NatureDSP Signal for HiFi4

Digital Signal Processing

Performance data

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Contents

Performance Briefs

This chapter collects brief performance data for library functions. 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 RG-2018.9 Core used is HiFi4 + VFPU (bd5) with xclib configurations.

Function Name	Description	Invocation parameters	Cycles Measurements
			RG2018.9, HiFi4 with VFPU, bd5
FIR Filters			
Filtering			
bkfir16x16_process	Fast Real FIR filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 80; M: 256	2929 (7.0 MACs/cycle)
bkfira16x16_process	Real FIR filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 80; M: 256	2999 (6.8 MACs/cycle)
bkfir24x24p_process	Fast Real FIR filter (24-bit data, 24-bit packed internal delay line buffer and internal coefficients storage)	N: 80; M: 256	5440 (3.8 MACs/cycle)
bkfir32x16_process	Fast Real FIR filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 80; M: 256	3629 (5.6 MACs/cycle)
bkfir32x32_process	Fast Real FIR filter (32-bit data, 32-bit coefficients, 32-bit outputs)	N: 80; M: 256	5398 (3.8 MACs/cycle)
bkfir32x32ep_process	Fast Real FIR filter (32-bit data, 32-bit coefficients, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 80; M: 256	5581 (3.7 MACs/cycle)
bkfira32x16_process	Real FIR filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 80; M: 256	4261 (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_process	Real FIR filter (32-bit data, 32-bit coefficients, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 80; M: 256	5770 (3.5 MACs/cycle)
cxfir16x16_process	Fast Complex Block FIR Filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 80; M: 128	8176 (5.0 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	10858 (3.8 MACs/cycle)
cxfir32x32ep_process	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	11022 (3.7 MACs/cycle)
stereo_bkfir16x16_process	Fast Real FIR Stereo filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 80; M: 256	6161 (6.6 MACs/cycle)
stereo_bkfir32x32_process	Fast Real FIR Stereo filter (32-bit data, 32-bit coefficients, 32-bit outputs)	N: 80; M: 256	10914 (3.8 MACs/cycle)
bkfiraf_process	Real FIR filter (floating point data)	N: 512; M: 32	7452 (2.2 MACs/cycle)
bkfirf_process	Fast Real FIR filter (floating point data)	N: 512; M: 32	7693 (2.1 MACs/cycle)
stereo_bkfirf_process	Fast Real FIR Stereo filter (floating point data)	N: 512; M: 32	18165 (1.8 MACs/cycle)
cxfirf_process	Fast Complex Block FIR Filter (floating point data)	N: 512; M: 32	19211 (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	46110 (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	80036 (3.3 MACs/cycle)
firdec16x16_process	Decimating Block Real FIR Filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 1024; M: 256; D: 4	39200 (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	39206 (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	66085 (4.0 MACs/cycle)
firdec32x16_process	Decimating Block Real FIR Filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 4	43302 (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	71712 (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	74531 (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	74272 (3.5 MACs/cycle)
firdec32x32ep_process	Decimating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs) using 72-bit accumulator for intermediate	N: 1024; M: 256; D: 2	89121 (2.9 MACs/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RG2018.9, HiFi4 with VFPU, bd5
	computations		
firdec32x32ep_process	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	75299 (3.5 MACs/cycle)
firdec32x32ep_process	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	74532 (3.5 MACs/cycle)
firdecf_process	Decimating Block Real FIR Filter (floating point data)	N: 1024; M: 256; D: 2	71702 (3.7 MACs/cycle)
firdecf_process	Decimating Block Real FIR Filter (floating point data)	N: 1024; M: 256; D: 3	99353 (2.6 MACs/cycle)
firdecf_process	Decimating Block Real FIR Filter (floating point data)	N: 1024; M: 256; D: 4	114713 (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	88857 (5.9 MACs/cycle)
firinterp16x16_process	Interpolating Block Real FIR Filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 1024; M: 256; D: 3	134307 (5.9 MACs/cycle)
firinterp16x16_process	Interpolating Block Real FIR Filter (16-bit data, 16-bit coefficients, 16-bit outputs)	N: 1024; M: 256; D: 4	178215 (5.9 MACs/cycle)
