10210 (0.100 pts/cycle)
ifft cplx32x16 ie	N=256, scaling=3	2073 (0.123 pts/cycle)
ifft cplx32x16 ie	N=256, scaling=2	2514 (0.102 pts/cycle)
ifft cplx32x16 ie	N=512, scaling=3	4847 (0.106 pts/cycle)
ifft cplx32x16 ie	N=512, scaling=2	5714 (0.090 pts/cycle)
ifft cplx32x16 ie	N=1024, scaling=3	9811 (0.104 pts/cycle)
ifft cplx32x16 ie	N=1024, scaling=2	11522 (0.089 pts/cycle)
ifft cplx32x32 ie	N=128, scaling=3	904 (0.142 pts/cycle)
ifft cplx32x32 ie	N=128, scaling=2	1087 (0.118 pts/cycle)
ifft cplx32x32 ie	N=256, scaling=3	1616 (0.158 pts/cycle)
ifft cplx32x32 ie	N=256, scaling=2	1920 (0.133 pts/cycle)
ifft cplx32x32 ie	N=512, scaling=3	3759 (0.136 pts/cycle)
ifft cplx32x32 ie	N=512, scaling=2	4311 (0.119 pts/cycle)
ifft cplx32x32 ie	N=1024, scaling=3	7147 (0.143 pts/cycle)
ifft cplx32x32 ie	N=1024, scaling=2	8180 (0.125 pts/cycle)
stereo fft cplx16x16 ie	N=128	1771 (0.072 pts/cycle)
stereo fft cplx16x16 ie	N=256	3639 (0.070 pts/cycle)
stereo fft cplx16x16 ie	N=512	8202 (0.062 pts/cycle)
stereo fft cplx16x16 ie	N=1024	17238 (0.059 pts/cycle)
stereo fft cplx32x16 ie	N=256, scaling=3	3013 (0.085 pts/cycle)
stereo fft cplx32x16 ie	N=256, scaling=2	3705 (0.069 pts/cycle)
stereo fft cplx32x16 ie	N=512, scaling=3	6973 (0.073 pts/cycle)
stereo fft cplx32x16 ie	N=512, scaling=2	8394 (0.061 pts/cycle)
stereo fft cplx32x16 ie	N=1024, scaling=3	14059 (0.073 pts/cycle)
stereo fft cplx32x16 ie	N=1024, scaling=2	16875 (0.061 pts/cycle)
stereo fft cplx32x32 ie	N=128, scaling=3	1692 (0.076 pts/cycle)
stereo fft cplx32x32 ie	N=128, scaling=2	2015 (0.064 pts/cycle)
stereo fft cplx32x32 ie	N=256, scaling=3	3125 (0.082 pts/cycle)
stereo fft cplx32x32 ie	N=256, scaling=2	3751 (0.068 pts/cycle)
stereo fft cplx32x32 ie	N=512, scaling=3	8098 (0.063 pts/cycle)
stereo fft cplx32x32 ie	N=512, scaling=2	9303 (0.055 pts/cycle)
stereo fft cplx32x32 ie	N=1024, scaling=3	15403 (0.066 pts/cycle)
stereo fft cplx32x32 ie	N=1024, scaling=2	17823 (0.057 pts/cycle)
stereo ifft cplx16x16 ie	N=128	1766 (0.072 pts/cycle)
stereo ifft cplx16x16 ie	N=256	3632 (0.070 pts/cycle)
stereo ifft cplx16x16 ie	N=512	8189 (0.063 pts/cycle)
stereo ifft cplx16x16 ie	N=1024	17215 (0.059 pts/cycle)
stereo ifft cplx32x16 ie	N=256, scaling=3	2943 (0.087 pts/cycle)
stereo ifft cplx32x16 ie	N=256, scaling=2	3661 (0.070 pts/cycle)
stereo ifft cplx32x16 ie	N=512, scaling=3	6865 (0.075 pts/cycle)
stereo ifft cplx32x16 ie	N=512, scaling=2	8339 (0.061 pts/cycle)
stereo ifft cplx32x16 ie	N=1024, scaling=3	13717 (0.075 pts/cycle)
stereo ifft cplx32x16 ie	N=1024, scaling=2	16639 (0.062 pts/cycle)
stereo ifft cplx32x32 ie	N=128, scaling=3	1725 (0.074 pts/cycle)
stereo ifft cplx32x32 ie	N=128, scaling=2	2074 (0.062 pts/cycle)
stereo ifft cplx32x32 ie	N=256, scaling=3	3190 (0.080 pts/cycle)
stereo ifft cplx32x32 ie	N=256, scaling=2	3858 (0.066 pts/cycle)
stereo ifft cplx32x32 ie	N=512, scaling=3	8227 (0.062 pts/cycle)
stereo ifft cplx32x32 ie	N=512, scaling=2	9506 (0.054 pts/cycle)
stereo ifft cplx32x32 ie	N=1024, scaling=3	15661 (0.065 pts/cycle)
stereo ifft cplx32x32 ie	N=1024, scaling=2	18220 (0.056 pts/cycle)
fft cplx16 ie	N=8	65 (0.123 pts/cycle)
fft cplx16 ie	N=16	127 (0.126 pts/cycle)
fft cplx16 ie	N=32	224 (0.143 pts/cycle)
fft cplx16 ie	N=64	572 (0.112 pts/cycle)
fft cplx16 ie	N=128	1078 (0.119 pts/cycle)
fft cplx16 ie	N=256	2727 (0.094 pts/cycle)
fft cplx16 ie	N=512	5361 (0.096 pts/cycle)
fft cplx16 ie	N=1024	13102 (0.078 pts/cycle)
fft cplx16 ie	N=2048	26024 (0.079 pts/cycle)
fft cplx16 ie	N=4096	61685 (0.066 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
ifft cplx ie	N=8	65 (0.123 pts/cycle)
ifft cplx ie	N=16	172 (0.093 pts/cycle)
ifft cplx ie	N=32	223 (0.143 pts/cycle)
ifft cplx ie	N=64	593 (0.108 pts/cycle)
ifft cplx ie	N=128	1080 (0.119 pts/cycle)
ifft cplx ie	N=256	2806 (0.091 pts/cycle)
ifft cplx ie	N=512	5377 (0.095 pts/cycle)
ifft cplx ie	N=1024	13421 (0.076 pts/cycle)
ifft cplx ie	N=2048	26086 (0.079 pts/cycle)
ifft cplx ie	N=4096	62965 (0.065 pts/cycle)
stereo fft cplx ie	N=8	129 (0.062 pts/cycle)
stereo fft cplx ie	N=16	193 (0.083 pts/cycle)
stereo fft cplx ie	N=32	567 (0.056 pts/cycle)
stereo fft cplx ie	N=64	955 (0.067 pts/cycle)
stereo fft cplx ie	N=128	2745 (0.047 pts/cycle)
stereo fft cplx ie	N=256	4869 (0.053 pts/cycle)
stereo fft cplx ie	N=512	13217 (0.039 pts/cycle)
stereo fft cplx ie	N=1024	24043 (0.043 pts/cycle)
stereo fft cplx ie	N=2048	62187 (0.033 pts/cycle)
stereo fft cplx ie	N=4096	114931 (0.036 pts/cycle)
stereo ifft cplx ie	N=8	140 (0.057 pts/cycle)
stereo ifft cplx ie	N=16	200 (0.080 pts/cycle)
stereo ifft cplx ie	N=32	571 (0.056 pts/cycle)
stereo ifft cplx ie	N=64	986 (0.065 pts/cycle)
stereo ifft cplx ie	N=128	2728 (0.047 pts/cycle)
stereo ifft cplx ie	N=256	4994 (0.051 pts/cycle)
stereo ifft cplx ie	N=512	13104 (0.039 pts/cycle)
stereo ifft cplx ie	N=1024	24554 (0.042 pts/cycle)
stereo ifft cplx ie	N=2048	61687 (0.033 pts/cycle)
stereo ifft cplx ie	N=4096	116976 (0.035 pts/cycle)
FFT Routines		
Real FFT with Optimized Memory		
fft real16x16 ie	N=256	1720 (0.149 pts/cycle)
fft real16x16 ie	N=512	3093 (0.166 pts/cycle)
fft real16x16 ie	N=1024	6337 (0.162 pts/cycle)
fft real32x16 ie	N=256, scaling=3	1327 (0.193 pts/cycle)
fft real32x16 ie	N=256, scaling=2	1473 (0.174 pts/cycle)
fft real32x16 ie	N=512, scaling=3	2463 (0.208 pts/cycle)
fft real32x16 ie	N=512, scaling=2	2719 (0.188 pts/cycle)
fft real32x16 ie	N=1024, scaling=3	5676 (0.180 pts/cycle)
fft real32x16 ie	N=1024, scaling=2	6155 (0.166 pts/cycle)
fft real32x32 ie	N=256, scaling=3	1234 (0.207 pts/cycle)
fft real32x32 ie	N=256, scaling=2	1578 (0.162 pts/cycle)
fft real32x32 ie	N=512, scaling=3	2178 (0.235 pts/cycle)
fft real32x32 ie	N=512, scaling=2	2803 (0.183 pts/cycle)
fft real32x32 ie	N=1024, scaling=3	4786 (0.214 pts/cycle)
fft real32x32 ie	N=1024, scaling=2	5979 (0.171 pts/cycle)
ifft real16x16 ie	N=256	1796 (0.143 pts/cycle)
ifft real16x16 ie	N=512	3234 (0.158 pts/cycle)
ifft real16x16 ie	N=1024	6605 (0.155 pts/cycle)
ifft real32x16 ie	N=256, scaling=3	1373 (0.186 pts/cycle)
ifft real32x16 ie	N=256, scaling=2	1761 (0.145 pts/cycle)
ifft real32x16 ie	N=512, scaling=3	2633 (0.194 pts/cycle)
ifft real32x16 ie	N=512, scaling=2	3375 (0.152 pts/cycle)
ifft real32x16 ie	N=1024, scaling=3	5887 (0.174 pts/cycle)
ifft real32x16 ie	N=1024, scaling=2	7343 (0.139 pts/cycle)
ifft real32x32 ie	N=256, scaling=3	1230 (0.208 pts/cycle)
ifft real32x32 ie	N=256, scaling=2	1564 (0.164 pts/cycle)
ifft real32x32 ie	N=512, scaling=3	2190 (0.234 pts/cycle)
ifft real32x32 ie	N=512, scaling=2	2781 (0.184 pts/cycle)
ifft real32x32 ie	N=1024, scaling=3	4829 (0.212 pts/cycle)
ifft real32x32 ie	N=1024, scaling=2	5940 (0.172 pts/cycle)
fft realf ie	N=8	39 (0.205 pts/cycle)
fft realf ie	N=16	142 (0.113 pts/cycle)
fft realf ie	N=32	234 (0.137 pts/cycle)
fft realf ie	N=64	374 (0.171 pts/cycle)
fft realf ie	N=128	805 (0.159 pts/cycle)
fft realf ie	N=256	1474 (0.174 pts/cycle)
fft realf ie	N=512	3452 (0.148 pts/cycle)
fft realf ie	N=1024	6741 (0.152 pts/cycle)
fft realf ie	N=2048	15795 (0.130 pts/cycle)
fft realf ie	N=4096	31340 (0.131 pts/cycle)
ifft realf ie	N=8	42 (0.190 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		Ri2020.4, HiFi4 with VFPU, bd5
ifft realf ie	N=16	142 (0.113 pts/cycle)
ifft realf ie	N=32	282 (0.113 pts/cycle)
ifft realf ie	N=64	373 (0.172 pts/cycle)
ifft realf ie	N=128	824 (0.155 pts/cycle)
ifft realf ie	N=256	1476 (0.173 pts/cycle)
ifft realf ie	N=512	3531 (0.145 pts/cycle)
ifft realf ie	N=1024	6755 (0.152 pts/cycle)
ifft realf ie	N=2048	16115 (0.127 pts/cycle)
ifft realf ie	N=4096	31403 (0.130 pts/cycle)
FFT Routines		
DCT		
dct 32x16	N=32, scalingOpt=3	152 (cycles)
dct 32x16	N=64, scalingOpt=3	293 (cycles)
dct 32x32	N=32, scalingOpt=3	176 (cycles)
dct 32x32	N=64, scalingOpt=3	295 (cycles)
dct 16x16	N=32, scalingOpt=3	214 (cycles)
dct 16x16	N=64, scalingOpt=3	385 (cycles)
dct4 32x16	N=32, scalingOpt=3	234 (cycles)
dct4 32x16	N=64, scalingOpt=3	584 (cycles)
dct4 32x16	N=128, scalingOpt=3	1191 (cycles)
dct4 32x16	N=256, scalingOpt=3	1994 (cycles)
dct4 32x16	N=512, scalingOpt=3	4627 (cycles)
dct4 32x32	N=32, scalingOpt=3	263 (cycles)
dct4 32x32	N=64, scalingOpt=3	630 (cycles)
dct4 32x32	N=128, scalingOpt=3	1256 (cycles)
dct4 32x32	N=256, scalingOpt=3	2186 (cycles)
dct4 32x32	N=512, scalingOpt=3	4919 (cycles)
mdct 32x16	N=32, scalingOpt=3	328 (cycles)
mdct 32x16	N=64, scalingOpt=3	719 (cycles)
mdct 32x16	N=128, scalingOpt=3	1406 (cycles)
mdct 32x16	N=256, scalingOpt=3	2369 (cycles)
mdct 32x16	N=512, scalingOpt=3	5322 (cycles)
mdct 32x32	N=32, scalingOpt=3	360 (cycles)
mdct 32x32	N=64, scalingOpt=3	767 (cycles)
mdct 32x32	N=128, scalingOpt=3	1473 (cycles)
mdct 32x32	N=256, scalingOpt=3	2564 (cycles)
mdct 32x32	N=512, scalingOpt=3	5616 (cycles)
imdct 32x16	N=32, scalingOpt=3	334 (cycles)
imdct 32x16	N=64, scalingOpt=3	725 (cycles)
imdct 32x16	N=128, scalingOpt=3	1414 (cycles)
imdct 32x16	N=256, scalingOpt=3	2375 (cycles)
imdct 32x16	N=512, scalingOpt=3	5330 (cycles)
imdct 32x32	N=32, scalingOpt=3	364 (cycles)
imdct 32x32	N=64, scalingOpt=3	771 (cycles)
imdct 32x32	N=128, scalingOpt=3	1477 (cycles)
imdct 32x32	N=256, scalingOpt=3	2568 (cycles)
imdct 32x32	N=512, scalingOpt=3	5622 (cycles)
dct2d 8x16	N=8, L=1, scalingOpt=0	269 (269.0 cycles/block)
dct2d 8x16	N=8, L=32, scalingOpt=0	8236 (257.4 cycles/block)
dct2d 8x16	N=8, L=1024, scalingOpt=0	263180 (257.0 cycles/block)
idct2d 16x8	N=8, L=1, scalingOpt=0	268 (268.0 cycles/block)
idct2d 16x8	N=8, L=32, scalingOpt=0	8112 (253.5 cycles/block)
idct2d 16x8	N=8, L=1024, scalingOpt=0	259087 (253.0 cycles/block)
dctf	N=32	230 (cycles)
dctf	N=64	470 (cycles)
fft spectrum16x32	N=2[mode=0 bexp=-1]	116 (0.02 pts/cycle)
fft spectrum16x32	N=4[mode=0 bexp=-1]	141 (0.03 pts/cycle)
fft spectrum16x32	N=8[mode=0 bexp=-1]	185 (0.04 pts/cycle)
fft spectrum16x32	N=16[mode=0 bexp=-1]	260 (0.06 pts/cycle)
fft spectrum16x32	N=32[mode=0 bexp=-1]	405 (0.08 pts/cycle)
fft spectrum16x32	N=64[mode=0 bexp=-1]	693 (0.09 pts/cycle)
fft spectrum16x32	N=128[mode=0 bexp=-1]	1269 (0.10 pts/cycle)
fft spectrum16x32	N=256[mode=0 bexp=-1]	2498 (0.10 pts/cycle)
fft spectrum16x32	N=512[mode=0 bexp=-1]	4957 (0.10 pts/cycle)
fft spectrum16x32	N=2048[mode=0 bexp=-1]	19705 (0.10 pts/cycle)
fft spectrum16x32	N=4096[mode=0 bexp=-1]	39369 (0.10 pts/cycle)
fft spectrum16x32	N=8192[mode=0 bexp=-1]	78697 (0.10 pts/cycle)
fft spectrum16x32	N=16384[mode=0 bexp=-1]	157353 (0.10 pts/cycle)
fft spectrum16x32	N=32768[mode=0 bexp=-1]	314665 (0.10 pts/cycle)
fft spectrum16x32	N=65536[mode=0 bexp=-1]	629289 (0.10 pts/cycle)
fft spectrum16x32	N=1024[mode=0 bexp=-1]	9873 (0.10 pts/cycle)
fft spectrum16x32	N=2[mode=1 bexp=-1]	115 (0.02 pts/cycle)
fft spectrum16x32	N=4[mode=1 bexp=-1]	191 (0.02 pts/cycle)
fft spectrum16x32	N=8[mode=1 bexp=-1]	216 (0.04 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
fft_spectrum16x32	N=16[mode=1 bexp=-1]	259 (0.06 pts/cycle)
fft_spectrum16x32	N=32[mode=1 bexp=-1]	335 (0.10 pts/cycle)
fft_spectrum16x32	N=64[mode=1 bexp=-1]	480 (0.13 pts/cycle)
fft_spectrum16x32	N=128[mode=1 bexp=-1]	768 (0.17 pts/cycle)
fft_spectrum16x32	N=256[mode=1 bexp=-1]	1344 (0.19 pts/cycle)
fft_spectrum16x32	N=512[mode=1 bexp=-1]	2573 (0.20 pts/cycle)
fft_spectrum16x32	N=2048[mode=1 bexp=-1]	9947 (0.21 pts/cycle)
fft_spectrum16x32	N=4096[mode=1 bexp=-1]	19780 (0.21 pts/cycle)
fft_spectrum16x32	N=8192[mode=1 bexp=-1]	39443 (0.21 pts/cycle)
fft_spectrum16x32	N=16384[mode=1 bexp=-1]	78772 (0.21 pts/cycle)
fft_spectrum16x32	N=32768[mode=1 bexp=-1]	157427 (0.21 pts/cycle)
fft_spectrum16x32	N=65536[mode=1 bexp=-1]	314740 (0.21 pts/cycle)
fft_spectrum16x32	N=1024[mode=1 bexp=-1]	5031 (0.20 pts/cycle)
fft_spectrum16x32	N=2[mode=0 bexp=-1 inplace]	116 (0.02 pts/cycle)
fft_spectrum16x32	N=4[mode=0 bexp=-1 inplace]	141 (0.03 pts/cycle)
fft_spectrum16x32	N=8[mode=0 bexp=-1 inplace]	184 (0.04 pts/cycle)
fft_spectrum16x32	N=16[mode=0 bexp=-1 inplace]	261 (0.06 pts/cycle)
fft_spectrum16x32	N=32[mode=0 bexp=-1 inplace]	405 (0.08 pts/cycle)
fft_spectrum16x32	N=64[mode=0 bexp=-1 inplace]	693 (0.09 pts/cycle)
fft_spectrum16x32	N=128[mode=0 bexp=-1 inplace]	1270 (0.10 pts/cycle)
fft_spectrum16x32	N=256[mode=0 bexp=-1 inplace]	2498 (0.10 pts/cycle)
fft_spectrum16x32	N=512[mode=0 bexp=-1 inplace]	4956 (0.10 pts/cycle)
fft_spectrum16x32	N=2048[mode=0 bexp=-1 inplace]	19705 (0.10 pts/cycle)
fft_spectrum16x32	N=4096[mode=0 bexp=-1 inplace]	39368 (0.10 pts/cycle)
fft_spectrum16x32	N=8192[mode=0 bexp=-1 inplace]	78696 (0.10 pts/cycle)
fft_spectrum16x32	N=16384[mode=0 bexp=-1 inplace]	157353 (0.10 pts/cycle)
fft_spectrum16x32	N=32768[mode=0 bexp=-1 inplace]	314664 (0.10 pts/cycle)
fft_spectrum16x32	N=65536[mode=0 bexp=-1 inplace]	629288 (0.10 pts/cycle)
fft_spectrum16x32	N=1024[mode=0 bexp=-1 inplace]	9873 (0.10 pts/cycle)
fft_spectrum16x32	N=2[mode=1 bexp=-1 inplace]	115 (0.02 pts/cycle)
fft_spectrum16x32	N=4[mode=1 bexp=-1 inplace]	191 (0.02 pts/cycle)
fft_spectrum16x32	N=8[mode=1 bexp=-1 inplace]	217 (0.04 pts/cycle)
fft_spectrum16x32	N=16[mode=1 bexp=-1 inplace]	259 (0.06 pts/cycle)
fft_spectrum16x32	N=32[mode=1 bexp=-1 inplace]	335 (0.10 pts/cycle)
fft_spectrum16x32	N=64[mode=1 bexp=-1 inplace]	481 (0.13 pts/cycle)
fft_spectrum16x32	N=128[mode=1 bexp=-1 inplace]	768 (0.17 pts/cycle)
fft_spectrum16x32	N=256[mode=1 bexp=-1 inplace]	1345 (0.19 pts/cycle)
fft_spectrum16x32	N=512[mode=1 bexp=-1 inplace]	2573 (0.20 pts/cycle)
fft_spectrum16x32	N=2048[mode=1 bexp=-1 inplace]	9948 (0.21 pts/cycle)
fft_spectrum16x32	N=4096[mode=1 bexp=-1 inplace]	19779 (0.21 pts/cycle)
fft_spectrum16x32	N=8192[mode=1 bexp=-1 inplace]	39444 (0.21 pts/cycle)
fft_spectrum16x32	N=16384[mode=1 bexp=-1 inplace]	78771 (0.21 pts/cycle)
fft_spectrum16x32	N=32768[mode=1 bexp=-1 inplace]	157428 (0.21 pts/cycle)
fft_spectrum16x32	N=65536[mode=1 bexp=-1 inplace]	314739 (0.21 pts/cycle)
fft_spectrum16x32	N=1024[mode=1 bexp=-1 inplace]	5031 (0.20 pts/cycle)
fft_spectrum32x32	N=2[mode=0 bexp=-1]	139 (0.01 pts/cycle)
fft_spectrum32x32	N=4[mode=0 bexp=-1]	180 (0.02 pts/cycle)
fft_spectrum32x32	N=8[mode=0 bexp=-1]	225 (0.04 pts/cycle)
fft_spectrum32x32	N=16[mode=0 bexp=-1]	311 (0.05 pts/cycle)
fft_spectrum32x32	N=32[mode=0 bexp=-1]	477 (0.07 pts/cycle)
fft_spectrum32x32	N=64[mode=0 bexp=-1]	817 (0.08 pts/cycle)
fft_spectrum32x32	N=128[mode=0 bexp=-1]	1593 (0.08 pts/cycle)
fft_spectrum32x32	N=256[mode=0 bexp=-1]	3145 (0.08 pts/cycle)
fft_spectrum32x32	N=512[mode=0 bexp=-1]	6249 (0.08 pts/cycle)
fft_spectrum32x32	N=2048[mode=0 bexp=-1]	24874 (0.08 pts/cycle)
fft_spectrum32x32	N=4096[mode=0 bexp=-1]	49708 (0.08 pts/cycle)
fft_spectrum32x32	N=8192[mode=0 bexp=-1]	99371 (0.08 pts/cycle)
fft_spectrum32x32	N=16384[mode=0 bexp=-1]	198699 (0.08 pts/cycle)
fft_spectrum32x32	N=32768[mode=0 bexp=-1]	397354 (0.08 pts/cycle)
fft_spectrum32x32	N=65536[mode=0 bexp=-1]	794667 (0.08 pts/cycle)
fft_spectrum32x32	N=1024[mode=0 bexp=-1]	12459 (0.08 pts/cycle)
fft_spectrum32x32	N=2[mode=1 bexp=-1]	140 (0.01 pts/cycle)
fft_spectrum32x32	N=4[mode=1 bexp=-1]	237 (0.02 pts/cycle)
fft_spectrum32x32	N=8[mode=1 bexp=-1]	279 (0.03 pts/cycle)
fft_spectrum32x32	N=16[mode=1 bexp=-1]	324 (0.05 pts/cycle)
fft_spectrum32x32	N=32[mode=1 bexp=-1]	411 (0.08 pts/cycle)
fft_spectrum32x32	N=64[mode=1 bexp=-1]	576 (0.11 pts/cycle)
fft_spectrum32x32	N=128[mode=1 bexp=-1]	917 (0.14 pts/cycle)
fft_spectrum32x32	N=256[mode=1 bexp=-1]	1693 (0.15 pts/cycle)
fft_spectrum32x32	N=512[mode=1 bexp=-1]	3248 (0.16 pts/cycle)
fft_spectrum32x32	N=2048[mode=1 bexp=-1]	12577 (0.16 pts/cycle)
fft_spectrum32x32	N=4096[mode=1 bexp=-1]	25009 (0.16 pts/cycle)
fft_spectrum32x32	N=8192[mode=1 bexp=-1]	49873 (0.16 pts/cycle)
fft_spectrum32x32	N=16384[mode=1 bexp=-1]	99596 (0.16 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
fft_spectrum32x32	N=32768[mode=1 bexp=-1]	199052 (0.16 pts/cycle)
fft_spectrum32x32	N=65536[mode=1 bexp=-1]	397964 (0.16 pts/cycle)
fft_spectrum32x32	N=1024[mode=1 bexp=-1]	6360 (0.16 pts/cycle)
fft_spectrum32x32	N=2[mode=0 bexp=-1 inplace]	140 (0.01 pts/cycle)
fft_spectrum32x32	N=4[mode=0 bexp=-1 inplace]	181 (0.02 pts/cycle)
fft_spectrum32x32	N=8[mode=0 bexp=-1 inplace]	226 (0.04 pts/cycle)
fft_spectrum32x32	N=16[mode=0 bexp=-1 inplace]	312 (0.05 pts/cycle)
fft_spectrum32x32	N=32[mode=0 bexp=-1 inplace]	478 (0.07 pts/cycle)
fft_spectrum32x32	N=64[mode=0 bexp=-1 inplace]	818 (0.08 pts/cycle)
fft_spectrum32x32	N=128[mode=0 bexp=-1 inplace]	1594 (0.08 pts/cycle)
fft_spectrum32x32	N=256[mode=0 bexp=-1 inplace]	3146 (0.08 pts/cycle)
fft_spectrum32x32	N=512[mode=0 bexp=-1 inplace]	6250 (0.08 pts/cycle)
fft_spectrum32x32	N=2048[mode=0 bexp=-1 inplace]	24874 (0.08 pts/cycle)
fft_spectrum32x32	N=4096[mode=0 bexp=-1 inplace]	49706 (0.08 pts/cycle)
fft_spectrum32x32	N=8192[mode=0 bexp=-1 inplace]	99370 (0.08 pts/cycle)
fft_spectrum32x32	N=16384[mode=0 bexp=-1 inplace]	198698 (0.08 pts/cycle)
fft_spectrum32x32	N=32768[mode=0 bexp=-1 inplace]	397354 (0.08 pts/cycle)
fft_spectrum32x32	N=65536[mode=0 bexp=-1 inplace]	794666 (0.08 pts/cycle)
fft_spectrum32x32	N=1024[mode=0 bexp=-1 inplace]	12458 (0.08 pts/cycle)
fft_spectrum32x32	N=2[mode=1 bexp=-1 inplace]	139 (0.01 pts/cycle)
fft_spectrum32x32	N=4[mode=1 bexp=-1 inplace]	237 (0.02 pts/cycle)
fft_spectrum32x32	N=8[mode=1 bexp=-1 inplace]	278 (0.03 pts/cycle)
fft_spectrum32x32	N=16[mode=1 bexp=-1 inplace]	324 (0.05 pts/cycle)
fft_spectrum32x32	N=32[mode=1 bexp=-1 inplace]	410 (0.08 pts/cycle)
fft_spectrum32x32	N=64[mode=1 bexp=-1 inplace]	576 (0.11 pts/cycle)
fft_spectrum32x32	N=128[mode=1 bexp=-1 inplace]	916 (0.14 pts/cycle)
fft_spectrum32x32	N=256[mode=1 bexp=-1 inplace]	1693 (0.15 pts/cycle)
fft_spectrum32x32	N=512[mode=1 bexp=-1 inplace]	3247 (0.16 pts/cycle)
fft_spectrum32x32	N=2048[mode=1 bexp=-1 inplace]	12576 (0.16 pts/cycle)
fft_spectrum32x32	N=4096[mode=1 bexp=-1 inplace]	25008 (0.16 pts/cycle)
fft_spectrum32x32	N=8192[mode=1 bexp=-1 inplace]	49872 (0.16 pts/cycle)
fft_spectrum32x32	N=16384[mode=1 bexp=-1 inplace]	99595 (0.16 pts/cycle)
fft_spectrum32x32	N=32768[mode=1 bexp=-1 inplace]	199050 (0.16 pts/cycle)
fft_spectrum32x32	N=65536[mode=1 bexp=-1 inplace]	397964 (0.16 pts/cycle)
fft_spectrum32x32	N=1024[mode=1 bexp=-1 inplace]	6359 (0.16 pts/cycle)
fft_spectrumf	N=2[mode=0]	112 (0.02 pts/cycle)
fft_spectrumf	N=4[mode=0]	142 (0.03 pts/cycle)
fft_spectrumf	N=8[mode=0]	227 (0.04 pts/cycle)
fft_spectrumf	N=16[mode=0]	364 (0.04 pts/cycle)
fft_spectrumf	N=32[mode=0]	640 (0.05 pts/cycle)
fft_spectrumf	N=64[mode=0]	1192 (0.05 pts/cycle)
fft_spectrumf	N=128[mode=0]	2296 (0.06 pts/cycle)
fft_spectrumf	N=256[mode=0]	4576 (0.06 pts/cycle)
fft_spectrumf	N=512[mode=0]	9136 (0.06 pts/cycle)
fft_spectrumf	N=2048[mode=0]	36497 (0.06 pts/cycle)
fft_spectrumf	N=4096[mode=0]	72977 (0.06 pts/cycle)
fft_spectrumf	N=8192[mode=0]	145937 (0.06 pts/cycle)
fft_spectrumf	N=16384[mode=0]	291857 (0.06 pts/cycle)
fft_spectrumf	N=32768[mode=0]	583697 (0.06 pts/cycle)
fft_spectrumf	N=65536[mode=0]	1167377 (0.06 pts/cycle)
fft_spectrumf	N=1024[mode=0]	18256 (0.06 pts/cycle)
fft_spectrumf	N=2[mode=1]	111 (0.02 pts/cycle)
fft_spectrumf	N=4[mode=1]	207 (0.02 pts/cycle)
fft_spectrumf	N=8[mode=1]	242 (0.03 pts/cycle)
fft_spectrumf	N=16[mode=1]	322 (0.05 pts/cycle)
fft_spectrumf	N=32[mode=1]	459 (0.07 pts/cycle)
fft_spectrumf	N=64[mode=1]	735 (0.09 pts/cycle)
fft_spectrumf	N=128[mode=1]	1287 (0.10 pts/cycle)
fft_spectrumf	N=256[mode=1]	2391 (0.11 pts/cycle)
fft_spectrumf	N=512[mode=1]	4671 (0.11 pts/cycle)
fft_spectrumf	N=2048[mode=1]	18352 (0.11 pts/cycle)
fft_spectrumf	N=4096[mode=1]	36592 (0.11 pts/cycle)
fft_spectrumf	N=8192[mode=1]	73072 (0.11 pts/cycle)
fft_spectrumf	N=16384[mode=1]	146032 (0.11 pts/cycle)
fft_spectrumf	N=32768[mode=1]	291952 (0.11 pts/cycle)
fft_spectrumf	N=65536[mode=1]	583792 (0.11 pts/cycle)
fft_spectrumf	N=1024[mode=1]	9232 (0.11 pts/cycle)
fft_spectrumf	N=2[mode=0 inplace]	112 (0.02 pts/cycle)
fft_spectrumf	N=4[mode=0 inplace]	142 (0.03 pts/cycle)
fft_spectrumf	N=8[mode=0 inplace]	227 (0.04 pts/cycle)
fft_spectrumf	N=16[mode=0 inplace]	364 (0.04 pts/cycle)
fft_spectrumf	N=32[mode=0 inplace]	640 (0.05 pts/cycle)
fft_spectrumf	N=64[mode=0 inplace]	1192 (0.05 pts/cycle)
fft_spectrumf	N=128[mode=0 inplace]	2296 (0.06 pts/cycle)

NatureDSP Signal Library Performance Data

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
fft_spectrumf	N=256[mode=0 inplace]	4576 (0.06 pts/cycle)
fft_spectrumf	N=512[mode=0 inplace]	9136 (0.06 pts/cycle)
fft_spectrumf	N=2048[mode=0 inplace]	36496 (0.06 pts/cycle)
fft_spectrumf	N=4096[mode=0 inplace]	72976 (0.06 pts/cycle)
fft_spectrumf	N=8192[mode=0 inplace]	145936 (0.06 pts/cycle)
fft_spectrumf	N=16384[mode=0 inplace]	291856 (0.06 pts/cycle)
fft_spectrumf	N=32768[mode=0 inplace]	583696 (0.06 pts/cycle)
fft_spectrumf	N=65536[mode=0 inplace]	1167376 (0.06 pts/cycle)
fft_spectrumf	N=1024[mode=0 inplace]	18256 (0.06 pts/cycle)
fft_spectrumf	N=2[mode=1 inplace]	111 (0.02 pts/cycle)
fft_spectrumf	N=4[mode=1 inplace]	207 (0.02 pts/cycle)
fft_spectrumf	N=8[mode=1 inplace]	242 (0.03 pts/cycle)
fft_spectrumf	N=16[mode=1 inplace]	322 (0.05 pts/cycle)
fft_spectrumf	N=32[mode=1 inplace]	459 (0.07 pts/cycle)
fft_spectrumf	N=64[mode=1 inplace]	735 (0.09 pts/cycle)
fft_spectrumf	N=128[mode=1 inplace]	1287 (0.10 pts/cycle)
fft_spectrumf	N=256[mode=1 inplace]	2391 (0.11 pts/cycle)
fft_spectrumf	N=512[mode=1 inplace]	4671 (0.11 pts/cycle)
fft_spectrumf	N=2048[mode=1 inplace]	18351 (0.11 pts/cycle)
fft_spectrumf	N=4096[mode=1 inplace]	36591 (0.11 pts/cycle)
fft_spectrumf	N=8192[mode=1 inplace]	73071 (0.11 pts/cycle)
fft_spectrumf	N=16384[mode=1 inplace]	146031 (0.11 pts/cycle)
fft_spectrumf	N=32768[mode=1 inplace]	291951 (0.11 pts/cycle)
fft_spectrumf	N=65536[mode=1 inplace]	583790 (0.11 pts/cycle)
fft_spectrumf	N=1024[mode=1 inplace]	9229 (0.11 pts/cycle)
logmel132x32_process	Fs: 8000; fftSize: 256; Range: 133.3-3700.0 Hz; Bands: 20; Flavor: HTK	1903 (cycles per STFT hop)
logmel132x32_process	Fs: 16000; fftSize: 512; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	2767 (cycles per STFT hop)
logmel132x32_process	Fs: 24000; fftSize: 1024; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	3397 (cycles per STFT hop)
logmel132x32_process	Fs: 32000; fftSize: 2048; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	4652 (cycles per STFT hop)
logmel132x32_process	Fs: 8000; fftSize: 256; Range: 133.3-3700.0 Hz; Bands: 40; Flavor: AUDITORY	2504 (cycles per STFT hop)
logmel132x32_process	Fs: 16000; fftSize: 512; Range: 133.3-6853.8 Hz; Bands: 40; Flavor: AUDITORY	3431 (cycles per STFT hop)
logmel132x32_process	Fs: 24000; fftSize: 1024; Range: 133.3-6853.8 Hz; Bands: 40; Flavor: AUDITORY	4068 (cycles per STFT hop)
logmel132x32_process	Fs: 32000; fftSize: 2048; Range: 133.3-6853.8 Hz; Bands: 40; Flavor: AUDITORY	5233 (cycles per STFT hop)
mfcc32x32_process	Fs: 8000; fftSize: 256; Win: 25 ms; Hop: 10 ms; Range: 133.3-3700.0 Hz; Bands: 20; Ceps: 13; Flavor: HTK	4716 (cycles per STFT hop)
mfcc32x32_process	Fs: 16000; fftSize: 512; Win: 25 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 20; Ceps: 13; Flavor: HTK	7570 (cycles per STFT hop)
mfcc32x32_process	Fs: 24000; fftSize: 1024; Win: 25 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 20; Ceps: 13; Flavor: HTK	11799 (cycles per STFT hop)
mfcc32x32_process	Fs: 32000; fftSize: 2048; Win: 30 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 20; Ceps: 13; Flavor: HTK	19618 (cycles per STFT hop)
mfcc32x32_process	Fs: 8000; fftSize: 256; Win: 16 ms; Hop: 10 ms; Range: 133.3-3700.0 Hz; Bands: 40; Ceps: 13; Flavor: AUDITORY	4917 (cycles per STFT hop)
mfcc32x32_process	Fs: 16000; fftSize: 512; Win: 16 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 40; Ceps: 13; Flavor: AUDITORY	7492 (cycles per STFT hop)
mfcc32x32_process	Fs: 24000; fftSize: 1024; Win: 16 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 40; Ceps: 13; Flavor: AUDITORY	10760 (cycles per STFT hop)
mfcc32x32_process	Fs: 32000; fftSize: 2048; Win: 30 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 40; Ceps: 13; Flavor: AUDITORY	19137 (cycles per STFT hop)
logmelf_process	Fs: 8000; fftSize: 256; Range: 133.3-3700.0 Hz; Bands: 20; Flavor: HTK	2632 (cycles per STFT hop)
logmelf_process	Fs: 16000; fftSize: 512; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	3913 (cycles per STFT hop)
logmelf_process	Fs: 24000; fftSize: 1024; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	4850 (cycles per STFT hop)
logmelf_process	Fs: 32000; fftSize: 2048; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	6727 (cycles per STFT hop)
logmelf_process	Fs: 8000; fftSize: 256; Range: 133.3-3700.0 Hz; Bands: 40; Flavor: AUDITORY	3535 (cycles per STFT hop)
logmelf_process	Fs: 16000; fftSize: 512; Range: 133.3-6853.8 Hz; Bands: 40; Flavor: AUDITORY	4907 (cycles per STFT hop)
logmelf_process	Fs: 24000; fftSize: 1024; Range: 133.3-6853.8 Hz; Bands: 40; Flavor: AUDITORY	5860 (cycles per STFT hop)
logmelf_process	Fs: 32000; fftSize: 2048; Range: 133.3-6853.8 Hz; Bands: 40; Flavor: AUDITORY	7652 (cycles per STFT hop)
mfccf_process	Fs: 8000; fftSize: 256; Win: 25 ms; Hop: 10 ms; Range: 133.3-3700.0 Hz; Bands: 20; Ceps: 13; Flavor: HTK	5908 (cycles per STFT hop)
mfccf_process	Fs: 16000; fftSize: 512; Win: 25 ms; Hop: 10 ms; Range: 133.3-3700.0 Hz; Bands: 20; Ceps: 13; Flavor: HTK	10314 (cycles per STFT hop)

Function name	Invocation parameters	Cycles Measurements
		RI2020.4, HiFi4 with VFPU, bd5
	133.3-6853.8 Hz; Bands: 20; Ceps: 13; Flavor: HTK	
mfccf_process	Fs: 24000; fftSize: 1024; Win: 25 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 20; Ceps: 13; Flavor: HTK	15855 (cycles per STFT hop)
mfccf_process	Fs: 32000; fftSize: 2048; Win: 30 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 20; Ceps: 13; Flavor: HTK	29143 (cycles per STFT hop)
mfccf_process	Fs: 8000; fftSize: 256; Win: 16 ms; Hop: 10 ms; Range: 133.3-3700.0 Hz; Bands: 40; Ceps: 13; Flavor: AUDITORY	5942 (cycles per STFT hop)
mfccf_process	Fs: 16000; fftSize: 512; Win: 16 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 40; Ceps: 13; Flavor: AUDITORY	9633 (cycles per STFT hop)
mfccf_process	Fs: 24000; fftSize: 1024; Win: 16 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 40; Ceps: 13; Flavor: AUDITORY	14348 (cycles per STFT hop)
mfccf_process	Fs: 32000; fftSize: 2048; Win: 30 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 40; Ceps: 13; Flavor: AUDITORY	26675 (cycles per STFT hop)
image processing functions		
image rotation		
imgrotate gu8_process	SQCIF(128x96) 0 degrees	8918 (cycles)
imgrotate gu8_process	SQCIF(128x96) 90 degrees	22230 (cycles)
imgrotate gu8_process	SQCIF(128x96) 180 degrees	7509 (cycles)
imgrotate gu8_process	SQCIF(128x96) 270 degrees	22481 (cycles)
imgrotate gu8_process	SQCIF(128x96) 45 degrees	201250 (cycles)
imgrotate gu8_process	SQCIF(128x96) 135 degrees	201199 (cycles)
imgrotate gu8_process	SQCIF(128x96) 225 degrees	201478 (cycles)
imgrotate gu8_process	SQCIF(128x96) 315 degrees	201560 (cycles)
imgrotate gu8_process	QCIF(176x144) 0 degrees	15326 (cycles)
imgrotate gu8_process	QCIF(176x144) 90 degrees	44503 (cycles)
imgrotate gu8_process	QCIF(176x144) 180 degrees	13997 (cycles)
imgrotate gu8_process	QCIF(176x144) 270 degrees	44882 (cycles)
imgrotate gu8_process	QCIF(176x144) 45 degrees	393901 (cycles)
imgrotate gu8_process	QCIF(176x144) 135 degrees	385854 (cycles)
imgrotate gu8_process	QCIF(176x144) 225 degrees	394213 (cycles)
imgrotate gu8_process	QCIF(176x144) 315 degrees	386398 (cycles)
imgrotate gu8_process	CIF(352x288) 0 degrees	45622 (cycles)
imgrotate gu8_process	CIF(352x288) 90 degrees	171223 (cycles)
imgrotate gu8_process	CIF(352x288) 180 degrees	48429 (cycles)
imgrotate gu8_process	CIF(352x288) 270 degrees	171977 (cycles)
imgrotate gu8_process	CIF(352x288) 45 degrees	1457764 (cycles)
imgrotate gu8_process	CIF(352x288) 135 degrees	1401844 (cycles)
imgrotate gu8_process	CIF(352x288) 225 degrees	1458387 (cycles)
imgrotate gu8_process	CIF(352x288) 315 degrees	1402928 (cycles)
imgrotate gu8_process	QVGA(320x240) 0 degrees	35833 (cycles)
imgrotate gu8_process	QVGA(320x240) 90 degrees	130232 (cycles)
imgrotate gu8_process	QVGA(320x240) 180 degrees	37265 (cycles)
imgrotate gu8_process	QVGA(320x240) 270 degrees	130860 (cycles)
imgrotate gu8_process	QVGA(320x240) 45 degrees	1121136 (cycles)
imgrotate gu8_process	QVGA(320x240) 135 degrees	1099057 (cycles)
imgrotate gu8_process	QVGA(320x240) 225 degrees	1121704 (cycles)
imgrotate gu8_process	QVGA(320x240) 315 degrees	1099953 (cycles)
imgrotate gu8_process	VGA(640x480) 0 degrees	116979 (cycles)
imgrotate gu8_process	VGA(640x480) 90 degrees	509912 (cycles)
imgrotate gu8_process	VGA(640x480) 180 degrees	136773 (cycles)
imgrotate gu8_process	VGA(640x480) 270 degrees	511171 (cycles)
imgfastrotate gu8_process	SQCIF(128x96) 0 degrees	2638 (cycles)
imgfastrotate gu8_process	SQCIF(128x96) 90 degrees	5788 (cycles)
imgfastrotate gu8_process	SQCIF(128x96) 180 degrees	6200 (cycles)
imgfastrotate gu8_process	SQCIF(128x96) 270 degrees	5831 (cycles)
imgfastrotate gu8_process	SQCIF(128x96) 45 degrees	187160 (cycles)
imgfastrotate gu8_process	SQCIF(128x96) 135 degrees	197024 (cycles)
imgfastrotate gu8_process	SQCIF(128x96) 225 degrees	187260 (cycles)
imgfastrotate gu8_process	SQCIF(128x96) 315 degrees	195382 (cycles)
imgfastrotate gu8_process	QCIF(176x144) 0 degrees	4750 (cycles)
imgfastrotate gu8_process	QCIF(176x144) 90 degrees	10654 (cycles)
imgfastrotate gu8_process	QCIF(176x144) 180 degrees	11816 (cycles)
imgfastrotate gu8_process	QCIF(176x144) 270 degrees	10721 (cycles)
imgfastrotate gu8_process	QCIF(176x144) 45 degrees	364614 (cycles)
imgfastrotate gu8_process	QCIF(176x144) 135 degrees	378635 (cycles)
imgfastrotate gu8_process	QCIF(176x144) 225 degrees	364798 (cycles)
imgfastrotate gu8_process	QCIF(176x144) 315 degrees	375457 (cycles)
imgfastrotate gu8_process	CIF(352x288) 0 degrees	15694 (cycles)
imgfastrotate gu8_process	CIF(352x288) 90 degrees	43216 (cycles)
imgfastrotate gu8_process	CIF(352x288) 180 degrees	42488 (cycles)
imgfastrotate gu8_process	CIF(352x288) 270 degrees	43355 (cycles)
imgfastrotate gu8_process	CIF(352x288) 45 degrees	1350220 (cycles)
imgfastrotate gu8_process	CIF(352x288) 135 degrees	1392221 (cycles)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
imgfastrotate gu8 process	CIF(352x288) 225 degrees	1350512 (cycles)
imgfastrotate gu8 process	CIF(352x288) 315 degrees	1381123 (cycles)
imgfastrotate gu8 process	QVGA(320x240) 0 degrees	12142 (cycles)
imgfastrotate gu8 process	QVGA(320x240) 90 degrees	32919 (cycles)
imgfastrotate gu8 process	QVGA(320x240) 180 degrees	32551 (cycles)
imgfastrotate gu8 process	QVGA(320x240) 270 degrees	33034 (cycles)
imgfastrotate gu8 process	QVGA(320x240) 45 degrees	1037981 (cycles)
imgfastrotate gu8 process	QVGA(320x240) 135 degrees	1089284 (cycles)
imgfastrotate gu8 process	QVGA(320x240) 225 degrees	1038225 (cycles)
imgfastrotate gu8 process	QVGA(320x240) 315 degrees	1080876 (cycles)
imgfastrotate gu8 process	VGA(640x480) 0 degrees	43342 (cycles)
imgfastrotate gu8 process	VGA(640x480) 90 degrees	128069 (cycles)
imgfastrotate gu8 process	VGA(640x480) 180 degrees	122551 (cycles)
imgfastrotate gu8 process	VGA(640x480) 270 degrees	128302 (cycles)
imgrotate gs8 process	SQCIF(128x96) 0 degrees	8919 (cycles)
imgrotate gs8 process	SQCIF(128x96) 90 degrees	22230 (cycles)
imgrotate gs8 process	SQCIF(128x96) 180 degrees	7511 (cycles)
imgrotate gs8 process	SQCIF(128x96) 270 degrees	22481 (cycles)
imgrotate gs8 process	SQCIF(128x96) 45 degrees	202234 (cycles)
imgrotate gs8 process	SQCIF(128x96) 135 degrees	202952 (cycles)
imgrotate gs8 process	SQCIF(128x96) 225 degrees	202401 (cycles)
imgrotate gs8 process	SQCIF(128x96) 315 degrees	203118 (cycles)
imgrotate gs8 process	QCIF(176x144) 0 degrees	15324 (cycles)
imgrotate gs8 process	QCIF(176x144) 90 degrees	44502 (cycles)
imgrotate gs8 process	QCIF(176x144) 180 degrees	13993 (cycles)
imgrotate gs8 process	QCIF(176x144) 270 degrees	44878 (cycles)
imgrotate gs8 process	QCIF(176x144) 45 degrees	397271 (cycles)
imgrotate gs8 process	QCIF(176x144) 135 degrees	390894 (cycles)
imgrotate gs8 process	QCIF(176x144) 225 degrees	397586 (cycles)
imgrotate gs8 process	QCIF(176x144) 315 degrees	391144 (cycles)
imgrotate gs8 process	CIF(352x288) 0 degrees	45621 (cycles)
imgrotate gs8 process	CIF(352x288) 90 degrees	171223 (cycles)
imgrotate gs8 process	CIF(352x288) 180 degrees	48429 (cycles)
imgrotate gs8 process	CIF(352x288) 270 degrees	171977 (cycles)
imgrotate gs8 process	CIF(352x288) 45 degrees	1471423 (cycles)
imgrotate gs8 process	CIF(352x288) 135 degrees	1422578 (cycles)
imgrotate gs8 process	CIF(352x288) 225 degrees	1471872 (cycles)
imgrotate gs8 process	CIF(352x288) 315 degrees	1423086 (cycles)
imgrotate gs8 process	QVGA(320x240) 0 degrees	35833 (cycles)
imgrotate gs8 process	QVGA(320x240) 90 degrees	130230 (cycles)
imgrotate gs8 process	QVGA(320x240) 180 degrees	37263 (cycles)
imgrotate gs8 process	QVGA(320x240) 270 degrees	130860 (cycles)
imgrotate gs8 process	QVGA(320x240) 45 degrees	1130719 (cycles)
imgrotate gs8 process	QVGA(320x240) 135 degrees	1113749 (cycles)
imgrotate gs8 process	QVGA(320x240) 225 degrees	1131130 (cycles)
imgrotate gs8 process	QVGA(320x240) 315 degrees	1114175 (cycles)
imgrotate gs8 process	VGA(640x480) 0 degrees	116980 (cycles)
imgrotate gs8 process	VGA(640x480) 90 degrees	509910 (cycles)
imgrotate gs8 process	VGA(640x480) 180 degrees	136775 (cycles)
imgrotate gs8 process	VGA(640x480) 270 degrees	511171 (cycles)
imgfastrotate gs8 process	SQCIF(128x96) 0 degrees	2638 (cycles)
imgfastrotate gs8 process	SQCIF(128x96) 90 degrees	5788 (cycles)
imgfastrotate gs8 process	SQCIF(128x96) 180 degrees	6199 (cycles)
imgfastrotate gs8 process	SQCIF(128x96) 270 degrees	5830 (cycles)
imgfastrotate gs8 process	SQCIF(128x96) 45 degrees	189607 (cycles)
imgfastrotate gs8 process	SQCIF(128x96) 135 degrees	199187 (cycles)
imgfastrotate gs8 process	SQCIF(128x96) 225 degrees	189635 (cycles)
imgfastrotate gs8 process	SQCIF(128x96) 315 degrees	197611 (cycles)
imgfastrotate gs8 process	QCIF(176x144) 0 degrees	4750 (cycles)
imgfastrotate gs8 process	QCIF(176x144) 90 degrees	10653 (cycles)
imgfastrotate gs8 process	QCIF(176x144) 180 degrees	11815 (cycles)
imgfastrotate gs8 process	QCIF(176x144) 270 degrees	10720 (cycles)
imgfastrotate gs8 process	QCIF(176x144) 45 degrees	369840 (cycles)
imgfastrotate gs8 process	QCIF(176x144) 135 degrees	383599 (cycles)
imgfastrotate gs8 process	QCIF(176x144) 225 degrees	369844 (cycles)
imgfastrotate gs8 process	QCIF(176x144) 315 degrees	380523 (cycles)
imgfastrotate gs8 process	CIF(352x288) 0 degrees	15694 (cycles)
imgfastrotate gs8 process	CIF(352x288) 90 degrees	43214 (cycles)
imgfastrotate gs8 process	CIF(352x288) 180 degrees	42487 (cycles)
imgfastrotate gs8 process	CIF(352x288) 270 degrees	43354 (cycles)
imgfastrotate gs8 process	CIF(352x288) 45 degrees	1374550 (cycles)
imgfastrotate gs8 process	CIF(352x288) 135 degrees	1413543 (cycles)
imgfastrotate gs8 process	CIF(352x288) 225 degrees	1374626 (cycles)
imgfastrotate gs8 process	CIF(352x288) 315 degrees	1402577 (cycles)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
imgfastrotate_gs8_process	QVGA(320x240) 0 degrees	12142 (cycles)
imgfastrotate_gs8_process	QVGA(320x240) 90 degrees	32916 (cycles)
imgfastrotate_gs8_process	QVGA(320x240) 180 degrees	32551 (cycles)
imgfastrotate_gs8_process	QVGA(320x240) 270 degrees	33032 (cycles)
imgfastrotate_gs8_process	QVGA(320x240) 45 degrees	1055783 (cycles)
imgfastrotate_gs8_process	QVGA(320x240) 135 degrees	1104930 (cycles)
imgfastrotate_gs8_process	QVGA(320x240) 225 degrees	1055847 (cycles)
imgfastrotate_gs8_process	QVGA(320x240) 315 degrees	1096689 (cycles)
imgfastrotate_gs8_process	VGA(640x480) 0 degrees	43343 (cycles)
imgfastrotate_gs8_process	VGA(640x480) 90 degrees	128066 (cycles)
imgfastrotate_gs8_process	VGA(640x480) 180 degrees	122551 (cycles)
imgfastrotate_gs8_process	VGA(640x480) 270 degrees	128302 (cycles)
imgrotate_gs16_process	SQCIF(128x96) 0 degrees	5545 (cycles)
imgrotate_gs16_process	SQCIF(128x96) 90 degrees	12258 (cycles)
imgrotate_gs16_process	SQCIF(128x96) 180 degrees	7350 (cycles)
imgrotate_gs16_process	SQCIF(128x96) 270 degrees	11725 (cycles)
imgrotate_gs16_process	SQCIF(128x96) 45 degrees	189834 (cycles)
imgrotate_gs16_process	SQCIF(128x96) 135 degrees	193696 (cycles)
imgrotate_gs16_process	SQCIF(128x96) 225 degrees	189711 (cycles)
imgrotate_gs16_process	SQCIF(128x96) 315 degrees	192801 (cycles)
imgrotate_gs16_process	QCIF(176x144) 0 degrees	10405 (cycles)
imgrotate_gs16_process	QCIF(176x144) 90 degrees	24057 (cycles)
imgrotate_gs16_process	QCIF(176x144) 180 degrees	14405 (cycles)
imgrotate_gs16_process	QCIF(176x144) 270 degrees	23056 (cycles)
imgrotate_gs16_process	QCIF(176x144) 45 degrees	361130 (cycles)
imgrotate_gs16_process	QCIF(176x144) 135 degrees	362644 (cycles)
imgrotate_gs16_process	QCIF(176x144) 225 degrees	360695 (cycles)
imgrotate_gs16_process	QCIF(176x144) 315 degrees	361302 (cycles)
imgrotate_gs16_process	CIF(352x288) 0 degrees	36507 (cycles)
imgrotate_gs16_process	CIF(352x288) 90 degrees	91520 (cycles)
imgrotate_gs16_process	CIF(352x288) 180 degrees	54005 (cycles)
imgrotate_gs16_process	CIF(352x288) 270 degrees	87924 (cycles)
imgrotate_gs16_process	CIF(352x288) 45 degrees	1343435 (cycles)
imgrotate_gs16_process	CIF(352x288) 135 degrees	1332290 (cycles)
imgrotate_gs16_process	CIF(352x288) 225 degrees	1343968 (cycles)
imgrotate_gs16_process	CIF(352x288) 315 degrees	1329607 (cycles)
imgrotate_gs16_process	QVGA(320x240) 0 degrees	28045 (cycles)
imgrotate_gs16_process	QVGA(320x240) 90 degrees	70014 (cycles)
imgrotate_gs16_process	QVGA(320x240) 180 degrees	41189 (cycles)
imgrotate_gs16_process	QVGA(320x240) 270 degrees	67225 (cycles)
imgrotate_gs16_process	QVGA(320x240) 45 degrees	1026351 (cycles)
imgrotate_gs16_process	QVGA(320x240) 135 degrees	1037037 (cycles)
imgrotate_gs16_process	QVGA(320x240) 225 degrees	1024596 (cycles)
imgrotate_gs16_process	QVGA(320x240) 315 degrees	1034801 (cycles)
imgrotate_gs16_process	VGA(640x480) 0 degrees	103945 (cycles)
imgrotate_gs16_process	VGA(640x480) 90 degrees	271876 (cycles)
imgrotate_gs16_process	VGA(640x480) 180 degrees	159029 (cycles)
imgrotate_gs16_process	VGA(640x480) 270 degrees	261487 (cycles)
imgfastrotate_gs16_process	SQCIF(128x96) 0 degrees	4076 (cycles)
imgfastrotate_gs16_process	SQCIF(128x96) 90 degrees	5175 (cycles)
imgfastrotate_gs16_process	SQCIF(128x96) 180 degrees	4379 (cycles)
imgfastrotate_gs16_process	SQCIF(128x96) 270 degrees	5147 (cycles)
imgfastrotate_gs16_process	SQCIF(128x96) 45 degrees	178421 (cycles)
imgfastrotate_gs16_process	SQCIF(128x96) 135 degrees	187115 (cycles)
imgfastrotate_gs16_process	SQCIF(128x96) 225 degrees	178347 (cycles)
imgfastrotate_gs16_process	SQCIF(128x96) 315 degrees	186596 (cycles)
imgfastrotate_gs16_process	QCIF(176x144) 0 degrees	7772 (cycles)
imgfastrotate_gs16_process	QCIF(176x144) 90 degrees	9833 (cycles)
imgfastrotate_gs16_process	QCIF(176x144) 180 degrees	8217 (cycles)
imgfastrotate_gs16_process	QCIF(176x144) 270 degrees	9794 (cycles)
imgfastrotate_gs16_process	QCIF(176x144) 45 degrees	345079 (cycles)

Function name	Invocation parameters	Cycles Measurements
		RI2020.4, HiFi4 with VFPU, bd5
imgfastrotate_gs16_processes	QCIF(176x144) 135 degrees	356822 (cycles)
imgfastrotate_gs16_processes	QCIF(176x144) 225 degrees	344970 (cycles)
imgfastrotate_gs16_processes	QCIF(176x144) 315 degrees	356051 (cycles)
imgfastrotate_gs16_processes	CIF(352x288) 0 degrees	28077 (cycles)
imgfastrotate_gs16_processes	CIF(352x288) 90 degrees	35329 (cycles)
imgfastrotate_gs16_processes	CIF(352x288) 180 degrees	28954 (cycles)
imgfastrotate_gs16_processes	CIF(352x288) 270 degrees	35255 (cycles)
imgfastrotate_gs16_processes	CIF(352x288) 45 degrees	1275474 (cycles)
imgfastrotate_gs16_processes	CIF(352x288) 135 degrees	1315785 (cycles)
imgfastrotate_gs16_processes	CIF(352x288) 225 degrees	1275257 (cycles)
imgfastrotate_gs16_processes	CIF(352x288) 315 degrees	1314329 (cycles)
imgfastrotate_gs16_processes	QVGA(320x240) 0 degrees	21500 (cycles)
imgfastrotate_gs16_processes	QVGA(320x240) 90 degrees	27070 (cycles)
imgfastrotate_gs16_processes	QVGA(320x240) 180 degrees	22233 (cycles)
imgfastrotate_gs16_processes	QVGA(320x240) 270 degrees	27010 (cycles)
imgfastrotate_gs16_processes	QVGA(320x240) 45 degrees	982647 (cycles)
imgfastrotate_gs16_processes	QVGA(320x240) 135 degrees	1028149 (cycles)
imgfastrotate_gs16_processes	QVGA(320x240) 225 degrees	982464 (cycles)
imgfastrotate_gs16_processes	QVGA(320x240) 315 degrees	1026870 (cycles)
imgfastrotate_gs16_processes	VGA(640x480) 0 degrees	81260 (cycles)
imgfastrotate_gs16_processes	VGA(640x480) 90 degrees	101965 (cycles)
imgfastrotate_gs16_processes	VGA(640x480) 180 degrees	82713 (cycles)
imgfastrotate_gs16_processes	VGA(640x480) 270 degrees	101844 (cycles)
image processing functions		
image resize		
imgresize_gu8_process	SQCIF(128x96)->QCIF(176x144), nearest	58272 (cycles)
imgresize_gu8_process	SQCIF(128x96)->CIF(352x288), nearest	160382 (cycles)
imgresize_gu8_process	SQCIF(128x96)->QVGA(320x240), nearest	128729 (cycles)
imgresize_gu8_process	SQCIF(128x96)->VGA(640x480), nearest	396189 (cycles)
imgresize_gu8_process	QCIF(176x144)->SQCIF(128x96), nearest	38988 (cycles)
imgresize_gu8_process	QCIF(176x144)->CIF(352x288), nearest	88383 (cycles)
imgresize_gu8_process	QCIF(176x144)->QVGA(320x240), nearest	139549 (cycles)
imgresize_gu8_process	QCIF(176x144)->VGA(640x480), nearest	419469 (cycles)
imgresize_gu8_process	CIF(352x288)->SQCIF(128x96), nearest	56195 (cycles)
imgresize_gu8_process	CIF(352x288)->QCIF(176x144), nearest	50652 (cycles)
imgresize_gu8_process	CIF(352x288)->QVGA(320x240), nearest	184454 (cycles)
imgresize_gu8_process	CIF(352x288)->VGA(640x480), nearest	505389 (cycles)
imgresize_gu8_process	QVGA(320x240)->SQCIF(128x96), nearest	53077 (cycles)
imgresize_gu8_process	QVGA(320x240)->QCIF(176x144), nearest	85458 (cycles)
imgresize_gu8_process	QVGA(320x240)->CIF(352x288), nearest	216543 (cycles)
imgresize_gu8_process	QVGA(320x240)->VGA(640x480), nearest	235527 (cycles)
imgresize_gu8_process	VGA(640x480)->SQCIF(128x96), nearest	84276 (cycles)
imgresize_gu8_process	VGA(640x480)->QCIF(176x144), nearest	136137 (cycles)
imgresize_gu8_process	VGA(640x480)->CIF(352x288), nearest	309857 (cycles)
imgresize_gu8_process	VGA(640x480)->QVGA(320x240), nearest	138203 (cycles)
imgfastresize_gu8_process	SQCIF(128x96)->QCIF(176x144), nearest	28720 (cycles)
imgfastresize_gu8_process	SQCIF(128x96)->CIF(352x288), nearest	88587 (cycles)
imgfastresize_gu8_process	SQCIF(128x96)->QVGA(320x240), nearest	69256 (cycles)
imgfastresize_gu8_process	SQCIF(128x96)->VGA(640x480), nearest	230597 (cycles)
imgfastresize_gu8_process	QCIF(176x144)->SQCIF(128x96), nearest	19011 (cycles)
imgfastresize_gu8_process	QCIF(176x144)->CIF(352x288), nearest	48390 (cycles)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
imgfastresize gu8 process	QCIF(176x144)->QVGA(320x240), nearest	75257 (cycles)
imgfastresize gu8 process	QCIF(176x144)->VGA (640x480), nearest	242835 (cycles)
imgfastresize gu8 process	CIF (352x288)->SQCIF(128x96), nearest	28324 (cycles)
imgfastresize gu8 process	CIF (352x288)->QCIF(176x144), nearest	24048 (cycles)
imgfastresize gu8 process	CIF (352x288)->QVGA(320x240), nearest	97695 (cycles)
imgfastresize gu8 process	CIF (352x288)->VGA (640x480), nearest	286756 (cycles)
imgfastresize gu8 process	QVGA(320x240)->SQCIF(128x96), nearest	26693 (cycles)
imgfastresize gu8 process	QVGA(320x240)->QCIF(176x144), nearest	43983 (cycles)
imgfastresize gu8 process	QVGA(320x240)->CIF (352x288), nearest	117532 (cycles)
imgfastresize gu8 process	QVGA(320x240)->VGA (640x480), nearest	132295 (cycles)
imgfastresize gu8 process	VGA (640x480)->SQCIF(128x96), nearest	43012 (cycles)
imgfastresize gu8 process	VGA (640x480)->QCIF(176x144), nearest	68464 (cycles)
imgfastresize gu8 process	VGA (640x480)->CIF (352x288), nearest	166710 (cycles)
imgfastresize gu8 process	VGA (640x480)->QVGA(320x240), nearest	63647 (cycles)
imgresize gs8 process	SQCIF(128x96)->QCIF(176x144), nearest	58272 (cycles)
imgresize gs8 process	SQCIF(128x96)->CIF (352x288), nearest	160383 (cycles)
imgresize gs8 process	SQCIF(128x96)->QVGA(320x240), nearest	128727 (cycles)
imgresize gs8 process	SQCIF(128x96)->VGA (640x480), nearest	396189 (cycles)
imgresize gs8 process	QCIF(176x144)->SQCIF(128x96), nearest	38987 (cycles)
imgresize gs8 process	QCIF(176x144)->CIF (352x288), nearest	88382 (cycles)
imgresize gs8 process	QCIF(176x144)->QVGA(320x240), nearest	139547 (cycles)
imgresize gs8 process	QCIF(176x144)->VGA (640x480), nearest	419468 (cycles)
imgresize gs8 process	CIF (352x288)->SQCIF(128x96), nearest	56194 (cycles)
imgresize gs8 process	CIF (352x288)->QCIF(176x144), nearest	50651 (cycles)
imgresize gs8 process	CIF (352x288)->QVGA(320x240), nearest	184453 (cycles)
imgresize gs8 process	CIF (352x288)->VGA (640x480), nearest	505388 (cycles)
imgresize gs8 process	QVGA(320x240)->SQCIF(128x96), nearest	53077 (cycles)
imgresize gs8 process	QVGA(320x240)->QCIF(176x144), nearest	85457 (cycles)
imgresize gs8 process	QVGA(320x240)->CIF (352x288), nearest	216542 (cycles)
imgresize gs8 process	QVGA(320x240)->VGA (640x480), nearest	235526 (cycles)
imgresize gs8 process	VGA (640x480)->SQCIF(128x96), nearest	84274 (cycles)
imgresize gs8 process	VGA (640x480)->QCIF(176x144), nearest	136137 (cycles)
imgresize gs8 process	VGA (640x480)->CIF (352x288), nearest	309856 (cycles)
imgresize gs8 process	VGA (640x480)->QVGA(320x240), nearest	138203 (cycles)
imgfastresize gs8 process	SQCIF(128x96)->QCIF(176x144), nearest	28721 (cycles)
imgfastresize gs8 process	SQCIF(128x96)->CIF (352x288), nearest	88588 (cycles)
imgfastresize gs8 process	SQCIF(128x96)->QVGA(320x240), nearest	69256 (cycles)
imgfastresize gs8 process	SQCIF(128x96)->VGA (640x480), nearest	230596 (cycles)
imgfastresize gs8 process	QCIF(176x144)->SQCIF(128x96), nearest	19011 (cycles)
imgfastresize gs8 process	QCIF(176x144)->CIF (352x288), nearest	48389 (cycles)
imgfastresize gs8 process	QCIF(176x144)->QVGA(320x240), nearest	75256 (cycles)
imgfastresize gs8 process	QCIF(176x144)->VGA (640x480), nearest	242837 (cycles)
imgfastresize gs8 process	CIF (352x288)->SQCIF(128x96), nearest	28324 (cycles)
imgfastresize gs8 process	CIF (352x288)->QCIF(176x144), nearest	24048 (cycles)
imgfastresize gs8 process	CIF (352x288)->QVGA(320x240), nearest	97696 (cycles)
imgfastresize gs8 process	CIF (352x288)->VGA (640x480), nearest	286756 (cycles)
imgfastresize gs8 process	QVGA(320x240)->SQCIF(128x96), nearest	26691 (cycles)
imgfastresize gs8 process	QVGA(320x240)->QCIF(176x144), nearest	43984 (cycles)
imgfastresize gs8 process	QVGA(320x240)->CIF (352x288), nearest	117531 (cycles)
imgfastresize gs8 process	QVGA(320x240)->VGA (640x480), nearest	132294 (cycles)
imgfastresize gs8 process	VGA (640x480)->SQCIF(128x96), nearest	43012 (cycles)
imgfastresize gs8 process	VGA (640x480)->QCIF(176x144), nearest	68464 (cycles)
imgfastresize gs8 process	VGA (640x480)->CIF (352x288), nearest	166707 (cycles)
imgfastresize gs8 process	VGA (640x480)->QVGA(320x240), nearest	63646 (cycles)
imgresize gs16 process	SQCIF(128x96)->QCIF(176x144), nearest	38216 (cycles)
imgresize gs16 process	SQCIF(128x96)->CIF (352x288), nearest	103827 (cycles)
imgresize gs16 process	SQCIF(128x96)->QVGA(320x240), nearest	82376 (cycles)
imgresize gs16 process	SQCIF(128x96)->VGA (640x480), nearest	248428 (cycles)
imgresize gs16 process	QCIF(176x144)->SQCIF(128x96), nearest	27820 (cycles)
imgresize gs16 process	QCIF(176x144)->CIF (352x288), nearest	74323 (cycles)
imgresize gs16 process	QCIF(176x144)->QVGA(320x240), nearest	94258 (cycles)
imgresize gs16 process	QCIF(176x144)->VGA (640x480), nearest	272186 (cycles)
imgresize gs16 process	CIF (352x288)->SQCIF(128x96), nearest	45243 (cycles)
imgresize gs16 process	CIF (352x288)->QCIF(176x144), nearest	50405 (cycles)
imgresize gs16 process	CIF (352x288)->QVGA(320x240), nearest	137817 (cycles)
imgresize gs16 process	CIF (352x288)->VGA (640x480), nearest	359306 (cycles)
imgresize gs16 process	QVGA(320x240)->SQCIF(128x96), nearest	42076 (cycles)
imgresize gs16 process	QVGA(320x240)->QCIF(176x144), nearest	66730 (cycles)
imgresize gs16 process	QVGA(320x240)->CIF (352x288), nearest	160851 (cycles)
imgresize gs16 process	QVGA(320x240)->VGA (640x480), nearest	210069 (cycles)
imgresize gs16 process	VGA (640x480)->SQCIF(128x96), nearest	73756 (cycles)
imgresize gs16 process	VGA (640x480)->QCIF(176x144), nearest	114249 (cycles)
imgresize gs16 process	VGA (640x480)->CIF (352x288), nearest	255892 (cycles)
imgresize gs16 process	VGA (640x480)->QVGA(320x240), nearest	144293 (cycles)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
imgfastresize_gsl6_process	SQCIF(128x96)->QCIF(176x144), nearest	30680 (cycles)
imgfastresize_gsl6_process	SQCIF(128x96)->CIF (352x288), nearest	88421 (cycles)
imgfastresize_gsl6_process	SQCIF(128x96)->QVGA(320x240), nearest	69403 (cycles)
imgfastresize_gsl6_process	SQCIF(128x96)->VGA (640x480), nearest	222221 (cycles)
imgfastresize_gsl6_process	QCIF(176x144)->SQCIF(128x96), nearest	20375 (cycles)
imgfastresize_gsl6_process	QCIF(176x144)->CIF (352x288), nearest	52904 (cycles)
imgfastresize_gsl6_process	QCIF(176x144)->QVGA(320x240), nearest	77442 (cycles)
imgfastresize_gsl6_process	QCIF(176x144)->VGA (640x480), nearest	236863 (cycles)
imgfastresize_gsl6_process	CIF (352x288)->SQCIF(128x96), nearest	31728 (cycles)
imgfastresize_gsl6_process	CIF (352x288)->QCIF(176x144), nearest	29278 (cycles)
imgfastresize_gsl6_process	CIF (352x288)->QVGA(320x240), nearest	103296 (cycles)
imgfastresize_gsl6_process	CIF (352x288)->VGA (640x480), nearest	293623 (cycles)
imgfastresize_gsl6_process	QVGA(320x240)->SQCIF(128x96), nearest	29351 (cycles)
imgfastresize_gsl6_process	QVGA(320x240)->QCIF(176x144), nearest	47807 (cycles)
imgfastresize_gsl6_process	QVGA(320x240)->CIF (352x288), nearest	124637 (cycles)
imgfastresize_gsl6_process	QVGA(320x240)->VGA (640x480), nearest	144199 (cycles)
imgfastresize_gsl6_process	VGA (640x480)->SQCIF(128x96), nearest	49680 (cycles)
imgfastresize_gsl6_process	VGA (640x480)->QCIF(176x144), nearest	78047 (cycles)
imgfastresize_gsl6_process	VGA (640x480)->CIF (352x288), nearest	183239 (cycles)
imgfastresize_gsl6_process	VGA (640x480)->QVGA(320x240), nearest	81070 (cycles)
imgresize_gu8_process	SQCIF(128x96)->QCIF(176x144), bilinear	84453 (cycles)
imgresize_gu8_process	SQCIF(128x96)->CIF (352x288), bilinear	246213 (cycles)
imgresize_gu8_process	SQCIF(128x96)->QVGA(320x240), bilinear	194965 (cycles)
imgresize_gu8_process	SQCIF(128x96)->VGA (640x480), bilinear	648057 (cycles)
imgresize_gu8_process	QCIF(176x144)->SQCIF(128x96), bilinear	99951 (cycles)
imgresize_gu8_process	QCIF(176x144)->CIF (352x288), bilinear	203503 (cycles)
imgresize_gu8_process	QCIF(176x144)->QVGA(320x240), bilinear	222213 (cycles)
imgresize_gu8_process	QCIF(176x144)->VGA (640x480), bilinear	697067 (cycles)
imgresize_gu8_process	CIF (352x288)->SQCIF(128x96), bilinear	211297 (cycles)
imgresize_gu8_process	CIF (352x288)->QCIF(176x144), bilinear	153085 (cycles)
imgresize_gu8_process	CIF (352x288)->QVGA(320x240), bilinear	516139 (cycles)
imgresize_gu8_process	CIF (352x288)->VGA (640x480), bilinear	848533 (cycles)
imgresize_gu8_process	QVGA(320x240)->SQCIF(128x96), bilinear	179592 (cycles)
imgresize_gu8_process	QVGA(320x240)->QCIF(176x144), bilinear	227108 (cycles)
imgresize_gu8_process	QVGA(320x240)->CIF (352x288), bilinear	358076 (cycles)
imgresize_gu8_process	QVGA(320x240)->VGA (640x480), bilinear	583189 (cycles)
imgresize_gu8_process	VGA (640x480)->SQCIF(128x96), bilinear	500133 (cycles)
imgresize_gu8_process	VGA (640x480)->QCIF(176x144), bilinear	548941 (cycles)
imgresize_gu8_process	VGA (640x480)->CIF (352x288), bilinear	865975 (cycles)
imgresize_gu8_process	VGA (640x480)->QVGA(320x240), bilinear	430200 (cycles)
imgfastresize_gu8_process	SQCIF(128x96)->QCIF(176x144), bilinear	74145 (cycles)
imgfastresize_gu8_process	SQCIF(128x96)->CIF (352x288), bilinear	222680 (cycles)
imgfastresize_gu8_process	SQCIF(128x96)->QVGA(320x240), bilinear	175677 (cycles)
imgfastresize_gu8_process	SQCIF(128x96)->VGA (640x480), bilinear	593608 (cycles)
imgfastresize_gu8_process	QCIF(176x144)->SQCIF(128x96), bilinear	90952 (cycles)
imgfastresize_gu8_process	QCIF(176x144)->CIF (352x288), bilinear	178278 (cycles)
imgfastresize_gu8_process	QCIF(176x144)->QVGA(320x240), bilinear	201335 (cycles)
imgfastresize_gu8_process	QCIF(176x144)->VGA (640x480), bilinear	641027 (cycles)
imgfastresize_gu8_process	CIF (352x288)->SQCIF(128x96), bilinear	197519 (cycles)
imgfastresize_gu8_process	CIF (352x288)->QCIF(176x144), bilinear	136402 (cycles)
imgfastresize_gu8_process	CIF (352x288)->QVGA(320x240), bilinear	490194 (cycles)
imgfastresize_gu8_process	CIF (352x288)->VGA (640x480), bilinear	787427 (cycles)
imgfastresize_gu8_process	QVGA(320x240)->SQCIF(128x96), bilinear	167439 (cycles)
imgfastresize_gu8_process	QVGA(320x240)->QCIF(176x144), bilinear	211792 (cycles)
imgfastresize_gu8_process	QVGA(320x240)->CIF (352x288), bilinear	329441 (cycles)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
imgfastresize gu8 process	QVGA (320x240)->VGA (640x480), bilinear	523999 (cycles)
imgfastresize gu8 process	VGA (640x480)->SQCIF(128x96), bilinear	479887 (cycles)
imgfastresize gu8 process	VGA (640x480)->QCIF(176x144), bilinear	525791 (cycles)
imgfastresize gu8 process	VGA (640x480)->CIF (352x288), bilinear	829027 (cycles)
imgfastresize gu8 process	VGA (640x480)->QVGA(320x240), bilinear	398074 (cycles)
imgresize gs8 process	SQCIF(128x96)->QCIF(176x144), bilinear	86879 (cycles)
imgresize gs8 process	SQCIF(128x96)->CIF (352x288), bilinear	253751 (cycles)
imgresize gs8 process	SQCIF(128x96)->QVGA(320x240), bilinear	200845 (cycles)
imgresize gs8 process	SQCIF(128x96)->VGA (640x480), bilinear	668937 (cycles)
imgresize gs8 process	QCIF(176x144)->SQCIF(128x96), bilinear	101681 (cycles)
imgresize gs8 process	QCIF(176x144)->CIF (352x288), bilinear	211279 (cycles)
imgresize gs8 process	QCIF(176x144)->QVGA(320x240), bilinear	228334 (cycles)
imgresize gs8 process	QCIF(176x144)->VGA (640x480), bilinear	718187 (cycles)
imgresize gs8 process	CIF (352x288)->SQCIF(128x96), bilinear	213746 (cycles)
imgresize gs8 process	CIF (352x288)->QCIF(176x144), bilinear	156469 (cycles)
imgresize gs8 process	CIF (352x288)->QVGA(320x240), bilinear	522980 (cycles)
imgresize gs8 process	CIF (352x288)->VGA (640x480), bilinear	870374 (cycles)
imgresize gs8 process	QVGA(320x240)->SQCIF(128x96), bilinear	181811 (cycles)
imgresize gs8 process	QVGA(320x240)->QCIF(176x144), bilinear	230244 (cycles)
imgresize gs8 process	QVGA(320x240)->CIF (352x288), bilinear	366324 (cycles)
imgresize gs8 process	QVGA(320x240)->VGA (640x480), bilinear	604799 (cycles)
imgresize gs8 process	VGA (640x480)->SQCIF(128x96), bilinear	503542 (cycles)
imgresize gs8 process	VGA (640x480)->QCIF(176x144), bilinear	553287 (cycles)
imgresize gs8 process	VGA (640x480)->CIF (352x288), bilinear	875432 (cycles)
imgresize gs8 process	VGA (640x480)->QVGA(320x240), bilinear	438001 (cycles)
imgfastresize gs8 process	SQCIF(128x96)->QCIF(176x144), bilinear	75635 (cycles)
imgfastresize gs8 process	SQCIF(128x96)->CIF (352x288), bilinear	228057 (cycles)
imgfastresize gs8 process	SQCIF(128x96)->QVGA(320x240), bilinear	180000 (cycles)
imgfastresize gs8 process	SQCIF(128x96)->VGA (640x480), bilinear	611371 (cycles)
imgfastresize gs8 process	QCIF(176x144)->SQCIF(128x96), bilinear	91842 (cycles)
imgfastresize gs8 process	QCIF(176x144)->CIF (352x288), bilinear	183967 (cycles)
imgfastresize gs8 process	QCIF(176x144)->QVGA(320x240), bilinear	205681 (cycles)
imgfastresize gs8 process	QCIF(176x144)->VGA (640x480), bilinear	658813 (cycles)
imgfastresize gs8 process	CIF (352x288)->SQCIF(128x96), bilinear	198481 (cycles)
imgfastresize gs8 process	CIF (352x288)->QCIF(176x144), bilinear	137989 (cycles)
imgfastresize gs8 process	CIF (352x288)->QVGA(320x240), bilinear	495475 (cycles)
imgfastresize gs8 process	CIF (352x288)->VGA (640x480), bilinear	806149 (cycles)
imgfastresize gs8 process	QVGA(320x240)->SQCIF(128x96), bilinear	168304 (cycles)
imgfastresize gs8 process	QVGA(320x240)->QCIF(176x144), bilinear	214003 (cycles)
imgfastresize gs8 process	QVGA(320x240)->CIF (352x288), bilinear	335826 (cycles)
imgfastresize gs8 process	QVGA(320x240)->VGA (640x480), bilinear	541760 (cycles)
imgfastresize gs8 process	VGA (640x480)->SQCIF(128x96), bilinear	481233 (cycles)
imgfastresize gs8 process	VGA (640x480)->QCIF(176x144), bilinear	527761 (cycles)
imgfastresize gs8 process	VGA (640x480)->CIF (352x288), bilinear	836610 (cycles)
imgfastresize gs8 process	VGA (640x480)->QVGA(320x240), bilinear	402875 (cycles)
imgresize gs16 process	SQCIF(128x96)->QCIF(176x144), bilinear	72885 (cycles)
imgresize gs16 process	SQCIF(128x96)->CIF (352x288), bilinear	206925 (cycles)
imgresize gs16 process	SQCIF(128x96)->QVGA(320x240), bilinear	164675 (cycles)
imgresize gs16 process	SQCIF(128x96)->VGA (640x480), bilinear	539168 (cycles)
imgresize gs16 process	QCIF(176x144)->SQCIF(128x96), bilinear	95239 (cycles)
imgresize gs16 process	QCIF(176x144)->CIF (352x288), bilinear	165667 (cycles)
imgresize gs16 process	QCIF(176x144)->QVGA(320x240), bilinear	193382 (cycles)
imgresize gs16 process	QCIF(176x144)->VGA (640x480), bilinear	589631 (cycles)
imgresize gs16 process	CIF (352x288)->SQCIF(128x96), bilinear	217860 (cycles)
imgresize gs16 process	CIF (352x288)->QCIF(176x144), bilinear	154248 (cycles)
imgresize gs16 process	CIF (352x288)->QVGA(320x240), bilinear	498582 (cycles)
imgresize gs16 process	CIF (352x288)->VGA (640x480), bilinear	752376 (cycles)
imgresize gs16 process	QVGA(320x240)->SQCIF(128x96), bilinear	182549 (cycles)
imgresize gs16 process	QVGA(320x240)->QCIF(176x144), bilinear	224647 (cycles)
imgresize gs16 process	QVGA(320x240)->CIF (352x288), bilinear	327895 (cycles)
imgresize gs16 process	QVGA(320x240)->VGA (640x480), bilinear	483429 (cycles)
imgresize gs16 process	VGA (640x480)->SQCIF(128x96), bilinear	541317 (cycles)
imgresize gs16 process	VGA (640x480)->QCIF(176x144), bilinear	584724 (cycles)
imgresize gs16 process	VGA (640x480)->CIF (352x288), bilinear	874039 (cycles)
imgresize gs16 process	VGA (640x480)->QVGA(320x240), bilinear	447264 (cycles)
imgfastresize_gs16_process	SQCIF(128x96)->QCIF(176x144), bilinear	70739 (cycles)
imgfastresize_gs16_process	SQCIF(128x96)->CIF (352x288), bilinear	203767 (cycles)
imgfastresize_gs16_process	SQCIF(128x96)->QVGA(320x240), bilinear	161856 (cycles)
imgfastresize_gs16_process	SQCIF(128x96)->VGA (640x480), bilinear	534665 (cycles)
imgfastresize_gs16_process	QCIF(176x144)->SQCIF(128x96), bilinear	92849 (cycles)