firinterp32x16_process	Interpolating Block Real FIR Filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 2	81961 (6.4 MACs/cycle)
firinterp32x16_process	Interpolating Block Real FIR Filter (32-bit data, 16-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 3	121387 (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: 4	164139 (6.4 MACs/cycle)
firinterp32x32_process	Interpolating Block Real FIR Filter (32-bit data, 32-bit coefficients, 32-bit outputs)	N: 1024; M: 256; D: 2	140072 (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	217129 (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	287784 (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: 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	219945 (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	293415 (3.6 MACs/cycle)
firinterpf_process	Interpolating Block Real FIR Filter (floating point data)	N: 1024; M: 256; D: 2	134422 (3.9 MACs/cycle)
firinterpf_process	Interpolating Block Real FIR Filter (floating point data)	N: 1024; M: 256; D: 3	221461 (3.6 MACs/cycle)
firinterpf_process	Interpolating Block Real FIR Filter (floating point data)	N: 1024; M: 256; D: 4	269336 (3.9 MACs/cycle)
Correlation, Convolution, Despreading, LMS			
fir_convol16x16	Fast Circular Convolution (16x16-bit data, 16-bit outputs)	N: 256; M: 80	4112 (5.0 MACs/cycle)
fir_convol32x16	Fast Circular Convolution (32x16-bit data, 32-bit outputs)	N: 256; M: 80	3799 (5.4 MACs/cycle)
fir_convol32x32	Fast Circular Convolution (32x32-bit data, 32-bit outputs)	N: 256; M: 80	5626 (3.6 MACs/cycle)
fir_convol32x32ep	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_convola16x16	Circular Convolution (16x16-bit data, 16-bit outputs)	N=256; M=80	3937 (5.2 MACs/cycle)
fir_convola32x16	Circular Convolution (32x16-bit data, 32-bit outputs)	N: 256; M: 80	4130 (5.0 MACs/cycle)
fir_convola32x32	Circular Convolution (32x32-bit data, 32-bit outputs)	N=256; M=80	5903 (3.5 MACs/cycle)
fir_convola32x32ep	Circular Convolution (32x32-bit data, 32-bit outputs) using 72-bit accumulator for intermediate computations	N=256; M=80	6611 (3.1 MACs/cycle)
cxfir_convol32x16	Fast Circular Convolution (32x16-bit complex data, 32-bit complex outputs)	N: 256; M: 80	16456 (5.0 MACs/cycle)
cxfir_convola32x16	Circular Convolution (32x16-bit complex data, 32-bit complex outputs)	N: 256; M: 80	17109 (4.8 MACs/cycle)
fir_lconvola16x16	Linear Convolution (16x16-bit data, 16-bit outputs)	N=256; M=80	4228 (4.8 MACs/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RG2018.9, HiFi4 with VFPU, bd5
fir_lconvola32x32	Linear Convolution (32x32-bit data, 32-bit outputs)	N=256; M=80	11935 (1.7 MACs/cycle)
fir_xcorr16x16	Fast Circular Correlation (16x16-bit data, 16-bit outputs)	N: 256; M: 80	4590 (4.5 MACs/cycle)
fir_xcorr32x16	Fast Circular Correlation (32x16-bit data, 32-bit outputs)	N: 256; M: 80	3593 (5.7 MACs/cycle)
fir_xcorr32x32	Fast Circular Correlation (32x32-bit data, 32-bit outputs)	N: 256; M: 80	5578 (3.7 MACs/cycle)
fir_xcorr32x32ep	Fast Circular Correlation (32x32-bit data, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 256; M: 80	6216 (3.3 MACs/cycle)
cxfir_xcorr32x32	Fast Circular Correlation (32x32-bit complex data, 32-bit complex outputs)	N: 256; M: 80	21251 (3.9 MACs/cycle)
fir_xcorra16x16	Circular Correlation (16x16-bit data, 16-bit outputs)	N: 256; M: 80	3932 (5.2 MACs/cycle)
fir_xcorra32x16	Circular Correlation (32x16-bit data, 32-bit outputs)	N: 256; M: 80	4164 (4.9 MACs/cycle)
fir_xcorra32x32	Circular Correlation (32x32-bit data, 32-bit outputs)	N: 256; M: 80	5972 (3.4 MACs/cycle)
fir_xcorra32x32ep	Circular Correlation (32x32-bit data, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 256; M: 80	6675 (3.1 MACs/cycle)
fir_lxcorra16x16	Linear Correlation (16x16-bit data, 16-bit outputs)	N=256; M=80	4242 (4.8 MACs/cycle)
fir_lxcorra32x32	Linear Correlation (32x32-bit data, 32-bit outputs)	N=256; M=80	11970 (1.7 MACs/cycle)
fir_acorr16x16	Fast Circular Autocorrelation (16-bit data, 16-bit outputs)	N: 256	12985 (5.0 MACs/cycle)
fir_acorr32x32	Fast Circular Autocorrelation (32-bit data, 32-bit outputs)	N: 256	16849 (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_acorra16x16	Circular Autocorrelation (16-bit data, 16-bit outputs)	N=256	9695 (6.8 MACs/cycle)
fir_acorra32x32	Circular Autocorrelation (32-bit data, 32-bit outputs)	N: 256	17123 (3.8 MACs/cycle)
fir_acorra32x32ep	Circular Autocorrelation (32-bit data, 32-bit outputs) using 72-bit accumulator for intermediate computations	N: 256	17823 (3.7 MACs/cycle)