Function name	Invocation parameters	Cycles Measurements
		RI2020.4, HiFi4 with VFPU, bd5
s		
imgfastresize_gs16_process	QCIF(176x144)->CIF (352x288), bilinear	161936 (cycles)
imgfastresize_gs16_process	QCIF(176x144)->QVGA(320x240), bilinear	189984 (cycles)
imgfastresize_gs16_process	QCIF(176x144)->VGA (640x480), bilinear	584556 (cycles)
imgfastresize_gs16_process	CIF (352x288)->SQCIF(128x96), bilinear	213744 (cycles)
imgfastresize_gs16_process	CIF (352x288)->QCIF(176x144), bilinear	149794 (cycles)
imgfastresize_gs16_process	CIF (352x288)->QVGA(320x240), bilinear	493458 (cycles)
imgfastresize_gs16_process	CIF (352x288)->VGA (640x480), bilinear	745573 (cycles)
imgfastresize_gs16_process	QVGA(320x240)->SQCIF(128x96), bilinear	179007 (cycles)
imgfastresize_gs16_process	QVGA(320x240)->QCIF(176x144), bilinear	220769 (cycles)
imgfastresize_gs16_process	QVGA(320x240)->CIF (352x288), bilinear	323009 (cycles)
imgfastresize_gs16_process	QVGA(320x240)->VGA (640x480), bilinear	477199 (cycles)
imgfastresize_gs16_process	VGA (640x480)->SQCIF(128x96), bilinear	534896 (cycles)
imgfastresize_gs16_process	VGA (640x480)->QCIF(176x144), bilinear	577967 (cycles)
imgfastresize_gs16_process	VGA (640x480)->CIF (352x288), bilinear	866273 (cycles)
imgfastresize_gs16_process	VGA (640x480)->QVGA(320x240), bilinear	439834 (cycles)
imgresize_gu8_process	SQCIF(128x96)->QCIF(176x144), bicubic	112319 (cycles)
imgresize_gu8_process	SQCIF(128x96)->CIF (352x288), bicubic	323927 (cycles)
imgresize_gu8_process	SQCIF(128x96)->QVGA(320x240), bicubic	256333 (cycles)
imgresize_gu8_process	SQCIF(128x96)->VGA (640x480), bicubic	871658 (cycles)
imgresize_gu8_process	QCIF(176x144)->SQCIF(128x96), bicubic	134518 (cycles)
imgresize_gu8_process	QCIF(176x144)->CIF (352x288), bicubic	253421 (cycles)
imgresize_gu8_process	QCIF(176x144)->QVGA(320x240), bicubic	302239 (cycles)
imgresize_gu8_process	QCIF(176x144)->VGA (640x480), bicubic	921011 (cycles)
imgresize_gu8_process	CIF (352x288)->SQCIF(128x96), bicubic	309605 (cycles)
imgresize_gu8_process	CIF (352x288)->QCIF(176x144), bicubic	216776 (cycles)
imgresize_gu8_process	CIF (352x288)->QVGA(320x240), bicubic	699188 (cycles)
imgresize_gu8_process	CIF (352x288)->VGA (640x480), bicubic	1167905 (cycles)
imgresize_gu8_process	QVGA(320x240)->SQCIF(128x96), bicubic	260354 (cycles)
imgresize_gu8_process	QVGA(320x240)->QCIF(176x144), bicubic	312388 (cycles)
imgresize_gu8_process	QVGA(320x240)->CIF (352x288), bicubic	480858 (cycles)
imgresize_gu8_process	QVGA(320x240)->VGA (640x480), bicubic	727188 (cycles)
imgresize_gu8_process	VGA (640x480)->SQCIF(128x96), bicubic	792560 (cycles)
imgresize_gu8_process	VGA (640x480)->QCIF(176x144), bicubic	826864 (cycles)
imgresize_gu8_process	VGA (640x480)->CIF (352x288), bicubic	1202576 (cycles)
imgresize_gu8_process	VGA (640x480)->QVGA(320x240), bicubic	622771 (cycles)
imgfastresize_gu8_process	SQCIF(128x96)->QCIF(176x144), bicubic	102010 (cycles)
imgfastresize_gu8_process	SQCIF(128x96)->CIF (352x288), bicubic	300393 (cycles)
imgfastresize_gu8_process	SQCIF(128x96)->QVGA(320x240), bicubic	237045 (cycles)
imgfastresize_gu8_process	SQCIF(128x96)->VGA (640x480), bicubic	817213 (cycles)
imgfastresize_gu8_process	QCIF(176x144)->SQCIF(128x96), bicubic	125520 (cycles)
imgfastresize_gu8_process	QCIF(176x144)->CIF (352x288), bicubic	228195 (cycles)
imgfastresize_gu8_process	QCIF(176x144)->QVGA(320x240), bicubic	281363 (cycles)
imgfastresize_gu8_process	QCIF(176x144)->VGA (640x480), bicubic	864968 (cycles)
imgfastresize_gu8_process	CIF (352x288)->SQCIF(128x96), bicubic	295827 (cycles)
imgfastresize_gu8_process	CIF (352x288)->QCIF(176x144), bicubic	200092 (cycles)
imgfastresize_gu8_process	CIF (352x288)->QVGA(320x240), bicubic	673239 (cycles)
imgfastresize_gu8_process	CIF (352x288)->VGA (640x480), bicubic	1106798 (cycles)
imgfastresize_gu8_process	QVGA(320x240)->SQCIF(128x96), bicubic	248202 (cycles)
imgfastresize_gu8_process	QVGA(320x240)->QCIF(176x144), bicubic	297071 (cycles)
imgfastresize_gu8_process	QVGA(320x240)->CIF (352x288), bicubic	452222 (cycles)
imgfastresize_gu8_process	QVGA(320x240)->VGA (640x480), bicubic	667995 (cycles)
imgfastresize_gu8_process	VGA (640x480)->SQCIF(128x96), bicubic	772313 (cycles)
imgfastresize_gu8_process	VGA (640x480)->QCIF(176x144), bicubic	803715 (cycles)
imgfastresize_gu8_process	VGA (640x480)->CIF (352x288), bicubic	1165623 (cycles)
imgfastresize_gu8_process	VGA (640x480)->QVGA(320x240), bicubic	590644 (cycles)
imgresize_gs8_process	SQCIF(128x96)->QCIF(176x144), bicubic	114747 (cycles)
imgresize_gs8_process	SQCIF(128x96)->CIF (352x288), bicubic	331464 (cycles)
imgresize_gs8_process	SQCIF(128x96)->QVGA(320x240), bicubic	262213 (cycles)
imgresize_gs8_process	SQCIF(128x96)->VGA (640x480), bicubic	892539 (cycles)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
imgresize_gs8_process	QCIF(176x144)->SQCIF(128x96), bicubic	136250 (cycles)
imgresize_gs8_process	QCIF(176x144)->CIF (352x288), bicubic	261197 (cycles)
imgresize_gs8_process	QCIF(176x144)->QVGA(320x240), bicubic	308361 (cycles)
imgresize_gs8_process	QCIF(176x144)->VGA (640x480), bicubic	942131 (cycles)
imgresize_gs8_process	CIF (352x288)->SQCIF(128x96), bicubic	312055 (cycles)
imgresize_gs8_process	CIF (352x288)->QCIF(176x144), bicubic	220159 (cycles)
imgresize_gs8_process	CIF (352x288)->QVGA(320x240), bicubic	706028 (cycles)
imgresize_gs8_process	CIF (352x288)->VGA (640x480), bicubic	1189745 (cycles)
imgresize_gs8_process	QVGA(320x240)->SQCIF(128x96), bicubic	262572 (cycles)
imgresize_gs8_process	QVGA(320x240)->QCIF(176x144), bicubic	315526 (cycles)
imgresize_gs8_process	QVGA(320x240)->CIF (352x288), bicubic	489106 (cycles)
imgresize_gs8_process	QVGA(320x240)->VGA (640x480), bicubic	748798 (cycles)
imgresize_gs8_process	VGA (640x480)->SQCIF(128x96), bicubic	795970 (cycles)
imgresize_gs8_process	VGA (640x480)->QCIF(176x144), bicubic	831209 (cycles)
imgresize_gs8_process	VGA (640x480)->CIF (352x288), bicubic	1212032 (cycles)
imgresize_gs8_process	VGA (640x480)->QVGA(320x240), bicubic	630571 (cycles)
imgfastresize_gs8_process	SQCIF(128x96)->QCIF(176x144), bicubic	103501 (cycles)
imgfastresize_gs8_process	SQCIF(128x96)->CIF (352x288), bicubic	305772 (cycles)
imgfastresize_gs8_process	SQCIF(128x96)->QVGA(320x240), bicubic	241367 (cycles)
imgfastresize_gs8_process	SQCIF(128x96)->VGA (640x480), bicubic	834974 (cycles)
imgfastresize_gs8_process	QCIF(176x144)->SQCIF(128x96), bicubic	126410 (cycles)
imgfastresize_gs8_process	QCIF(176x144)->CIF (352x288), bicubic	233884 (cycles)
imgfastresize_gs8_process	QCIF(176x144)->QVGA(320x240), bicubic	285709 (cycles)
imgfastresize_gs8_process	QCIF(176x144)->VGA (640x480), bicubic	882755 (cycles)
imgfastresize_gs8_process	CIF (352x288)->SQCIF(128x96), bicubic	296788 (cycles)
imgfastresize_gs8_process	CIF (352x288)->QCIF(176x144), bicubic	201678 (cycles)
imgfastresize_gs8_process	CIF (352x288)->QVGA(320x240), bicubic	678522 (cycles)
imgfastresize_gs8_process	CIF (352x288)->VGA (640x480), bicubic	1125520 (cycles)
imgfastresize_gs8_process	QVGA(320x240)->SQCIF(128x96), bicubic	249069 (cycles)
imgfastresize_gs8_process	QVGA(320x240)->QCIF(176x144), bicubic	299282 (cycles)
imgfastresize_gs8_process	QVGA(320x240)->CIF (352x288), bicubic	458608 (cycles)
imgfastresize_gs8_process	QVGA(320x240)->VGA (640x480), bicubic	685756 (cycles)
imgfastresize_gs8_process	VGA (640x480)->SQCIF(128x96), bicubic	773660 (cycles)
imgfastresize_gs8_process	VGA (640x480)->QCIF(176x144), bicubic	805684 (cycles)
imgfastresize_gs8_process	VGA (640x480)->CIF (352x288), bicubic	1173209 (cycles)
imgfastresize_gs8_process	VGA (640x480)->QVGA(320x240), bicubic	595448 (cycles)
imgresize_gs16_process	SQCIF(128x96)->QCIF(176x144), bicubic	100753 (cycles)
imgresize_gs16_process	SQCIF(128x96)->CIF (352x288), bicubic	284640 (cycles)
imgresize_gs16_process	SQCIF(128x96)->QVGA(320x240), bicubic	226043 (cycles)
imgresize_gs16_process	SQCIF(128x96)->VGA (640x480), bicubic	762770 (cycles)
imgresize_gs16_process	QCIF(176x144)->SQCIF(128x96), bicubic	129807 (cycles)
imgresize_gs16_process	QCIF(176x144)->CIF (352x288), bicubic	215585 (cycles)
imgresize_gs16_process	QCIF(176x144)->QVGA(320x240), bicubic	273409 (cycles)
imgresize_gs16_process	QCIF(176x144)->VGA (640x480), bicubic	813575 (cycles)
imgresize_gs16_process	CIF (352x288)->SQCIF(128x96), bicubic	316168 (cycles)
imgresize_gs16_process	CIF (352x288)->QCIF(176x144), bicubic	217937 (cycles)
imgresize_gs16_process	CIF (352x288)->QVGA(320x240), bicubic	681630 (cycles)
imgresize_gs16_process	CIF (352x288)->VGA (640x480), bicubic	1071747 (cycles)
imgresize_gs16_process	QVGA(320x240)->SQCIF(128x96), bicubic	263312 (cycles)
imgresize_gs16_process	QVGA(320x240)->QCIF(176x144), bicubic	309928 (cycles)
imgresize_gs16_process	QVGA(320x240)->CIF (352x288), bicubic	450676 (cycles)
imgresize_gs16_process	QVGA(320x240)->VGA (640x480), bicubic	627426 (cycles)
imgresize_gs16_process	VGA (640x480)->SQCIF(128x96), bicubic	833744 (cycles)
imgresize_gs16_process	VGA (640x480)->QCIF(176x144), bicubic	862647 (cycles)
imgresize_gs16_process	VGA (640x480)->CIF (352x288), bicubic	1210638 (cycles)
imgresize_gs16_process	VGA (640x480)->QVGA(320x240), bicubic	639834 (cycles)
imgfastresize_gs16_process	SQCIF(128x96)->QCIF(176x144), bicubic	98603 (cycles)
imgfastresize_gs16_process	SQCIF(128x96)->CIF (352x288), bicubic	281482 (cycles)
imgfastresize_gs16_process	SQCIF(128x96)->QVGA(320x240), bicubic	223222 (cycles)
imgfastresize_gs16_process	SQCIF(128x96)->VGA (640x480), bicubic	758269 (cycles)
imgfastresize_gs16_process	QCIF(176x144)->SQCIF(128x96), bicubic	127418 (cycles)
imgfastresize_gs16_process	QCIF(176x144)->CIF (352x288), bicubic	211852 (cycles)
imgfastresize_gs16_process	QCIF(176x144)->QVGA(320x240), bicubic	270011 (cycles)
imgfastresize_gs16_process	QCIF(176x144)->VGA (640x480), bicubic	808497 (cycles)
imgfastresize_gs16_process	CIF (352x288)->SQCIF(128x96), bicubic	312051 (cycles)

Function name	Invocation parameters	Cycles Measurements
		RI2020.4, HiFi4 with VFPU, bd5
imgfastresize_gsl6_processes	CIF (352x288) -> QCIF (176x144), bicubic	213485 (cycles)
imgfastresize_gsl6_processes	CIF (352x288) -> QVGA (320x240), bicubic	676505 (cycles)
imgfastresize_gsl6_processes	CIF (352x288) -> VGA (640x480), bicubic	1064943 (cycles)
imgfastresize_gsl6_processes	QVGA (320x240) -> SQCIF (128x96), bicubic	259773 (cycles)
imgfastresize_gsl6_processes	QVGA (320x240) -> QCIF (176x144), bicubic	306048 (cycles)
imgfastresize_gsl6_processes	QVGA (320x240) -> CIF (352x288), bicubic	445791 (cycles)
imgfastresize_gsl6_processes	QVGA (320x240) -> VGA (640x480), bicubic	621195 (cycles)
imgfastresize_gsl6_processes	VGA (640x480) -> SQCIF (128x96), bicubic	827324 (cycles)
imgfastresize_gsl6_processes	VGA (640x480) -> QCIF (176x144), bicubic	855893 (cycles)
imgfastresize_gsl6_processes	VGA (640x480) -> CIF (352x288), bicubic	1202873 (cycles)
imgfastresize_gsl6_processes	VGA (640x480) -> QVGA (320x240), bicubic	632404 (cycles)
image processing functions		
miscellaneous image processing		
imghist_gu8	SQCIF (128x96)	52146 (cycles)
imghist_gu8	QCIF (176x144)	100577 (cycles)
imghist_gu8	CIF (352x288)	365682 (cycles)
imghist_gu8	QVGA (320x240)	279809 (cycles)
imghist_gu8	VGA (640x480)	1058612 (cycles)
imgfasthist_gu8	SQCIF (128x96)	44380 (cycles)
imgfasthist_gu8	QCIF (176x144)	88925 (cycles)
imgfasthist_gu8	CIF (352x288)	342365 (cycles)
imgfasthist_gu8	QVGA (320x240)	260381 (cycles)
imgfasthist_gu8	VGA (640x480)	1019741 (cycles)
imghist_gs8	SQCIF (128x96)	54335 (cycles)
imghist_gs8	QCIF (176x144)	103856 (cycles)
imghist_gs8	CIF (352x288)	372238 (cycles)
imghist_gs8	QVGA (320x240)	285273 (cycles)
imghist_gs8	VGA (640x480)	1069533 (cycles)
imgfasthist_gs8	SQCIF (128x96)	45235 (cycles)
imgfasthist_gs8	QCIF (176x144)	90210 (cycles)
imgfasthist_gs8	CIF (352x288)	344947 (cycles)
imgfasthist_gs8	QVGA (320x240)	262530 (cycles)
imgfasthist_gs8	VGA (640x480)	1024051 (cycles)
imghist_gsl6	SQCIF (128x96)	44034 (cycles)
imghist_gsl6	QCIF (176x144)	88395 (cycles)
imghist_gsl6	CIF (352x288)	341295 (cycles)
imghist_gsl6	QVGA (320x240)	259490 (cycles)
imghist_gsl6	VGA (640x480)	1017951 (cycles)
imgfasthist_gsl6	SQCIF (128x96)	42946 (cycles)
imgfasthist_gsl6	QCIF (176x144)	85906 (cycles)
imgfasthist_gsl6	CIF (352x288)	329986 (cycles)
imgfasthist_gsl6	QVGA (320x240)	251027 (cycles)
imgfasthist_gsl6	VGA (640x480)	981827 (cycles)
imgnorm_gu8	SQCIF (128x96)	39612 (cycles)
imgnorm_gu8	QCIF (176x144)	71904 (cycles)
imgnorm_gu8	CIF (352x288)	235596 (cycles)
imgnorm_gu8	QVGA (320x240)	182424 (cycles)
imgnorm_gu8	VGA (640x480)	643164 (cycles)
imgfastnorm_gu8	SQCIF (128x96)	25136 (cycles)
imgfastnorm_gu8	QCIF (176x144)	49328 (cycles)
imgfastnorm_gu8	CIF (352x288)	184110 (cycles)
imgfastnorm_gu8	QVGA (320x240)	140478 (cycles)
imgfastnorm_gu8	VGA (640x480)	540078 (cycles)
imgnorm_gs8	SQCIF (128x96)	35100 (cycles)
imgnorm_gs8	QCIF (176x144)	63840 (cycles)
imgnorm_gs8	CIF (352x288)	209964 (cycles)
imgnorm_gs8	QVGA (320x240)	162500 (cycles)
imgnorm_gs8	VGA (640x480)	574524 (cycles)
imgfastnorm_gs8	SQCIF (128x96)	23599 (cycles)
imgfastnorm_gs8	QCIF (176x144)	46161 (cycles)
imgfastnorm_gs8	CIF (352x288)	171439 (cycles)
imgfastnorm_gs8	QVGA (320x240)	130879 (cycles)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
imgfastnorm_gs8	VGA (640x480)	501679 (cycles)
imgnorm_gsl6	SQCIF(128x96)	24507 (cycles)
imgnorm_gsl6	QCIF(176x144)	47955 (cycles)
imgnorm_gsl6	CIF (352x288)	178204 (cycles)
imgnorm_gsl6	QVGA(320x240)	136037 (cycles)
imgnorm_gsl6	VGA (640x480)	521595 (cycles)
imgfastnorm_gsl6	SQCIF(128x96)	18533 (cycles)
imgfastnorm_gsl6	QCIF(176x144)	36215 (cycles)
imgfastnorm_gsl6	CIF (352x288)	135705 (cycles)
imgfastnorm_gsl6	QVGA(320x240)	103806 (cycles)
imgfastnorm_gsl6	VGA (640x480)	399525 (cycles)
imgnorm_gu8_nonlinear	SQCIF(128x96)	54572 (cycles)
imgnorm_gu8_nonlinear	QCIF(176x144)	106042 (cycles)
imgnorm_gu8_nonlinear	CIF (352x288)	389460 (cycles)
imgnorm_gu8_nonlinear	QVGA(320x240)	297693 (cycles)
imgnorm_gu8_nonlinear	VGA (640x480)	1132933 (cycles)
imgfastnorm_gu8_nonlinear	SQCIF(128x96)	49380 (cycles)
imgfastnorm_gu8_nonlinear	QCIF(176x144)	98259 (cycles)
imgfastnorm_gu8_nonlinear	CIF (352x288)	373863 (cycles)
imgfastnorm_gu8_nonlinear	QVGA(320x240)	284677 (cycles)
imgfastnorm_gu8_nonlinear	VGA (640x480)	1106930 (cycles)
imgnorm_gs8_nonlinear	SQCIF(128x96)	58098 (cycles)
imgnorm_gs8_nonlinear	QCIF(176x144)	113058 (cycles)
imgnorm_gs8_nonlinear	CIF (352x288)	416309 (cycles)
imgnorm_gs8_nonlinear	QVGA(320x240)	318024 (cycles)
imgnorm_gs8_nonlinear	VGA (640x480)	1212023 (cycles)
imgfastnorm_gs8_nonlinear	SQCIF(128x96)	48786 (cycles)
imgfastnorm_gs8_nonlinear	QCIF(176x144)	97361 (cycles)
imgfastnorm_gs8_nonlinear	CIF (352x288)	372115 (cycles)
imgfastnorm_gs8_nonlinear	QVGA(320x240)	283217 (cycles)
imgfastnorm_gs8_nonlinear	VGA (640x480)	1104019 (cycles)
imgnorm_gsl6_nonlinear	SQCIF(128x96)	39078 (cycles)
imgnorm_gsl6_nonlinear	QCIF(176x144)	77600 (cycles)
imgnorm_gsl6_nonlinear	CIF (352x288)	294584 (cycles)
imgnorm_gsl6_nonlinear	QVGA(320x240)	224375 (cycles)
imgnorm_gsl6_nonlinear	VGA (640x480)	871121 (cycles)
imgfastnorm_gsl6_nonlinear	SQCIF(128x96)	35597 (cycles)
imgfastnorm_gsl6_nonlinear	QCIF(176x144)	70656 (cycles)
imgfastnorm_gsl6_nonlinear	CIF (352x288)	268020 (cycles)
imgfastnorm_gsl6_nonlinear	QVGA(320x240)	204178 (cycles)
imgfastnorm_gsl6_nonlinear	VGA (640x480)	792289 (cycles)
imginterleave	SQCIF(128x96)	49594 (cycles)
imginterleave	QCIF(176x144)	101440 (cycles)
imginterleave	CIF (352x288)	401269 (cycles)
imginterleave	QVGA(320x240)	304330 (cycles)
imginterleave	VGA (640x480)	1209850 (cycles)
imginterleave16	SQCIF(128x96)	20659 (cycles)
imginterleave16	QCIF(176x144)	41347 (cycles)
imginterleave16	CIF (352x288)	158708 (cycles)
imginterleave16	QVGA(320x240)	120741 (cycles)
imgfastinterleave	SQCIF(128x96)	24594 (cycles)
imgfastinterleave	QCIF(176x144)	49840 (cycles)
imgfastinterleave	CIF (352x288)	194705 (cycles)
imgfastinterleave	QVGA(320x240)	147858 (cycles)
imgfastinterleave	VGA (640x480)	583697 (cycles)
imgfastinterleave16	SQCIF(128x96)	19315 (cycles)
imgfastinterleave16	QCIF(176x144)	38469 (cycles)
imgfastinterleave16	CIF (352x288)	146611 (cycles)
imgfastinterleave16	QVGA(320x240)	111620 (cycles)
imgdeinterleave	SQCIF(128x96)	50935 (cycles)
imgdeinterleave	QCIF(176x144)	103934 (cycles)
imgdeinterleave	CIF (352x288)	409817 (cycles)
imgdeinterleave	QVGA(320x240)	310917 (cycles)
imgdeinterleave	VGA (640x480)	1233821 (cycles)
imgdeinterleave16	SQCIF(128x96)	21256 (cycles)
imgdeinterleave16	QCIF(176x144)	42242 (cycles)
imgdeinterleave16	CIF (352x288)	160493 (cycles)
imgdeinterleave16	QVGA(320x240)	122227 (cycles)
imgfastdeinterleave	SQCIF(128x96)	15284 (cycles)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
imgfastdeinterleave	QCIF(176x144)	29397 (cycles)
imgfastdeinterleave	CIF(352x288)	106291 (cycles)
imgfastdeinterleave	QVGA(320x240)	81379 (cycles)
imgfastdeinterleave	VGA(640x480)	306740 (cycles)
imgfastdeinterleave16	SQCIF(128x96)	18740 (cycles)
imgfastdeinterleave16	QCIF(176x144)	37605 (cycles)
imgfastdeinterleave16	CIF(352x288)	144883 (cycles)
imgfastdeinterleave16	QVGA(320x240)	110181 (cycles)
imgconvert rgbyuv	SQCIF(128x96)	122152 (cycles)
imgconvert rgbyuv	QCIF(176x144)	249510 (cycles)
imgconvert rgbyuv	CIF(352x288)	985240 (cycles)
imgconvert rgbyuv	QVGA(320x240)	747361 (cycles)
imgconvert rgbyuv	VGA(640x480)	2968267 (cycles)
imgconvert rgbyuv16	SQCIF(128x96)	79406 (cycles)
imgconvert rgbyuv16	QCIF(176x144)	158821 (cycles)
imgconvert rgbyuv16	CIF(352x288)	609038 (cycles)
imgconvert rgbyuv16	QVGA(320x240)	463383 (cycles)
imgconvert rgbyuv16	VGA(640x480)	1809904 (cycles)
imgfastconvert rgbyuv	SQCIF(128x96)	74846 (cycles)
imgfastconvert rgbyuv	QCIF(176x144)	149390 (cycles)
imgfastconvert rgbyuv	CIF(352x288)	571166 (cycles)
imgfastconvert rgbyuv	QVGA(320x240)	434702 (cycles)
imgfastconvert rgbyuv	VGA(640x480)	1694942 (cycles)
imgfastconvert rgbyuv16	SQCIF(128x96)	49403 (cycles)
imgfastconvert rgbyuv16	QCIF(176x144)	99992 (cycles)
imgfastconvert rgbyuv16	CIF(352x288)	390007 (cycles)
imgfastconvert rgbyuv16	QVGA(320x240)	296216 (cycles)
imgfastconvert rgbyuv16	VGA(640x480)	1168377 (cycles)
imgconvert yuvrgb	SQCIF(128x96)	129292 (cycles)
imgconvert yuvrgb	QCIF(176x144)	263045 (cycles)
imgconvert yuvrgb	CIF(352x288)	1032940 (cycles)
imgconvert yuvrgb	QVGA(320x240)	783995 (cycles)
imgconvert yuvrgb	VGA(640x480)	3103949 (cycles)
imgconvert yuvrgb16	SQCIF(128x96)	83004 (cycles)
imgconvert yuvrgb16	QCIF(176x144)	169413 (cycles)
imgconvert yuvrgb16	CIF(352x288)	668255 (cycles)
imgconvert yuvrgb16	QVGA(320x240)	506966 (cycles)
imgconvert yuvrgb16	VGA(640x480)	2012292 (cycles)
imgfastconvert yuvrgb	SQCIF(128x96)	69835 (cycles)
imgfastconvert yuvrgb	QCIF(176x144)	141883 (cycles)
imgfastconvert yuvrgb	CIF(352x288)	556171 (cycles)
imgfastconvert yuvrgb	QVGA(320x240)	422204 (cycles)
imgfastconvert yuvrgb	VGA(640x480)	1669964 (cycles)
imgfastconvert yuvrgb16	SQCIF(128x96)	49578 (cycles)
imgfastconvert yuvrgb16	QCIF(176x144)	100268 (cycles)
imgfastconvert yuvrgb16	CIF(352x288)	390573 (cycles)
imgfastconvert yuvrgb16	QVGA(320x240)	296683 (cycles)
imgfastconvert yuvrgb16	VGA(640x480)	1169323 (cycles)
imgpad gu8	padding, SQCIF(128x96)->QCIF(176x144)	30637 (cycles)
imgpad gu8	padding, SQCIF(128x96)->CIF(352x288)	124358 (cycles)
imgpad gu8	padding, SQCIF(128x96)->QVGA(320x240)	88412 (cycles)
imgpad gu8	padding, SQCIF(128x96)->VGA(640x480)	363997 (cycles)
imgpad gu8	padding, QCIF(176x144)->CIF(352x288)	105998 (cycles)
imgpad gu8	padding, QCIF(176x144)->QVGA(320x240)	76533 (cycles)
imgpad gu8	padding, QCIF(176x144)->VGA(640x480)	364001 (cycles)
imgpad gu8	padding, QVGA(320x240)->CIF(352x288)	115738 (cycles)
imgpad gu8	padding, QVGA(320x240)->VGA(640x480)	307829 (cycles)
imgpad gu8	padding, CIF(352x288)->VGA(640x480)	277043 (cycles)
imgpad gs8	padding, SQCIF(128x96)->QCIF(176x144)	30677 (cycles)
imgpad gs8	padding, SQCIF(128x96)->CIF(352x288)	124399 (cycles)
imgpad gs8	padding, SQCIF(128x96)->QVGA(320x240)	88451 (cycles)
imgpad gs8	padding, SQCIF(128x96)->VGA(640x480)	364038 (cycles)
imgpad gs8	padding, QCIF(176x144)->CIF(352x288)	106039 (cycles)
imgpad gs8	padding, QCIF(176x144)->QVGA(320x240)	76571 (cycles)
imgpad gs8	padding, QCIF(176x144)->VGA(640x480)	364036 (cycles)
imgpad gs8	padding, QVGA(320x240)->CIF(352x288)	115775 (cycles)
imgpad gs8	padding, QVGA(320x240)->VGA(640x480)	307865 (cycles)
imgpad gs8	padding, CIF(352x288)->VGA(640x480)	277079 (cycles)
imgpad gs16	padding, SQCIF(128x96)->QCIF(176x144)	15102 (cycles)
imgpad gs16	padding, SQCIF(128x96)->CIF(352x288)	63112 (cycles)
imgpad gs16	padding, SQCIF(128x96)->QVGA(320x240)	45849 (cycles)
imgpad gs16	padding, SQCIF(128x96)->VGA(640x480)	184694 (cycles)
imgpad gs16	padding, QCIF(176x144)->CIF(352x288)	54303 (cycles)
imgpad gs16	padding, QCIF(176x144)->QVGA(320x240)	39719 (cycles)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
imgpad gs16	padding, QCIF (176x144)->VGA (640x480)	184694 (cycles)
imgpad gs16	padding, QVGA (320x240)->CIF (352x288)	54447 (cycles)
imgpad gs16	padding, QVGA (320x240)->VGA (640x480)	152990 (cycles)
imgpad gs16	padding, CIF (352x288)->VGA (640x480)	143823 (cycles)
imgfastpad gu8	padding, SQCIF (128x96)->QCIF (176x144)	7709 (cycles)
imgfastpad gu8	padding, SQCIF (128x96)->CIF (352x288)	29846 (cycles)
imgfastpad gu8	padding, SQCIF (128x96)->QVGA (320x240)	21991 (cycles)
imgfastpad gu8	padding, SQCIF (128x96)->VGA (640x480)	85127 (cycles)
imgfastpad gu8	padding, QCIF (176x144)->CIF (352x288)	26011 (cycles)
imgfastpad gu8	padding, QCIF (176x144)->QVGA (320x240)	19399 (cycles)
imgfastpad gu8	padding, QCIF (176x144)->VGA (640x480)	85128 (cycles)
imgfastpad gu8	padding, QVGA (320x240)->CIF (352x288)	20793 (cycles)
imgfastpad gu8	padding, QVGA (320x240)->VGA (640x480)	69790 (cycles)
imgfastpad gu8	padding, CIF (352x288)->VGA (640x480)	64605 (cycles)
imgfastpad gs8	padding, SQCIF (128x96)->QCIF (176x144)	7744 (cycles)
imgfastpad gs8	padding, SQCIF (128x96)->CIF (352x288)	29885 (cycles)
imgfastpad gs8	padding, SQCIF (128x96)->QVGA (320x240)	22030 (cycles)
imgfastpad gs8	padding, SQCIF (128x96)->VGA (640x480)	85166 (cycles)
imgfastpad gs8	padding, QCIF (176x144)->CIF (352x288)	26050 (cycles)
imgfastpad gs8	padding, QCIF (176x144)->QVGA (320x240)	19440 (cycles)
imgfastpad gs8	padding, QCIF (176x144)->VGA (640x480)	85168 (cycles)
imgfastpad gs8	padding, QVGA (320x240)->CIF (352x288)	20830 (cycles)
imgfastpad gs8	padding, QVGA (320x240)->VGA (640x480)	69826 (cycles)
imgfastpad gs8	padding, CIF (352x288)->VGA (640x480)	64642 (cycles)
imgfastpad gs16	padding, SQCIF (128x96)->QCIF (176x144)	11754 (cycles)
imgfastpad gs16	padding, SQCIF (128x96)->CIF (352x288)	54111 (cycles)
imgfastpad gs16	padding, SQCIF (128x96)->QVGA (320x240)	39269 (cycles)
imgfastpad gs16	padding, SQCIF (128x96)->VGA (640x480)	161175 (cycles)
imgfastpad gs16	padding, QCIF (176x144)->CIF (352x288)	45863 (cycles)
imgfastpad gs16	padding, QCIF (176x144)->QVGA (320x240)	33148 (cycles)
imgfastpad gs16	padding, QCIF (176x144)->VGA (640x480)	161174 (cycles)
imgfastpad gs16	padding, QVGA (320x240)->CIF (352x288)	35780 (cycles)
imgfastpad gs16	padding, QVGA (320x240)->VGA (640x480)	130364 (cycles)
imgfastpad gs16	padding, CIF (352x288)->VGA (640x480)	119925 (cycles)
imgpad gu8	cropping, QCIF (176x144)->SQCIF (128x96)	18260 (cycles)
imgpad gu8	cropping, CIF (352x288)->SQCIF (128x96)	17493 (cycles)
imgpad gu8	cropping, QVGA (320x240)->SQCIF (128x96)	15779 (cycles)
imgpad gu8	cropping, VGA (640x480)->SQCIF (128x96)	17684 (cycles)
imgpad gu8	cropping, CIF (352x288)->QCIF (176x144)	29373 (cycles)
imgpad gu8	cropping, QVGA (320x240)->QCIF (176x144)	29918 (cycles)
imgpad gu8	cropping, VGA (640x480)->QCIF (176x144)	34052 (cycles)
imgpad gu8	cropping, CIF (352x288)->QVGA (320x240)	117176 (cycles)
imgpad gu8	cropping, VGA (640x480)->QVGA (320x240)	76274 (cycles)
imgpad gu8	cropping, VGA (640x480)->CIF (352x288)	98223 (cycles)
imgpad gs8	cropping, QCIF (176x144)->SQCIF (128x96)	18300 (cycles)
imgpad gs8	cropping, CIF (352x288)->SQCIF (128x96)	17529 (cycles)
imgpad gs8	cropping, QVGA (320x240)->SQCIF (128x96)	15815 (cycles)
imgpad gs8	cropping, VGA (640x480)->SQCIF (128x96)	17722 (cycles)
imgpad gs8	cropping, CIF (352x288)->QCIF (176x144)	29412 (cycles)
imgpad gs8	cropping, QVGA (320x240)->QCIF (176x144)	29956 (cycles)
imgpad gs8	cropping, VGA (640x480)->QCIF (176x144)	34089 (cycles)
imgpad gs8	cropping, CIF (352x288)->QVGA (320x240)	117215 (cycles)
imgpad gs8	cropping, VGA (640x480)->QVGA (320x240)	76315 (cycles)
imgpad gs8	cropping, VGA (640x480)->CIF (352x288)	98261 (cycles)
imgpad gs16	cropping, QCIF (176x144)->SQCIF (128x96)	8754 (cycles)
imgpad gs16	cropping, CIF (352x288)->SQCIF (128x96)	9098 (cycles)
imgpad gs16	cropping, QVGA (320x240)->SQCIF (128x96)	8418 (cycles)
imgpad gs16	cropping, VGA (640x480)->SQCIF (128x96)	9481 (cycles)
imgpad gs16	cropping, CIF (352x288)->QCIF (176x144)	14898 (cycles)
imgpad gs16	cropping, QVGA (320x240)->QCIF (176x144)	15219 (cycles)
imgpad gs16	cropping, VGA (640x480)->QCIF (176x144)	17979 (cycles)
imgpad gs16	cropping, CIF (352x288)->QVGA (320x240)	44922 (cycles)
imgpad gs16	cropping, VGA (640x480)->QVGA (320x240)	38682 (cycles)
imgpad gs16	cropping, VGA (640x480)->CIF (352x288)	50610 (cycles)
imgfastpad gu8	cropping, QCIF (176x144)->SQCIF (128x96)	4671 (cycles)
imgfastpad gu8	cropping, CIF (352x288)->SQCIF (128x96)	4734 (cycles)
imgfastpad gu8	cropping, QVGA (320x240)->SQCIF (128x96)	4562 (cycles)
imgfastpad gu8	cropping, VGA (640x480)->SQCIF (128x96)	4928 (cycles)
imgfastpad gu8	cropping, CIF (352x288)->QCIF (176x144)	7740 (cycles)
imgfastpad gu8	cropping, QVGA (320x240)->QCIF (176x144)	7844 (cycles)
imgfastpad gu8	cropping, VGA (640x480)->QCIF (176x144)	8975 (cycles)
imgfastpad gu8	cropping, CIF (352x288)->QVGA (320x240)	16285 (cycles)
imgfastpad gu8	cropping, VGA (640x480)->QVGA (320x240)	17727 (cycles)
imgfastpad gu8	cropping, VGA (640x480)->CIF (352x288)	21758 (cycles)

Function name	Invocation parameters	Cycles Measurements
		RI2020.4, HiFi4 with VFPU, bd5
imgfastpad_gs8	cropping, QCIF(176x144)->SQCIF(128x96)	4707 (cycles)
imgfastpad_gs8	cropping, CIF (352x288)->SQCIF(128x96)	4773 (cycles)
imgfastpad_gs8	cropping, QVGA(320x240)->SQCIF(128x96)	4602 (cycles)
imgfastpad_gs8	cropping, VGA (640x480)->SQCIF(128x96)	4964 (cycles)
imgfastpad_gs8	cropping, CIF (352x288)->QCIF(176x144)	7773 (cycles)
imgfastpad_gs8	cropping, QVGA(320x240)->QCIF(176x144)	7882 (cycles)
imgfastpad_gs8	cropping, VGA (640x480)->QCIF(176x144)	9014 (cycles)
imgfastpad_gs8	cropping, CIF (352x288)->QVGA(320x240)	16324 (cycles)
imgfastpad_gs8	cropping, VGA (640x480)->QVGA(320x240)	17763 (cycles)
imgfastpad_gs8	cropping, VGA (640x480)->CIF (352x288)	21796 (cycles)
imgfastpad_gs16	cropping, QCIF(176x144)->SQCIF(128x96)	6611 (cycles)
imgfastpad_gs16	cropping, CIF (352x288)->SQCIF(128x96)	7469 (cycles)
imgfastpad_gs16	cropping, QVGA(320x240)->SQCIF(128x96)	7089 (cycles)
imgfastpad_gs16	cropping, VGA (640x480)->SQCIF(128x96)	7851 (cycles)
imgfastpad_gs16	cropping, CIF (352x288)->QCIF(176x144)	11997 (cycles)
imgfastpad_gs16	cropping, QVGA(320x240)->QCIF(176x144)	11830 (cycles)
imgfastpad_gs16	cropping, VGA (640x480)->QCIF(176x144)	15063 (cycles)
imgfastpad_gs16	cropping, CIF (352x288)->QVGA(320x240)	28186 (cycles)
imgfastpad_gs16	cropping, VGA (640x480)->QVGA(320x240)	30683 (cycles)
imgfastpad_gs16	cropping, VGA (640x480)->CIF (352x288)	37776 (cycles)
image processing functions		
2D FFT for image data		
imgfft_gu8	64x64	62829 (cycles)
imgfft_gu8	128x128	233460 (cycles)
imgfft_gu8	256x256	895363 (cycles)
imgfft_gu8	512x512	3575264 (cycles)
imgfft_gu8	SQCIF(128x96)	181637 (cycles)
imgfft_gu8	QCIF(176x144)	505109 (cycles)
imgfft_gu8	QVGA(320x240)	1214824 (cycles)
imgfft_gu8	CIF (352x288)	1888859 (cycles)
imgfft_gu8	VGA (640x480)	4740125 (cycles)
imgfft_gs8	64x64	63726 (cycles)
imgfft_gs8	128x128	235893 (cycles)
imgfft_gs8	256x256	903429 (cycles)
imgfft_gs8	512x512	3603169 (cycles)
imgfft_gs8	SQCIF(128x96)	183525 (cycles)
imgfft_gs8	QCIF(176x144)	508326 (cycles)
imgfft_gs8	QVGA(320x240)	1223703 (cycles)
imgfft_gs8	CIF (352x288)	1900334 (cycles)
imgfft_gs8	VGA (640x480)	4772607 (cycles)
imgfft_gs16	64x64	62955 (cycles)
imgfft_gs16	128x128	235250 (cycles)
imgfft_gs16	256x256	905090 (cycles)
imgfft_gs16	512x512	3619294 (cycles)
imgfft_gs16	SQCIF(128x96)	182978 (cycles)
imgfft_gs16	QCIF(176x144)	508273 (cycles)
imgfft_gs16	QVGA(320x240)	1226820 (cycles)
imgfft_gs16	CIF (352x288)	1904986 (cycles)
imgfft_gs16	VGA (640x480)	4792925 (cycles)
imgifft_gu8	64x64	66970 (cycles)
imgifft_gu8	128x128	243375 (cycles)
imgifft_gu8	256x256	920990 (cycles)
imgifft_gu8	512x512	3651001 (cycles)
imgifft_gu8	SQCIF(128x96)	189307 (cycles)
imgifft_gu8	QCIF(176x144)	519362 (cycles)
imgifft_gu8	QVGA(320x240)	1252210 (cycles)
imgifft_gu8	CIF (352x288)	1930247 (cycles)
imgifft_gu8	VGA (640x480)	4842634 (cycles)
imgifft_gs8	64x64	66652 (cycles)
imgifft_gs8	128x128	243762 (cycles)
imgifft_gs8	256x256	925857 (cycles)
imgifft_gs8	512x512	3677118 (cycles)
imgifft_gs8	SQCIF(128x96)	189596 (cycles)
imgifft_gs8	QCIF(176x144)	520661 (cycles)
imgifft_gs8	QVGA(320x240)	1258695 (cycles)
imgifft_gs8	CIF (352x288)	1939178 (cycles)
imgifft_gs8	VGA (640x480)	4874797 (cycles)
imgifft_gs16	64x64	64471 (cycles)
imgifft_gs16	128x128	235309 (cycles)
imgifft_gs16	256x256	892572 (cycles)
imgifft_gs16	512x512	3545015 (cycles)
imgifft_gs16	SQCIF(128x96)	183255 (cycles)
imgifft_gs16	QCIF(176x144)	507696 (cycles)

Function name	Invocation parameters	Cycles Measurements
		R12020.4, HiFi4 with VFPU, bd5
imgifft_gsl6	QVGA (320x240)	1219810 (cycles)
imgifft_gsl6	CIF (352x288)	1887909 (cycles)
imgifft_gsl6	VGA (640x480)	4720232 (cycles)

Functions Code and Data Size

Detailed code/data size information might be taken by `xt-size` and `xt-nm` utilities from Cadence toolchain. The spreadsheet below summarizes that information in a one table.

Most modules are located in a one file and are not referencing to other modules, so code/data size for such modules is defined by number from the second column. However, some modules (i.e. FFTs) may share common data/functions. So, they are referenced to another modules and total code/data size usage will be defined by the sum of corresponding cells from the second column.

Object file	Code size	Data size	Symbols	
			Global	Referenced
bqriir16x16_df1_hifi4.o	1734		bqriir16x16_df1, bqriir16x16_df1_alloc, bqriir16x16_df1_groupDelay, bqriir16x16_df1_init	
bqriir16x16_df1_nd_hifi4.o	1983		bqriir16x16_df1_nd, bqriir16x16_df1_nd_alloc, bqriir16x16_df1_nd_groupDelay, bqriir16x16_df1_nd_init	
bqriir16x16_df2_hifi4.o	1918		bqriir16x16_df2, bqriir16x16_df2_alloc, bqriir16x16_df2_groupDelay, bqriir16x16_df2_init	
bqriir16x16_df2_nd_hifi4.o	1955		bqriir16x16_df2_nd, bqriir16x16_df2_nd_alloc, bqriir16x16_df2_nd_groupDelay, bqriir16x16_df2_nd_init	
bqriir32x16_df1_hifi4.o	49		bqriir32x16_df1_alloc, bqriir32x16_df1_groupDelay, bqriir32x16_df1_init	bqriir32x16_df1_nd_alloc, bqriir32x16_df1_nd_init
bqriir32x16_df1_process_hifi4.o	25		bqriir32x16_df1	bqriir32x16_df1_nd
bqriir32x16_df2_hifi4.o	49		bqriir32x16_df2_alloc, bqriir32x16_df2_groupDelay, bqriir32x16_df2_init	bqriir32x16_df2_nd_alloc, bqriir32x16_df2_nd_init
bqriir32x16_df2_process_hifi4.o	25		bqriir32x16_df2	bqriir32x16_df2_nd
bqriir32x32_df1_hifi4.o	49		bqriir32x32_df1_alloc, bqriir32x32_df1_groupDelay, bqriir32x32_df1_init	bqriir32x32_df1_nd_alloc, bqriir32x32_df1_nd_init
bqriir32x32_df1_process_hifi4.o	25		bqriir32x32_df1	bqriir32x32_df1_nd
bqriir32x32_df2_hifi4.o	49		bqriir32x32_df2_alloc, bqriir32x32_df2_groupDelay, bqriir32x32_df2_init	bqriir32x32_df2_nd_alloc, bqriir32x32_df2_nd_init
bqriir32x32_df2_process_hifi4.o	25		bqriir32x32_df2	bqriir32x32_df2_nd
bqriir32x16_df1_nd_hifi4.o	246		bqriir32x16_df1_nd_alloc, bqriir32x16_df1_nd_groupDelay, bqriir32x16_df1_nd_init	
bqriir32x16_df1_nd_process_hifi4.o	1485		bqriir32x16_df1_nd	
bqriir32x16_df2_nd_hifi4.o	221		bqriir32x16_df2_nd_alloc, bqriir32x16_df2_nd_groupDelay, bqriir32x16_df2_nd_init	
bqriir32x16_df2_nd_process_hifi4.o	1069		bqriir32x16_df2_nd	
bqriir32x32_df1_nd_hifi4.o	450		bqriir32x32_df1_nd_alloc, bqriir32x32_df1_nd_groupDelay, bqriir32x32_df1_nd_init	
bqriir32x32_df1_nd_process_hifi4.o	1821		bqriir32x32_df1_nd	
bqriir32x32_df2_nd_hifi4.o	158		bqriir32x32_df2_nd_alloc, bqriir32x32_df2_nd_groupDelay, bqriir32x32_df2_nd_init	

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Object file	Code size	Data size	Symbols	
			Global	Referenced
bqriir32x32_df2_nd_process_hifi4.o	1229		bqriir32x32_df2_nd	
scl_complex2invmag_hifi4.o	191		scl_complex2invmag	
scl_complex2mag_hifi4.o	273		scl_complex2mag	
vec_complex2invmag_hifi4.o	1474		vec_complex2invmag	
vec_complex2mag_hifi4.o	1676		vec_complex2mag	
fft_spectrumf_hifi4.o	1301		fft_spectrumf	
fft_spectruml6x32_hifi4.o	1873	24	fft_spectruml6x32	
fft_spectrum32x32_hifi4.o	2205	24	fft_spectrum32x32	
scl_add_32x16ef_hifi4.o	135		scl_add_32x16ef	
scl_mul_32x16ef_hifi4.o	104		scl_mul_32x16ef	
scl_mac_32x16ef_hifi4.o	194		scl_mac_32x16ef	
vec_add_32x16ef_hifi4.o	1034		vec_add_32x16ef	
vec_mul_32x16ef_hifi4.o	612		vec_mul_32x16ef	
vec_mac_32x16ef_hifi4.o	816		vec_mac_32x16ef	
vec_dot_32x16ef_hifi4.o	1244		vec_dot_32x16ef	
vec_dot_batchl6x16_fast_hifi4.o	305		vec_dot_batchl6x16_fast	
vec_dot_batchl6x16_hifi4.o	468		vec_dot_batchl6x16	
vec_dot_batch8x16_fast_hifi4.o	324		vec_dot_batch8x16_fast	
vec_dot_batch8x16_hifi4.o	2346		vec_dot_batch8x16	
vec_dot_batch8x8_fast_hifi4.o	308		vec_dot_batch8x8_fast	
vec_dot_batch8x8_hifi4.o	8018		vec_dot_batch8x8	
vec_dot_batchf_fast_hifi4.o	365		vec_dot_batchf_fast	
vec_dot_batchf_hifi4.o	876		vec_dot_batchf	
dct_16x16_cffts_hifi4.o	1754	16	NatureDSP_Signal_522, NatureDSP_Signal_847	
dct_16x16_hifi4.o	1051		dct_16x16	NatureDSP_Signal_522, NatureDSP_Signal_847
dct_32x16_cffts_hifi4.o	1528	16	NatureDSP_Signal_016, NatureDSP_Signal_521	
dct_32x16_hifi4.o	434		dct_32x16	NatureDSP_Signal_016, NatureDSP_Signal_521
dct_32x32_cffts_hifi4.o	1466	24	NatureDSP_Signal_520, NatureDSP_Signal_848	
dct_32x32_hifi4.o	511		dct_32x32	NatureDSP_Signal_520, NatureDSP_Signal_848
dct4_32x16_hifi4.o	4666		dct4_32x16	
dct4_32x32_hifi4.o	4753		dct4_32x32	
dct2d_8x16_hifi4.o	966	52	dct2d_16_8, dct2d_8x16	
idct2d_16x8_hifi4.o	1339	52	idct2d_16_8, idct2d_16x8	
dctf_hifi4.o	1389	4	dctf	fft_cplx_ie
fft_cplx_16x16_hifi4.o	350		fft_cplx16x16	NatureDSP_Signal_523, NatureDSP_Signal_524
fft_cplx_16x16_stages_scl2_r2_r3_r5_hifi4.o	5134	32	NatureDSP_Signal_509, NatureDSP_Signal_511, NatureDSP_Signal_572, NatureDSP_Signal_573, NatureDSP_Signal_577, NatureDSP_Signal_579	divsi3
fft_cplx_16x16_stages_scl2_r4_r8_hifi4.o	7659	216	NatureDSP_Signal_510, NatureDSP_Signal_524, NatureDSP_Signal_563, NatureDSP_Signal_566, NatureDSP_Signal_567, NatureDSP_Signal_571, NatureDSP_Signal_578, NatureDSP_Signal_970, NatureDSP_Signal_971, NatureDSP_Signal_973	divsi3, NatureDSP_Signal_509, NatureDSP_Signal_511, NatureDSP_Signal_572, NatureDSP_Signal_573, NatureDSP_Signal_577, NatureDSP_Signal_579
fft_cplx_16x16_stages_scl3_r2_r3_r5_hifi4.o	4148	32	NatureDSP_Signal_506, NatureDSP_Signal_508, NatureDSP_Signal_569, NatureDSP_Signal_570, NatureDSP_Signal_574, NatureDSP_Signal_576	divsi3
fft_cplx_16x16_stages_scl3_r4_r8_hifi4.o	4620	104	NatureDSP_Signal_507, NatureDSP_Signal_523, NatureDSP_Signal_562, NatureDSP_Signal_564, NatureDSP_Signal_565, NatureDSP_Signal_568, NatureDSP_Signal_575	divsi3, NatureDSP_Signal_506, NatureDSP_Signal_508, NatureDSP_Signal_569, NatureDSP_Signal_570, NatureDSP_Signal_574, NatureDSP_Signal_576
fft_cplx_32x16_hifi4.o	357		fft_cplx32x16	NatureDSP_Signal_518, NatureDSP_Signal_519
fft_cplx_32x16_stages_scl2_r2_r3_r5_hifi4.o	5672		NatureDSP_Signal_502, NatureDSP_Signal_504, NatureDSP_Signal_505, NatureDSP_Signal_539, NatureDSP_Signal_541, NatureDSP_Signal_542, NatureDSP_Signal_548, NatureDSP_Signal_551, NatureDSP_Signal_552, NatureDSP_Signal_557, NatureDSP_Signal_559, NatureDSP_Signal_560	divsi3
fft_cplx_32x16_stages_scl2_r4_r8_hifi4.o	3950	104	NatureDSP_Signal_503, NatureDSP_Signal_519, NatureDSP_Signal_532, NatureDSP_Signal_538, NatureDSP_Signal_540, NatureDSP_Signal_549, NatureDSP_Signal_550, NatureDSP_Signal_558	divsi3, NatureDSP_Signal_502, NatureDSP_Signal_504, NatureDSP_Signal_505, NatureDSP_Signal_539, NatureDSP_Signal_541,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_542, NatureDSP_Signal_548, NatureDSP_Signal_551, NatureDSP_Signal_552, NatureDSP_Signal_557, NatureDSP_Signal_559, NatureDSP_Signal_560
fft_cplx_32x16_stages_scl3_r2_r3_r5_hifi4.o	4874		NatureDSP_Signal_498, NatureDSP_Signal_500, NatureDSP_Signal_501, NatureDSP_Signal_534, NatureDSP_Signal_536, NatureDSP_Signal_537, NatureDSP_Signal_543, NatureDSP_Signal_546, NatureDSP_Signal_547, NatureDSP_Signal_553, NatureDSP_Signal_555, NatureDSP_Signal_556	divsi3
fft_cplx_32x16_stages_scl3_r4_r8_hifi4.o	3250	104	NatureDSP_Signal_499, NatureDSP_Signal_518, NatureDSP_Signal_531, NatureDSP_Signal_533, NatureDSP_Signal_535, NatureDSP_Signal_544, NatureDSP_Signal_545, NatureDSP_Signal_554	_divsi3, NatureDSP_Signal_498, NatureDSP_Signal_500, NatureDSP_Signal_501, NatureDSP_Signal_534, NatureDSP_Signal_536, NatureDSP_Signal_537, NatureDSP_Signal_543, NatureDSP_Signal_546, NatureDSP_Signal_547, NatureDSP_Signal_553, NatureDSP_Signal_555, NatureDSP_Signal_556
fft_cplx_32x32_hifi4.o	334		fft_cplx32x32	
fft_cplx_stages_S2_radix2_3_5_32x32_hifi4.o	5193		NatureDSP_Signal_341, NatureDSP_Signal_342, NatureDSP_Signal_343, NatureDSP_Signal_344, NatureDSP_Signal_345, NatureDSP_Signal_346, NatureDSP_Signal_350, NatureDSP_Signal_351, NatureDSP_Signal_352, NatureDSP_Signal_353, NatureDSP_Signal_354, NatureDSP_Signal_355, NatureDSP_Signal_356, NatureDSP_Signal_359, NatureDSP_Signal_360	divsi3
fft_cplx_stages_S2_radix4_8_3_2x32_hifi4.o	4764	24	NatureDSP_Signal_347, NatureDSP_Signal_348, NatureDSP_Signal_349, NatureDSP_Signal_357, NatureDSP_Signal_358, NatureDSP_Signal_415, NatureDSP_Signal_417, NatureDSP_Signal_418, NatureDSP_Signal_419	divsi3
fft_cplx_stages_S3_radix2_3_5_32x32_hifi4.o	4279		NatureDSP_Signal_361, NatureDSP_Signal_362, NatureDSP_Signal_363, NatureDSP_Signal_364, NatureDSP_Signal_365, NatureDSP_Signal_366, NatureDSP_Signal_370, NatureDSP_Signal_371, NatureDSP_Signal_372, NatureDSP_Signal_374, NatureDSP_Signal_375, NatureDSP_Signal_376, NatureDSP_Signal_377, NatureDSP_Signal_380, NatureDSP_Signal_381	divsi3
fft_cplx_stages_S3_radix4_8_3_2x32_hifi4.o	4375	32	NatureDSP_Signal_367, NatureDSP_Signal_368, NatureDSP_Signal_369, NatureDSP_Signal_373, NatureDSP_Signal_378, NatureDSP_Signal_379, NatureDSP_Signal_420, NatureDSP_Signal_421, NatureDSP_Signal_422	divsi3
fft_real_16x16_hifi4.o	1173		fft_reall6x16	fft_cplx16x16
fft_real_32x16_hifi4.o	389		fft_real32x16	fft_cplx32x16
fft_real_32x32_hifi4.o	949		fft_real32x32	
ifft_cplx_16x16_hifi4.o	339		ifft_cplx16x16	NatureDSP_Signal_523, NatureDSP_Signal_524
ifft_cplx_32x16_hifi4.o	354		ifft_cplx32x16	NatureDSP_Signal_518, NatureDSP_Signal_519
ifft_cplx_32x32_hifi4.o	319		ifft_cplx32x32	
ifft_real_16x16_hifi4.o	1529		ifft_reall6x16	ifft_cplx16x16
ifft_real_32x16_hifi4.o	661		ifft_real32x16	NatureDSP_Signal_518, NatureDSP_Signal_519
ifft_real_32x32_hifi4.o	798		ifft_real32x32	
fft_cplx16x16_ie_hifi4.o	1699		fft_cplx16x16_ie	_divsi3, NatureDSP_Signal_340
fft_cplx32x16_ie_hifi4.o	2489		fft_cplx32x16_ie	
fft_cplx32x32_ie_hifi4.o	377		fft_cplx32x32_ie	NatureDSP_Signal_341, NatureDSP_Signal_348, NatureDSP_Signal_349, NatureDSP_Signal_363, NatureDSP_Signal_368, NatureDSP_Signal_369, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_reall6x16_ie_hifi4.o	657		fft_reall6x16_ie	fft_cplx16x16_ie

Object file	Code size	Data size	Symbols	
			Global	Referenced
fft_real32x16_ie_hifi4.o	565		fft_real32x16_ie	fft_cplx32x16_ie
fft_real32x32_ie_hifi4.o	519		fft_real32x32_ie	fft_cplx32x32_ie
fft_stage_inner_DFT4_16x16_ie_hifi4.o	644		NatureDSP_Signal_340	divsi3
ifft_cplx16x16_ie_hifi4.o	1626		ifft_cplx16x16_ie	_divsi3, NatureDSP_Signal_340
ifft_cplx32x16_ie_hifi4.o	2631		ifft_cplx32x16_ie	
				NatureDSP_Signal_341, NatureDSP_Signal_349, NatureDSP_Signal_358, NatureDSP_Signal_363, NatureDSP_Signal_369, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_421
ifft_cplx32x32_ie_hifi4.o	377		ifft_cplx32x32_ie	
ifft_real16x16_ie_hifi4.o	704		ifft_real16x16_ie	ifft_cplx16x16_ie
ifft_real32x16_ie_hifi4.o	561		ifft_real32x16_ie	ifft_cplx32x16_ie
ifft_real32x32_ie_hifi4.o	439		ifft_real32x32_ie	ifft_cplx32x32_ie
fft_cplx16_ie_hifi4.o	1955	4	fft_cplx16_ie	
fft_real16_ie_hifi4.o	783		fft_real16_ie	fft_cplx16_ie
ifft_cplx32_ie_hifi4.o	1883	4	ifft_cplx32_ie	
ifft_real32_ie_hifi4.o	794		ifft_real32_ie	ifft_cplx32_ie
stereo_fft_cplx16x16_ie_hifi4.o	2162		stereo_fft_cplx16x16_ie	
stereo_fft_cplx32x16_ie_hifi4.o	608		stereo_fft_cplx32x16_ie	NatureDSP_Signal_800
stereo_fft_cplx32x32_ie_hifi4.o	969		stereo_fft_cplx32x32_ie	NatureDSP_Signal_801, NatureDSP_Signal_802
stereo_fft_cplx16_ie_hifi4.o	1215		stereo_fft_cplx16_ie	
stereo_ifft_cplx16x16_ie_hifi4.o	2121		stereo_ifft_cplx16x16_ie	
stereo_ifft_cplx32x16_ie_hifi4.o	1000		stereo_ifft_cplx32x16_ie	NatureDSP_Signal_800
stereo_ifft_cplx32x32_ie_hifi4.o	1403		stereo_ifft_cplx32x32_ie	NatureDSP_Signal_801, NatureDSP_Signal_802
stereo_ifft_cplx16_ie_hifi4.o	1336		stereo_ifft_cplx16_ie	
stereo_fft_cplx32x16_ie_inner_hifi4.o	2509		NatureDSP_Signal_800	
stereo_fft_cplx32x32_ie_inner_hifi4.o	2204		NatureDSP_Signal_801, NatureDSP_Signal_802	
imdct_32x16_hifi4.o	247		imdct_32x16	dct4_32x16
imdct_32x32_hifi4.o	247		imdct_32x32	dct4_32x32
mdct_32x16_hifi4.o	143		mdct_32x16	dct4_32x16
mdct_32x32_hifi4.o	148		mdct_32x32	dct4_32x32
conv2d_11x7_16x16_hifi4.o	1189		conv2d_11x7_16x16, conv2d_11x7_16x16_getScratchSize	
conv2d_11x7_8x16_hifi4.o	102		conv2d_11x7_8x16, conv2d_11x7_8x16_getScratchSize	conv2d_11x7_16x16, conv2d_11x7_16x16_getScratchSize
conv2d_11x7_8x8_hifi4.o	1406		conv2d_11x7_8x8, conv2d_11x7_8x8_getScratchSize	
conv2d_3x3_16x16_hifi4.o	509		conv2d_3x3_16x16, conv2d_3x3_16x16_getScratchSize	
conv2d_3x3_8x16_hifi4.o	92		conv2d_3x3_8x16, conv2d_3x3_8x16_getScratchSize	conv2d_3x3_16x16, conv2d_3x3_16x16_getScratchSize
conv2d_3x3_8x8_hifi4.o	753		conv2d_3x3_8x8, conv2d_3x3_8x8_getScratchSize	
conv2d_5x5_16x16_hifi4.o	1270		conv2d_5x5_16x16, conv2d_5x5_16x16_getScratchSize	
conv2d_5x5_8x16_hifi4.o	138		conv2d_5x5_8x16, conv2d_5x5_8x16_getScratchSize	conv2d_5x5_16x16, conv2d_5x5_16x16_getScratchSize
conv2d_5x5_8x8_hifi4.o	1581		conv2d_5x5_8x8, conv2d_5x5_8x8_getScratchSize	
conv2d_11x7f_hifi4.o	1163		conv2d_11x7f, conv2d_11x7f_getScratchSize	
conv2d_3x3f_hifi4.o	3805		conv2d_3x3f, conv2d_3x3f_getScratchSize	
conv2d_5x5f_hifi4.o	7164		conv2d_5x5f, conv2d_5x5f_getScratchSize	
stereo_bkfir16x16_hifi4.o	105		stereo_bkfir16x16_alloc, stereo_bkfir16x16_init	bkfir16x16_alloc, bkfir16x16_init
stereo_bkfir16x16_process_hifi4.o	570		stereo_bkfir16x16_process	bkfir16x16_process
stereo_bkfir32x32_hifi4.o	250		stereo_bkfir32x32_alloc, stereo_bkfir32x32_init	
stereo_bkfir32x32_process_hifi4.o	514		stereo_bkfir32x32_process	

Object file	Code size	Data size	Symbols	
			Global	Referenced
stereo_bqriir16x16_df1_hifi4.o	157		stereo_bqriir16x16_df1_alloc, stereo_bqriir16x16_df1_groupDelay, stereo_bqriir16x16_df1_init	bqriir16x16_df1_alloc, bqriir16x16_df1_init
stereo_bqriir16x16_df1_process_hifi4.o	629		stereo_bqriir16x16_df1	bqriir16x16_df1
stereo_bqriir32x16_df1_hifi4.o	65		stereo_bqriir32x16_df1_alloc, stereo_bqriir32x16_df1_groupDelay, stereo_bqriir32x16_df1_init	stereo_bqriir32x16_df1_nd_alloc, stereo_bqriir32x16_df1_nd_init
stereo_bqriir32x16_df1_process_hifi4.o	25		stereo_bqriir32x16_df1	stereo_bqriir32x16_df1_nd
stereo_bqriir32x32_df1_hifi4.o	65		stereo_bqriir32x32_df1_alloc, stereo_bqriir32x32_df1_groupDelay, stereo_bqriir32x32_df1_init	stereo_bqriir32x32_df1_nd_alloc, stereo_bqriir32x32_df1_nd_init
stereo_bqriir32x32_df1_process_hifi4.o	25		stereo_bqriir32x32_df1	stereo_bqriir32x32_df1_nd
stereo_bqriirf_df1_hifi4.o	234		stereo_bqriirf_df1_alloc, stereo_bqriirf_df1_groupDelay, stereo_bqriirf_df1_init	
stereo_bqriirf_df1_process_hifi4.o	1711		stereo_bqriirf_df1	
stereo_bqriir16x16_df1_nd_hifi4.o	149		stereo_bqriir16x16_df1_nd_alloc, stereo_bqriir16x16_df1_nd_groupDelay, stereo_bqriir16x16_df1_nd_init	bqriir16x16_df1_nd_alloc, bqriir16x16_df1_nd_init
stereo_bqriir16x16_df1_nd_process_hifi4.o	629		stereo_bqriir16x16_df1_nd	bqriir16x16_df1_nd
stereo_bqriir32x16_df1_nd_hifi4.o	390		stereo_bqriir32x16_df1_nd_alloc, stereo_bqriir32x16_df1_nd_groupDelay, stereo_bqriir32x16_df1_nd_init	
stereo_bqriir32x16_df1_nd_process_hifi4.o	1757		stereo_bqriir32x16_df1_nd	
stereo_bqriir32x32_df1_nd_hifi4.o	815		stereo_bqriir32x32_df1_nd_alloc, stereo_bqriir32x32_df1_nd_groupDelay, stereo_bqriir32x32_df1_nd_init	
stereo_bqriir32x32_df1_nd_process_hifi4.o	1184		stereo_bqriir32x32_df1_nd	
stereo_bqriirf_df1_nd_hifi4.o	226		stereo_bqriirf_df1_nd_alloc, stereo_bqriirf_df1_nd_groupDelay, stereo_bqriirf_df1_nd_init	
stereo_bqriirf_df1_nd_process_hifi4.o	1795		stereo_bqriirf_df1_nd	
stereo_bkfirf_hifi4.o	105		stereo_bkfirf_alloc, stereo_bkfirf_init	bkfirf_alloc, bkfirf_init
stereo_bkfirf_process_hifi4.o	317		stereo_bkfirf_process	bkfirf_process
bkfir24x24p_hifi4.o	296		bkfir24x24p_alloc, bkfir24x24p_init	
bkfir24x24p_process_hifi4.o	723		bkfir24x24p_process	
bkfir16x16_hifi4.o	880		bkfir16x16_alloc, bkfir16x16_init, bkfir16x16_process	
bkfir32x16_hifi4.o	346		bkfir32x16_alloc, bkfir32x16_init	NatureDSP_Signal_803, NatureDSP_Signal_804, NatureDSP_Signal_805
bkfir32x16_process_hifi4.o	1514		bkfir32x16_process, NatureDSP_Signal_803, NatureDSP_Signal_804, NatureDSP_Signal_805	
bkfir32x32ep_hifi4.o	239		bkfir32x32ep_alloc, bkfir32x32ep_init	
bkfir32x32ep_process_hifi4.o	328		bkfir32x32ep_process	
bkfir32x32_hifi4.o	225		bkfir32x32_alloc, bkfir32x32_init	
bkfir32x32_process_hifi4.o	679		bkfir32x32_process	
bkfira16x16_hifi4.o	1521		bkfira16x16_alloc, bkfira16x16_init, bkfira16x16_process	
bkfira32x16_hifi4.o	363		bkfira32x16_alloc, bkfira32x16_init	
bkfira32x16_process_hifi4.o	759		bkfira32x16_process	
bkfira32x32ep_hifi4.o	359		bkfira32x32ep_alloc, bkfira32x32ep_init	
bkfira32x32ep_process_hifi4.o	705		bkfira32x32ep_process	
bkfira32x32_hifi4.o	359		bkfira32x32_alloc, bkfira32x32_init	
bkfira32x32_process_hifi4.o	554		bkfira32x32_process	
cxfir16x16_hifi4.o	667		cxfir16x16_alloc, cxfir16x16_init, cxfir16x16_process	
cxfir32x16_hifi4.o	228		cxfir32x16_alloc, cxfir32x16_init	
cxfir32x16_process_hifi4.o	447		cxfir32x16_process	
cxfir32x32ep_hifi4.o	267		cxfir32x32ep_alloc, cxfir32x32ep_init	
cxfir32x32ep_process_hifi4.o	307		cxfir32x32ep_process	
cxfir32x32_hifi4.o	267		cxfir32x32_alloc, cxfir32x32_init	
cxfir32x32_process_hifi4.o	316		cxfir32x32_process	
bkfiraf_hifi4.o	158		bkfiraf_alloc, bkfiraf_init	
bkfiraf_process_hifi4.o	684		bkfiraf_process	

Object file	Code size	Data size	Symbols	
			Global	Referenced
bkf1rf hifi4.o	153		bkf1rf alloc, bkf1rf init	
bkf1rf process hifi4.o	306		bkf1rf process	
cx1rf hifi4.o	154		cx1rf alloc, cx1rf init	
cx1rf process hifi4.o	256		cx1rf process	
firdec16x16 D2 hifi4.o	313		NatureDSP Signal 400	
firdec16x16 D3 hifi4.o	295		NatureDSP Signal 401	
firdec16x16 D4 hifi4.o	318		NatureDSP Signal 402	
firdec16x16 DX hifi4.o	319		NatureDSP Signal 403	
firdec16x16 hifi4.o	468		firdec16x16_alloc, firdec16x16_init, firdec16x16_process	NatureDSP_Signal_400, NatureDSP_Signal_401, NatureDSP_Signal_402, NatureDSP_Signal_403
firdec32x16 D2 hifi4.o	383		NatureDSP Signal 423	
firdec32x16 D3 hifi4.o	455		NatureDSP Signal 424	
firdec32x16 D4 hifi4.o	613		NatureDSP Signal 425	
firdec32x16 DX hifi4.o	317		NatureDSP Signal 426	
firdec32x16 hifi4.o	465		firdec32x16_alloc, firdec32x16_init, firdec32x16_process	NatureDSP_Signal_423, NatureDSP_Signal_424, NatureDSP_Signal_425, NatureDSP_Signal_426
firdec32x32ep D2 hifi4.o	360		NatureDSP Signal 193	
firdec32x32ep D3 hifi4.o	546		NatureDSP Signal 194	
firdec32x32ep D4 hifi4.o	402		NatureDSP Signal 195	
firdec32x32ep DX hifi4.o	408		NatureDSP Signal 196	
firdec32x32ep hifi4.o	486		firdec32x32ep_alloc, firdec32x32ep_init, firdec32x32ep_process	NatureDSP_Signal_193, NatureDSP_Signal_194, NatureDSP_Signal_195, NatureDSP_Signal_196
firdec32x32 D2 hifi4.o	279		NatureDSP Signal 396	
firdec32x32 D3 hifi4.o	498		NatureDSP Signal 397	
firdec32x32 D4 hifi4.o	451		NatureDSP Signal 398	
firdec32x32 DX hifi4.o	328		NatureDSP Signal 399	
firdec32x32 hifi4.o	454		firdec32x32_alloc, firdec32x32_init, firdec32x32_process	NatureDSP_Signal_396, NatureDSP_Signal_397, NatureDSP_Signal_398, NatureDSP_Signal_399
firdecf hifi4.o	297	12	firdecf alloc, firdecf init, firdecf process	NatureDSP_Signal_214, NatureDSP_Signal_215, NatureDSP_Signal_216, NatureDSP_Signal_217
fir decimaf 2x hifi4.o	315		NatureDSP Signal 214	
fir decimaf 3x hifi4.o	566		NatureDSP Signal 215	
fir decimaf 4x hifi4.o	410		NatureDSP Signal 216	
fir decimaf Dx hifi4.o	294		NatureDSP Signal 217	
firinterp16x16 D2 hifi4.o	335		NatureDSP Signal 392	
firinterp16x16 D3 hifi4.o	525		NatureDSP Signal 393	
firinterp16x16 D4 hifi4.o	380		NatureDSP Signal 394	
firinterp16x16 DX hifi4.o	696		NatureDSP Signal 395	
firinterp16x16 hifi4.o	498		firinterp16x16_alloc, firinterp16x16_init, firinterp16x16_process	NatureDSP_Signal_392, NatureDSP_Signal_393, NatureDSP_Signal_394, NatureDSP_Signal_395
firinterp32x16 D2 hifi4.o	913		NatureDSP Signal 427	
firinterp32x16 D3 hifi4.o	1467		NatureDSP Signal 428	
firinterp32x16 D4 hifi4.o	1060		NatureDSP Signal 429	
firinterp32x16 DX hifi4.o	555		NatureDSP Signal 430	
firinterp32x16 hifi4.o	623		firinterp32x16_alloc, firinterp32x16_init, firinterp32x16_process	NatureDSP_Signal_427, NatureDSP_Signal_428, NatureDSP_Signal_429, NatureDSP_Signal_430
firinterp32x32ep D2 hifi4.o	540		NatureDSP Signal 184	
firinterp32x32ep D3 hifi4.o	454		NatureDSP Signal 185	
firinterp32x32ep D4 hifi4.o	495		NatureDSP Signal 186	
firinterp32x32ep DX hifi4.o	485		NatureDSP Signal 183	
firinterp32x32ep hifi4.o	484		firinterp32x32ep_alloc, firinterp32x32ep_init, firinterp32x32ep_process	NatureDSP_Signal_183, NatureDSP_Signal_184, NatureDSP_Signal_185, NatureDSP_Signal_186
firinterp32x32 D2 hifi4.o	506		NatureDSP Signal 388	
firinterp32x32 D3 hifi4.o	462		NatureDSP Signal 389	
firinterp32x32 D4 hifi4.o	462		NatureDSP Signal 390	
firinterp32x32 DX hifi4.o	469		NatureDSP Signal 391	
firinterp32x32 hifi4.o	484		firinterp32x32_alloc, firinterp32x32_init, firinterp32x32_process	NatureDSP_Signal_388, NatureDSP_Signal_389, NatureDSP_Signal_390, NatureDSP_Signal_391

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Object file	Code size	Data size	Symbols	
			Global	Referenced
firinterpfi_hifi4.o	443	12	firinterpfi_alloc, firinterpfi_init, firinterpfi_process	NatureDSP_Signal_218, NatureDSP_Signal_219, NatureDSP_Signal_220, NatureDSP_Signal_221
fir_interpf_2x_hifi4.o	304		NatureDSP_Signal_218	
fir_interpf_3x_hifi4.o	331		NatureDSP_Signal_219	
fir_interpf_4x_hifi4.o	405		NatureDSP_Signal_220	
fir_interpf_Dx_hifi4.o	388		NatureDSP_Signal_221	
cxfir_conv32x16_hifi4.o	305		cxfir_conv32x16	
cxfir_conv32x16_hifi4.o	1082		cxfir_conv32x16	
fir_acorr16x16_hifi4.o	25		fir_acorr16x16	fir_xcorr16x16
fir_acorr32x32ep_hifi4.o	257		fir_acorr32x32ep	
fir_acorr32x32_hifi4.o	25		fir_acorr32x32	fir_xcorr32x32
fir_acorr16x16_hifi4.o	279		fir_acorr16x16	NatureDSP_Signal_382
fir_acorr32x32ep_hifi4.o	178		fir_acorr32x32ep	fir_xcorr32x32ep, NatureDSP_Signal_187
fir_acorr32x32_hifi4.o	178		fir_acorr32x32	fir_xcorr32x32, NatureDSP_Signal_383
fir_blms16x16_hifi4.o	1446		fir_blms16x16	
fir_blms16x32_hifi4.o	1101		fir_blms16x32	NatureDSP_Signal_008
fir_blms32x32ep_hifi4.o	869		fir_blms32x32ep	NatureDSP_Signal_008
fir_blms32x32_hifi4.o	1152		fir_blms32x32	NatureDSP_Signal_008
cxfir_blms32x32_hifi4.o	616		cxfir_blms32x32	NatureDSP_Signal_008
fir_conv16x16_hifi4.o	675		fir_conv16x16	
fir_conv32x16_hifi4.o	1355		fir_conv32x16	
fir_conv32x32ep_hifi4.o	331		fir_conv32x32ep	
fir_conv32x32_hifi4.o	439		fir_conv32x32	
fir_conv32x16_hifi4.o	312		fir_conv32x16	NatureDSP_Signal_382
fir_conv32x32ep_hifi4.o	339		fir_conv32x32ep	NatureDSP_Signal_449
fir_conv32x32_hifi4.o	317		fir_conv32x32	NatureDSP_Signal_187
fir_lacorr16x16_hifi4.o	295		fir_lacorr16x16	NatureDSP_Signal_383
fir_lacorr32x32_hifi4.o	1288		fir_lacorr32x32	
fir_lconv32x16_hifi4.o	764		fir_lconv32x16	
fir_lconv32x32ep_hifi4.o	238		fir_lconv32x32ep	NatureDSP_Signal_384
fir_lconv32x32_hifi4.o	246		fir_lconv32x32	NatureDSP_Signal_385
fir_lxcorr16x16_hifi4.o	235		fir_lxcorr16x16	NatureDSP_Signal_384
fir_lxcorr32x32_hifi4.o	218		fir_lxcorr32x32	NatureDSP_Signal_385
fir_xcorr16x16_hifi4.o	661		fir_xcorr16x16	
fir_xcorr32x16_hifi4.o	1049		fir_xcorr32x16	
fir_xcorr32x32ep_hifi4.o	278		fir_xcorr32x32ep	
fir_xcorr32x32_hifi4.o	343		fir_xcorr32x32	
cxfir_xcorr32x32_hifi4.o	213		cxfir_xcorr32x32	
cxfir_xcorr32x32ep_hifi4.o	351		cxfir_xcorr32x32ep	
fir_xcorr16x16_hifi4.o	285		fir_xcorr16x16	NatureDSP_Signal_382
fir_xcorr32x16_hifi4.o	291		fir_xcorr32x16	NatureDSP_Signal_449
fir_xcorr32x32ep_hifi4.o	285		fir_xcorr32x32ep	NatureDSP_Signal_187
fir_xcorr32x32_hifi4.o	275		fir_xcorr32x32	NatureDSP_Signal_383
raw_corr16x16_hifi4.o	769		NatureDSP_Signal_382	
raw_corr32x16_hifi4.o	1335		NatureDSP_Signal_449	
raw_corr32x32_hifi4.o	861		NatureDSP_Signal_383	
raw_corr32x32ep_hifi4.o	466		NatureDSP_Signal_187	
raw_lxcorr16x16_hifi4.o	2496		NatureDSP_Signal_384	
raw_lxcorr32x32_hifi4.o	1400		NatureDSP_Signal_385	
cxfir_xcorr16x16_hifi4.o	427		cxfir_xcorr16x16	
cxfir_xcorr32x32_hifi4.o	236		cxfir_xcorr32x32	
fir_acorr16x16_hifi4.o	29		fir_acorr16x16	fir_xcorr16x16
fir_acorr32x32_hifi4.o	25		fir_acorr32x32	fir_xcorr32x32
fir_blmsf_hifi4.o	612		fir_blmsf	
cxfir_blmsf_hifi4.o	527		cxfir_blmsf	
fir_conv32x16_hifi4.o	331		fir_conv32x16	NatureDSP_Signal_256
fir_conv32x32_hifi4.o	265		fir_conv32x32	
fir_xcorr16x16_hifi4.o	246		fir_xcorr16x16	NatureDSP_Signal_256
fir_xcorr32x32_hifi4.o	252		fir_xcorr32x32	
raw_corr16x16_hifi4.o	501		NatureDSP_Signal_256	
vec_poly4_32x32_hifi4.o	495		vec_poly4_32x32	
vec_poly8_32x32_hifi4.o	749		vec_poly8_32x32	
vec_poly4f_hifi4.o	800		vec_poly4f	
vec_poly8f_hifi4.o	773		vec_poly8f	
latr16x16_hifi4.o	5169	36	latr16x16_alloc, latr16x16_init, latr16x16_process	
latr32x16_1_proc_hifi4.o	90		NatureDSP_Signal_431	
latr32x16_2_proc_hifi4.o	90		NatureDSP_Signal_432	
latr32x16_3_proc_hifi4.o	174		NatureDSP_Signal_433	
latr32x16_4_proc_hifi4.o	172		NatureDSP_Signal_434	