fir_lacorra16x16	Linear Autocorrelation (16-bit data, 16-bit outputs)	N=256	5303 (6.2 MACs/cycle)
fir_lacorra32x32	Linear Autocorrelation (32-bit data, 32-bit outputs)	N=256	17885 (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	3778 (5.4 MACs/cycle)
fir_blms16x32	Blockwise Adaptive LMS Algorithm for Real Data (32-bit coefficients, 16-bit data, 16-bit output)	N: 80; M: 128	3677 (5.6 MACs/cycle)
fir_blms32x32	Blockwise Adaptive LMS Algorithm for Real Data (32-bit coefficients, 32-bit data, 32-bit output)	N: 80; M: 128	5683 (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	6216 (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	21963 (3.7 MACs/cycle)
fir_convolf	Fast Circular Convolution (floating point data)	N: 256; M: 80	6916 (3.0 MACs/cycle)
fir_convolaf	Circular Convolution (floating point data)	N: 256; M: 80	7459 (2.7 MACs/cycle)
fir_xcorrf	Fast Circular Correlation (floating point data)	N: 256; M: 80	6662 (3.1 MACs/cycle)
cxfir_xcorrf	Circular Correlation (complex floating point data)	N: 256; M: 80	21636 (3.8 MACs/cycle)
fir_xcorraf	Circular Correlation (floating point data)	N: 256; M: 80	7504 (2.7 MACs/cycle)
cxfir_xcorraf	Circular Correlation (complex floating point data)	N: 256; M: 80	21643 (3.8 MACs/cycle)
fir_acorrf	Fast Circular Autocorrelation (floating point data)	N: 256	17932 (3.7 MACs/cycle)
fir_acorraf	Circular Autocorrelation (floating point data)	N: 256	19338 (3.4 MACs/cycle)
fir_blmsf	Blockwise Adaptive LMS Algorithm for Real Data (floating point data)	N: 80; M: 128	6633 (3.1 MACs/cycle)
cxfir_blmsf	Blockwise Adaptive LMS Algorithm for Complex Data (floating point data)	N: 80; M: 128	21561 (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	174607 (3.4 MACs/cycle)
conv2d_5x5_8x8	2D Convolution (5x5 8-bit kernel, 8-bit data)	M=5,N=5,P=256, Q=256	674318 (2.4 MACs/cycle)
conv2d_11x7_8x8	2D Convolution (11x7 8-bit kernel, 8-bit data)	M=11,N=7,P=256 ,Q=256	906738 (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)

Function Name	Description	Invocation parameters	Cycles Measurements
			RG2018.9, HiFi4 with VFPU, bd5
conv2d_5x5_8x16	2D Convolution (5x5 8-bit kernel, 16-bit data)	M=5,N=5,P=256, Q=256	588256 (2.8 MACs/cycle)
conv2d_11x7_8x16	2D Convolution (11x7 8-bit kernel, 16-bit data)	M=11,N=7,P=256 ,Q=256	858611 (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	586147 (2.8 MACs/cycle)
conv2d_11x7_16x16	2D Convolution (11x7 16-bit kernel, 16-bit data)	M=11,N=7,P=256 ,Q=256	858554 (5.9 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	4892 (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	4897 (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	3452 (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	4047 (2.0 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	3506 (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	6038 (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	10661 (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	9637 (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	8422 (4.1 cycles/(biquad*pts)
bqriirf_df1	Bi-quad Real Block IIR, DFI (floating point data)	N=512, M=16	22474 (2.7 cycles/(biquad*pts)
bqriirf_df2	Bi-quad Real Block IIR, DFII (floating point data)	N=512, M=16	19921 (2.4 cycles/(biquad*pts)
bqriirf_df2t	Bi-quad Real Block IIR, DFIIt (floating point data)	N=512, M=16	18457 (2.3 cycles/(biquad*pts)
bqciirf_df1	Bi-quad Real Block IIR, DFI (complex floating point data)	N=512, M=16	37813 (4.6 cycles/(biquad*pts)
stereo_bqriirf_df1	Bi-quad Real Block Stereo IIR, DFI (floating point data)	N=512, M=16	38518 (4.7 cycles/(biquad*pts)
Lattice Filters			
latr16x16_process	Lattice Block Real IIR (16-bit data, 16-bit coefficients)	N=256, M=8	2601 (1.3 cycles/(sample*M)
latr32x16_process	Lattice Block Real IIR (32-bit data, 16-bit coefficients)	N=256, M=8	2592 (1.3 cycles/(sample*M)
latr32x32_process	Lattice Block Real IIR (32-bit data, 32-bit coefficients)	N=256, M=8	3101 (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	2015 (10.1 cycles/pts)
vec_recip32x32	Vector Reciprocal (32-bit data)	N=200	2631 (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	6269 (31.3 cycles/pts)
vec_log2_32x32	Vector Base-2 Logarithm (32-bit data)	N=200	928 (4.6 cycles/pts)
vec_logn_32x32	Vector Natural Logarithm (32-bit data)	N=200	1032 (5.2 cycles/pts)
vec_log10_32x32	Vector Base-10 Logarithm (32-bit data)	N=200	1032 (5.2 cycles/pts)