Object file	Code size	Data size	Symbols	
			Global	Referenced
latr32x16 5 proc hifi4.o	220		NatureDSP Signal 435	
latr32x16 6 proc hifi4.o	218		NatureDSP Signal 436	
latr32x16 7 proc hifi4.o	570		NatureDSP Signal 437	
latr32x16 8 proc hifi4.o	654		NatureDSP Signal 438	
latr32x16 hifi4.o	811		latr32x16_alloc, latr32x16_init, latr32x16_process	NatureDSP_Signal_431, NatureDSP_Signal_432, NatureDSP_Signal_433, NatureDSP_Signal_434, NatureDSP_Signal_435, NatureDSP_Signal_436, NatureDSP_Signal_437, NatureDSP_Signal_438, NatureDSP_Signal_439
latr32x16 X proc hifi4.o	714		NatureDSP Signal 439	
latr32x32 1 proc hifi4.o	213		NatureDSP Signal 440	
latr32x32 2 proc hifi4.o	122		NatureDSP Signal 441	
latr32x32 3 proc hifi4.o	159		NatureDSP Signal 442	
latr32x32 4 proc hifi4.o	402		NatureDSP Signal 443	
latr32x32 5 proc hifi4.o	236		NatureDSP Signal 444	
latr32x32 6 proc hifi4.o	568		NatureDSP Signal 445	
latr32x32 7 proc hifi4.o	751		NatureDSP Signal 446	
latr32x32 8 proc hifi4.o	321		NatureDSP Signal 447	
latr32x32 hifi4.o	210	36	latr32x32_alloc, latr32x32_init, latr32x32_process	NatureDSP_Signal_440, NatureDSP_Signal_441, NatureDSP_Signal_442, NatureDSP_Signal_443, NatureDSP_Signal_444, NatureDSP_Signal_445, NatureDSP_Signal_446, NatureDSP_Signal_447, NatureDSP_Signal_448
latr32x32 X proc hifi4.o	308		NatureDSP Signal 448	
bqciirf_df1 hifi4.o	191		bqciirf_df1_alloc, bqciirf_df1_groupDelay, bqciirf_df1_init	
bqciirf_df1_process hifi4.o	1671		bqciirf_df1	
bqriirf_df1 hifi4.o	300		bqriirf_df1_alloc, bqriirf_df1_groupDelay, bqriirf_df1_init	
bqriirf_df1_process hifi4.o	1660		bqriirf_df1	
bqriirf_df2t hifi4.o	255		bqriirf_df2t_alloc, bqriirf_df2t_groupDelay, bqriirf_df2t_init	
bqriirf_df2t_process hifi4.o	1941		bqriirf_df2t	
bqriirf_df2 hifi4.o	266		bqriirf_df2_alloc, bqriirf_df2_groupDelay, bqriirf_df2_init	
bqriirf_df2_process hifi4.o	1360		bqriirf_df2	
bqciirf_df1_nd hifi4.o	183		bqciirf_df1_nd_alloc, bqciirf_df1_nd_groupDelay, bqciirf_df1_nd_init	
bqciirf_df1_nd_process_hifi4.o	1735		bqciirf_df1_nd	
bqriirf_df1_nd hifi4.o	322		bqriirf_df1_nd_alloc, bqriirf_df1_nd_groupDelay, bqriirf_df1_nd_init	
bqriirf_df1_nd_process_hifi4.o	1584		bqriirf_df1_nd	
bqriirf_df2t_nd hifi4.o	397		bqriirf_df2t_nd_alloc, bqriirf_df2t_nd_groupDelay, bqriirf_df2t_nd_init	
bqriirf_df2t_nd_process_hifi4.o	1724		bqriirf_df2t_nd	
bqriirf_df2_nd hifi4.o	269		bqriirf_df2_nd_alloc, bqriirf_df2_nd_groupDelay, bqriirf_df2_nd_init	
bqriirf_df2_nd_process_hifi4.o	679		bqriirf_df2_nd	
latrf1 hifi4.o	133		NatureDSP Signal 224	
latrf2 hifi4.o	298		NatureDSP Signal 225	
latrf3 hifi4.o	484		NatureDSP Signal 226	
latrf4 hifi4.o	329		NatureDSP Signal 227	
latrf5 hifi4.o	605		NatureDSP Signal 228	
latrf6 hifi4.o	496		NatureDSP Signal 229	
latrf7 hifi4.o	880		NatureDSP Signal 230	
latrf8 hifi4.o	920		NatureDSP Signal 231	
latrfX hifi4.o	984		NatureDSP Signal 232	
latrf hifi4.o	168	32	latrf_alloc, latrf_init, latrf_process	NatureDSP_Signal_224, NatureDSP_Signal_225, NatureDSP_Signal_226,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_227, NatureDSP_Signal_228, NatureDSP_Signal_229, NatureDSP_Signal_230, NatureDSP_Signal_231, NatureDSP_Signal_232
scl_alog10 32x32 hifi4.o	117		scl_antilog10 32x32	NatureDSP_Signal_202
scl_alog2 32x32 hifi4.o	97		scl_antilog2 32x32	NatureDSP_Signal_202
scl_alogn 32x32 hifi4.o	117		scl_antilogn 32x32	NatureDSP_Signal_202
scl_atan 32x32 hifi4.o	150		scl_atan32x32	NatureDSP_Signal_012
scl_cosine 32x32 hifi4.o	115		scl_cosine32x32	NatureDSP_Signal_009
scl_divide16x16 hifi4.o	247		scl_divide16x16	
scl_divide32x32 hifi4.o	146		scl_divide32x32	
scl_divide64x32 hifi4.o	455		scl_divide64x32	
scl_log10 32x32 hifi4.o	157		scl_log10 32x32	NatureDSP_Signal_011
scl_log2 32x32 hifi4.o	134		scl_log2 32x32	NatureDSP_Signal_011
scl_logn 32x32 hifi4.o	157		scl_logn 32x32	NatureDSP_Signal_011
scl_recip16x16 hifi4.o	268		scl_recip16x16	
scl_recip32x32 hifi4.o	161		scl_recip32x32	
scl_rsqrt16x16 hifi4.o	173		scl_rsqrt16x16	
scl_rsqrt32x32 hifi4.o	218		scl_rsqrt32x32	
scl_sigmoid32x32 hifi4.o	194	20	scl_sigmoid32x32	
scl_sine 32x32 hifi4.o	115		scl_sine32x32	NatureDSP_Signal_009
scl_sqrt16x16 hifi4.o	142		scl_sqrt16x16	NatureDSP_Signal_386
scl_sqrt64x32 hifi4.o	152		scl_sqrt64x32	NatureDSP_Signal_010
scl_sqrt 32x32 hifi4.o	123		scl_sqrt32x32	NatureDSP_Signal_010
scl_tanh32x32 hifi4.o	178	20	scl_tanh32x32	
scl_tan 32x32 hifi4.o	299		scl_tan32x32	NatureDSP_Signal_008, NatureDSP_Signal_009
vec_alog10 32x32 hifi4.o	589		vec_antilog10 32x32	NatureDSP_Signal_202
vec_alog2 32x32 hifi4.o	693		vec_antilog2 32x32	NatureDSP_Signal_202
vec_alogn 32x32 hifi4.o	589		vec_antilogn 32x32	NatureDSP_Signal_202
vec_atan 32x32 hifi4.o	841		vec_atan32x32	NatureDSP_Signal_012
vec_cosine 32x32 fast hifi4.o	429		vec_cosine32x32 fast	NatureDSP_Signal_009
vec_cosine 32x32 hifi4.o	451		vec_cosine32x32	NatureDSP_Signal_009
vec_divide16x16 fast hifi4.o	968	8	vec_divide16x16 fast	
vec_divide16x16 hifi4.o	1066	8	vec_divide16x16	
vec_divide32x32 fast hifi4.o	713		vec_divide32x32 fast	
vec_divide32x32 hifi4.o	1092		vec_divide32x32	
vec_divide64x32i hifi4.o	1482		vec_divide64x32i	
vec_log10 32x32 hifi4.o	921	4	vec_log10 32x32	NatureDSP_Signal_011
vec_log2 32x32 hifi4.o	789		vec_log2 32x32	NatureDSP_Signal_011
vec_logn 32x32 hifi4.o	921	4	vec_logn 32x32	NatureDSP_Signal_011
vec_recip16x16 hifi4.o	1101	8	vec_recip16x16	
vec_recip32x32 hifi4.o	826	8	vec_recip32x32	
vec_rsqrt16x16 hifi4.o	1399		vec_rsqrt16x16	
vec_rsqrt32x32 hifi4.o	1345		vec_rsqrt32x32	
vec_sigmoid32x32 hifi4.o	902	20	vec_sigmoid32x32	
vec_sine 32x32 fast hifi4.o	423		vec_sine32x32 fast	NatureDSP_Signal_009
vec_sine 32x32 hifi4.o	544		vec_sine32x32	NatureDSP_Signal_009
vec_softmax32x32 hifi4.o	789	20	vec_softmax32x32	
vec_sqrt16x16 hifi4.o	1269		vec_sqrt16x16	NatureDSP_Signal_386
vec_sqrt64x32 hifi4.o	954		vec_sqrt64x32	NatureDSP_Signal_010
vec_sqrt 32x32 fast hifi4.o	734		vec_sqrt32x32 fast	NatureDSP_Signal_010
vec_sqrt 32x32 hifi4.o	996		vec_sqrt32x32	NatureDSP_Signal_010
vec_tanh32x32 hifi4.o	831	20	vec_tanh32x32	
vec_tan 32x32 hifi4.o	1256		vec_tan32x32	NatureDSP_Signal_008, NatureDSP_Signal_009
scl_antilog10f hifi4.o	367		scl_antilog10f	_reent_ptr, NatureDSP_Signal_206, NatureDSP_Signal_207, NatureDSP_Signal_212, NatureDSP_Signal_241, NatureDSP_Signal_244
scl_antilog2f hifi4.o	347		scl_antilog2f	_reent_ptr, NatureDSP_Signal_208, NatureDSP_Signal_212, NatureDSP_Signal_241, NatureDSP_Signal_244
scl_antilognf hifi4.o	350		scl_antilognf	_reent_ptr, NatureDSP_Signal_212, NatureDSP_Signal_213, NatureDSP_Signal_241, NatureDSP_Signal_244
scl_atan2f hifi4.o	341		scl_atan2f	_reent_ptr,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_209, NatureDSP_Signal_210, NatureDSP_Signal_241, NatureDSP_Signal_244, NatureDSP_Signal_246, NatureDSP_Signal_249
scl_atanf hifi4.o	220		scl_atanf	_reent_ptr, NatureDSP_Signal_209, NatureDSP_Signal_210, NatureDSP_Signal_241, NatureDSP_Signal_244, NatureDSP_Signal_246
scl_cosinef hifi4.o	298	24	scl_cosinef	_reent_ptr, NatureDSP_Signal_241, NatureDSP_Signal_251, NatureDSP_Signal_252, NatureDSP_Signal_253, NatureDSP_Signal_268
scl_float2int hifi4.o	31		scl_float2int	
scl_int2float hifi4.o	25		scl_int2float	
scl_log10f hifi4.o	552		scl_log10f	_reent_ptr, NatureDSP_Signal_203, NatureDSP_Signal_205, NatureDSP_Signal_241, NatureDSP_Signal_243, NatureDSP_Signal_244, NatureDSP_Signal_258
scl_log2f hifi4.o	549		scl_log2f	_reent_ptr, NatureDSP_Signal_234, NatureDSP_Signal_241, NatureDSP_Signal_243, NatureDSP_Signal_244, NatureDSP_Signal_258
scl_lognf hifi4.o	558		scl_lognf	_reent_ptr, NatureDSP_Signal_233, NatureDSP_Signal_241, NatureDSP_Signal_243, NatureDSP_Signal_244, NatureDSP_Signal_258, NatureDSP_Signal_260
scl_sinef hifi4.o	299	24	scl_sinef	_reent_ptr, NatureDSP_Signal_241, NatureDSP_Signal_251, NatureDSP_Signal_252, NatureDSP_Signal_253, NatureDSP_Signal_268
scl_tanf hifi4.o	367	24	scl_tanf	_reent_ptr, NatureDSP_Signal_241, NatureDSP_Signal_254, NatureDSP_Signal_255, NatureDSP_Signal_268
scl_tanhf hifi4.o	387		scl_tanhf	_reent_ptr, NatureDSP_Signal_479, NatureDSP_Signal_480, NatureDSP_Signal_485, NatureDSP_Signal_512
scl_reluf hifi4.o	28		scl_reluf	
scl_relu32x32 hifi4.o	17		scl_relu32x32	
scl_recip64x64 hifi4.o	314		scl_recip64x64	
scl_divide64x64 hifi4.o	388		scl_divide64x64	
scl_sqrt32x16 hifi4.o	150		scl_sqrt32x16	NatureDSP_Signal_386
scl_sigmoidf hifi4.o	290	36	scl_sigmoidf	
vec_alog10f hifi4.o	796		vec_antilog10f	NatureDSP_Signal_206, NatureDSP_Signal_207, NatureDSP_Signal_212
vec_alog2f hifi4.o	829		vec_antilog2f	NatureDSP_Signal_208, NatureDSP_Signal_212, NatureDSP_Signal_241
vec_alognf hifi4.o	831		vec_antilognf	NatureDSP_Signal_212, NatureDSP_Signal_213, NatureDSP_Signal_241
vec_atan2f hifi4.o	2233		vec_atan2f	NatureDSP_Signal_209, NatureDSP_Signal_210, NatureDSP_Signal_241, NatureDSP_Signal_244, NatureDSP_Signal_246, NatureDSP_Signal_249

Object file	Code size	Data size	Symbols	
			Global	Referenced
vec_atanf_hifi4.o	1818		vec_atanf	NatureDSP_Signal_209, NatureDSP_Signal_210, NatureDSP_Signal_244, NatureDSP_Signal_246
vec_cosinef_hifi4.o	1767	24	vec_cosinef	NatureDSP_Signal_241, NatureDSP_Signal_251, NatureDSP_Signal_252, NatureDSP_Signal_253, NatureDSP_Signal_268
vec_float2int_hifi4.o	291		vec_float2int	
vec_int2float_hifi4.o	331		vec_int2float	
vec_log10f_hifi4.o	1646	16	vec_log10f	NatureDSP_Signal_203, NatureDSP_Signal_205, NatureDSP_Signal_241, NatureDSP_Signal_243, NatureDSP_Signal_244, NatureDSP_Signal_258
vec_log2f_hifi4.o	1596	16	vec_log2f	NatureDSP_Signal_234, NatureDSP_Signal_241, NatureDSP_Signal_243, NatureDSP_Signal_244, NatureDSP_Signal_258
vec_lognf_hifi4.o	1587	16	vec_lognf	NatureDSP_Signal_233, NatureDSP_Signal_241, NatureDSP_Signal_243, NatureDSP_Signal_244, NatureDSP_Signal_258, NatureDSP_Signal_260
vec_sinef_hifi4.o	1787	24	vec_sinef	NatureDSP_Signal_241, NatureDSP_Signal_251, NatureDSP_Signal_252, NatureDSP_Signal_253, NatureDSP_Signal_268
vec_tanf_hifi4.o	2416	24	vec_tanf	NatureDSP_Signal_241, NatureDSP_Signal_254, NatureDSP_Signal_255, NatureDSP_Signal_268
vec_tanhf_hifi4.o	2492		vec_tanhf	NatureDSP_Signal_479, NatureDSP_Signal_480, NatureDSP_Signal_485, NatureDSP_Signal_512, scl_tanhf
vec_reluf_hifi4.o	180		vec_reluf	
vec_relu32x32_hifi4.o	195		vec_relu32x32	
vec_softmaxf_hifi4.o	838		vec_softmaxf	NatureDSP_Signal_243, vec_antilognf
vec_recip64x64_hifi4.o	1855		vec_recip64x64	
vec_divide64x64_hifi4.o	2618		vec_divide64x64	
vec_sqrt32x16_hifi4.o	975		vec_sqrt32x16	NatureDSP_Signal_386, scl_sqrt32x16
vec_sigmoidf_hifi4.o	1967	36	vec_sigmoidf	scl_sigmoidf
vec_pow_32x32_hifi4.o	3364		vec_pow_32x32	NatureDSP_Signal_450, NatureDSP_Signal_451, NatureDSP_Signal_452
scl_pow_32x32_hifi4.o	570		NatureDSP_Signal_452	NatureDSP_Signal_450, NatureDSP_Signal_451
vec_powf_hifi4.o	4426	72	vec_powf	NatureDSP_Signal_241, NatureDSP_Signal_244, NatureDSP_Signal_479, NatureDSP_Signal_484
scl_powf_hifi4.o	1299	36	scl_powf	_reent_ptr, NatureDSP_Signal_241, NatureDSP_Signal_244, NatureDSP_Signal_479, NatureDSP_Signal_484
mtx_inv2x2f_hifi4.o	99		mtx_inv2x2f, mtx_inv2x2f_getScratchSize	
mtx_inv3x3f_hifi4.o	394		mtx_inv3x3f, mtx_inv3x3f_getScratchSize	
mtx_inv4x4f_hifi4.o	592		mtx_inv4x4f, mtx_inv4x4f_getScratchSize	
mtx_inv6x6f_hifi4.o	810		mtx_inv6x6f, mtx_inv6x6f_getScratchSize	
mtx_inv8x8f_hifi4.o	917		mtx_inv8x8f, mtx_inv8x8f_getScratchSize	
mtx_inv10x10f_hifi4.o	1076		mtx_inv10x10f, mtx_inv10x10f_getScratchSize	
cmtx_gjelim10x10_32x32_hifi4.o	3017		cmtx_gjelim10x10_32x32, cmtx_gjelim10x10_32x32_getScratchSize	
cmtx_gjelim2x2_32x32_hifi4.o	1040		cmtx_gjelim2x2_32x32, cmtx_gjelim2x2_32x32_getScratchSize	
cmtx_gjelim3x3_32x32_hifi4.o	1232		cmtx_gjelim3x3_32x32,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			cmtx_gjelim3x3_32x32_getScratchSize	
cmtx_gjelim4x4_32x32_hifi4.o	1513		cmtx_gjelim4x4_32x32, cmtx_gjelim4x4_32x32_getScratchSize	
cmtx_gjelim6x6_32x32_hifi4.o	1997		cmtx_gjelim6x6_32x32, cmtx_gjelim6x6_32x32_getScratchSize	
cmtx_gjelim8x8_32x32_hifi4.o	2678		cmtx_gjelim8x8_32x32, cmtx_gjelim8x8_32x32_getScratchSize	
cmtx_inv10x10_32x32_hifi4.o	1727		cmtx_inv10x10_32x32, cmtx_inv10x10_32x32_getScratchSize	
cmtx_inv2x2_32x32_hifi4.o	1215		cmtx_inv2x2_32x32, cmtx_inv2x2_32x32_getScratchSize	
cmtx_inv3x3_32x32_hifi4.o	1309		cmtx_inv3x3_32x32, cmtx_inv3x3_32x32_getScratchSize	
cmtx_inv4x4_32x32_hifi4.o	1511		cmtx_inv4x4_32x32, cmtx_inv4x4_32x32_getScratchSize	
cmtx_inv6x6_32x32_hifi4.o	1449		cmtx_inv6x6_32x32, cmtx_inv6x6_32x32_getScratchSize	
cmtx_inv8x8_32x32_hifi4.o	1596		cmtx_inv8x8_32x32, cmtx_inv8x8_32x32_getScratchSize	
mtx_gjelim10x10_32x32_hifi4.o	1687		mtx_gjelim10x10_32x32, mtx_gjelim10x10_32x32_getScratchSize	
mtx_gjelim2x2_32x32_hifi4.o	238		mtx_gjelim2x2_32x32, mtx_gjelim2x2_32x32_getScratchSize	
mtx_gjelim3x3_32x32_hifi4.o	1106		mtx_gjelim3x3_32x32, mtx_gjelim3x3_32x32_getScratchSize	
mtx_gjelim4x4_32x32_hifi4.o	1214		mtx_gjelim4x4_32x32, mtx_gjelim4x4_32x32_getScratchSize	
mtx_gjelim6x6_32x32_hifi4.o	1493		mtx_gjelim6x6_32x32, mtx_gjelim6x6_32x32_getScratchSize	
mtx_gjelim8x8_32x32_hifi4.o	1502		mtx_gjelim8x8_32x32, mtx_gjelim8x8_32x32_getScratchSize	
mtx_inv10x10_32x32_hifi4.o	1450		mtx_inv10x10_32x32, mtx_inv10x10_32x32_getScratchSize	
mtx_inv2x2_32x32_hifi4.o	248		mtx_inv2x2_32x32, mtx_inv2x2_32x32_getScratchSize	
mtx_inv3x3_32x32_hifi4.o	1201		mtx_inv3x3_32x32, mtx_inv3x3_32x32_getScratchSize	
mtx_inv4x4_32x32_hifi4.o	1291		mtx_inv4x4_32x32, mtx_inv4x4_32x32_getScratchSize	
mtx_inv6x6_32x32_hifi4.o	1247		mtx_inv6x6_32x32, mtx_inv6x6_32x32_getScratchSize	
mtx_inv8x8_32x32_hifi4.o	1369		mtx_inv8x8_32x32, mtx_inv8x8_32x32_getScratchSize	
mtx_mpy16x16_fast_hifi4.o	473		mtx_mpy16x16_fast, mtx_mpy16x16_fast_getScratchSize	
mtx_mpy16x16_hifi4.o	2146		mtx_mpy16x16, mtx_mpy16x16_getScratchSize	
mtx_mpy32x32_fast_hifi4.o	480		mtx_mpy32x32_fast, mtx_mpy32x32_fast_getScratchSize	
mtx_mpy32x32_hifi4.o	2632		mtx_mpy32x32, mtx_mpy32x32_getScratchSize	
mtx_mpy8x16_fast_hifi4.o	476		mtx_mpy8x16_fast, mtx_mpy8x16_fast_getScratchSize	
mtx_mpy8x16_hifi4.o	10647		mtx_mpy8x16, mtx_mpy8x16_getScratchSize	
mtx_mpy8x8_fast_hifi4.o	637		mtx_mpy8x8_fast, mtx_mpy8x8_fast_getScratchSize	
mtx_mpy8x8_hifi4.o	10732		mtx_mpy8x8, mtx_mpy8x8_getScratchSize	
mtx_mpyt16x16_fast_hifi4.o	617		mtx_mpyt16x16_fast, mtx_mpyt16x16_fast_getScratchSize	
mtx_mpyt16x16_hifi4.o	1813		mtx_mpyt16x16, mtx_mpyt16x16_getScratchSize	
mtx_mpyt32x32_fast_hifi4.o	490		mtx_mpyt32x32_fast, mtx_mpyt32x32_fast_getScratchSize	
mtx_mpyt32x32_hifi4.o	1144		mtx_mpyt32x32, mtx_mpyt32x32_getScratchSize	
mtx_mpyt8x16_fast_hifi4.o	628		mtx_mpyt8x16_fast, mtx_mpyt8x16_fast_getScratchSize	
mtx_mpyt8x16_hifi4.o	9079		mtx_mpyt8x16, mtx_mpyt8x16_getScratchSize	
mtx_mpyt8x8_fast_hifi4.o	525		mtx_mpyt8x8_fast, mtx_mpyt8x8_fast_getScratchSize	
mtx_mpyt8x8_hifi4.o	11813		mtx_mpyt8x8, mtx_mpyt8x8_getScratchSize	
mtx_transpose16x16_fast_hifi4.o	514		mtx_transpose16x16_fast	
mtx_transpose16x16_hifi4.o	791		mtx_transpose16x16	
mtx_transpose32x32_fast_hifi4.o	150		mtx_transpose32x32_fast	
mtx_transpose32x32_hifi4.o	244		mtx_transpose32x32	
mtx_transpose8x8_fast_hifi4.o	330		mtx_transpose8x8_fast	
mtx_transpose8x8_hifi4.o	72		mtx_transpose8x8	
mtx_transposef_fast_hifi4.o	23		mtx_transposef_fast	mtx_transpose32x32_fast

Object file	Code size	Data size	Symbols	
			Global	Referenced
mtx transposef hifi4.o	23		mtx transposef	mtx transpose32x32
mtx vecmpyl6x16 fast hifi4.o	555		mtx vecmpyl6x16 fast	
mtx vecmpyl6x16 hifi4.o	1236		mtx vecmpyl6x16	
mtx vecmpy32x32 fast hifi4.o	338		mtx vecmpy32x32 fast	
mtx vecmpy32x32 hifi4.o	528		mtx vecmpy32x32	
mtx vecmpy8x16 fast hifi4.o	1127		mtx vecmpy8x16 fast	
mtx vecmpy8x16 hifi4.o	1261		mtx vecmpy8x16	
mtx vecmpy8x8 fast hifi4.o	1228		mtx vecmpy8x8 fast	
mtx vecmpy8x8 hifi4.o	2520		mtx vecmpy8x8	
mtx mpyf fast hifi4.o	372		mtx mpyf fast, mtx mpyf fast getScratchSize	
mtx mpyf hifi4.o	1288		mtx mpyf, mtx mpyf getScratchSize	
mtx mpytf fast hifi4.o	524		mtx mpytf fast, mtx mpytf fast getScratchSize	
mtx mpytf hifi4.o	2725		mtx mpytf, mtx mpytf getScratchSize	
mtx vecmpyf fast hifi4.o	296		mtx vecmpyf fast	
mtx vecmpyf hifi4.o	946		mtx vecmpyf	
scl bexp16 hifi4.o	50		scl bexp16	
scl bexp32 hifi4.o	44		scl bexp32	
vec add16x16 fast hifi4.o	151		vec add16x16 fast	
vec add16x16 hifi4.o	514		vec add16x16	
vec add32x32 fast hifi4.o	118		vec add32x32 fast	
vec add32x32 hifi4.o	151		vec add32x32	
vec bexp16 fast hifi4.o	281		vec bexp16 fast	
vec bexp16 hifi4.o	186		vec bexp16	
vec bexp32 fast hifi4.o	269		vec bexp32 fast	
vec bexp32 hifi4.o	192		vec bexp32	
vec dot16x16 fast hifi4.o	164		vec dot16x16 fast	
vec dot16x16 hifi4.o	249		vec dot16x16	
vec dot32x16 fast hifi4.o	159		vec dot32x16 fast	
vec dot32x16 hifi4.o	236	8	vec dot32x16	
vec dot32x32 fast hifi4.o	135		vec dot32x32 fast	
vec dot32x32 hifi4.o	344		vec dot32x32	
vec dot64x32 fast hifi4.o	200		vec dot64x32 fast	
vec dot64x32 hifi4.o	314		vec dot64x32	
vec dot64x64i fast hifi4.o	125		vec dot64x64i fast	
vec dot64x64i hifi4.o	168		vec dot64x64i	
vec dot64x64 fast hifi4.o	157		vec dot64x64 fast	
vec dot64x64 hifi4.o	248		vec dot64x64	
vec max 16x16 fast hifi4.o	289		vec max16x16 fast	
vec max 16x16 hifi4.o	284		vec max16x16	
vec max 32x32 fast hifi4.o	194		vec max32x32 fast	
vec max 32x32 hifi4.o	206		vec max32x32	
vec min 16x16 fast hifi4.o	239		vec min16x16 fast	
vec min 16x16 hifi4.o	284		vec min16x16	
vec min 32x32 fast hifi4.o	167		vec min32x32 fast	
vec min 32x32 hifi4.o	206		vec min32x32	
vec power16x16 fast hifi4.o	124		vec power16x16 fast	
vec power16x16 hifi4.o	185		vec power16x16	
vec power32x32 fast hifi4.o	104		vec power32x32 fast	
vec power32x32 hifi4.o	178		vec power32x32	
vec scale16x16 fast hifi4.o	119		vec scale16x16 fast	
vec scale16x16 hifi4.o	812		vec scale16x16	
vec scale32x32 fast hifi4.o	114		vec scale32x32 fast	
vec scale32x32 hifi4.o	287		vec scale32x32	
vec shift16x16 fast hifi4.o	194		vec shift16x16 fast	
vec shift16x16 hifi4.o	1400		vec shift16x16	
vec shift32x32 fast hifi4.o	124		vec shift32x32 fast	
vec shift32x32 hifi4.o	242		vec shift32x32	
scl bexpf hifi4.o	102		scl bexpf	
vec addf hifi4.o	329		vec addf	
vec bexpf hifi4.o	276		vec bexpf	
vec dotf hifi4.o	278		vec dotf	
vec maxf hifi4.o	153	4	vec maxf	
vec minf hifi4.o	165	4	vec minf	
vec powerf hifi4.o	533		vec powerf	
vec scalef hifi4.o	544		vec scalef	
vec scale_sf hifi4.o	314		vec scale_sf	
vec shiftof hifi4.o	442		vec shiftof	
alog10f tbl.o		12	NatureDSP Signal 206, NatureDSP Signal 207	
alog2f tbl.o		8	NatureDSP Signal 208	
atanf tbl.o		64	NatureDSP Signal 209, NatureDSP Signal 210	
expf tbl.o		80	NatureDSP_Signal_211, NatureDSP_Signal_212, NatureDSP_Signal_213, NatureDSP_Signal_485, NatureDSP_Signal_582	

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Object file	Code size	Data size	Symbols	
			Global	Referenced
inff tbl.o		16	NatureDSP_Signal_243, NatureDSP_Signal_244, NatureDSP_Signal_245, NatureDSP_Signal_923	
inv2pif tbl.o		16	NatureDSP_Signal_222, NatureDSP_Signal_223, NatureDSP_Signal_268	
log10f tbl.o		44	NatureDSP_Signal_203, NatureDSP_Signal_204, NatureDSP_Signal_205	
log2f tbl.o		40	NatureDSP_Signal_234	
lognf tbl.o		36	NatureDSP_Signal_233, NatureDSP_Signal_260	
nan tbl.o		32	NatureDSP_Signal_235, NatureDSP_Signal_236, NatureDSP_Signal_237, NatureDSP_Signal_238	
nanf tbl.o		16	NatureDSP_Signal_239, NatureDSP_Signal_240, NatureDSP_Signal_241, NatureDSP_Signal_242	
pif tbl.o		16	NatureDSP_Signal_246, NatureDSP_Signal_247, NatureDSP_Signal_248, NatureDSP_Signal_249	
polyrsqrtq23 tbl.o		20	NatureDSP_Signal_386	
scl_atan table.o		524	NatureDSP_Signal_012	
scl_atan table16.o		136	NatureDSP_Signal_013	
scl_sine table16.o		1028	NatureDSP_Signal_257	
scl_sine table32.o		2056	NatureDSP_Signal_009	
scl_sqrt table.o		1024	NatureDSP_Signal_010	
sinf tbl.o		52	NatureDSP_Signal_250, NatureDSP_Signal_251, NatureDSP_Signal_252, NatureDSP_Signal_253	
sqrt2f tbl.o		8	NatureDSP_Signal_258, NatureDSP_Signal_259	
tanf tbl.o		36	NatureDSP_Signal_254, NatureDSP_Signal_255	
tanhf tbl.o		20	NatureDSP_Signal_480, NatureDSP_Signal_512	
pow2f tbl.o		112	NatureDSP_Signal_479, NatureDSP_Signal_481, NatureDSP_Signal_484	
vec_alog table.o		20	NatureDSP_Signal_202	
vec_log table.o		1024	NatureDSP_Signal_011	
vec_recip table.o		516	NatureDSP_Signal_008	
vec_pow 32x32 table.o		156	NatureDSP_Signal_450, NatureDSP_Signal_451	
logmel32x32_hifi4.o	2618	68	logmel32x32_alloc, logmel32x32_init	memset, NatureDSP_Signal_806, NatureDSP_Signal_807, NatureDSP_Signal_809, vec_recip32x32
logmelf_hifi4.o	1690		logmelf_alloc, logmelf_init	memset, NatureDSP_Signal_806, NatureDSP_Signal_807, scl_antilog10f, scl_antilog2f, scl_int2float, scl_log10f, scl_log2f, vec_recip32x32
mfcc32x32_hifi4.o	789		mfcc32x32_alloc, mfcc32x32_init	logmel32x32_alloc, logmel32x32_init, memset, mtx_vecmpy32x32, mtx_vecmpy32x32_fast, NatureDSP_Signal_810, NatureDSP_Signal_811
mfccf_hifi4.o	734		mfccf_alloc, mfccf_init	logmelf_alloc, logmelf_init, memset, mtx_vecmpyf, mtx_vecmpyf_fast, NatureDSP_Signal_812, NatureDSP_Signal_813
dct_16_32.o		168	dct2_16_32	
dct_16_64.o		312	dct2_16_64	
dct_32_32.o		320	dct2_32_32	
dct_32_64.o		792	dct2_32_64	
dct4_16_128.o		568	dct4_16_128, mdct_16_128	
dct4_16_256.o		1112	dct4_16_256, mdct_16_256	
dct4_16_32.o		160	dct4_16_32, mdct_16_32	
dct4_16_512.o		2200	dct4_16_512, mdct_16_512	
dct4_16_64.o		296	dct4_16_64, mdct_16_64	
dct4_32_128.o		1108	dct4_32_128, mdct_32_128	
dct4_32_256.o		2196	dct4_32_256, mdct_32_256	
dct4_32_32.o		292	dct4_32_32, mdct_32_32	
dct4_32_512.o		4372	dct4_32_512, mdct_32_512	
dct4_32_64.o		564	dct4_32_64, mdct_32_64	
dctf_32_twd.o		376	dct2_f_32	
dctf_64_twd.o		728	dct2_f_64	
fft_cplx_twd16_1024_tbl.o		4224	cfft16_1024, cfft16_1024, NatureDSP_Signal_761, NatureDSP_Signal_786	
fft_cplx_twd16_128_tbl.o		592	cfft16_128, cfft16_128,	

NatureDSP Signal Library Performance Data

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP Signal 760, NatureDSP Signal 785	
fft_cplx_twd16_144_tbl.o		688	cinfft16_144, cnfft16_144, NatureDSP Signal 944, NatureDSP Signal 953	
fft_cplx_twd16_16_tbl.o		144	cffft16_16, ciffft16_16, NatureDSP_Signal_759, NatureDSP Signal 784	
fft_cplx_twd16_160_tbl.o		752	cinfft16_160, cnfft16_160, NatureDSP Signal 758, NatureDSP Signal 783	
fft_cplx_twd16_176_tbl.o		772	cinfft16_176, cnfft16_176, NatureDSP Signal 945, NatureDSP Signal 954	
fft_cplx_twd16_192_tbl.o		864	cinfft16_192, cnfft16_192, NatureDSP Signal 757, NatureDSP Signal 782	
fft_cplx_twd16_2048_tbl.o		8304	cffft16_2048, ciffft16_2048, NatureDSP Signal 756, NatureDSP Signal 781	
fft_cplx_twd16_240_tbl.o		1056	cinfft16_240, cnfft16_240, NatureDSP Signal 755, NatureDSP Signal 780	
fft_cplx_twd16_256_tbl.o		1136	cffft16_256, ciffft16_256, NatureDSP Signal 754, NatureDSP Signal 779	
fft_cplx_twd16_288_tbl.o		1248	cinfft16_288, cnfft16_288, NatureDSP Signal 946, NatureDSP Signal 955	
fft_cplx_twd16_32_tbl.o		192	cffft16_32, ciffft16_32, NatureDSP_Signal_753, NatureDSP Signal 778	
fft_cplx_twd16_320_tbl.o		1376	cinfft16_320, cnfft16_320, NatureDSP Signal 947, NatureDSP Signal 956	
fft_cplx_twd16_352_tbl.o		1492	cinfft16_352, cnfft16_352, NatureDSP Signal 948, NatureDSP Signal 957	
fft_cplx_twd16_384_tbl.o		1664	cinfft16_384, cnfft16_384	
fft_cplx_twd16_4096_tbl.o		16528	cffft16_4096, ciffft16_4096, NatureDSP Signal 752, NatureDSP Signal 777	
fft_cplx_twd16_48_tbl.o		288	cinfft16_48, cnfft16_48, NatureDSP Signal 949, NatureDSP Signal 958	
fft_cplx_twd16_480_tbl.o		2048	cinfft16_480, cnfft16_480	
fft_cplx_twd16_512_tbl.o		2144	cffft16_512, ciffft16_512, NatureDSP Signal 751, NatureDSP Signal 776	
fft_cplx_twd16_576_tbl.o		2432	cinfft16_576, cnfft16_576, NatureDSP Signal 950, NatureDSP Signal 959	
fft_cplx_twd16_64_tbl.o		352	cffft16_64, ciffft16_64, NatureDSP_Signal_750, NatureDSP Signal 775	
fft_cplx_twd16_640_tbl.o		2656	cinfft16_640, cnfft16_640, NatureDSP Signal 951, NatureDSP Signal 960	
fft_cplx_twd16_96_tbl.o		464	cinfft16_96, cnfft16_96, NatureDSP Signal 952, NatureDSP Signal 961	
fft_cplx_twd32_100_tbl.o		896	cinfft32_100, cnfft32_100	NatureDSP_Signal_348, NatureDSP_Signal_350, NatureDSP_Signal_352, NatureDSP_Signal_358, NatureDSP_Signal_368, NatureDSP_Signal_370, NatureDSP_Signal_372, NatureDSP_Signal_379
fft_cplx_twd32_1024_tbl.o		6328	cffft32_1024, ciffft32_1024, NatureDSP Signal 279, NatureDSP_Signal_312	NatureDSP_Signal_348, NatureDSP_Signal_349, NatureDSP_Signal_358, NatureDSP_Signal_368, NatureDSP_Signal_369, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_419, NatureDSP_Signal_421, NatureDSP_Signal_422
fft_cplx_twd32_108_tbl.o		1000	cinfft32_108, cnfft32_108, NatureDSP Signal 289, NatureDSP Signal 322	NatureDSP_Signal_344, NatureDSP_Signal_346, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_364, NatureDSP_Signal_366, NatureDSP_Signal_368, NatureDSP_Signal_379
fft_cplx_twd32_12_tbl.o		176	cinfft32_12, cnfft32_12, NatureDSP Signal 282, NatureDSP Signal 315	NatureDSP_Signal_345, NatureDSP_Signal_349, NatureDSP_Signal_356, NatureDSP_Signal_365, NatureDSP_Signal_369, NatureDSP_Signal_377
fft_cplx_twd32_120_tbl.o		1080	cinfft32_120, cnfft32_120, NatureDSP Signal 290, NatureDSP_Signal_323	NatureDSP_Signal_342, NatureDSP_Signal_344, NatureDSP_Signal_348, NatureDSP_Signal_352,

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Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_358, NatureDSP_Signal_361, NatureDSP_Signal_364, NatureDSP_Signal_368, NatureDSP_Signal_372, NatureDSP_Signal_379
fft_cplx_twd32_128_tbl.o		920	cffft32_128, ciff32_128, NatureDSP_Signal_276, NatureDSP_Signal_309	NatureDSP_Signal_341, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_368, NatureDSP_Signal_373, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_419, NatureDSP_Signal_421
fft_cplx_twd32_144_tbl.o		1288	cinfft32_144, cnfft32_144, NatureDSP_Signal_291, NatureDSP_Signal_324	NatureDSP_Signal_344, NatureDSP_Signal_346, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_364, NatureDSP_Signal_366, NatureDSP_Signal_368, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_cplx_twd32_16_tbl.o		208	cffft32_16, ciff32_16, NatureDSP_Signal_273, NatureDSP_Signal_306	NatureDSP_Signal_348, NatureDSP_Signal_349, NatureDSP_Signal_358, NatureDSP_Signal_368, NatureDSP_Signal_369, NatureDSP_Signal_379
fft_cplx_twd32_160_tbl.o		1352	cinfft32_160, cnfft32_160, NatureDSP_Signal_769, NatureDSP_Signal_794	NatureDSP_Signal_348, NatureDSP_Signal_350, NatureDSP_Signal_358, NatureDSP_Signal_368, NatureDSP_Signal_370, NatureDSP_Signal_373, NatureDSP_Signal_379, NatureDSP_Signal_415
fft_cplx_twd32_180_tbl.o		1560	cinfft32_180, cnfft32_180, NatureDSP_Signal_292, NatureDSP_Signal_325	NatureDSP_Signal_344, NatureDSP_Signal_348, NatureDSP_Signal_352, NatureDSP_Signal_358, NatureDSP_Signal_364, NatureDSP_Signal_368, NatureDSP_Signal_372, NatureDSP_Signal_379
fft_cplx_twd32_192_tbl.o		1664	cinfft32_192, cnfft32_192, NatureDSP_Signal_293, NatureDSP_Signal_326	NatureDSP_Signal_345, NatureDSP_Signal_347, NatureDSP_Signal_349, NatureDSP_Signal_356, NatureDSP_Signal_365, NatureDSP_Signal_367, NatureDSP_Signal_369, NatureDSP_Signal_377, NatureDSP_Signal_417, NatureDSP_Signal_420
fft_cplx_twd32_200_tbl.o		1720	cinfft32_200, cnfft32_200	NatureDSP_Signal_342, NatureDSP_Signal_348, NatureDSP_Signal_350, NatureDSP_Signal_352, NatureDSP_Signal_358, NatureDSP_Signal_361, NatureDSP_Signal_368, NatureDSP_Signal_370, NatureDSP_Signal_372, NatureDSP_Signal_379
fft_cplx_twd32_2048_tbl.o		12488	cffft32_2048, ciff32_2048, NatureDSP_Signal_280, NatureDSP_Signal_313	NatureDSP_Signal_341, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_368, NatureDSP_Signal_373, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_419, NatureDSP_Signal_421
fft_cplx_twd32_216_tbl.o		1896	cinfft32_216, cnfft32_216, NatureDSP_Signal_294, NatureDSP_Signal_327	NatureDSP_Signal_341, NatureDSP_Signal_344,

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Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_363, NatureDSP_Signal_364, NatureDSP_Signal_368, NatureDSP_Signal_379
fft_cplx_twd32_24_tbl.o		304	cinfft32_24, cnfft32_24, NatureDSP_Signal_283, NatureDSP_Signal_316	NatureDSP_Signal_341, NatureDSP_Signal_345, NatureDSP_Signal_347, NatureDSP_Signal_356, NatureDSP_Signal_365, NatureDSP_Signal_373, NatureDSP_Signal_377
fft_cplx_twd32_240_tbl.o		2040	cinfft32_240, cnfft32_240, NatureDSP_Signal_295, NatureDSP_Signal_328	NatureDSP_Signal_345, NatureDSP_Signal_347, NatureDSP_Signal_352, NatureDSP_Signal_356, NatureDSP_Signal_365, NatureDSP_Signal_367, NatureDSP_Signal_372, NatureDSP_Signal_377, NatureDSP_Signal_417, NatureDSP_Signal_420
fft_cplx_twd32_256_tbl.o		1696	cffft32_256, ciffft32_256, NatureDSP_Signal_277, NatureDSP_Signal_310	NatureDSP_Signal_348, NatureDSP_Signal_349, NatureDSP_Signal_358, NatureDSP_Signal_368, NatureDSP_Signal_369, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_419, NatureDSP_Signal_421, NatureDSP_Signal_422
fft_cplx_twd32_288_tbl.o		2464	cinfft32_288, cnfft32_288, NatureDSP_Signal_296, NatureDSP_Signal_329	NatureDSP_Signal_342, NatureDSP_Signal_344, NatureDSP_Signal_346, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_361, NatureDSP_Signal_364, NatureDSP_Signal_366, NatureDSP_Signal_368, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_cplx_twd32_300_tbl.o		2520	cinfft32_300, cnfft32_300, NatureDSP_Signal_297, NatureDSP_Signal_330	NatureDSP_Signal_345, NatureDSP_Signal_347, NatureDSP_Signal_350, NatureDSP_Signal_352, NatureDSP_Signal_356, NatureDSP_Signal_365, NatureDSP_Signal_367, NatureDSP_Signal_370, NatureDSP_Signal_372, NatureDSP_Signal_377
fft_cplx_twd32_32_tbl.o		320	cffft32_32, ciffft32_32, NatureDSP_Signal_274, NatureDSP_Signal_307	NatureDSP_Signal_341, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_368, NatureDSP_Signal_373, NatureDSP_Signal_379, NatureDSP_Signal_419
fft_cplx_twd32_320_tbl.o		2688	cinfft32_320, cnfft32_320	NatureDSP_Signal_347, NatureDSP_Signal_349, NatureDSP_Signal_351, NatureDSP_Signal_360, NatureDSP_Signal_367, NatureDSP_Signal_369, NatureDSP_Signal_371, NatureDSP_Signal_381, NatureDSP_Signal_417, NatureDSP_Signal_420
fft_cplx_twd32_324_tbl.o		2752	cinfft32_324, cnfft32_324, NatureDSP_Signal_298, NatureDSP_Signal_331	NatureDSP_Signal_344, NatureDSP_Signal_346, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_364, NatureDSP_Signal_366,

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Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_368, NatureDSP_Signal_379
fft_cplx_twd32_36_tbl.o		400	cinfft32_36, cnfft32_36, NatureDSP_Signal_284, NatureDSP_Signal_317	NatureDSP_Signal_344, NatureDSP_Signal_346, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_364, NatureDSP_Signal_366, NatureDSP_Signal_368, NatureDSP_Signal_379
fft_cplx_twd32_360_tbl.o		3024	cinfft32_360, cnfft32_360, NatureDSP_Signal_299, NatureDSP_Signal_332	NatureDSP_Signal_343, NatureDSP_Signal_344, NatureDSP_Signal_352, NatureDSP_Signal_354, NatureDSP_Signal_362, NatureDSP_Signal_364, NatureDSP_Signal_372, NatureDSP_Signal_375, NatureDSP_Signal_417, NatureDSP_Signal_420
fft_cplx_twd32_384_tbl.o		3168	cinfft32_384, cnfft32_384	NatureDSP_Signal_344, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_364, NatureDSP_Signal_368, NatureDSP_Signal_373, NatureDSP_Signal_379, NatureDSP_Signal_415, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_cplx_twd32_400_tbl.o		3320	cinfft32_400, cnfft32_400	NatureDSP_Signal_348, NatureDSP_Signal_350, NatureDSP_Signal_352, NatureDSP_Signal_358, NatureDSP_Signal_368, NatureDSP_Signal_370, NatureDSP_Signal_372, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_cplx_twd32_4096_tbl.o		24784	cffft32_4096, ciff32_4096, NatureDSP_Signal_281, NatureDSP_Signal_314	NatureDSP_Signal_348, NatureDSP_Signal_349, NatureDSP_Signal_358, NatureDSP_Signal_368, NatureDSP_Signal_369, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_419, NatureDSP_Signal_421, NatureDSP_Signal_422
fft_cplx_twd32_432_tbl.o		3616	cinfft32_432, cnfft32_432, NatureDSP_Signal_300, NatureDSP_Signal_333	NatureDSP_Signal_344, NatureDSP_Signal_346, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_364, NatureDSP_Signal_366, NatureDSP_Signal_368, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_cplx_twd32_48_tbl.o		496	cinfft32_48, cnfft32_48, NatureDSP_Signal_285, NatureDSP_Signal_318	NatureDSP_Signal_346, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_366, NatureDSP_Signal_368, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_cplx_twd32_480_tbl.o		3984	cinfft32_480, cnfft32_480, NatureDSP_Signal_301, NatureDSP_Signal_334	NatureDSP_Signal_342, NatureDSP_Signal_344, NatureDSP_Signal_348, NatureDSP_Signal_352, NatureDSP_Signal_358, NatureDSP_Signal_361, NatureDSP_Signal_364, NatureDSP_Signal_368, NatureDSP_Signal_372, NatureDSP_Signal_379,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_418, NatureDSP_Signal_421
fft_cplx_twd32_512_tbl.o		3248	cffft32_512, ciffft32_512, NatureDSP_Signal_278, NatureDSP_Signal_311	NatureDSP_Signal_341, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_368, NatureDSP_Signal_373, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_419, NatureDSP_Signal_421
fft_cplx_twd32_540_tbl.o		4464	cinfft32_540, cnfft32_540, NatureDSP_Signal_302, NatureDSP_Signal_335	NatureDSP_Signal_344, NatureDSP_Signal_348, NatureDSP_Signal_352, NatureDSP_Signal_358, NatureDSP_Signal_364, NatureDSP_Signal_368, NatureDSP_Signal_372, NatureDSP_Signal_379
fft_cplx_twd32_576_tbl.o		4768	cinfft32_576, cnfft32_576, NatureDSP_Signal_303, NatureDSP_Signal_336	NatureDSP_Signal_344, NatureDSP_Signal_346, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_364, NatureDSP_Signal_366, NatureDSP_Signal_368, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_cplx_twd32_60_tbl.o		576	cinfft32_60, cnfft32_60, NatureDSP_Signal_286, NatureDSP_Signal_319	NatureDSP_Signal_344, NatureDSP_Signal_348, NatureDSP_Signal_352, NatureDSP_Signal_358, NatureDSP_Signal_364, NatureDSP_Signal_368, NatureDSP_Signal_372, NatureDSP_Signal_379
fft_cplx_twd32_600_tbl.o		4896	cinfft32_600, cnfft32_600	NatureDSP_Signal_345, NatureDSP_Signal_350, NatureDSP_Signal_356, NatureDSP_Signal_365, NatureDSP_Signal_370, NatureDSP_Signal_373, NatureDSP_Signal_377, NatureDSP_Signal_415
fft_cplx_twd32_64_tbl.o		520	cffft32_64, ciffft32_64, NatureDSP_Signal_275, NatureDSP_Signal_308	NatureDSP_Signal_348, NatureDSP_Signal_349, NatureDSP_Signal_358, NatureDSP_Signal_368, NatureDSP_Signal_369, NatureDSP_Signal_379, NatureDSP_Signal_419, NatureDSP_Signal_422
fft_cplx_twd32_72_tbl.o		720	cinfft32_72, cnfft32_72, NatureDSP_Signal_287, NatureDSP_Signal_320	NatureDSP_Signal_341, NatureDSP_Signal_344, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_363, NatureDSP_Signal_364, NatureDSP_Signal_368, NatureDSP_Signal_379
fft_cplx_twd32_768_tbl.o		6304	cinfft32_768, cnfft32_768, NatureDSP_Signal_304, NatureDSP_Signal_337	NatureDSP_Signal_346, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_366, NatureDSP_Signal_368, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_cplx_twd32_80_tbl.o		736	cinfft32_80, cnfft32_80, NatureDSP_Signal_762, NatureDSP_Signal_787	NatureDSP_Signal_348, NatureDSP_Signal_352, NatureDSP_Signal_358, NatureDSP_Signal_368, NatureDSP_Signal_372, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_cplx_twd32_96_tbl.o		904	cinfft32_96, cnfft32_96,	NatureDSP_Signal_342,

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_288, NatureDSP_Signal_321	NatureDSP_Signal_346, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_361, NatureDSP_Signal_366, NatureDSP_Signal_368, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_421
				NatureDSP_Signal_344, NatureDSP_Signal_348, NatureDSP_Signal_352, NatureDSP_Signal_358, NatureDSP_Signal_364, NatureDSP_Signal_368, NatureDSP_Signal_372, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_cplx_twd32_960_tbl.o		7824	cinfft32_960, cnfft32_960, NatureDSP_Signal_305, NatureDSP_Signal_338	
fft_cplx_twd32x16_160_tbl.o		744	cinfft32x16_160, cnfft32x16_160, NatureDSP_Signal_774, NatureDSP_Signal_799	
fft_cplx_twd32x16_192_tbl.o		912	cinfft32x16_192, cnfft32x16_192, NatureDSP_Signal_773, NatureDSP_Signal_798	
fft_cplx_twd32x16_240_tbl.o		1104	cinfft32x16_240, cnfft32x16_240, NatureDSP_Signal_772, NatureDSP_Signal_797	
fft_cplx_twd32x16_320_tbl.o		1424	cinfft32x16_320, cnfft32x16_320	
fft_cplx_twd32x16_384_tbl.o		1664	cinfft32x16_384, cnfft32x16_384	
fft_cplx_twd32x16_480_tbl.o		2048	cinfft32x16_480, cnfft32x16_480	
fft_real_twd16_1024_tbl.o		1048	rfft16_1024, rfft16_1024	NatureDSP_Signal_751, NatureDSP_Signal_776
fft_real_twd16_128_tbl.o		152	rfft16_128, rfft16_128	NatureDSP_Signal_750, NatureDSP_Signal_775
fft_real_twd16_144_tbl.o		560	rinfft16_144, rnfft16_144	
fft_real_twd16_160_tbl.o		576	rinfft16_160, rnfft16_160	
fft_real_twd16_176_tbl.o		612	rinfft16_176, rnfft16_176	
fft_real_twd16_192_tbl.o		704	rinfft16_192, rnfft16_192	
fft_real_twd16_2048_tbl.o		2072	rfft16_2048, rfft16_2048	NatureDSP_Signal_761, NatureDSP_Signal_786
fft_real_twd16_240_tbl.o		848	rinfft16_240, rnfft16_240	
fft_real_twd16_256_tbl.o		280	rfft16_256, rfft16_256	NatureDSP_Signal_760, NatureDSP_Signal_785
fft_real_twd16_288_tbl.o		312	rinfft16_288, rnfft16_288	NatureDSP_Signal_944, NatureDSP_Signal_953
fft_real_twd16_32_tbl.o		56	rfft16_32, rfft16_32	NatureDSP_Signal_759, NatureDSP_Signal_784
fft_real_twd16_320_tbl.o		344	rinfft16_320, rnfft16_320	NatureDSP_Signal_758, NatureDSP_Signal_783
fft_real_twd16_352_tbl.o		376	rinfft16_352, rnfft16_352	NatureDSP_Signal_945, NatureDSP_Signal_954
fft_real_twd16_384_tbl.o		408	rinfft16_384, rnfft16_384	NatureDSP_Signal_757, NatureDSP_Signal_782
fft_real_twd16_4096_tbl.o		4120	rfft16_4096, rfft16_4096	NatureDSP_Signal_756, NatureDSP_Signal_781
fft_real_twd16_480_tbl.o		504	rinfft16_480, rnfft16_480	NatureDSP_Signal_755, NatureDSP_Signal_780
fft_real_twd16_512_tbl.o		536	rfft16_512, rfft16_512	NatureDSP_Signal_754, NatureDSP_Signal_779
fft_real_twd16_576_tbl.o		600	rinfft16_576, rnfft16_576	NatureDSP_Signal_946, NatureDSP_Signal_955
fft_real_twd16_64_tbl.o		88	rfft16_64, rfft16_64	NatureDSP_Signal_753, NatureDSP_Signal_778
fft_real_twd16_640_tbl.o		664	rinfft16_640, rnfft16_640	NatureDSP_Signal_947, NatureDSP_Signal_956
fft_real_twd16_8192_tbl.o		8216	rfft16_8192, rfft16_8192	NatureDSP_Signal_752, NatureDSP_Signal_777
fft_real_twd16_96_tbl.o		120	rinfft16_96, rnfft16_96	NatureDSP_Signal_949, NatureDSP_Signal_958
fft_real_twd32_1024_tbl.o		2072	rfft32_1024, rfft32_1024	NatureDSP_Signal_278, NatureDSP_Signal_311
fft_real_twd32_108_tbl.o		800	rinfft32_108, rnfft32_108	NatureDSP_Signal_343, NatureDSP_Signal_344, NatureDSP_Signal_346, NatureDSP_Signal_354, NatureDSP_Signal_362, NatureDSP_Signal_364, NatureDSP_Signal_366, NatureDSP_Signal_375

Object file	Code size	Data size	Symbols	
			Global	Referenced
fft_real_twd32_1152_tbl.o		2328	rinfft32_1152, rnfft32_1152	NatureDSP_Signal_303, NatureDSP_Signal_336
fft_real_twd32_12_tbl.o		184	rinfft32_12, rnfft32_12	NatureDSP_Signal_341, NatureDSP_Signal_345, NatureDSP_Signal_356, NatureDSP_Signal_363, NatureDSP_Signal_365, NatureDSP_Signal_377
fft_real_twd32_120_tbl.o		264	rinfft32_120, rnfft32_120	NatureDSP_Signal_286, NatureDSP_Signal_319
fft_real_twd32_128_tbl.o		280	rfft32_128, rfft32_128	NatureDSP_Signal_275, NatureDSP_Signal_308
fft_real_twd32_144_tbl.o		312	rinfft32_144, rnfft32_144	NatureDSP_Signal_287, NatureDSP_Signal_320
fft_real_twd32_1440_tbl.o		8800	rinfft32_1440, rnfft32_1440	NatureDSP_Signal_344, NatureDSP_Signal_348, NatureDSP_Signal_352, NatureDSP_Signal_358, NatureDSP_Signal_364, NatureDSP_Signal_368, NatureDSP_Signal_372, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_real_twd32_1536_tbl.o		3096	rinfft32_1536, rnfft32_1536	NatureDSP_Signal_304, NatureDSP_Signal_337
fft_real_twd32_160_tbl.o		344	rinfft32_160, rnfft32_160	NatureDSP_Signal_762, NatureDSP_Signal_787
fft_real_twd32_180_tbl.o		1216	rinfft32_180, rnfft32_180	NatureDSP_Signal_343, NatureDSP_Signal_344, NatureDSP_Signal_352, NatureDSP_Signal_354, NatureDSP_Signal_362, NatureDSP_Signal_364, NatureDSP_Signal_372, NatureDSP_Signal_375
fft_real_twd32_192_tbl.o		408	rinfft32_192, rnfft32_192	NatureDSP_Signal_288, NatureDSP_Signal_321
fft_real_twd32_1920_tbl.o		3864	rinfft32_1920, rnfft32_1920	NatureDSP_Signal_305, NatureDSP_Signal_338
fft_real_twd32_2048_tbl.o		4120	rfft32_2048, rfft32_2048	NatureDSP_Signal_279, NatureDSP_Signal_312
fft_real_twd32_216_tbl.o		456	rinfft32_216, rnfft32_216	NatureDSP_Signal_289, NatureDSP_Signal_322
fft_real_twd32_24_tbl.o		72	rinfft32_24, rnfft32_24	NatureDSP_Signal_282, NatureDSP_Signal_315
fft_real_twd32_240_tbl.o		504	rinfft32_240, rnfft32_240	NatureDSP_Signal_290, NatureDSP_Signal_323
fft_real_twd32_256_tbl.o		536	rfft32_256, rfft32_256	NatureDSP_Signal_276, NatureDSP_Signal_309
fft_real_twd32_288_tbl.o		600	rinfft32_288, rnfft32_288	NatureDSP_Signal_291, NatureDSP_Signal_324
fft_real_twd32_30_tbl.o		272	rinfft32_30, rnfft32_30	NatureDSP_Signal_345, NatureDSP_Signal_352, NatureDSP_Signal_356, NatureDSP_Signal_365, NatureDSP_Signal_372, NatureDSP_Signal_377
fft_real_twd32_300_tbl.o		1936	rinfft32_300, rnfft32_300	NatureDSP_Signal_343, NatureDSP_Signal_344, NatureDSP_Signal_350, NatureDSP_Signal_352, NatureDSP_Signal_354, NatureDSP_Signal_362, NatureDSP_Signal_364, NatureDSP_Signal_370, NatureDSP_Signal_372, NatureDSP_Signal_375
fft_real_twd32_32_tbl.o		88	rfft32_32, rfft32_32	NatureDSP_Signal_273, NatureDSP_Signal_306
fft_real_twd32_320_tbl.o		664	rinfft32_320, rnfft32_320	NatureDSP_Signal_769, NatureDSP_Signal_794
fft_real_twd32_324_tbl.o		2120	rinfft32_324, rnfft32_324	NatureDSP_Signal_343, NatureDSP_Signal_344, NatureDSP_Signal_346, NatureDSP_Signal_354, NatureDSP_Signal_362,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_364, NatureDSP_Signal_366, NatureDSP_Signal_375
fft_real_twd32_36_tbl.o		344	rinfft32_36, rnfft32_36	NatureDSP_Signal_342, NatureDSP_Signal_345, NatureDSP_Signal_346, NatureDSP_Signal_356, NatureDSP_Signal_361, NatureDSP_Signal_365, NatureDSP_Signal_366, NatureDSP_Signal_377
fft_real_twd32_360_tbl.o		744	rinfft32_360, rnfft32_360	NatureDSP_Signal_292, NatureDSP_Signal_325
fft_real_twd32_384_tbl.o		792	rinfft32_384, rnfft32_384	NatureDSP_Signal_293, NatureDSP_Signal_326
fft_real_twd32_4096_tbl.o		8216	rfft32_4096, rfft32_4096	NatureDSP_Signal_280, NatureDSP_Signal_313
fft_real_twd32_432_tbl.o		888	rinfft32_432, rnfft32_432	NatureDSP_Signal_294, NatureDSP_Signal_327
fft_real_twd32_48_tbl.o		120	rinfft32_48, rnfft32_48	NatureDSP_Signal_283, NatureDSP_Signal_316
fft_real_twd32_480_tbl.o		984	rinfft32_480, rnfft32_480	NatureDSP_Signal_295, NatureDSP_Signal_328
fft_real_twd32_512_tbl.o		1048	rfft32_512, rfft32_512	NatureDSP_Signal_277, NatureDSP_Signal_310
fft_real_twd32_540_tbl.o		3400	rinfft32_540, rnfft32_540	NatureDSP_Signal_343, NatureDSP_Signal_344, NatureDSP_Signal_352, NatureDSP_Signal_354, NatureDSP_Signal_362, NatureDSP_Signal_364, NatureDSP_Signal_372, NatureDSP_Signal_375
fft_real_twd32_576_tbl.o		1176	rinfft32_576, rnfft32_576	NatureDSP_Signal_296, NatureDSP_Signal_329
fft_real_twd32_60_tbl.o		472	rinfft32_60, rnfft32_60	NatureDSP_Signal_343, NatureDSP_Signal_344, NatureDSP_Signal_352, NatureDSP_Signal_354, NatureDSP_Signal_362, NatureDSP_Signal_364, NatureDSP_Signal_372, NatureDSP_Signal_375
fft_real_twd32_64_tbl.o		152	rfft32_64, rfft32_64	NatureDSP_Signal_274, NatureDSP_Signal_307
fft_real_twd32_72_tbl.o		168	rinfft32_72, rnfft32_72	NatureDSP_Signal_284, NatureDSP_Signal_317
fft_real_twd32_720_tbl.o		1464	rinfft32_720, rnfft32_720	NatureDSP_Signal_299, NatureDSP_Signal_332
fft_real_twd32_768_tbl.o		4784	rinfft32_768, rnfft32_768	NatureDSP_Signal_342, NatureDSP_Signal_346, NatureDSP_Signal_348, NatureDSP_Signal_358, NatureDSP_Signal_361, NatureDSP_Signal_366, NatureDSP_Signal_368, NatureDSP_Signal_379, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_real_twd32_8192_tbl.o		16408	rfft32_8192, rfft32_8192	NatureDSP_Signal_281, NatureDSP_Signal_314
fft_real_twd32_90_tbl.o		656	rinfft32_90, rnfft32_90	NatureDSP_Signal_344, NatureDSP_Signal_345, NatureDSP_Signal_352, NatureDSP_Signal_356, NatureDSP_Signal_364, NatureDSP_Signal_365, NatureDSP_Signal_372, NatureDSP_Signal_377
fft_real_twd32_96_tbl.o		216	rinfft32_96, rnfft32_96	NatureDSP_Signal_285, NatureDSP_Signal_318
fft_real_twd32_960_tbl.o		1944	rinfft32_960, rnfft32_960	NatureDSP_Signal_301, NatureDSP_Signal_334
fft_real_twd32x16_160_tbl.o		616	rinfft32x16_160, rnfft32x16_160	
fft_real_twd32x16_192_tbl.o		696	rinfft32x16_192, rnfft32x16_192	
fft_real_twd32x16_240_tbl.o		840	rinfft32x16_240, rnfft32x16_240	
fft_real_twd32x16_320_tbl.o		344	rinfft32x16_320, rnfft32x16_320	NatureDSP_Signal_774,

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Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_799
fft_real_twd32x16_384_tbl.o		408	rinfft32x16_384, rnfft32x16_384	NatureDSP_Signal_773, NatureDSP_Signal_798
fft_real_twd32x16_480_tbl.o		504	rinfft32x16_480, rnfft32x16_480	NatureDSP_Signal_772, NatureDSP_Signal_797
cubic_kernel_hifi4.o	489	16	NatureDSP_Signal_845	
divide_q31_hifi4.o	470		NatureDSP_Signal_846, NatureDSP_Signal_926	
img_getCoef_dn_cubic_hifi4.o	1177		img_getCoef_dn_cubic_init, NatureDSP_Signal_853	NatureDSP_Signal_845, NatureDSP_Signal_846, NatureDSP_Signal_926
img_getCoef_dn_hifi4.o	941		img_getCoef_dn_init, NatureDSP_Signal_852	NatureDSP_Signal_846, NatureDSP_Signal_926
img_getCoef_up_cubic_hifi4.o	1177		img_getCoef_up_cubic_init, NatureDSP_Signal_855	NatureDSP_Signal_845, NatureDSP_Signal_846, NatureDSP_Signal_926
img_getCoef_up_hifi4.o	554		img_getCoef_up_init, NatureDSP_Signal_854	NatureDSP_Signal_846
imghist_gu8_hifi4.o	2007		imghist_gu8	
imghist_gs8_hifi4.o	2303		imghist_gs8	
imghist_gs8_hifi4.o	2303		imghist_gs8	
img_resize_hifi4.o	1192		NatureDSP_Signal_891, NatureDSP_Signal_892, NatureDSP_Signal_894, NatureDSP_Signal_895	
imgconvert_rgbuyv_hifi4.o	2034		imgconvert_rgbuyv	
imgconvert_rgbuyv16_hifi4.o	2280		imgconvert_rgbuyv16	
imgconvert_yuvrgb_hifi4.o	1789		imgconvert_yuvrgb	
imgconvert_yuvrgb16_hifi4.o	1171		imgconvert_yuvrgb16	
imgcopy_api_gu8_temp_hifi4.o	272	8	NatureDSP_Signal_876	
imgcopy_api_gs8_temp_hifi4.o	324	8	NatureDSP_Signal_1036	
imgcopy_api_gsl6_temp_hifi4.o	356	8	NatureDSP_Signal_874	
imgcopy_api_gsl6fast_temp_hifi4.o	201	8	NatureDSP_Signal_875	
imgcopy_api_gu8fast_temp_hifi4.o	123	8	NatureDSP_Signal_877	
imgcopy_api_gs8fast_temp_hifi4.o	166	8	NatureDSP_Signal_1037	
imgcopy_api_temp_gu8_hifi4.o	655	8	NatureDSP_Signal_878	
imgcopy_api_temp_gs8_hifi4.o	464	8	NatureDSP_Signal_1038	
imgcopy_api_temp_gsl6_hifi4.o	276	8	NatureDSP_Signal_879	
imgcopy_api_temp_gsl6fast_hifi4.o	399	8	NatureDSP_Signal_880	
imgcopy_api_temp_gu8fast_hifi4.o	1057	8	NatureDSP_Signal_881	
imgcopy_api_temp_gs8fast_hifi4.o	626	8	NatureDSP_Signal_1039	
imgcopyHorz_gu8_hifi4.o	258		NatureDSP_Signal_866	
imgcopyHorz_gs8_hifi4.o	25		NatureDSP_Signal_1032	NatureDSP_Signal_866
imgcopyHorz_gsl6_hifi.o	192		NatureDSP_Signal_867	
imgcopyLeftRightBorders_gu8_hifi4.o	654		NatureDSP_Signal_868	
imgcopyLeftRightBorders_gs8_hifi4.o	117		NatureDSP_Signal_1033	NatureDSP_Signal_868
imgcopyLeftRightBorders_gsl6_hifi4.o	826		NatureDSP_Signal_869	
imgcopyUpBtmBorders_gu8_hifi4.o	1236		NatureDSP_Signal_870	
imgcopyUpBtmBorders_gs8_hifi4.o	117		NatureDSP_Signal_1034	NatureDSP_Signal_870
imgcopyUpBtmBorders_gsl6_hifi4.o	893		NatureDSP_Signal_871	
imgcopyVert_gu8_hifi4.o	305		NatureDSP_Signal_872	
imgcopyVert_gs8_hifi4.o	25		NatureDSP_Signal_1035	NatureDSP_Signal_872
imgcopyVert_gsl6_hifi4.o	148		NatureDSP_Signal_873	
imgdeinterleave_hifi4.o	472		imgdeinterleave	
imgdeinterleave16_hifi4.o	527		imgdeinterleave16	
imgfastconvert_rgbuyv_hifi4.o	2792		imgfastconvert_rgbuyv	
imgfastconvert_rgbuyv16_hifi4.o	1472		imgfastconvert_rgbuyv16	
imgfastconvert_yuvrgb_hifi4.o	1353		imgfastconvert_yuvrgb	
imgfastconvert_yuvrgb16_hifi4.o	1451		imgfastconvert_yuvrgb16	
imgfastdeinterleave_hifi4.o	1354		imgfastdeinterleave	
imgfastdeinterleave16_hifi4.o	656		imgfastdeinterleave16	
imgfasthist_gu8_hifi4.o	1470		imgfasthist_gu8	
imgfasthist_gs8_hifi4.o	1675		imgfasthist_gs8	
imgfasthist_gsl6_hifi4.o	1464		imgfasthist_gsl6	
imgfastinterleave_hifi4.o	732		imgfastinterleave	

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Object file	Code size	Data size	Symbols	
			Global	Referenced
imgfastinterleave16 hifi4.o	662		imgfastinterleave16	
imgfastnorm gu8 hifi4.o	2235		imgfastnorm gu8	
imgfastnorm gu8 nonlinear hifi4.o	2352		imgfastnorm gu8 nonlinear	
imgfastnorm gs8 hifi4.o	2199		imgfastnorm gs8	
imgfastnorm gs8 nonlinear hifi4.o	1874		imgfastnorm gs8 nonlinear	
imgfastnorm gsl6 hifi4.o	1490		imgfastnorm gsl6	NatureDSP_Signal_846
imgfastnorm gsl6 nonlinear hifi4.o	1147		imgfastnorm gsl6 nonlinear	
imgfastpad gu8 hifi4.o	44	28	imgfastpad gu8, imgfastpad gu8 getScratchSize	NatureDSP_Signal_866, NatureDSP_Signal_868, NatureDSP_Signal_870, NatureDSP_Signal_872, NatureDSP_Signal_889, NatureDSP_Signal_890, NatureDSP_Signal_916
imgfastpad gs8 hifi4.o	44	28	imgfastpad gs8, imgfastpad gs8 getScratchSize	NatureDSP_Signal_1032, NatureDSP_Signal_1033, NatureDSP_Signal_1034, NatureDSP_Signal_1035, NatureDSP_Signal_1047, NatureDSP_Signal_889, NatureDSP_Signal_890
imgfastpad gsl6 hifi4.o	44	28	imgfastpad gsl6, imgfastpad gsl6 getScratchSize	NatureDSP_Signal_867, NatureDSP_Signal_869, NatureDSP_Signal_871, NatureDSP_Signal_873, NatureDSP_Signal_889, NatureDSP_Signal_890, NatureDSP_Signal_917
imgfastresize gu8 hifi4.o	87		imgfastresize gu8_alloc, imgfastresize gu8_getScratchSize, imgfastresize gu8_init, imgfastresize gu8_process	NatureDSP_Signal_877, NatureDSP_Signal_881, NatureDSP_Signal_891, NatureDSP_Signal_892, NatureDSP_Signal_894, NatureDSP_Signal_895
imgfastresize gs8 hifi4.o	87		imgfastresize gs8_alloc, imgfastresize gs8_getScratchSize, imgfastresize gs8_init, imgfastresize gs8_process	NatureDSP_Signal_1037, NatureDSP_Signal_1039, NatureDSP_Signal_891, NatureDSP_Signal_892, NatureDSP_Signal_894, NatureDSP_Signal_895
imgfastresize gsl6 hifi4.o	87		imgfastresize gsl6_alloc, imgfastresize gsl6_getScratchSize, imgfastresize gsl6_init, imgfastresize gsl6_process	NatureDSP_Signal_875, NatureDSP_Signal_880, NatureDSP_Signal_891, NatureDSP_Signal_892, NatureDSP_Signal_894, NatureDSP_Signal_895
imghist gsl6 hifi4.o	1428		imghist gsl6	
imginterleave hifi4.o	298		imginterleave	
imginterleave16 hifi4.o	438		imginterleave16	
imgnorm gu8 hifi4.o	4856		imgnorm gu8	
imgnorm gu8 nonlinear hifi4.o	6002		imgnorm gu8 nonlinear	
imgnorm gs8 hifi4.o	4729		imgnorm gs8	
imgnorm gs8 nonlinear hifi4.o	6553		imgnorm gs8 nonlinear	
imgnorm gsl6 hifi4.o	1449		imgnorm gsl6	NatureDSP_Signal_846
imgnorm gsl6 nonlinear hifi4.o	1174		imgnorm gsl6 nonlinear	
imgpad gu8 hifi4.o	44	28	imgpad gu8, imgpad gu8 getScratchSize	NatureDSP_Signal_866, NatureDSP_Signal_868, NatureDSP_Signal_870, NatureDSP_Signal_872, NatureDSP_Signal_889, NatureDSP_Signal_890, NatureDSP_Signal_916
imgpad gs8 hifi4.o	44	28	imgpad gs8, imgpad gs8 getScratchSize	NatureDSP_Signal_1032, NatureDSP_Signal_1033, NatureDSP_Signal_1034, NatureDSP_Signal_1035, NatureDSP_Signal_1047, NatureDSP_Signal_889, NatureDSP_Signal_890
imgpad gsl6 hifi4.o	44	28	imgpad gsl6, imgpad gsl6 getScratchSize	NatureDSP_Signal_867, NatureDSP_Signal_869, NatureDSP_Signal_871, NatureDSP_Signal_873,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_889, NatureDSP_Signal_890, NatureDSP_Signal_917
imgpad_process_hifi4.o	777		NatureDSP_Signal_889, NatureDSP_Signal_890	
imgresize_gu8_hifi4.o	87		imgresize_gu8_alloc, imgresize_gu8_getScratchSize, imgresize_gu8_init, imgresize_gu8_process	NatureDSP_Signal_876, NatureDSP_Signal_878, NatureDSP_Signal_891, NatureDSP_Signal_892, NatureDSP_Signal_894, NatureDSP_Signal_895
imgresize_gs8_hifi4.o	87		imgresize_gs8_alloc, imgresize_gs8_getScratchSize, imgresize_gs8_init, imgresize_gs8_process	NatureDSP_Signal_1036, NatureDSP_Signal_1038, NatureDSP_Signal_891, NatureDSP_Signal_892, NatureDSP_Signal_894, NatureDSP_Signal_895
imgresize_gsl6_hifi4.o	87		imgresize_gsl6_alloc, imgresize_gsl6_getScratchSize, imgresize_gsl6_init, imgresize_gsl6_process	NatureDSP_Signal_874, NatureDSP_Signal_879, NatureDSP_Signal_891, NatureDSP_Signal_892, NatureDSP_Signal_894, NatureDSP_Signal_895
imgresizer_bicubic_hifi4.o	1019	36	imgresize_method_bicubic	NatureDSP_Signal_897, NatureDSP_Signal_899, NatureDSP_Signal_901, NatureDSP_Signal_903, NatureDSP_Signal_907, NatureDSP_Signal_909, NatureDSP_Signal_911, NatureDSP_Signal_913
imgresizer_bilinear_hifi4.o	1019	36	imgresize_method_bilinear	NatureDSP_Signal_896, NatureDSP_Signal_898, NatureDSP_Signal_900, NatureDSP_Signal_902, NatureDSP_Signal_906, NatureDSP_Signal_908, NatureDSP_Signal_910, NatureDSP_Signal_912
imgresizer_dn2xh_cubic_hifi4.o	577	44	NatureDSP_Signal_897	
imgresizer_dn2xh_hifi4.o	410	36	NatureDSP_Signal_896	
imgresizer_dn2xv_cubic_hifi4.o	574	28	NatureDSP_Signal_899	
imgresizer_dn2xv_hifi4.o	460	20	NatureDSP_Signal_898	
imgresizer_dnxh_cubic_hifi4.o	1730	20	NatureDSP_Signal_901	img_getCoef_dn_cubic_in it, NatureDSP_Signal_853
imgresizer_dnxh_hifi4.o	1622	20	NatureDSP_Signal_900	img_getCoef_dn_init, NatureDSP_Signal_852
imgresizer_dnxv_cubic_hifi4.o	796	20	NatureDSP_Signal_903	img_getCoef_dn_cubic_in it, NatureDSP_Signal_853
imgresizer_dnxv_hifi4.o	881	20	NatureDSP_Signal_902	img_getCoef_dn_init, NatureDSP_Signal_852
imgresizer_nearest_hifi4.o	266	36	imgresize_method_nearest	NatureDSP_Signal_904, NatureDSP_Signal_905
imgresizer_nh_hifi4.o	13185	20	NatureDSP_Signal_904	
imgresizer_nv_hifi4.o	2763	20	NatureDSP_Signal_905	
imgresizer_up2xh_cubic_hifi4.o	664	28	NatureDSP_Signal_907	
imgresizer_up2xh_hifi4.o	371	20	NatureDSP_Signal_906	
imgresizer_up2xv_cubic_hifi4.o	704	28	NatureDSP_Signal_909	
imgresizer_up2xv_hifi4.o	314	20	NatureDSP_Signal_908	
imgresizer_upxh_cubic_hifi4.o	1599	20	NatureDSP_Signal_911	img_getCoef_up_cubic_in it, NatureDSP_Signal_855
imgresizer_upxh_hifi4.o	1355	20	NatureDSP_Signal_910	img_getCoef_up_init, NatureDSP_Signal_854
imgresizer_upxv_cubic_hifi4.o	915	20	NatureDSP_Signal_913	img_getCoef_up_cubic_in it, NatureDSP_Signal_855
imgresizer_upxv_hifi4.o	1078	20	NatureDSP_Signal_912	img_getCoef_up_init, NatureDSP_Signal_854
imgsubcopy_gu8_hifi4.o	530		NatureDSP_Signal_916	
imgsubcopy_gs8_hifi4.o	29		NatureDSP_Signal_1047	NatureDSP_Signal_916