vec_antilog2_32x32	Vector Base-2 Antilogarithm, (32-bit data)	N=200	584 (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	9242 (46.2 cycles/pts)

Function Name	Description	Invocation parameters	Cycles Measurements
			RG2018.9, HiFi4 with VFPU, bd5
vec_tan32x32	Vector Tangent (32-bit data)	N=200	2945 (14.7 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	1192 (6.0 cycles/pts)
vec_sqrt32x16	Vector Square Root (32-bit inputs, 16-bit output)	N=200	1571 (7.9 cycles/pts)
vec_sqrt64x32	Vector Square Root (64-bit inputs, 32-bit output)	N=200	1245 (6.2 cycles/pts)
vec_rsqrt16x16	Vector Reciprocal Square Root (16-bit data)	N=200	2308 (11.5 cycles/pts)
vec_rsqrt32x32	Vector Reciprocal Square Root (32-bit data)	N=200	2907 (14.5 cycles/pts)
vec_sigmoid32x32	Vector Sigmoid (32-bit data)	N=200	1170 (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	1167 (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	2997 (15.0 cycles/pts)
vec_cosinef	Cosine (floating point data)	N=200	2955 (14.8 cycles/pts)
vec_tanf	Vector Tangent (floating point data)	N=200	3700 (18.5 cycles/pts)
vec_log2f	Vector Base-2 Logarithm (floating point data)	N=200	2544 (12.7 cycles/pts)
vec_log10f	Vector Base-10 Logarithm (floating point data)	N=200	2516 (12.6 cycles/pts)
vec_lognf	Vector Natural Logarithm (floating point data)	N=200	2373 (11.9 cycles/pts)
vec_antilog2f	Vector Base-2 Antilogarithm, (floating point data)	N=200	1145 (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_atanf	Vector Arctangent (floating point data)	N=200	2445 (12.2 cycles/pts)
vec_atan2f	Vector Full-Quadrant Arctangent (floating point data)	N=200	3513 (17.6 cycles/pts)
vec_sigmoidf	Vector Sigmoid (floating point data)	N=200	3356 (16.8 cycles/pts)
vec_softmaxf	Vector Softmax (floating point data)	N=200	1845 (9.2 cycles/pts)
vec_tanhf	Vector Hyperbolic Tangent (floating point data)	N=200	4278 (21.4 cycles/pts)
vec_reluf	Vector Rectifier Function (floating point data)	N=200	216 (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	1631 (8.2 cycles/pts)
vec_sine32x32_fast	Fast Vector Sine (32-bit data)	N=200	727 (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	64 (0.3 cycles/pts)
vec_dot32x16_fast	Fast Vector Dot product (32x16-bit data, 64-bit output)	N=200	85 (0.4 cycles/pts)

Function Name	Description	Invocation parameters	Cycles Measurements
			RG2018.9, HiFi4 with VFPU, bd5
vec_dot32x32_fast	Fast Vector Dot product (32x32-bit data, 64-bit output)	N=200	114 (0.6 cycles/pts)
vec_dot64x32_fast	Fast Vector Dot product (64x32-bit data, 64-bit output)	N=200	215 (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	210 (1.0 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	160 (0.8 cycles/pts)
vec_power16x16_fast	Fast Power of a Vector (16x16-bit data, 64-bit output)	N=200	39 (0.2 cycles/pts)
vec_power32x32_fast	Fast Power of a Vector (32x32-bit data, 64-bit output)	N=200	60 (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	62 (0.3 cycles/pts)
vec_scale32x32_fast	Fast Vector Scaling with Saturation (32-bit input, 32-bit output)	N=200	112 (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	86 (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	119 (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	95 (0.5 cycles/pts)
scl_bexp16	Exponent (16-bit input data)		5 (cycles)
scl_bexp32	Exponent (32-bit input data)		3 (cycles)
vec_dotf	Vector Dot product (floating point data)	N=200	236 (1.2 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	224 (1.1 cycles/pts)
vec_scalef	Vector Scaling with Saturation (floating point data)	N=200	214 (1.1 cycles/pts)
vec_scale_sf	Vector Scaling with Saturation (floating point data)	N=200	231 (1.2 cycles/pts)
vec_minf	Vector Minimum Value (floating point data)	N=200	117 (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	2026 (10.1 cycles/pts)
vec_dot_32x16ef	Vector Dot product (emulated floating point)	N=200	1076 (5.4 cycles/pts)
scl_add_32x16ef	Scalar Addition (emulated floating point)		23 (cycles)
scl_mul_32x16ef	Scalar Multiply (emulated floating point)		13 (cycles)
scl_mac_32x16ef	Scalar Multiply-Accumulate (emulated floating point)		27 (cycles)
Matrix Operations			
mtx_mpy8x8	Matrix Multiply (8-bit data)	16x16 x 16x16	4364 (0.9 MACs/cycle)
mtx_mpy8x8	Matrix Multiply (8-bit data)	32x32 x 32x32	28290 (1.2 MACs/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RG2018.9, HiFi4 with VFPU, bd5
mtx_mpy8x8_fast	Fast Matrix Multiply (8-bit data)	16x16 x 16x16	2093 (2.0 MACs/cycle)
mtx_mpy8x8_fast	Fast Matrix Multiply (8-bit data)	32x32 x 32x32	12381 (2.6 MACs/cycle)