Object file	Code size	Data size	Symbols	
			Global	Referenced
imgsubcopy_gsl6_hifi4.o	653		NatureDSP Signal 917	
				cfft16_1024, cfft16_128, cfft16_2048, cfft16_256, cfft16_512, cfft16_64, cnfft16_144, cnfft16_176, cnfft16_240, cnfft16_288, cnfft16_320, cnfft16_352, cnfft16_384, cnfft16_480, cnfft16_576, cnfft16_640, cnfft16_96, fft_cplx16x16, fft_real16x16, rfft16_1024, rfft16_128, rfft16_2048, rfft16_256, rfft16_512, rfft16_64, rnfft16_144, rnfft16_176, rnfft16_240, rnfft16_288, rnfft16_320, rnfft16_352, rnfft16_384, rnfft16_480, rnfft16_576, rnfft16_640, rnfft16_96
imgfft_common_hifi4.o	2486		NatureDSP Signal 930, NatureDSP Signal 932	
imgfft_gu8_hifi4.o	227		imgfft_gu8, imgfft_gu8_getScratchSize	NatureDSP Signal 930, NatureDSP Signal 932
imgfft_gs8_hifi4.o	352		imgfft_gs8, imgfft_gs8_getScratchSize	NatureDSP Signal 930, NatureDSP Signal 932
imgfft_gsl6_hifi4.o	183		imgfft_gsl6, imgfft_gsl6_getScratchSize	NatureDSP Signal 930, NatureDSP Signal 932
				ciff16_1024, ciff16_128, ciff16_2048, ciff16_256, ciff16_512, ciff16_64, cinfft16_144, cinfft16_176, cinfft16_240, cinfft16_288, cinfft16_320, cinfft16_352, cinfft16_384, cinfft16_480, cinfft16_576, cinfft16_640, cinfft16_96, ifft_cplx16x16, ifft_real16x16, riff16_1024, riff16_128, riff16_2048, riff16_256, riff16_512, riff16_64, rinfft16_144, rinfft16_176, rinfft16_240, rinfft16_288, rinfft16_320, rinfft16_352, rinfft16_384, rinfft16_480, rinfft16_576, rinfft16_640, rinfft16_96
imgifft_common_hifi4.o	1425		NatureDSP Signal 931, NatureDSP Signal 933	
imgifft_gu8_hifi4.o	851		imgifft_gu8, imgifft_gu8_getScratchSize	divs13, NatureDSP Signal 931, NatureDSP Signal 933
imgifft_gs8_hifi4.o	658		imgifft_gs8, imgifft_gs8_getScratchSize	divs13,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_931, NatureDSP_Signal_933
imgifft gs16 hifi4.o	394		imgifft gs16, imgifft gs16_getScratchSize	__divsi3, NatureDSP_Signal_931, NatureDSP_Signal_933
img gu8 crop hifi4.o	1931		NatureDSP_Signal_860	
img gs8 crop hifi4.o	942		NatureDSP_Signal_1024	
img gs hshear hifi4.o	900		NatureDSP_Signal_862	
img gu8 rot0 16 hifi4.o	818		NatureDSP_Signal_979	
img gu8 rot0 hifi4.o	805		NatureDSP_Signal_978	
img gu8 rot180 16 hifi4.o	786		NatureDSP_Signal_981	
img gu8 rot180 hifi4.o	1704		NatureDSP_Signal_980	
img gu8 rot270 16 hifi4.o	1258		NatureDSP_Signal_983	
img gu8 rot270 hifi4.o	578		NatureDSP_Signal_982	
img gu8 rot90 16 hifi4.o	1148		NatureDSP_Signal_985	
img gu8 rot90 hifi4.o	642		NatureDSP_Signal_984	
img gu8 rotq hifi4.o	104		NatureDSP_Signal_863	NatureDSP_Signal_978, NatureDSP_Signal_980, NatureDSP_Signal_982, NatureDSP_Signal_984
img gu8 rotq16 hifi4.o	126		NatureDSP_Signal_864	NatureDSP_Signal_979, NatureDSP_Signal_981, NatureDSP_Signal_983, NatureDSP_Signal_985
img gs8 rot0 16 hifi4.o	983		NatureDSP_Signal_1026	
img gs8 rot180 16 hifi4.o	1018		NatureDSP_Signal_1027	
img gs8 rot270 16 hifi4.o	1380		NatureDSP_Signal_1028	
img gs8 rot90 16 hifi4.o	1269		NatureDSP_Signal_1029	
img gs8 rotq hifi4.o	104		NatureDSP_Signal_1030	NatureDSP_Signal_978, NatureDSP_Signal_980, NatureDSP_Signal_982, NatureDSP_Signal_984
img gs8 rotq16 hifi4.o	126		NatureDSP_Signal_1031	NatureDSP_Signal_1026, NatureDSP_Signal_1027, NatureDSP_Signal_1028, NatureDSP_Signal_1029
img gs vshear hifi4.o	3087		NatureDSP_Signal_865	
img gs16 crop hifi4.o	560		NatureDSP_Signal_856	
img gs16 rot0 hifi4.o	244		NatureDSP_Signal_974	
img gs16 rot0 16 hifi4.o	483		NatureDSP_Signal_1013	
img gs16 rot180 hifi4.o	271		NatureDSP_Signal_975	
img gs16 rot180 16 hifi4.o	484		NatureDSP_Signal_1014	
img gs16 rot270 hifi4.o	1087		NatureDSP_Signal_976	
img gs16 rot270 16 hifi4.o	1461		NatureDSP_Signal_1015	
img gs16 rot90 hifi4.o	1026		NatureDSP_Signal_977	
img gs16 rot90 16 hifi4.o	1341		NatureDSP_Signal_1016	
img gs16 rotq hifi4.o	104		NatureDSP_Signal_858	NatureDSP_Signal_974, NatureDSP_Signal_975, NatureDSP_Signal_976, NatureDSP_Signal_977
img gs16 rotq16 hifi4.o	126		NatureDSP_Signal_859	NatureDSP_Signal_1013, NatureDSP_Signal_1014, NatureDSP_Signal_1015, NatureDSP_Signal_1016
imgfast gu8 crop hifi4.o	1017		NatureDSP_Signal_886	
imgfast gu8 rot0 16 hifi4.o	540		NatureDSP_Signal_995	
imgfast gu8 rot0 hifi4.o	142		NatureDSP_Signal_994	
imgfast gu8 rot180 16 hifi4.o	634		NatureDSP_Signal_997	
imgfast gu8 rot180 hifi4.o	777		NatureDSP_Signal_996	
imgfast gu8 rot270 16 hifi4.o	1728		NatureDSP_Signal_999	
imgfast gu8 rot270 hifi4.o	910		NatureDSP_Signal_998	
imgfast gu8 rot90 16 hifi4.o	1432		NatureDSP_Signal_1001	
imgfast gu8 rot90 hifi4.o	833		NatureDSP_Signal_1000	
imgfast gu8 rotq hifi4.o	104		NatureDSP_Signal_887	NatureDSP_Signal_1000, NatureDSP_Signal_994, NatureDSP_Signal_996, NatureDSP_Signal_998
imgfast gu8 rotq16 hifi4.o	126		NatureDSP_Signal_888	NatureDSP_Signal_1001, NatureDSP_Signal_995, NatureDSP_Signal_997, NatureDSP_Signal_999
imgfast gs8 crop hifi4.o	573		NatureDSP_Signal_1040	
imgfast gs8 rot0 16 hifi4.o	585		NatureDSP_Signal_1041	
imgfast gs8 rot180 16 hifi4.o	693		NatureDSP_Signal_1042	
imgfast gs8 rot270 16 hifi4.o	2067		NatureDSP_Signal_1043	

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Object file	Code size	Data size	Symbols	
			Global	Referenced
imgfast_gs8_rot90_16_hifi4.o	1612		NatureDSP_Signal_1044	
imgfast_gs8_rotq_hifi4.o	104		NatureDSP_Signal_1045	NatureDSP_Signal_1000, NatureDSP_Signal_994, NatureDSP_Signal_996, NatureDSP_Signal_998
imgfast_gs8_rotq16_hifi4.o	126		NatureDSP_Signal_1046	NatureDSP_Signal_1041, NatureDSP_Signal_1042, NatureDSP_Signal_1043, NatureDSP_Signal_1044
imgfast_gsl6_crop_hifi4.o	532		NatureDSP_Signal_882	
imgfast_gsl6_rot0_16_hifi4.o	437		NatureDSP_Signal_987	
imgfast_gsl6_rot0_hifi4.o	167		NatureDSP_Signal_986	
imgfast_gsl6_rot180_16_hifi4.o	541		NatureDSP_Signal_989	
imgfast_gsl6_rot180_hifi4.o	262		NatureDSP_Signal_988	
imgfast_gsl6_rot270_16_hifi4.o	1864		NatureDSP_Signal_991	
imgfast_gsl6_rot270_hifi4.o	1502		NatureDSP_Signal_990	
imgfast_gsl6_rot90_16_hifi4.o	1794		NatureDSP_Signal_993	
imgfast_gsl6_rot90_hifi4.o	1424		NatureDSP_Signal_992	
imgfast_gsl6_rotq_hifi4.o	104		NatureDSP_Signal_884	NatureDSP_Signal_986, NatureDSP_Signal_988, NatureDSP_Signal_990, NatureDSP_Signal_992
imgfast_gsl6_rotq16_hifi4.o	126		NatureDSP_Signal_885	NatureDSP_Signal_987, NatureDSP_Signal_989, NatureDSP_Signal_991, NatureDSP_Signal_993
imgfastrotate_gu8_hifi4.o	258	40	imgfastrotate_gu8_alloc, imgfastrotate_gu8_getOutSize, imgfastrotate_gu8_getScratchSize, imgfastrotate_gu8_init, imgfastrotate_gu8_process	NatureDSP_Signal_862, NatureDSP_Signal_865, NatureDSP_Signal_886, NatureDSP_Signal_887, NatureDSP_Signal_888, NatureDSP_Signal_914, NatureDSP_Signal_915
imgfastrotate_gs8_hifi4.o	258	40	imgfastrotate_gs8_alloc, imgfastrotate_gs8_getOutSize, imgfastrotate_gs8_getScratchSize, imgfastrotate_gs8_init, imgfastrotate_gs8_process	NatureDSP_Signal_1040, NatureDSP_Signal_1045, NatureDSP_Signal_1046, NatureDSP_Signal_862, NatureDSP_Signal_865, NatureDSP_Signal_914, NatureDSP_Signal_915
imgfastrotate_gsl6_hifi4.o	258	40	imgfastrotate_gsl6_alloc, imgfastrotate_gsl6_getOutSize, imgfastrotate_gsl6_getScratchSize, imgfastrotate_gsl6_init, imgfastrotate_gsl6_process,	NatureDSP_Signal_862, NatureDSP_Signal_865, NatureDSP_Signal_882, NatureDSP_Signal_884, NatureDSP_Signal_885, NatureDSP_Signal_914, NatureDSP_Signal_915
imgrotate_getCoef_hifi4.o	604	48	NatureDSP_Signal_914	
imgrotate_gu8_hifi4.o	258	40	imgrotate_gu8_alloc, imgrotate_gu8_getOutSize, imgrotate_gu8_getScratchSize, imgrotate_gu8_init, imgrotate_gu8_process,	NatureDSP_Signal_860, NatureDSP_Signal_862, NatureDSP_Signal_863, NatureDSP_Signal_864, NatureDSP_Signal_865, NatureDSP_Signal_914, NatureDSP_Signal_915
imgrotate_gs8_hifi4.o	258	40	imgrotate_gs8_alloc, imgrotate_gs8_getOutSize, imgrotate_gs8_getScratchSize, imgrotate_gs8_init, imgrotate_gs8_process,	NatureDSP_Signal_1024, NatureDSP_Signal_1030, NatureDSP_Signal_1031, NatureDSP_Signal_862, NatureDSP_Signal_865, NatureDSP_Signal_914, NatureDSP_Signal_915
imgrotate_gsl6_hifi4.o	258	40	imgrotate_gsl6_alloc, imgrotate_gsl6_getOutSize, imgrotate_gsl6_getScratchSize, imgrotate_gsl6_init, imgrotate_gsl6_process,	NatureDSP_Signal_856, NatureDSP_Signal_858, NatureDSP_Signal_859, NatureDSP_Signal_862, NatureDSP_Signal_865, NatureDSP_Signal_914, NatureDSP_Signal_915
imgrotate_process_hifi4.o	231		NatureDSP_Signal_915	
cmatcholtransformR_hifi4.o	122		NatureDSP_Signal_968	
cmatcholbkwsbstnrxn_hifi4.o	748		NatureDSP_Signal_1017	
cmatcholfwdsbstnrxn_hifi4.o	519		NatureDSP_Signal_1018	
cmatcholfwdsbststrec_hifi4.o	563		NatureDSP_Signal_1019	
cmatcholdiagUpd_hifi4.o	293		NatureDSP_Signal_965	

Object file	Code size	Data size	Symbols	
			Global	Referenced
cmatcholdecomp10x10_32x32_hifi4.o	1026		cmatcholdecomp10x10_32x32, cmatcholdecomp10x10_32x32_getScratchSize	NatureDSP_Signal_1019, NatureDSP_Signal_965
cmatcholdecomp4x4_32x32_hifi4.o	597		cmatcholdecomp4x4_32x32, cmatcholdecomp4x4_32x32_getScratchSize	NatureDSP_Signal_1019, NatureDSP_Signal_965
cmatcholdecomp6x6_32x32_hifi4.o	721		cmatcholdecomp6x6_32x32, cmatcholdecomp6x6_32x32_getScratchSize	NatureDSP_Signal_1019, NatureDSP_Signal_965
cmatcholdecomp8x8_32x32_hifi4.o	888		cmatcholdecomp8x8_32x32, cmatcholdecomp8x8_32x32_getScratchSize	NatureDSP_Signal_1019, NatureDSP_Signal_965
cmatcholbkwsbst10x10_32x32_hifi4.o	434		cmatcholbkwsbst10x10_32x32, cmatcholbkwsbst10x10_32x32_getScratchSize	
cmatcholbkwsbst4x4_32x32_hifi4.o	413		cmatcholbkwsbst4x4_32x32, cmatcholbkwsbst4x4_32x32_getScratchSize	
cmatcholbkwsbst6x6_32x32_hifi4.o	434		cmatcholbkwsbst6x6_32x32, cmatcholbkwsbst6x6_32x32_getScratchSize	
cmatcholbkwsbst8x8_32x32_hifi4.o	434		cmatcholbkwsbst8x8_32x32, cmatcholbkwsbst8x8_32x32_getScratchSize	
cmatcholfwdsbst10x10_32x32_hifi4.o	1195		cmatcholfwdsbst10x10_32x32, cmatcholfwdsbst10x10_32x32_getScratchSize	
cmatcholfwdsbst4x4_32x32_hifi4.o	686		cmatcholfwdsbst4x4_32x32, cmatcholfwdsbst4x4_32x32_getScratchSize	
cmatcholfwdsbst6x6_32x32_hifi4.o	836		cmatcholfwdsbst6x6_32x32, cmatcholfwdsbst6x6_32x32_getScratchSize	
cmatcholfwdsbst8x8_32x32_hifi4.o	947		cmatcholfwdsbst8x8_32x32, cmatcholfwdsbst8x8_32x32_getScratchSize	
cmatcholmmesolver10x10_32x32_hifi4.o	161		cmatcholmmesolver10x10_32x32, cmatcholmmesolver10x10_32x32_getScratchSize	cmatcholbkwsbst10x10_32x32, cmatcholbkwsbst10x10_32x32_getScratchSize, cmatcholdecomp10x10_32x32, cmatcholdecomp10x10_32x32_getScratchSize, cmatcholfwdsbst10x10_32x32, cmatcholfwdsbst10x10_32x32_getScratchSize
cmatcholmmesolver4x4_32x32_hifi4.o	158		cmatcholmmesolver4x4_32x32, cmatcholmmesolver4x4_32x32_getScratchSize	cmatcholbkwsbst4x4_32x32, cmatcholbkwsbst4x4_32x32_getScratchSize, cmatcholdecomp4x4_32x32, cmatcholdecomp4x4_32x32_getScratchSize, cmatcholfwdsbst4x4_32x32, cmatcholfwdsbst4x4_32x32_getScratchSize
cmatcholmmesolver6x6_32x32_hifi4.o	161		cmatcholmmesolver6x6_32x32, cmatcholmmesolver6x6_32x32_getScratchSize	cmatcholbkwsbst6x6_32x32, cmatcholbkwsbst6x6_32x32_getScratchSize, cmatcholdecomp6x6_32x32, cmatcholdecomp6x6_32x32_getScratchSize, cmatcholfwdsbst6x6_32x32, cmatcholfwdsbst6x6_32x32_getScratchSize
cmatcholmmesolver8x8_32x32_hifi4.o	161		cmatcholmmesolver8x8_32x32, cmatcholmmesolver8x8_32x32_getScratchSize	cmatcholbkwsbst8x8_32x32, cmatcholbkwsbst8x8_32x32_getScratchSize, cmatcholdecomp8x8_32x32, cmatcholdecomp8x8_32x32_getScratchSize, cmatcholfwdsbst8x8_32x32, cmatcholfwdsbst8x8_32x32_getScratchSize
cmatcholpseudoinv10x10_32x32_hifi4.o	153		cmatcholpseudoinv10x10_32x32, cmatcholpseudoinv10x10_32x32_getScratchSize	cmatcholdecomp10x10_32x32, cmatcholdecomp10x10_32x32_getScratchSize, NatureDSP_Signal_1017,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_1018, NatureDSP_Signal_968
cmatcholpseudoinv4x4_32x32_hifi4.o	147		cmatcholpseudoinv4x4_32x32, cmatcholpseudoinv4x4_32x32_getScratchSize	cmatcholdecomp4x4_32x32 , cmatcholdecomp4x4_32x32_getScratchSize, NatureDSP_Signal_1017, NatureDSP_Signal_1018, NatureDSP_Signal_968
cmatcholpseudoinv6x6_32x32_hifi4.o	150		cmatcholpseudoinv6x6_32x32, cmatcholpseudoinv6x6_32x32_getScratchSize	cmatcholdecomp6x6_32x32 , cmatcholdecomp6x6_32x32_getScratchSize, NatureDSP_Signal_1017, NatureDSP_Signal_1018, NatureDSP_Signal_968
cmatcholpseudoinv8x8_32x32_hifi4.o	153		cmatcholpseudoinv8x8_32x32, cmatcholpseudoinv8x8_32x32_getScratchSize	cmatcholdecomp8x8_32x32 , cmatcholdecomp8x8_32x32_getScratchSize, NatureDSP_Signal_1017, NatureDSP_Signal_1018, NatureDSP_Signal_968
cmatcholpreprocess10x10_32x32_hifi4.o	1010		cmatcholpreprocess10x10_32x32, cmatcholpreprocess10x10_32x32_getScratchSize	
cmatcholpreprocess4x4_32x32_hifi4.o	626		cmatcholpreprocess4x4_32x32, cmatcholpreprocess4x4_32x32_getScratchSize	
cmatcholpreprocess6x6_32x32_hifi4.o	724		cmatcholpreprocess6x6_32x32, cmatcholpreprocess6x6_32x32_getScratchSize	
cmatcholpreprocess8x8_32x32_hifi4.o	888		cmatcholpreprocess8x8_32x32, cmatcholpreprocess8x8_32x32_getScratchSize	
matcholbkwsbstnxn_hifi4.o	440		NatureDSP_Signal_1020	
matcholfwdsbstnxn_hifi4.o	386		NatureDSP_Signal_1022	
matcholfwdsbstrec_hifi4.o	508		NatureDSP_Signal_1023	
matcholdiagUpd_hifi4.o	274		NatureDSP_Signal_1021	
matcholdecomp10x10_32x32_hifi4.o	115		matcholdecomp10x10_32x32, matcholdecomp10x10_32x32_getScratchSize	matcholpreprocess10x10_32x32, NatureDSP_Signal_1021, NatureDSP_Signal_1023
matcholdecomp4x4_32x32_hifi4.o	115		matcholdecomp4x4_32x32, matcholdecomp4x4_32x32_getScratchSize	matcholpreprocess4x4_32x32, NatureDSP_Signal_1021, NatureDSP_Signal_1023
matcholdecomp6x6_32x32_hifi4.o	115		matcholdecomp6x6_32x32, matcholdecomp6x6_32x32_getScratchSize	matcholpreprocess6x6_32x32, NatureDSP_Signal_1021, NatureDSP_Signal_1023
matcholdecomp8x8_32x32_hifi4.o	115		matcholdecomp8x8_32x32, matcholdecomp8x8_32x32_getScratchSize	matcholpreprocess8x8_32x32, NatureDSP_Signal_1021, NatureDSP_Signal_1023
matcholbkwsbst10x10_32x32_hifi4.o	316		matcholbkwsbst10x10_32x32, matcholbkwsbst10x10_32x32_getScratchSize	
matcholbkwsbst4x4_32x32_hifi4.o	314		matcholbkwsbst4x4_32x32, matcholbkwsbst4x4_32x32_getScratchSize	
matcholbkwsbst6x6_32x32_hifi4.o	302		matcholbkwsbst6x6_32x32, matcholbkwsbst6x6_32x32_getScratchSize	
matcholbkwsbst8x8_32x32_hifi4.o	311		matcholbkwsbst8x8_32x32, matcholbkwsbst8x8_32x32_getScratchSize	
matcholfwdsbst10x10_32x32_hifi4.o	725		matcholfwdsbst10x10_32x32, matcholfwdsbst10x10_32x32_getScratchSize	
matcholfwdsbst4x4_32x32_hifi4.o	422		matcholfwdsbst4x4_32x32, matcholfwdsbst4x4_32x32_getScratchSize	
matcholfwdsbst6x6_32x32_hifi4.o	575		matcholfwdsbst6x6_32x32, matcholfwdsbst6x6_32x32_getScratchSize	
matcholfwdsbst8x8_32x32_hifi4.o	693		matcholfwdsbst8x8_32x32, matcholfwdsbst8x8_32x32_getScratchSize	
matcholmmesolver10x10_32x32_hifi4.o	230		matcholmmesolver10x10_32x32, matcholmmesolver10x10_32x32_getScratchSize	matcholbkwsbst10x10_32x32, matcholbkwsbst10x10_32x32_getScratchSize, matcholdecomp10x10_32x32, matcholdecomp10x10_32x32_getScratchSize, matcholfwdsbst10x10_32x32,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				matcholfdsubst10x10_32x32_getScratchSize
matcholmmesolver4x4_32x32_hifi4.o	222		matcholmmesolver4x4_32x32, matcholmmesolver4x4_32x32_getScratchSize	matcholbkwsbst4x4_32x32_2, matcholbkwsbst4x4_32x32_2_getScratchSize, matcholdecomp4x4_32x32, matcholdecomp4x4_32x32_getScratchSize, matcholfdsubst4x4_32x32_2, matcholfdsubst4x4_32x32_2_getScratchSize
matcholmmesolver6x6_32x32_hifi4.o	224		matcholmmesolver6x6_32x32, matcholmmesolver6x6_32x32_getScratchSize	matcholbkwsbst6x6_32x32_2, matcholbkwsbst6x6_32x32_2_getScratchSize, matcholdecomp6x6_32x32, matcholdecomp6x6_32x32_getScratchSize, matcholfdsubst6x6_32x32_2, matcholfdsubst6x6_32x32_2_getScratchSize
matcholmmesolver8x8_32x32_hifi4.o	230		matcholmmesolver8x8_32x32, matcholmmesolver8x8_32x32_getScratchSize	matcholbkwsbst8x8_32x32_2, matcholbkwsbst8x8_32x32_2_getScratchSize, matcholdecomp8x8_32x32, matcholdecomp8x8_32x32_getScratchSize, matcholfdsubst8x8_32x32_2, matcholfdsubst8x8_32x32_2_getScratchSize
matcholpseudoinv10x10_32x32_hifi4.o	137		matcholpseudoinv10x10_32x32, matcholpseudoinv10x10_32x32_getScratchSize	matcholdecomp10x10_32x32_2, matcholdecomp10x10_32x32_2_getScratchSize, NatureDSP_Signal_1020, NatureDSP_Signal_1022
matcholpseudoinv4x4_32x32_hifi4.o	129		matcholpseudoinv4x4_32x32, matcholpseudoinv4x4_32x32_getScratchSize	matcholdecomp4x4_32x32, matcholdecomp4x4_32x32_getScratchSize, NatureDSP_Signal_1020, NatureDSP_Signal_1022
matcholpseudoinv6x6_32x32_hifi4.o	132		matcholpseudoinv6x6_32x32, matcholpseudoinv6x6_32x32_getScratchSize	matcholdecomp6x6_32x32, matcholdecomp6x6_32x32_getScratchSize, NatureDSP_Signal_1020, NatureDSP_Signal_1022
matcholpseudoinv8x8_32x32_hifi4.o	137		matcholpseudoinv8x8_32x32, matcholpseudoinv8x8_32x32_getScratchSize	matcholdecomp8x8_32x32, matcholdecomp8x8_32x32_getScratchSize, NatureDSP_Signal_1020, NatureDSP_Signal_1022
matcholpreprocess10x10_32x32_hifi4.o	339		matcholpreprocess10x10_32x32, matcholpreprocess10x10_32x32_getScratchSize	
matcholpreprocess4x4_32x32_hifi4.o	330		matcholpreprocess4x4_32x32, matcholpreprocess4x4_32x32_getScratchSize	
matcholpreprocess6x6_32x32_hifi4.o	330		matcholpreprocess6x6_32x32, matcholpreprocess6x6_32x32_getScratchSize	
matcholpreprocess8x8_32x32_hifi4.o	336		matcholpreprocess8x8_32x32, matcholpreprocess8x8_32x32_getScratchSize	
cmatcholdecomp10x10f_hifi4.o	115	40	cmatcholdecomp10x10f, cmatcholdecomp10x10f_getScratchSize	cmatcholpreprocess10x10f, NatureDSP_Signal_1012, NatureDSP_Signal_831, NatureDSP_Signal_832, NatureDSP_Signal_833, NatureDSP_Signal_834, NatureDSP_Signal_835, NatureDSP_Signal_836, NatureDSP_Signal_837, NatureDSP_Signal_838, NatureDSP_Signal_839, NatureDSP_Signal_840

Object file	Code size	Data size	Symbols	
			Global	Referenced
cmatcholdecomp4x4f_hifi4.o	115	16	cmatcholdecomp4x4f, cmatcholdecomp4x4f_getScratchSize	cmatcholpreprocess4x4f, NatureDSP_Signal_1012, NatureDSP_Signal_832, NatureDSP_Signal_833, NatureDSP_Signal_834, NatureDSP_Signal_835
cmatcholdecomp6x6f_hifi4.o	115	24	cmatcholdecomp6x6f, cmatcholdecomp6x6f_getScratchSize	cmatcholpreprocess6x6f, NatureDSP_Signal_1012, NatureDSP_Signal_832, NatureDSP_Signal_833, NatureDSP_Signal_834, NatureDSP_Signal_835, NatureDSP_Signal_836, NatureDSP_Signal_837
cmatcholdecomp8x8f_hifi4.o	115	32	cmatcholdecomp8x8f, cmatcholdecomp8x8f_getScratchSize	cmatcholpreprocess8x8f, NatureDSP_Signal_1012, NatureDSP_Signal_832, NatureDSP_Signal_833, NatureDSP_Signal_834, NatureDSP_Signal_835, NatureDSP_Signal_836, NatureDSP_Signal_837, NatureDSP_Signal_838, NatureDSP_Signal_839
cmatcholbkwsbst10x10f_hifi4.o	875		cmatcholbkwsbst10x10f, cmatcholbkwsbst10x10f_getScratchSize	
cmatcholbkwsbst4x4f_hifi4.o	210		cmatcholbkwsbst4x4f, cmatcholbkwsbst4x4f_getScratchSize	
cmatcholbkwsbst6x6f_hifi4.o	389		cmatcholbkwsbst6x6f, cmatcholbkwsbst6x6f_getScratchSize	
cmatcholbkwsbst8x8f_hifi4.o	612		cmatcholbkwsbst8x8f, cmatcholbkwsbst8x8f_getScratchSize	
cmatcholfwdsbst10x10f_hifi4.o	460		cmatcholfwdsbst10x10f, cmatcholfwdsbst10x10f_getScratchSize, NatureDSP_Signal_841	NatureDSP_Signal_831
cmatcholfwdsbst4x4f_hifi4.o	276		cmatcholfwdsbst4x4f, cmatcholfwdsbst4x4f_getScratchSize, NatureDSP_Signal_842	NatureDSP_Signal_835
cmatcholfwdsbst6x6f_hifi4.o	276		cmatcholfwdsbst6x6f, cmatcholfwdsbst6x6f_getScratchSize, NatureDSP_Signal_843	NatureDSP_Signal_837
cmatcholfwdsbst8x8f_hifi4.o	398		cmatcholfwdsbst8x8f, cmatcholfwdsbst8x8f_getScratchSize, NatureDSP_Signal_844	NatureDSP_Signal_839
cmatcholmmesolver10x10f_hifi4.o	124		cmatcholmmesolver10x10f, cmatcholmmesolver10x10f_getScratchSize	cmatcholbkwsbst10x10f, cmatcholbkwsbst10x10f_getScratchSize, cmatcholdecomp10x10f_getScratchSize, cmatcholfwdsbst10x10f, cmatcholfwdsbst10x10f_getScratchSize
cmatcholmmesolver4x4f_hifi4.o	121		cmatcholmmesolver4x4f, cmatcholmmesolver4x4f_getScratchSize	cmatcholbkwsbst4x4f, cmatcholbkwsbst4x4f_getScratchSize, cmatcholdecomp4x4f_getScratchSize, cmatcholfwdsbst4x4f, cmatcholfwdsbst4x4f_getScratchSize
cmatcholmmesolver6x6f_hifi4.o	123		cmatcholmmesolver6x6f, cmatcholmmesolver6x6f_getScratchSize	cmatcholbkwsbst6x6f, cmatcholbkwsbst6x6f_getScratchSize, cmatcholdecomp6x6f_getScratchSize, cmatcholfwdsbst6x6f, cmatcholfwdsbst6x6f_getScratchSize
cmatcholmmesolver8x8f_hifi4.o	126		cmatcholmmesolver8x8f, cmatcholmmesolver8x8f_getScratchSize	cmatcholbkwsbst8x8f, cmatcholbkwsbst8x8f_getScratchSize, cmatcholdecomp8x8f_getScratchSize, cmatcholfwdsbst8x8f,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				cmatcholpseudoinv8x8f_hifi4.o
cmatcholpseudoinv10x10f_hifi4.o	1195		cmatcholpseudoinv10x10f, cmatcholpseudoinv10x10f_getScratchSize	cmatcholdecomp10x10f, cmatcholdecomp10x10f_getScratchSize
cmatcholpseudoinv4x4f_hifi4.o	454		cmatcholpseudoinv4x4f, cmatcholpseudoinv4x4f_getScratchSize	cmatcholdecomp4x4f, cmatcholdecomp4x4f_getScratchSize
cmatcholpseudoinv6x6f_hifi4.o	767		cmatcholpseudoinv6x6f, cmatcholpseudoinv6x6f_getScratchSize	cmatcholdecomp6x6f, cmatcholdecomp6x6f_getScratchSize
cmatcholpseudoinv8x8f_hifi4.o	1004		cmatcholpseudoinv8x8f, cmatcholpseudoinv8x8f_getScratchSize	cmatcholdecomp8x8f, cmatcholdecomp8x8f_getScratchSize
cmatcholpreprocess10x10f_hifi4.o	328		cmatcholpreprocess10x10f, cmatcholpreprocess10x10f_getScratchSize	
cmatcholpreprocess4x4f_hifi4.o	628		cmatcholpreprocess4x4f, cmatcholpreprocess4x4f_getScratchSize	
cmatcholpreprocess6x6f_hifi4.o	327		cmatcholpreprocess6x6f, cmatcholpreprocess6x6f_getScratchSize	
cmatcholpreprocess8x8f_hifi4.o	323		cmatcholpreprocess8x8f, cmatcholpreprocess8x8f_getScratchSize	
cplxcholDiagUpdf_hifi4.o	108		NatureDSP_Signal_1012	
cplxcholFwdrec10f_hifi4.o	832		NatureDSP_Signal_831	
cplxcholFwdrec1f_hifi4.o	20		NatureDSP_Signal_832	
cplxcholFwdrec2f_hifi4.o	54		NatureDSP_Signal_833	
cplxcholFwdrec3f_hifi4.o	110		NatureDSP_Signal_834	
cplxcholFwdrec4f_hifi4.o	183		NatureDSP_Signal_835	
cplxcholFwdrec5f_hifi4.o	264		NatureDSP_Signal_836	
cplxcholFwdrec6f_hifi4.o	353		NatureDSP_Signal_837	
cplxcholFwdrec7f_hifi4.o	459		NatureDSP_Signal_838	
cplxcholFwdrec8f_hifi4.o	575		NatureDSP_Signal_839	
cplxcholFwdrec9f_hifi4.o	697		NatureDSP_Signal_840	
matcholdecomp10x10f_hifi4.o	115	40	matcholdecomp10x10f, matcholdecomp10x10f_getScratchSize	matcholpreprocess10x10f, NatureDSP_Signal_1002, NatureDSP_Signal_1003, NatureDSP_Signal_1004, NatureDSP_Signal_1005, NatureDSP_Signal_1006, NatureDSP_Signal_1007, NatureDSP_Signal_1008, NatureDSP_Signal_1009, NatureDSP_Signal_1010, NatureDSP_Signal_1011, NatureDSP_Signal_972
matcholdecomp4x4f_hifi4.o	114	16	matcholdecomp4x4f, matcholdecomp4x4f_getScratchSize	matcholpreprocess4x4f, NatureDSP_Signal_1003, NatureDSP_Signal_1004, NatureDSP_Signal_1005, NatureDSP_Signal_1006, NatureDSP_Signal_972
matcholdecomp6x6f_hifi4.o	115	24	matcholdecomp6x6f, matcholdecomp6x6f_getScratchSize	matcholpreprocess6x6f, NatureDSP_Signal_1003, NatureDSP_Signal_1004, NatureDSP_Signal_1005, NatureDSP_Signal_1006, NatureDSP_Signal_1007, NatureDSP_Signal_1008, NatureDSP_Signal_972
matcholdecomp8x8f_hifi4.o	115	32	matcholdecomp8x8f, matcholdecomp8x8f_getScratchSize	matcholpreprocess8x8f, NatureDSP_Signal_1003, NatureDSP_Signal_1004, NatureDSP_Signal_1005, NatureDSP_Signal_1006, NatureDSP_Signal_1007, NatureDSP_Signal_1008, NatureDSP_Signal_1009, NatureDSP_Signal_1010, NatureDSP_Signal_972
matcholbkwsbst10x10f_hifi4.o	549		matcholbkwsbst10x10f, matcholbkwsbst10x10f_getScratchSize	
matcholbkwsbst4x4f_hifi4.o	148		matcholbkwsbst4x4f, matcholbkwsbst4x4f_getScratchSize	
matcholbkwsbst6x6f_hifi4.o	255		matcholbkwsbst6x6f, matcholbkwsbst6x6f_getScratchSize	

Object file	Code size	Data size	Symbols	
			Global	Referenced
matcholbkwsbst8x8f_hifi4.o	390		matcholbkwsbst8x8f, matcholbkwsbst8x8f_getScratchSize	
matcholfwdsubst10x10f_hifi4.o	470		matcholfwdsubst10x10f, matcholfwdsubst10x10f_getScratchSize	NatureDSP Signal 1002
matcholfwdsubst4x4f_hifi4.o	131		matcholfwdsubst4x4f, matcholfwdsubst4x4f_getScratchSize	NatureDSP Signal 1006
matcholfwdsubst6x6f_hifi4.o	185		matcholfwdsubst6x6f, matcholfwdsubst6x6f_getScratchSize	NatureDSP Signal 1008
matcholfwdsubst8x8f_hifi4.o	338		matcholfwdsubst8x8f, matcholfwdsubst8x8f_getScratchSize	NatureDSP Signal 1010
matcholmmesolver10x10f_hifi4.o	124		matcholmmesolver10x10f, matcholmmesolver10x10f_getScratchSize	matcholbkwsbst10x10f, matcholbkwsbst10x10f_g etScratchSize, matcholdecomp10x10f, matcholdecomp10x10f_get ScratchSize, matcholfwdsubst10x10f, matcholfwdsubst10x10f_g etScratchSize
matcholmmesolver4x4f_hifi4.o	113		matcholmmesolver4x4f, matcholmmesolver4x4f_getScratchSize	matcholbkwsbst4x4f, matcholbkwsbst4x4f_get ScratchSize, matcholdecomp4x4f, matcholdecomp4x4f_getSc ratchSize, matcholfwdsubst4x4f, matcholfwdsubst4x4f_get ScratchSize
matcholmmesolver6x6f_hifi4.o	121		matcholmmesolver6x6f, matcholmmesolver6x6f_getScratchSize	matcholbkwsbst6x6f, matcholbkwsbst6x6f_get ScratchSize, matcholdecomp6x6f, matcholdecomp6x6f_getSc ratchSize, matcholfwdsubst6x6f, matcholfwdsubst6x6f_get ScratchSize
matcholmmesolver8x8f_hifi4.o	124		matcholmmesolver8x8f, matcholmmesolver8x8f_getScratchSize	matcholbkwsbst8x8f, matcholbkwsbst8x8f_get ScratchSize, matcholdecomp8x8f, matcholdecomp8x8f_getSc ratchSize, matcholfwdsubst8x8f, matcholfwdsubst8x8f_get ScratchSize
matcholpseudoinv10x10f_hifi4.o	528		matcholpseudoinv10x10f, matcholpseudoinv10x10f_getScratchSize	matcholdecomp10x10f, matcholdecomp10x10f_get ScratchSize
matcholpseudoinv4x4f_hifi4.o	280		matcholpseudoinv4x4f, matcholpseudoinv4x4f_getScratchSize	matcholdecomp4x4f, matcholdecomp4x4f_getSc ratchSize
matcholpseudoinv6x6f_hifi4.o	344		matcholpseudoinv6x6f, matcholpseudoinv6x6f_getScratchSize	matcholdecomp6x6f, matcholdecomp6x6f_getSc ratchSize
matcholpseudoinv8x8f_hifi4.o	427		matcholpseudoinv8x8f, matcholpseudoinv8x8f_getScratchSize	matcholdecomp8x8f, matcholdecomp8x8f_getSc ratchSize
matcholpreprocess10x10f_hifi4.o	540		matcholpreprocess10x10f, matcholpreprocess10x10f_getScratchSize	
matcholpreprocess4x4f_hifi4.o	333		matcholpreprocess4x4f, matcholpreprocess4x4f_getScratchSize	
matcholpreprocess6x6f_hifi4.o	873		matcholpreprocess6x6f, matcholpreprocess6x6f_getScratchSize	
matcholpreprocess8x8f_hifi4.o	477		matcholpreprocess8x8f, matcholpreprocess8x8f_getScratchSize	
realcholDiagUpdf_hifi4.o	155		NatureDSP Signal 972	
realcholFwdrec10f_hifi4.o	495		NatureDSP Signal 1002	
realcholFwdrec1f_hifi4.o	20		NatureDSP Signal 1003	
realcholFwdrec2f_hifi4.o	43		NatureDSP Signal 1004	
realcholFwdrec3f_hifi4.o	74		NatureDSP Signal 1005	
realcholFwdrec4f_hifi4.o	118		NatureDSP Signal 1006	
realcholFwdrec5f_hifi4.o	169		NatureDSP Signal 1007	
realcholFwdrec6f_hifi4.o	228		NatureDSP Signal 1008	
realcholFwdrec7f_hifi4.o	287		NatureDSP Signal 1009	
realcholFwdrec8f_hifi4.o	350		NatureDSP Signal 1010	
realcholFwdrec9f_hifi4.o	430		NatureDSP Signal 1011	

Object file	Code size	Data size	Symbols
			Global Referenced
NatureDSP_Signal_complex_id.o		236	NatureDSP_Signal_annotation_scl_complex2invmag, NatureDSP_Signal_annotation_scl_complex2mag, NatureDSP_Signal_annotation_vec_complex2invmag, NatureDSP_Signal_annotation_vec_complex2mag
NatureDSP_Signal_fft_id.o		5401	NatureDSP_Signal_annotation_dct_16x16, NatureDSP_Signal_annotation_dct_24x24, NatureDSP_Signal_annotation_dct_32x16, NatureDSP_Signal_annotation_dct_32x32, NatureDSP_Signal_annotation_dct2d_8x16, NatureDSP_Signal_annotation_dct4_24x24, NatureDSP_Signal_annotation_dct4_32x16, NatureDSP_Signal_annotation_dct4_32x32, NatureDSP_Signal_annotation_dctf, NatureDSP_Signal_annotation_fft_cplx16x16, NatureDSP_Signal_annotation_fft_cplx16x16_ie , NatureDSP_Signal_annotation_fft_cplx24x24, NatureDSP_Signal_annotation_fft_cplx24x24_ie , NatureDSP_Signal_annotation_fft_cplx32x16, NatureDSP_Signal_annotation_fft_cplx32x16_ie , NatureDSP_Signal_annotation_fft_cplx32x32, NatureDSP_Signal_annotation_fft_cplx32x32_ie , NatureDSP_Signal_annotation_fft_cplxf_ie, NatureDSP_Signal_annotation_fft_reall6x16, NatureDSP_Signal_annotation_fft_reall6x16_ie , NatureDSP_Signal_annotation_fft_real24x24, NatureDSP_Signal_annotation_fft_real24x24_ie , NatureDSP_Signal_annotation_fft_real24x24_ie_24p, NatureDSP_Signal_annotation_fft_real32x16, NatureDSP_Signal_annotation_fft_real32x16_ie , NatureDSP_Signal_annotation_fft_real32x16_ie_24p, NatureDSP_Signal_annotation_fft_real32x32, NatureDSP_Signal_annotation_fft_real32x32_ie , NatureDSP_Signal_annotation_fft_realf_ie, NatureDSP_Signal_annotation_fft_spectruml6x32, NatureDSP_Signal_annotation_fft_spectrum32x32, NatureDSP_Signal_annotation_fft_spectrumf, NatureDSP_Signal_annotation_idct2d_16x8, NatureDSP_Signal_annotation_ifft_cplx16x16, NatureDSP_Signal_annotation_ifft_cplx16x16_ie, NatureDSP_Signal_annotation_ifft_cplx24x24, NatureDSP_Signal_annotation_ifft_cplx24x24_ie, NatureDSP_Signal_annotation_ifft_cplx32x16, NatureDSP_Signal_annotation_ifft_cplx32x16_ie, NatureDSP_Signal_annotation_ifft_cplx32x32, NatureDSP_Signal_annotation_ifft_cplx32x32_ie, NatureDSP_Signal_annotation_ifft_cplxf_ie, NatureDSP_Signal_annotation_ifft_reall6x16, NatureDSP_Signal_annotation_ifft_reall6x16_ie, NatureDSP_Signal_annotation_ifft_real24x24, NatureDSP_Signal_annotation_ifft_real24x24_ie, NatureDSP_Signal_annotation_ifft_real24x24_ie_24p, NatureDSP_Signal_annotation_ifft_real32x16, NatureDSP_Signal_annotation_ifft_real32x16_ie, NatureDSP_Signal_annotation_ifft_real32x16_ie_24p, NatureDSP_Signal_annotation_ifft_real32x32, NatureDSP_Signal_annotation_ifft_real32x32_ie, NatureDSP_Signal_annotation_ifft_realf_ie, NatureDSP_Signal_annotation_imdct_24x24, NatureDSP_Signal_annotation_imdct_32x16, NatureDSP_Signal_annotation_imdct_32x32,