mtx_mpy8x8_fast	Fast Matrix Multiply (8-bit data)	8x80 x 80x4	853 (3.0 MACs/cycle)
mtx_mpyt8x8	Matrix Multiply Transpose (8-bit data)	16x16 x 16x16	4642 (0.9 MACs/cycle)
mtx_mpyt8x8	Matrix Multiply Transpose (8-bit data)	32x32 x 32x32	29327 (1.1 MACs/cycle)
mtx_mpyt8x8_fast	Fast Matrix Multiply Transpose (8-bit data)	16x16 x 16x16	1766 (2.3 MACs/cycle)
mtx_mpyt8x8_fast	Fast Matrix Multiply Transpose (8-bit data)	32x32 x 32x32	10327 (3.2 MACs/cycle)
mtx_mpyt8x8_fast	Fast Matrix Multiply Transpose (8-bit data)	8x80 x 80x4	702 (3.6 MACs/cycle)
mtx_mpy8x16	Matrix Multiply (8/16-bit data)	16x16 x 16x16	3223 (1.3 MACs/cycle)
mtx_mpy8x16	Matrix Multiply (8/16-bit data)	32x32 x 32x32	17974 (1.8 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	748 (3.4 MACs/cycle)
mtx_mpyt8x16	Matrix Multiply Transpose (8/16-bit data)	16x16 x 16x16	3139 (1.3 MACs/cycle)
mtx_mpyt8x16	Matrix Multiply Transpose (8/16-bit data)	32x32 x 32x32	13247 (2.5 MACs/cycle)
mtx_mpyt8x16_fast	Fast Matrix Multiply Transpose (8/16-bit data)	16x16 x 16x16	1436 (2.9 MACs/cycle)
mtx_mpyt8x16_fast	Fast Matrix Multiply Transpose (8/16-bit data)	32x32 x 32x32	8192 (4.0 MACs/cycle)
mtx_mpyt8x16_fast	Fast Matrix Multiply Transpose (8/16-bit data)	8x80 x 80x4	529 (4.8 MACs/cycle)
mtx_mpy16x16	Matrix Multiply (16-bit data)	16x16 x 16x16	1701 (2.4 MACs/cycle)
mtx_mpy16x16	Matrix Multiply (16-bit data)	32x32 x 32x32	8427 (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	10576 (3.1 MACs/cycle)
mtx_mpy16x16_fast	Fast Matrix Multiply (16-bit data)	8x80 x 80x4	747 (3.4 MACs/cycle)
mtx_mpyt16x16	Matrix Multiply Transpose (16-bit data)	16x16 x 16x16	1554 (2.6 MACs/cycle)
mtx_mpyt16x16	Matrix Multiply Transpose (16-bit data)	32x32 x 32x32	7862 (4.2 MACs/cycle)
mtx_mpyt16x16_fast	Fast Matrix Multiply Transpose (16-bit data)	16x16 x 16x16	1468 (2.8 MACs/cycle)
mtx_mpyt16x16_fast	Fast Matrix Multiply Transpose (16-bit data)	32x32 x 32x32	7808 (4.2 MACs/cycle)
mtx_mpyt16x16_fast	Fast Matrix Multiply Transpose (16-bit data)	8x80 x 80x4	469 (5.5 MACs/cycle)
mtx_mpy32x32	Matrix Multiply (32-bit data)	16x16 x 16x16	2870 (1.4 MACs/cycle)
mtx_mpy32x32	Matrix Multiply (32-bit data)	32x32 x 32x32	14838 (2.2 MACs/cycle)
mtx_mpy32x32_fast	Fast Matrix Multiply (32-bit data)	16x16 x 16x16	1838 (2.2 MACs/cycle)
mtx_mpy32x32_fast	Fast Matrix Multiply (32-bit data)	32x32 x 32x32	11822 (2.8 MACs/cycle)
mtx_mpy32x32_fast	Fast Matrix Multiply (32-bit data)	8x80 x 80x4	824 (3.1 MACs/cycle)
mtx_mpyt32x32	Matrix Multiply Transpose (32-bit data)	16x16 x 16x16	3492 (1.2 MACs/cycle)
mtx_mpyt32x32	Matrix Multiply Transpose (32-bit data)	32x32 x 32x32	19556 (1.7 MACs/cycle)
mtx_mpyt32x32_fast	Fast Matrix Multiply Transpose (32-bit data)	16x16 x 16x16	1711 (2.4 MACs/cycle)
mtx_mpyt32x32_fast	Fast Matrix Multiply Transpose (32-bit data)	32x32 x 32x32	10768 (3.0 MACs/cycle)
mtx_mpyt32x32_fast	Fast Matrix Multiply Transpose (32-bit data)	8x80 x 80x4	747 (3.4 MACs/cycle)
mtx_vecmpy8x8_fast	Fast Matrix by Vector Multiply (8-bit data)	16x104 x 104x1	400 (4.2 MACs/cycle)
mtx_vecmpy8x16_fast	Fast Matrix by Vector Multiply (8/16-bit data)	16x104 x 104x1	333 (5.0 MACs/cycle)
mtx_vecmpy16x16_fast	Fast Matrix by Vector Multiply (16-bit data)	16x104 x 104x1	327 (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	586 (1.75 pts/cycle)
mtx_transpose16x16	Matrix transpose (16-bit data)	M=32,N=32	1630 (0.63 pts/cycle)
mtx_transpose16x16_fast	Fast Matrix transpose (16-bit data)	M=32,N=32	567 (1.81 pts/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RG2018.9, HiFi4 with VFPU, bd5
mtx_transpose32x32	Matrix transpose (32-bit data)	M=32,N=32	1502 (0.68 pts/cycle)
mtx_transpose32x32_fast	Fast Matrix transpose (32-bit data)	M=32,N=32	876 (1.17 pts/cycle)
mtx_mpyf	Matrix Multiply (floating point data)	16x16 x 16x16	1909 (2.1 MACs/cycle)
mtx_mpyf	Matrix Multiply (floating point data)	32x32 x 32x32	13002 (2.5 MACs/cycle)
mtx_mpyf_fast	Fast Matrix Multiply (floating point data)	16x16 x 16x16	2077 (2.0 MACs/cycle)
mtx_mpyf_fast	Fast Matrix Multiply (floating point data)	32x32 x 32x32	13260 (2.5 MACs/cycle)
mtx_mpyf_fast	Fast Matrix Multiply (floating point data)	8x16 x 16x4	278 (1.8 MACs/cycle)
mtx_mpytf	Matrix Multiply Transpose (floating point data)	16x16 x 16x16	2065 (2.0 MACs/cycle)
mtx_mpytf	Matrix Multiply Transpose (floating point data)	32x32 x 32x32	11957 (2.7 MACs/cycle)
mtx_mpytf_fast	Fast Matrix Multiply Transpose (floating point data)	16x16 x 16x16	2005 (2.0 MACs/cycle)
mtx_mpytf_fast	Fast Matrix Multiply Transpose (floating point data)	32x32 x 32x32	11933 (2.7 MACs/cycle)
mtx_mpytf_fast	Fast Matrix Multiply Transpose (floating point data)	8x16 x 16x4	271 (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	1508 (0.68 pts/cycle)
mtx_transposef_fast	Fast Matrix transpose (floating point data)	M=32,N=32	884 (1.16 pts/cycle)
Matrix Decomposition and Inversion			
cmtx_inv2x2_32x32	Gauss-Jordan matrix inversion (complex 32-bit fixed-point data)		366 (366.0 cycles/matrix)
cmtx_inv4x4_32x32	Gauss-Jordan matrix inversion (complex 32-bit fixed-point data)		1240 (1240.0 cycles/matrix)
cmtx_inv8x8_32x32	Gauss-Jordan matrix inversion (complex 32-bit fixed-point data)		6524 (6524.0 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)		668 (668.0 cycles/matrix)
mtx_inv8x8_32x32	Gauss-Jordan matrix inversion (32-bit fixed-point data)		3266 (3266.0 cycles/matrix)
cmtx_gjelim2x2_32x32	Gauss-Jordan linear equations solver (complex 32-bit fixed-point data)		319 (319.0 cycles/matrix)
cmtx_gjelim4x4_32x32	Gauss-Jordan linear equations solver (complex 32-bit fixed-point data)		993 (993.0 cycles/matrix)
cmtx_gjelim8x8_32x32	Gauss-Jordan linear equations solver (complex 32-bit fixed-point data)		3864 (3864.0 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)		593 (593.0 cycles/matrix)
mtx_gjelim8x8_32x32	Gauss-Jordan linear equations solver (32-bit fixed-point data)		2454 (2454.0 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)		276 (276.0 cycles/matrix)
mtx_inv8x8f	Gauss-Jordan matrix inversion (floating point data)		1722 (1722.0 cycles/matrix)
Fitting and Interpolation			
Polynomial Fitting			
vec_poly4_32x32	Polynomial approximation (32-bit data)	N=200	401 (2.0 cycles/pts)
vec_poly8_32x32	Polynomial approximation (32-bit data)	N=200	648 (3.2 cycles/pts)
vec_poly4f	Polynomial approximation (floating point data)	N=200	408 (2.0 cycles/pts)
vec_poly8f	Polynomial approximation (floating point data)	N=200	788 (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	38731 (0.106 pts/cycle)
fft_cplx16x16	FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	45318 (0.090 pts/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RG2018.9, HiFi4 with VFPU, bd5
fft_cplx32x16	FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	37458 (0.109 pts/cycle)
fft_cplx32x16	FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	39635 (0.103 pts/cycle)
fft_cplx32x32	FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=4096, scaling=3	34004 (0.120 pts/cycle)
fft_cplx32x32	FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=4096, scaling=2	38640 (0.106 pts/cycle)
ifft_cplx16x16	Inverse FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	38998 (0.105 pts/cycle)
ifft_cplx16x16	Inverse FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	45340 (0.090 pts/cycle)
ifft_cplx32x16	Inverse FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	37460 (0.109 pts/cycle)
ifft_cplx32x16	Inverse FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	40672 (0.101 pts/cycle)
ifft_cplx32x32	Inverse FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=4096, scaling=3	35519 (0.115 pts/cycle)
ifft_cplx32x32	Inverse FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=4096, scaling=2	37614 (0.109 pts/cycle)
Real FFT			
fft_real16x16	FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	22534 (0.182 pts/cycle)
fft_real16x16	FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	25335 (0.162 pts/cycle)
fft_real32x16	FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	20663 (0.198 pts/cycle)
fft_real32x16	FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	21665 (0.189 pts/cycle)
fft_real32x32	FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=8192, scaling=3	41224 (0.199 pts/cycle)
fft_real32x32	FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=8192, scaling=2	46895 (0.175 pts/cycle)
ifft_real16x16	Inverse FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	22684 (0.181 pts/cycle)
ifft_real16x16	Inverse FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	26905 (0.152 pts/cycle)
ifft_real32x16	Inverse FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=3	21642 (0.189 pts/cycle)
ifft_real32x16	Inverse FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=4096, scaling=2	23680 (0.173 pts/cycle)
ifft_real32x32	Inverse FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=8192, scaling=3	43774 (0.187 pts/cycle)
ifft_real32x32	Inverse FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=8192, scaling=2	46899 (0.175 pts/cycle)