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_annotation_mdct_24x24, NatureDSP_Signal_annotation_mdct_32x16, NatureDSP_Signal_annotation_mdct_32x32, NatureDSP_Signal_annotation_stereo_fft_cplx1 6x16_ie, NatureDSP_Signal_annotation_stereo_fft_cplx3 2x16_ie, NatureDSP_Signal_annotation_stereo_fft_cplx3 2x32_ie, NatureDSP_Signal_annotation_stereo_fft_cplx f_ie, NatureDSP_Signal_annotation_stereo_ifft_cplx 16x16_ie, NatureDSP_Signal_annotation_stereo_ifft_cplx 32x16_ie, NatureDSP_Signal_annotation_stereo_ifft_cplx 32x32_ie, NatureDSP_Signal_annotation_stereo_ifft_cplx f_ie	
NatureDSP_Signal_fir_id.o		9047	NatureDSP_Signal_annotation_bkfir16x16_proce ss, NatureDSP_Signal_annotation_bkfir24x24_proce ss, NatureDSP_Signal_annotation_bkfir24x24p_proc ess, NatureDSP_Signal_annotation_bkfir32x16_proce ss, NatureDSP_Signal_annotation_bkfir32x32_proce ss, NatureDSP_Signal_annotation_bkfir32x32ep_pro cess, NatureDSP_Signal_annotation_bkfir16x16_proc ess, NatureDSP_Signal_annotation_bkfira24x24_proc ess, NatureDSP_Signal_annotation_bkfira32x16_proc ess, NatureDSP_Signal_annotation_bkfira32x32_proc ess, NatureDSP_Signal_annotation_bkfira32x32ep_pr ocess, NatureDSP_Signal_annotation_bkfiraf_process, NatureDSP_Signal_annotation_bkfirf_process, NatureDSP_Signal_annotation_conv2d_11x7_16x1 6, NatureDSP_Signal_annotation_conv2d_11x7_8x16 , NatureDSP_Signal_annotation_conv2d_11x7_8x8, NatureDSP_Signal_annotation_conv2d_11x7f, NatureDSP_Signal_annotation_conv2d_3x3_16x16 , NatureDSP_Signal_annotation_conv2d_3x3_8x16, NatureDSP_Signal_annotation_conv2d_3x3_8x8, NatureDSP_Signal_annotation_conv2d_3x3f, NatureDSP_Signal_annotation_conv2d_5x5_16x16 , NatureDSP_Signal_annotation_conv2d_5x5_8x16, NatureDSP_Signal_annotation_conv2d_5x5_8x8, NatureDSP_Signal_annotation_conv2d_5x5f, NatureDSP_Signal_annotation_cxfir_blms32x32, NatureDSP_Signal_annotation_cxfir_blmsf, NatureDSP_Signal_annotation_cxfir_conv132x1 6, NatureDSP_Signal_annotation_cxfir_convola32x 16, NatureDSP_Signal_annotation_cxfir_xcorr32x32 , NatureDSP_Signal_annotation_cxfir_xcorra32x3 2, NatureDSP_Signal_annotation_cxfir_xcorraf, NatureDSP_Signal_annotation_cxfir_xcorrf, NatureDSP_Signal_annotation_cxfir16x16_proce ss, NatureDSP_Signal_annotation_cxfir24x24_proce ss, NatureDSP_Signal_annotation_cxfir32x16_proce ss, NatureDSP_Signal_annotation_cxfir32x32_proce ss,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_annotation_cxfir32x32ep_process, NatureDSP_Signal_annotation_cxfirf_process, NatureDSP_Signal_annotation_fir_acorr16x16, NatureDSP_Signal_annotation_fir_acorr24x24, NatureDSP_Signal_annotation_fir_acorr32x32, NatureDSP_Signal_annotation_fir_acorr32x32ep, , NatureDSP_Signal_annotation_fir_acorra16x16, NatureDSP_Signal_annotation_fir_acorra24x24, NatureDSP_Signal_annotation_fir_acorra32x32, NatureDSP_Signal_annotation_fir_acorra32x32ep, NatureDSP_Signal_annotation_fir_acorraf, NatureDSP_Signal_annotation_fir_acorrf, NatureDSP_Signal_annotation_fir_blms16x16, NatureDSP_Signal_annotation_fir_blms16x32, NatureDSP_Signal_annotation_fir_blms24x24, NatureDSP_Signal_annotation_fir_blms32x32, NatureDSP_Signal_annotation_fir_blms32x32ep, NatureDSP_Signal_annotation_fir_blmsf, NatureDSP_Signal_annotation_fir_conv16x16, NatureDSP_Signal_annotation_fir_conv124x24, NatureDSP_Signal_annotation_fir_conv132x16, NatureDSP_Signal_annotation_fir_conv132x32, NatureDSP_Signal_annotation_fir_conv132x32ep, NatureDSP_Signal_annotation_fir_convola16x16, , NatureDSP_Signal_annotation_fir_convola24x24, , NatureDSP_Signal_annotation_fir_convola32x16, , NatureDSP_Signal_annotation_fir_convola32x32, , NatureDSP_Signal_annotation_fir_convola32x32ep, NatureDSP_Signal_annotation_fir_convolaof, NatureDSP_Signal_annotation_fir_convolf, NatureDSP_Signal_annotation_fir_lacorra16x16, , NatureDSP_Signal_annotation_fir_lacorra32x32, , NatureDSP_Signal_annotation_fir_lconvola16x16, NatureDSP_Signal_annotation_fir_lconvola32x32, , NatureDSP_Signal_annotation_fir_lxcorra16x16, , NatureDSP_Signal_annotation_fir_lxcorra32x32, , NatureDSP_Signal_annotation_fir_xcorr16x16, NatureDSP_Signal_annotation_fir_xcorr24x24, NatureDSP_Signal_annotation_fir_xcorr32x16, NatureDSP_Signal_annotation_fir_xcorr32x32, NatureDSP_Signal_annotation_fir_xcorr32x32ep, , NatureDSP_Signal_annotation_fir_xcorra16x16, NatureDSP_Signal_annotation_fir_xcorra24x24, NatureDSP_Signal_annotation_fir_xcorra32x16, NatureDSP_Signal_annotation_fir_xcorra32x32, NatureDSP_Signal_annotation_fir_xcorra32x32ep, NatureDSP_Signal_annotation_fir_xcorraf, NatureDSP_Signal_annotation_fir_xcorrf, NatureDSP_Signal_annotation_firdec16x16_process, NatureDSP_Signal_annotation_firdec24x24_process, NatureDSP_Signal_annotation_firdec32x16_process, NatureDSP_Signal_annotation_firdec32x32_process, NatureDSP_Signal_annotation_firdec32x32ep_process, NatureDSP_Signal_annotation_firdecf_process, NatureDSP_Signal_annotation_firinterp16x16_process, NatureDSP_Signal_annotation_firinterp24x24_process,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_annotation_firinterp32x16_process, NatureDSP_Signal_annotation_firinterp32x32_process, NatureDSP_Signal_annotation_firinterp32x32ep_process, NatureDSP_Signal_annotation_firinterp_process, NatureDSP_Signal_annotation_stereo_bkfir16x16_process, NatureDSP_Signal_annotation_stereo_bkfir32x32_process, NatureDSP_Signal_annotation_stereo_bkfir_process	
NatureDSP_Signal_fit_id.o		250	NatureDSP_Signal_annotation_vec_poly4_24x24, NatureDSP_Signal_annotation_vec_poly4_32x32, NatureDSP_Signal_annotation_vec_poly4f, NatureDSP_Signal_annotation_vec_poly8_24x24, NatureDSP_Signal_annotation_vec_poly8_32x32, NatureDSP_Signal_annotation_vec_poly8f	
NatureDSP_Signal_iir_id.o		3720	NatureDSP_Signal_annotation_bqciirf_df1, NatureDSP_Signal_annotation_bqciirf_df1_nd, NatureDSP_Signal_annotation_bqriir16x16_df1, NatureDSP_Signal_annotation_bqriir16x16_df1_nd, NatureDSP_Signal_annotation_bqriir16x16_df2, NatureDSP_Signal_annotation_bqriir16x16_df2_nd, NatureDSP_Signal_annotation_bqriir24x24_df1, NatureDSP_Signal_annotation_bqriir24x24_df2, NatureDSP_Signal_annotation_bqriir32x16_df1, NatureDSP_Signal_annotation_bqriir32x16_df1_nd, NatureDSP_Signal_annotation_bqriir32x16_df2, NatureDSP_Signal_annotation_bqriir32x16_df2_nd, NatureDSP_Signal_annotation_bqriir32x32_df1, NatureDSP_Signal_annotation_bqriir32x32_df1_nd, NatureDSP_Signal_annotation_bqriir32x32_df2, NatureDSP_Signal_annotation_bqriir32x32_df2_nd, NatureDSP_Signal_annotation_bqriirf_df1, NatureDSP_Signal_annotation_bqriirf_df1_nd, NatureDSP_Signal_annotation_bqriirf_df2, NatureDSP_Signal_annotation_bqriirf_df2_nd, NatureDSP_Signal_annotation_bqriirf_df2t, NatureDSP_Signal_annotation_bqriirf_df2t_nd, NatureDSP_Signal_annotation_latr16x16_process, NatureDSP_Signal_annotation_latr24x24_process, NatureDSP_Signal_annotation_latr32x16_process, NatureDSP_Signal_annotation_latr32x32_process, NatureDSP_Signal_annotation_latrf_process, NatureDSP_Signal_annotation_stereo_bqriir16x16_df1, NatureDSP_Signal_annotation_stereo_bqriir16x16_df1_nd, NatureDSP_Signal_annotation_stereo_bqriir32x16_df1, NatureDSP_Signal_annotation_stereo_bqriir32x16_df1_nd, NatureDSP_Signal_annotation_stereo_bqriir32x32_df1, NatureDSP_Signal_annotation_stereo_bqriir32x32_df1_nd, NatureDSP_Signal_annotation_stereo_bqriirf_df1, NatureDSP_Signal_annotation_stereo_bqriirf_df1_nd	
NatureDSP_Signal_math_id.o		5053	NatureDSP_Signal_annotation_scl_antilog10_24x24, NatureDSP_Signal_annotation_scl_antilog10_32x32, NatureDSP_Signal_annotation_scl_antilog10f, NatureDSP_Signal_annotation_scl_antilog2_24x24,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_annotation_scl_antilog2_32x32, NatureDSP_Signal_annotation_scl_antilog2f, NatureDSP_Signal_annotation_scl_antilogn_24x24, NatureDSP_Signal_annotation_scl_antilogn_32x32, NatureDSP_Signal_annotation_scl_antilognf, NatureDSP_Signal_annotation_scl_atan2_24x24, NatureDSP_Signal_annotation_scl_atan24x24, NatureDSP_Signal_annotation_scl_atan2f, NatureDSP_Signal_annotation_scl_atan32x32, NatureDSP_Signal_annotation_scl_atanf, NatureDSP_Signal_annotation_scl_cosine24x24, NatureDSP_Signal_annotation_scl_cosine32x32, NatureDSP_Signal_annotation_scl_cosinef, NatureDSP_Signal_annotation_scl_divide16x16, NatureDSP_Signal_annotation_scl_divide24x24, NatureDSP_Signal_annotation_scl_divide32x32, NatureDSP_Signal_annotation_scl_divide64x32, NatureDSP_Signal_annotation_scl_divide64x64, NatureDSP_Signal_annotation_scl_float2int, NatureDSP_Signal_annotation_scl_int2float, NatureDSP_Signal_annotation_scl_log10_24x24, NatureDSP_Signal_annotation_scl_log10_32x32, NatureDSP_Signal_annotation_scl_log10f, NatureDSP_Signal_annotation_scl_log2_24x24, NatureDSP_Signal_annotation_scl_log2_32x32, NatureDSP_Signal_annotation_scl_log2f, NatureDSP_Signal_annotation_scl_logn_24x24, NatureDSP_Signal_annotation_scl_logn_32x32, NatureDSP_Signal_annotation_scl_lognf, NatureDSP_Signal_annotation_scl_powf, NatureDSP_Signal_annotation_scl_recip16x16, NatureDSP_Signal_annotation_scl_recip24x24, NatureDSP_Signal_annotation_scl_recip32x32, NatureDSP_Signal_annotation_scl_recip64x64, NatureDSP_Signal_annotation_scl_relu32x32, NatureDSP_Signal_annotation_scl_reluf, NatureDSP_Signal_annotation_scl_rsqrt16x16, NatureDSP_Signal_annotation_scl_rsqrt32x32, NatureDSP_Signal_annotation_scl_sigmoid32x32, NatureDSP_Signal_annotation_scl_sigmoidf, NatureDSP_Signal_annotation_scl_sine24x24, NatureDSP_Signal_annotation_scl_sine32x32, NatureDSP_Signal_annotation_scl_sinef, NatureDSP_Signal_annotation_scl_sqrt16x16, NatureDSP_Signal_annotation_scl_sqrt24x24, NatureDSP_Signal_annotation_scl_sqrt32x16, NatureDSP_Signal_annotation_scl_sqrt32x32, NatureDSP_Signal_annotation_scl_sqrt64x32, NatureDSP_Signal_annotation_scl_tan24x24, NatureDSP_Signal_annotation_scl_tan32x32, NatureDSP_Signal_annotation_scl_tanf, NatureDSP_Signal_annotation_scl_tanh32x32, NatureDSP_Signal_annotation_scl_tanhf, NatureDSP_Signal_annotation_vec_antilog10_24x24, NatureDSP_Signal_annotation_vec_antilog10_32x32, NatureDSP_Signal_annotation_vec_antilog10f, NatureDSP_Signal_annotation_vec_antilog2_24x24, NatureDSP_Signal_annotation_vec_antilog2_32x32, NatureDSP_Signal_annotation_vec_antilog2f, NatureDSP_Signal_annotation_vec_antilogn_24x24, NatureDSP_Signal_annotation_vec_antilogn_32x32, NatureDSP_Signal_annotation_vec_antilognf, NatureDSP_Signal_annotation_vec_atan2_24x24, NatureDSP_Signal_annotation_vec_atan24x24, NatureDSP_Signal_annotation_vec_atan2f, NatureDSP_Signal_annotation_vec_atan32x32, NatureDSP_Signal_annotation_vec_atanf, NatureDSP_Signal_annotation_vec_cosine24x24, NatureDSP_Signal_annotation_vec_cosine24x24	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			fast, NatureDSP_Signal_annotation_vec_cosine32x32, NatureDSP_Signal_annotation_vec_cosine32x32_ fast, NatureDSP_Signal_annotation_vec_cosinef, NatureDSP_Signal_annotation_vec_divide16x16, NatureDSP_Signal_annotation_vec_divide16x16_ fast, NatureDSP_Signal_annotation_vec_divide24x24, NatureDSP_Signal_annotation_vec_divide24x24_ fast, NatureDSP_Signal_annotation_vec_divide32x32, NatureDSP_Signal_annotation_vec_divide32x32_ fast, NatureDSP_Signal_annotation_vec_divide64x32i , NatureDSP_Signal_annotation_vec_divide64x64, NatureDSP_Signal_annotation_vec_float2int, NatureDSP_Signal_annotation_vec_int2float, NatureDSP_Signal_annotation_vec_log10_24x24, NatureDSP_Signal_annotation_vec_log10_32x32, NatureDSP_Signal_annotation_vec_log10f, NatureDSP_Signal_annotation_vec_log2_24x24, NatureDSP_Signal_annotation_vec_log2_32x32, NatureDSP_Signal_annotation_vec_log2f, NatureDSP_Signal_annotation_vec_logn_24x24, NatureDSP_Signal_annotation_vec_logn_32x32, NatureDSP_Signal_annotation_vec_lognf, NatureDSP_Signal_annotation_vec_pow_32x32, NatureDSP_Signal_annotation_vec_powf, NatureDSP_Signal_annotation_vec_recip16x16, NatureDSP_Signal_annotation_vec_recip24x24, NatureDSP_Signal_annotation_vec_recip32x32, NatureDSP_Signal_annotation_vec_recip64x64, NatureDSP_Signal_annotation_vec_relu32x32, NatureDSP_Signal_annotation_vec_relu, NatureDSP_Signal_annotation_vec_rsqrt16x16, NatureDSP_Signal_annotation_vec_rsqrt32x32, NatureDSP_Signal_annotation_vec_sigmoid32x32 , NatureDSP_Signal_annotation_vec_sigmoidf, NatureDSP_Signal_annotation_vec_sine24x24, NatureDSP_Signal_annotation_vec_sine24x24_fa st, NatureDSP_Signal_annotation_vec_sine32x32, NatureDSP_Signal_annotation_vec_sine32x32_fa st, NatureDSP_Signal_annotation_vec_sinef, NatureDSP_Signal_annotation_vec_softmax32x32 , NatureDSP_Signal_annotation_vec_softmaxf, NatureDSP_Signal_annotation_vec_sqrt16x16, NatureDSP_Signal_annotation_vec_sqrt24x24, NatureDSP_Signal_annotation_vec_sqrt24x24_fa st, NatureDSP_Signal_annotation_vec_sqrt32x16, NatureDSP_Signal_annotation_vec_sqrt32x32, NatureDSP_Signal_annotation_vec_sqrt32x32_fa st, NatureDSP_Signal_annotation_vec_sqrt64x32, NatureDSP_Signal_annotation_vec_tan24x24, NatureDSP_Signal_annotation_vec_tan32x32, NatureDSP_Signal_annotation_vec_tanf, NatureDSP_Signal_annotation_vec_tanh32x32, NatureDSP_Signal_annotation_vec_tanhf	
NatureDSP_Signal_matinv_id.o		7820	NatureDSP_Signal_annotation_cmatcholbkwsbst 10x10_32x32, NatureDSP_Signal_annotation_cmatcholbkwsbst 10x10f, NatureDSP_Signal_annotation_cmatcholbkwsbst 4x4_32x32, NatureDSP_Signal_annotation_cmatcholbkwsbst 4x4f, NatureDSP_Signal_annotation_cmatcholbkwsbst 6x6_32x32, NatureDSP_Signal_annotation_cmatcholbkwsbst 6x6f, NatureDSP_Signal_annotation_cmatcholbkwsbst 8x8_32x32, NatureDSP_Signal_annotation_cmatcholbkwsbst 8x8f, NatureDSP_Signal_annotation_cmatcholdecomp10	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			x10_32x32, NatureDSP_Signal_annotation_cmatcholdecomp10 x10f, NatureDSP_Signal_annotation_cmatcholdecomp4x 4_32x32, NatureDSP_Signal_annotation_cmatcholdecomp4x 4f, NatureDSP_Signal_annotation_cmatcholdecomp6x 6_32x32, NatureDSP_Signal_annotation_cmatcholdecomp6x 6f, NatureDSP_Signal_annotation_cmatcholdecomp8x 8_32x32, NatureDSP_Signal_annotation_cmatcholdecomp8x 8f, NatureDSP_Signal_annotation_cmatcholfwdsubst 10x10_32x32, NatureDSP_Signal_annotation_cmatcholfwdsubst 10x10f, NatureDSP_Signal_annotation_cmatcholfwdsubst 4x4_32x32, NatureDSP_Signal_annotation_cmatcholfwdsubst 4x4f, NatureDSP_Signal_annotation_cmatcholfwdsubst 6x6_32x32, NatureDSP_Signal_annotation_cmatcholfwdsubst 6x6f, NatureDSP_Signal_annotation_cmatcholfwdsubst 8x8_32x32, NatureDSP_Signal_annotation_cmatcholfwdsubst 8x8f, NatureDSP_Signal_annotation_cmatcholmmesolv er10x10_32x32, NatureDSP_Signal_annotation_cmatcholmmesolv er10x10f, NatureDSP_Signal_annotation_cmatcholmmesolv er4x4_32x32, NatureDSP_Signal_annotation_cmatcholmmesolv er4x4f, NatureDSP_Signal_annotation_cmatcholmmesolv er6x6_32x32, NatureDSP_Signal_annotation_cmatcholmmesolv er6x6f, NatureDSP_Signal_annotation_cmatcholmmesolv er8x8_32x32, NatureDSP_Signal_annotation_cmatcholmmesolv er8x8f, NatureDSP_Signal_annotation_cmatcholpreproce ss10x10_32x32, NatureDSP_Signal_annotation_cmatcholpreproce ss10x10f, NatureDSP_Signal_annotation_cmatcholpreproce ss4x4_32x32, NatureDSP_Signal_annotation_cmatcholpreproce ss4x4f, NatureDSP_Signal_annotation_cmatcholpreproce ss6x6_32x32, NatureDSP_Signal_annotation_cmatcholpreproce ss6x6f, NatureDSP_Signal_annotation_cmatcholpreproce ss8x8_32x32, NatureDSP_Signal_annotation_cmatcholpreproce ss8x8f, NatureDSP_Signal_annotation_cmatcholpseudoin v10x10_32x32, NatureDSP_Signal_annotation_cmatcholpseudoin v10x10f, NatureDSP_Signal_annotation_cmatcholpseudoin v4x4_32x32, NatureDSP_Signal_annotation_cmatcholpseudoin v4x4f, NatureDSP_Signal_annotation_cmatcholpseudoin v6x6_32x32, NatureDSP_Signal_annotation_cmatcholpseudoin v6x6f, NatureDSP_Signal_annotation_cmatcholpseudoin v8x8_32x32, NatureDSP_Signal_annotation_cmatcholpseudoin	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			v8x8f, NatureDSP_Signal_annotation_cmtx_gjelim10x10_32x32, NatureDSP_Signal_annotation_cmtx_gjelim2x2_32x32, NatureDSP_Signal_annotation_cmtx_gjelim3x3_32x32, NatureDSP_Signal_annotation_cmtx_gjelim4x4_32x32, NatureDSP_Signal_annotation_cmtx_gjelim6x6_32x32, NatureDSP_Signal_annotation_cmtx_gjelim8x8_32x32, NatureDSP_Signal_annotation_cmtx_inv10x10_32x32, NatureDSP_Signal_annotation_cmtx_inv2x2_32x32, NatureDSP_Signal_annotation_cmtx_inv3x3_32x32, NatureDSP_Signal_annotation_cmtx_inv4x4_32x32, NatureDSP_Signal_annotation_cmtx_inv6x6_32x32, NatureDSP_Signal_annotation_cmtx_inv8x8_32x32, NatureDSP_Signal_annotation_matcholbkwsbst10x10_32x32, NatureDSP_Signal_annotation_matcholbkwsbst10x10f, NatureDSP_Signal_annotation_matcholbkwsbst4x4_32x32, NatureDSP_Signal_annotation_matcholbkwsbst4x4f, NatureDSP_Signal_annotation_matcholbkwsbst6x6_32x32, NatureDSP_Signal_annotation_matcholbkwsbst6x6f, NatureDSP_Signal_annotation_matcholbkwsbst8x8_32x32, NatureDSP_Signal_annotation_matcholbkwsbst8x8f, NatureDSP_Signal_annotation_matcholdecomp10x10_32x32, NatureDSP_Signal_annotation_matcholdecomp10x10f, NatureDSP_Signal_annotation_matcholdecomp4x4_32x32, NatureDSP_Signal_annotation_matcholdecomp4x4f, NatureDSP_Signal_annotation_matcholdecomp6x6_32x32, NatureDSP_Signal_annotation_matcholdecomp6x6f, NatureDSP_Signal_annotation_matcholdecomp8x8_32x32, NatureDSP_Signal_annotation_matcholdecomp8x8f, NatureDSP_Signal_annotation_matcholfwdsubst10x10_32x32, NatureDSP_Signal_annotation_matcholfwdsubst10x10f, NatureDSP_Signal_annotation_matcholfwdsubst4x4_32x32, NatureDSP_Signal_annotation_matcholfwdsubst4x4f, NatureDSP_Signal_annotation_matcholfwdsubst6x6_32x32, NatureDSP_Signal_annotation_matcholfwdsubst6x6f, NatureDSP_Signal_annotation_matcholfwdsubst8x8_32x32, NatureDSP_Signal_annotation_matcholfwdsubst8x8f, NatureDSP_Signal_annotation_matcholmmsesolve10x10_32x32, NatureDSP_Signal_annotation_matcholmmsesolve10x10f, NatureDSP_Signal_annotation_matcholmmsesolve4x4_32x32,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_annotation_matcholmmesolve r4x4f, NatureDSP_Signal_annotation_matcholmmesolve r6x6_32x32, NatureDSP_Signal_annotation_matcholmmesolve r6x6f, NatureDSP_Signal_annotation_matcholmmesolve r8x8_32x32, NatureDSP_Signal_annotation_matcholmmesolve r8x8f, NatureDSP_Signal_annotation_matcholpreproces s10x10_32x32, NatureDSP_Signal_annotation_matcholpreproces s10x10f, NatureDSP_Signal_annotation_matcholpreproces s4x4_32x32, NatureDSP_Signal_annotation_matcholpreproces s4x4f, NatureDSP_Signal_annotation_matcholpreproces s6x6_32x32, NatureDSP_Signal_annotation_matcholpreproces s6x6f, NatureDSP_Signal_annotation_matcholpreproces s8x8_32x32, NatureDSP_Signal_annotation_matcholpreproces s8x8f, NatureDSP_Signal_annotation_matcholpseudoinv 10x10_32x32, NatureDSP_Signal_annotation_matcholpseudoinv 10x10f, NatureDSP_Signal_annotation_matcholpseudoinv 4x4_32x32, NatureDSP_Signal_annotation_matcholpseudoinv 4x4f, NatureDSP_Signal_annotation_matcholpseudoinv 6x6_32x32, NatureDSP_Signal_annotation_matcholpseudoinv 6x6f, NatureDSP_Signal_annotation_matcholpseudoinv 8x8_32x32, NatureDSP_Signal_annotation_matcholpseudoinv 8x8f, NatureDSP_Signal_annotation_mtx_gjelim10x10_32x32, NatureDSP_Signal_annotation_mtx_gjelim2x2_32x32, NatureDSP_Signal_annotation_mtx_gjelim3x3_32x32, NatureDSP_Signal_annotation_mtx_gjelim4x4_32x32, NatureDSP_Signal_annotation_mtx_gjelim6x6_32x32, NatureDSP_Signal_annotation_mtx_gjelim8x8_32x32, NatureDSP_Signal_annotation_mtx_inv10x10_32x32, NatureDSP_Signal_annotation_mtx_inv10x10f, NatureDSP_Signal_annotation_mtx_inv2x2_32x32, NatureDSP_Signal_annotation_mtx_inv2x2f, NatureDSP_Signal_annotation_mtx_inv3x3_32x32, NatureDSP_Signal_annotation_mtx_inv3x3f, NatureDSP_Signal_annotation_mtx_inv4x4_32x32, NatureDSP_Signal_annotation_mtx_inv4x4f, NatureDSP_Signal_annotation_mtx_inv6x6_32x32, NatureDSP_Signal_annotation_mtx_inv6x6f, NatureDSP_Signal_annotation_mtx_inv8x8_32x32, NatureDSP_Signal_annotation_mtx_inv8x8f	
NatureDSP_Signal_matop_id.o		1661	NatureDSP_Signal_annotation_mtx_mpy16x16, NatureDSP_Signal_annotation_mtx_mpy16x16_fast, NatureDSP_Signal_annotation_mtx_mpy24x24, NatureDSP_Signal_annotation_mtx_mpy24x24_fast, NatureDSP_Signal_annotation_mtx_mpy32x32, NatureDSP_Signal_annotation_mtx_mpy32x32_fast, NatureDSP_Signal_annotation_mtx_mpy8x16, NatureDSP_Signal_annotation_mtx_mpy8x16_fast, NatureDSP_Signal_annotation_mtx_mpy8x8, NatureDSP_Signal_annotation_mtx_mpy8x8_fast, NatureDSP_Signal_annotation_mtx_mpyf,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_annotation_mtx_mpyf_fast, NatureDSP_Signal_annotation_mtx_mpyt16x16, NatureDSP_Signal_annotation_mtx_mpyt16x16_fast, NatureDSP_Signal_annotation_mtx_mpyt32x32, NatureDSP_Signal_annotation_mtx_mpyt32x32_fast, NatureDSP_Signal_annotation_mtx_mpyt8x16, NatureDSP_Signal_annotation_mtx_mpyt8x16_fast, NatureDSP_Signal_annotation_mtx_mpyt8x8, NatureDSP_Signal_annotation_mtx_mpyt8x8_fast, NatureDSP_Signal_annotation_mtx_mpytf, NatureDSP_Signal_annotation_mtx_mpytf_fast, NatureDSP_Signal_annotation_mtx_transpose16x16, NatureDSP_Signal_annotation_mtx_transpose16x16_fast, NatureDSP_Signal_annotation_mtx_transpose32x32, NatureDSP_Signal_annotation_mtx_transpose32x32_fast, NatureDSP_Signal_annotation_mtx_transpose8x8, NatureDSP_Signal_annotation_mtx_transpose8x8_fast, NatureDSP_Signal_annotation_mtx_transposeef, NatureDSP_Signal_annotation_mtx_transposeef_fast, NatureDSP_Signal_annotation_mtx_vecmpy16x16, NatureDSP_Signal_annotation_mtx_vecmpy16x16_fast, NatureDSP_Signal_annotation_mtx_vecmpy24x24, NatureDSP_Signal_annotation_mtx_vecmpy24x24_fast, NatureDSP_Signal_annotation_mtx_vecmpy32x32, NatureDSP_Signal_annotation_mtx_vecmpy32x32_fast, NatureDSP_Signal_annotation_mtx_vecmpy8x16, NatureDSP_Signal_annotation_mtx_vecmpy8x16_fast, NatureDSP_Signal_annotation_mtx_vecmpy8x8, NatureDSP_Signal_annotation_mtx_vecmpy8x8_fast, NatureDSP_Signal_annotation_mtx_vecmpyf, NatureDSP_Signal_annotation_mtx_vecmpyf_fast	
NatureDSP_Signal_vector_id.o		3363	NatureDSP_Signal_annotation_scl_add_32x16ef, NatureDSP_Signal_annotation_scl_bexp16, NatureDSP_Signal_annotation_scl_bexp32, NatureDSP_Signal_annotation_scl_bexpf, NatureDSP_Signal_annotation_scl_mac_32x16ef, NatureDSP_Signal_annotation_scl_mul_32x16ef, NatureDSP_Signal_annotation_vec_add_32x16ef, NatureDSP_Signal_annotation_vec_add16x16, NatureDSP_Signal_annotation_vec_add16x16_fast, NatureDSP_Signal_annotation_vec_add32x32, NatureDSP_Signal_annotation_vec_add32x32_fast, NatureDSP_Signal_annotation_vec_addf, NatureDSP_Signal_annotation_vec_bexp16, NatureDSP_Signal_annotation_vec_bexp16_fast, NatureDSP_Signal_annotation_vec_bexp24_fast, NatureDSP_Signal_annotation_vec_bexp32, NatureDSP_Signal_annotation_vec_bexp32_fast, NatureDSP_Signal_annotation_vec_bexpf, NatureDSP_Signal_annotation_vec_dot_32x16ef, NatureDSP_Signal_annotation_vec_dot_batch16x16, NatureDSP_Signal_annotation_vec_dot_batch16x16_fast, NatureDSP_Signal_annotation_vec_dot_batch8x16, NatureDSP_Signal_annotation_vec_dot_batch8x16_fast, NatureDSP_Signal_annotation_vec_dot_batch8x8, NatureDSP_Signal_annotation_vec_dot_batch8x8_fast, NatureDSP_Signal_annotation_vec_dot_batchf, NatureDSP_Signal_annotation_vec_dot_batchf_fast, NatureDSP_Signal_annotation_vec_dot16x16,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_annotation_vec_dot16x16_fas t, NatureDSP_Signal_annotation_vec_dot32x16, NatureDSP_Signal_annotation_vec_dot32x16_fas t, NatureDSP_Signal_annotation_vec_dot32x32, NatureDSP_Signal_annotation_vec_dot32x32_fas t, NatureDSP_Signal_annotation_vec_dot64x32, NatureDSP_Signal_annotation_vec_dot64x32_fas t, NatureDSP_Signal_annotation_vec_dot64x64, NatureDSP_Signal_annotation_vec_dot64x64_fas t, NatureDSP_Signal_annotation_vec_dot64x64i, NatureDSP_Signal_annotation_vec_dot64x64i_fa st, NatureDSP_Signal_annotation_vec_dotf, NatureDSP_Signal_annotation_vec_mac_32x16ef, NatureDSP_Signal_annotation_vec_max16x16, NatureDSP_Signal_annotation_vec_max16x16_fas t, NatureDSP_Signal_annotation_vec_max32x32, NatureDSP_Signal_annotation_vec_max32x32_fas t, NatureDSP_Signal_annotation_vec_maxf, NatureDSP_Signal_annotation_vec_min16x16, NatureDSP_Signal_annotation_vec_min16x16_fas t, NatureDSP_Signal_annotation_vec_min32x32, NatureDSP_Signal_annotation_vec_min32x32_fas t, NatureDSP_Signal_annotation_vec_minf, NatureDSP_Signal_annotation_vec_mul_32x16ef, NatureDSP_Signal_annotation_vec_power16x16, NatureDSP_Signal_annotation_vec_power16x16_f ast, NatureDSP_Signal_annotation_vec_power32x32, NatureDSP_Signal_annotation_vec_power32x32_f ast, NatureDSP_Signal_annotation_vec_powerf, NatureDSP_Signal_annotation_vec_scale_sf, NatureDSP_Signal_annotation_vec_scale16x16, NatureDSP_Signal_annotation_vec_scale16x16_f ast, NatureDSP_Signal_annotation_vec_scale32x24_f ast, NatureDSP_Signal_annotation_vec_scale32x32, NatureDSP_Signal_annotation_vec_scale32x32_f ast, NatureDSP_Signal_annotation_vec_scalef, NatureDSP_Signal_annotation_vec_shift16x16, NatureDSP_Signal_annotation_vec_shift16x16_f ast, NatureDSP_Signal_annotation_vec_shift32x32, NatureDSP_Signal_annotation_vec_shift32x32_f ast, NatureDSP_Signal_annotation_vec_shiftf	
NatureDSP_Signal_mfcc_id.o		384	NatureDSP_Signal_annotation_logmel32x32_proc ess, NatureDSP_Signal_annotation_logmelf_process, NatureDSP_Signal_annotation_mfcc32x32_proces s, NatureDSP_Signal_annotation_mfccf_process	
NatureDSP_Signal_img_id.o		2535	NatureDSP_Signal_annotation_imgconvert_rgbbyu v, NatureDSP_Signal_annotation_imgconvert_rgbbyu v16, NatureDSP_Signal_annotation_imgconvert_yuvrg b, NatureDSP_Signal_annotation_imgconvert_yuvrg b16, NatureDSP_Signal_annotation_imgdeinterleave, NatureDSP_Signal_annotation_imgdeinterleavel 6, NatureDSP_Signal_annotation_imgfastconvert_r gbyuv, NatureDSP_Signal_annotation_imgfastconvert_r gbyuv16, NatureDSP_Signal_annotation_imgfastconvert_y uvrgb, NatureDSP_Signal_annotation_imgfastconvert_y uvrgb16, NatureDSP_Signal_annotation_imgfastdeinterle ave, NatureDSP_Signal_annotation_imgfastdeinterle ave16, NatureDSP_Signal_annotation_imgfasthist_gs16 , NatureDSP_Signal_annotation_imgfasthist_gs8, NatureDSP_Signal_annotation_imgfasthist_gu8,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_annotation_imgfastinterleave, NatureDSP_Signal_annotation_imgfastinterleave16, NatureDSP_Signal_annotation_imgfastnorm_gs16, NatureDSP_Signal_annotation_imgfastnorm_gs16_nonlinear, NatureDSP_Signal_annotation_imgfastnorm_gs8, NatureDSP_Signal_annotation_imgfastnorm_gs8_nonlinear, NatureDSP_Signal_annotation_imgfastnorm_gu8, NatureDSP_Signal_annotation_imgfastnorm_gu8_nonlinear, NatureDSP_Signal_annotation_imgfastpad_gs16, NatureDSP_Signal_annotation_imgfastpad_gs8, NatureDSP_Signal_annotation_imgfastpad_gu8, NatureDSP_Signal_annotation_imgfastresize_gs16_process, NatureDSP_Signal_annotation_imgfastresize_gs8_process, NatureDSP_Signal_annotation_imgfastresize_gu8_process, NatureDSP_Signal_annotation_imgfastrotate_gs16_process, NatureDSP_Signal_annotation_imgfastrotate_gs8_process, NatureDSP_Signal_annotation_imgfastrotate_gu8_process, NatureDSP_Signal_annotation_imgfft_gs16, NatureDSP_Signal_annotation_imgfft_gs8, NatureDSP_Signal_annotation_imgfft_gu8, NatureDSP_Signal_annotation_imghist_gs16, NatureDSP_Signal_annotation_imghist_gs8, NatureDSP_Signal_annotation_imghist_gu8, NatureDSP_Signal_annotation_imgifft_gs16, NatureDSP_Signal_annotation_imgifft_gs8, NatureDSP_Signal_annotation_imgifft_gu8, NatureDSP_Signal_annotation_imginterleave16, NatureDSP_Signal_annotation_imgnorm_gs16, NatureDSP_Signal_annotation_imgnorm_gs16_nonlinear, NatureDSP_Signal_annotation_imgnorm_gs8, NatureDSP_Signal_annotation_imgnorm_gs8_nonlinear, NatureDSP_Signal_annotation_imgnorm_gu8, NatureDSP_Signal_annotation_imgnorm_gu8_nonlinear, NatureDSP_Signal_annotation_imgpad_gs16, NatureDSP_Signal_annotation_imgpad_gs8, NatureDSP_Signal_annotation_imgpad_gu8, NatureDSP_Signal_annotation_imgresize_gs16_process, NatureDSP_Signal_annotation_imgresize_gs8_process, NatureDSP_Signal_annotation_imgresize_gu8_process, NatureDSP_Signal_annotation_imgrotate_gs16_process, NatureDSP_Signal_annotation_imgrotate_gs8_process, NatureDSP_Signal_annotation_imgrotate_gu8_process	
NatureDSP_Signal_fe.o	249		NatureDSP_Signal_feclearexcept, NatureDSP_Signal_feraiseexcept, NatureDSP_Signal_fetestexcept	
NatureDSP_Signal_isa_opt.o	28		NatureDSP_Signal_get_isa_opt	
feature.o	10		NatureDSP_Signal_isPresent	
math_stdlib.o, logmel32x32_hifi4.o	2618	68	logmel32x32_alloc, logmel32x32_init	memset, NatureDSP_Signal_806, NatureDSP_Signal_807, NatureDSP_Signal_809, vec_recip32x32
logmel32x32_process_hifi4.o	3220	42	logmel32x32_getScratchSize, logmel32x32_process	NatureDSP_Signal_010, NatureDSP_Signal_806, NatureDSP_Signal_807, vec_bexp32,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				vec_shift32x32
logmel_common_hifi4.o	323		NatureDSP_Signal_806, NatureDSP_Signal_807, NatureDSP_Signal_809	vec_recip32x32
logmelf_hifi4.o	1690		logmelf_alloc, logmelf_init	memset, NatureDSP_Signal_806, NatureDSP_Signal_807, scl_antilog10f, scl_antilog2f, scl_int2float, scl_log10f, scl_log2f, vec_recip32x32
logmelf_process_hifi4.o	2031	4	logmelf_getScratchSize, logmelf_process	NatureDSP_Signal_244, NatureDSP_Signal_806, NatureDSP_Signal_807, vec_log10f, vec_lognf
mfcc32x32_compDctMatrix_hifi4.o	1285		NatureDSP_Signal_810	NatureDSP_Signal_816, scl_sqrt64x32, vec_recip32x32
mfcc32x32_compLifterCoefs_hifi4.o	1072		NatureDSP_Signal_811	NatureDSP_Signal_816, vec_recip32x32
mfcc32x32_hifi4.o	789		mfcc32x32_alloc, mfcc32x32_init	logmel32x32_alloc, logmel32x32_init, memset, mtx_vecmpy32x32, mtx_vecmpy32x32_fast, NatureDSP_Signal_810, NatureDSP_Signal_811
mfcc32x32_preemph_hifi4.o	322		NatureDSP_Signal_814	
mfcc32x32_process_hifi4.o	839		mfcc32x32_getScratchSize, mfcc32x32_process	logmel32x32_getScratchSize, logmel32x32_process, memset, NatureDSP_Signal_814, NatureDSP_Signal_815, NatureDSP_Signal_817, vec_shift32x32
mfcc32x32_remdc_hifi4.o	189		NatureDSP_Signal_815	vec_recip32x32
mfcc32x32_tbl.o		192	NatureDSP_Signal_816	
mfcc32x32_vecmpy_hifi4.o	161		NatureDSP_Signal_817	
mfcc_common_hifi4.o	84		mfcc_getDefaultParams	memset
mfccf_compDctMatrix_hifi4.o	519		NatureDSP_Signal_812	NatureDSP_Signal_249, scl_cosinef
mfccf_compLifterCoefs_hifi4.o	256		NatureDSP_Signal_813	NatureDSP_Signal_249, scl_sinef
mfccf_hifi4.o	734		mfccf_alloc, mfccf_init	logmelf_alloc, logmelf_init, memset, mtx_vecmpyf, mtx_vecmpyf_fast, NatureDSP_Signal_812, NatureDSP_Signal_813
mfccf_preemph_hifi4.o	320		NatureDSP_Signal_818	
mfccf_process_hifi4.o	722		mfccf_getScratchSize, mfccf_process	logmelf_getScratchSize, logmelf_process, memset, NatureDSP_Signal_818, NatureDSP_Signal_819, NatureDSP_Signal_820
mfccf_remdc_hifi4.o	843		NatureDSP_Signal_819	
mfccf_vecmpy_hifi4.o	282		NatureDSP_Signal_820	
version.o	38	11	NatureDSP_Signal_get_library_api_version, NatureDSP_Signal_get_library_version	strncpy