Mixed Radix Complex FFT			
fft_cplx32x32	FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=3	9195 (0.104 pts/cycle)
fft_cplx32x32	FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=2	10788 (0.089 pts/cycle)
ifft_cplx32x32	Inverse FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=3	9534 (0.101 pts/cycle)
ifft_cplx32x32	Inverse FFT on Complex Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=2	10549 (0.091 pts/cycle)
fft_cplx32x16	FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	4639 (0.103 pts/cycle)
fft_cplx32x16	FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	4930 (0.097 pts/cycle)
ifft_cplx32x16	Inverse FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	4335 (0.111 pts/cycle)
ifft_cplx32x16	Inverse FFT on Complex Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	4936 (0.097 pts/cycle)
fft_cplx16x16	FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	4087 (0.117 pts/cycle)
fft_cplx16x16	FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	5155 (0.093 pts/cycle)
ifft_cplx16x16	Inverse FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	4162 (0.115 pts/cycle)
ifft_cplx16x16	Inverse FFT on Complex Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	5185 (0.093 pts/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RG2018.9, HiFi4 with VFPU, bd5
Mixed Radix Real FFT			
fft_real32x32	FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=3	6268 (0.153 pts/cycle)
fft_real32x32	FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=2	7258 (0.132 pts/cycle)
ifft_real32x32	Inverse FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=3	6557 (0.146 pts/cycle)
ifft_real32x32	Inverse FFT on Real Data (32-bit input/outputs, 32-bit twiddles)	N=960, scaling=2	7263 (0.132 pts/cycle)
fft_real32x16	FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	2606 (0.184 pts/cycle)
fft_real32x16	FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	2786 (0.172 pts/cycle)
ifft_real32x16	Inverse FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	2533 (0.189 pts/cycle)
ifft_real32x16	Inverse FFT on Real Data (32-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	2922 (0.164 pts/cycle)
fft_real16x16	FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	2631 (0.182 pts/cycle)
fft_real16x16	FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	3069 (0.156 pts/cycle)
ifft_real16x16	Inverse FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=3	2692 (0.178 pts/cycle)
ifft_real16x16	Inverse FFT on Real Data (16-bit input/outputs, 16-bit twiddles)	N=480, scaling=2	3296 (0.146 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	10213 (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	10005 (0.102 pts/cycle)
fft_cplx32x16_ie	FFT on Complex Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=2	10596 (0.097 pts/cycle)
fft_cplx32x32_ie	FFT on Complex Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=3	7440 (0.138 pts/cycle)
fft_cplx32x32_ie	FFT on Complex Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=2	8880 (0.115 pts/cycle)
ifft_cplx16x16_ie	Inverse FFT on Complex Data with Optimized Memory Usage (16-bit input/outputs, 16-bit twiddles)	N=1024	10209 (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	10269 (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=2	11653 (0.088 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	7808 (0.131 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	8630 (0.119 pts/cycle)
stereo_fft_cplx16x16_ie	FFT on Stereo Complex Data with Optimized Memory Usage (16-bit input/outputs, 16-bit twiddles)	N=1024	17271 (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	18518 (0.055 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	18916 (0.054 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	19273 (0.053 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	21303 (0.048 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	17480 (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	17767 (0.058 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	18165 (0.056 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	19780 (0.052 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	22208 (0.046 pts/cycle)
fft_cplxf_ie	FFT on Complex Data with Optimized Memory Usage (floating point data)	N=4096	64068 (0.064 pts/cycle)

Function Name	Description	Invocation parameters	Cycles Measurements
			RG2018.9, HiFi4 with VFPU, bd5
ifft_cplxf_ie	Inverse FFT on Complex Data with Optimized Memory Usage (floating point data)	N=4096	64242 (0.064 pts/cycle)
stereo_fft_cplxf_ie	FFT on Stereo Complex Data with Optimized Memory Usage (floating point data)	N=4096	117825 (0.035 pts/cycle)
stereo_ifft_cplxf_ie	Inverse FFT on Stereo Complex Data with Optimized Memory Usage (floating point data)	N=4096	120555 (0.034 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	6356 (0.161 pts/cycle)
fft_real32x16_ie	FFT on Real Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=3	6106 (0.168 pts/cycle)
fft_real32x16_ie	FFT on Real Data with Optimized Memory Usage (32-bit input/outputs, 16-bit twiddles)	N=1024, scaling=2	6357 (0.161 pts/cycle)
fft_real32x32_ie	FFT on Real Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=3	5314 (0.193 pts/cycle)
fft_real32x32_ie	FFT on Real Data with Optimized Memory Usage (32-bit input/outputs, 32-bit twiddles)	N=1024, scaling=2	6578 (0.156 pts/cycle)
ifft_real16x16_ie	Inverse FFT on Real Data with Optimized Memory Usage (16-bit input/outputs, 16-bit twiddles)	N=1024	6625 (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	6286 (0.163 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	7571 (0.135 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	5358 (0.191 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	6385 (0.160 pts/cycle)
fft_realf_ie	FFT on Real Data with Optimized Memory Usage (floating point data)	N=4096	32117 (0.128 pts/cycle)
ifft_realf_ie	Inverse FFT on Real Data with Optimized Memory Usage (floating point data)	N=4096	31788 (0.129 pts/cycle)
DCT			
dct_32x16	Discrete Cosine Transform, Type II (32-bit input/outputs, 16-bit twiddles)	N=32, scalingOpt=3	153 (cycles)
dct_32x32	Discrete Cosine Transform, Type II (32-bit input/outputs, 32-bit twiddles)	N=32, scalingOpt=3	173 (cycles)
dct_16x16	Discrete Cosine Transform, Type II (16-bit input/outputs, 16-bit twiddles)	N=32, scalingOpt=3	206 (cycles)
dct4_32x16	Discrete Cosine Transform, Type IV (32-bit input/outputs, 16-bit twiddles)	N=32, scalingOpt=3	238 (cycles)
dct4_32x32	Discrete Cosine Transform, Type IV (32-bit input/outputs, 32-bit twiddles)	N=32, scalingOpt=3	271 (cycles)
mdct_32x16	Modified Discrete Cosine Transform (32-bit input/outputs, 16-bit twiddles)	N=32, scalingOpt=3	332 (cycles)
mdct_32x32	Modified Discrete Cosine Transform (32-bit input/outputs, 32-bit twiddles)	N=32, scalingOpt=3	368 (cycles)
imdct_32x16	Inverse Modified Discrete Cosine Transform (32-bit input/outputs, 16-bit twiddles)	N=32, scalingOpt=3	338 (cycles)
imdct_32x32	Inverse Modified Discrete Cosine Transform (32-bit input/outputs, 32-bit twiddles)	N=32, scalingOpt=3	372 (cycles)
dct2d_8x16	2-D Discrete Cosine Transform (8-bit unsigned input, 16-bit signed output)	N=8, L=1024, scalingOpt=0	265228 (259.0 cycles/block)
idct2d_16x8	2-D Inverse Discrete Cosine Transform (16-bit signed input, 8-bit unsigned output)	N=8, L=1024, scalingOpt=0	263183 (257.0 cycles/block)
dctf	Discrete Cosine Transform, Type II (floating point data)	N=64	477 (cycles)
FFT power spectrum functions			
fft_spectrum16x32	FFT Power Spectrum (complex 16-bit data)	N=1024[mode=0 bexp=-1]	9826 (0.10 pts/cycle)
fft_spectrum32x32	FFT Power Spectrum (complex 32-bit data)	N=1024[mode=0 bexp=-1]	12605 (0.08 pts/cycle)
fft_spectrumf	FFT Power Spectrum (complex floating-point data, single precision)	N=1024[mode=0]	18268 (0.06 pts/cycle)
MFCC features extraction			

Function Name	Description	Invocation parameters	Cycles Measurements
			RG2018.9, HiFi4 with VFPU, bd5
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	2768 (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	3432 (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	8314 (cycles per STFT hop)
mfcc32x32_process	Compute Mel-Frequency Cepstrum Coefficients (32-bit fixed-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	7880 (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: 20; Flavor: HTK	3917 (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	4913 (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	10561 (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	9899 (cycles per STFT hop)

Functions Performance

This chapter collects detailed performance data for all library functions. All data presented below are given with memory modeling (build with `MEM_MODEL=1` and run simulator with `-mem_model`). These performance measurements are done using the Xtensa Xplorer and Tools version RG-2018.9. Cores used are HiFi4 with VFPU, xclib configurations, where bd5 indicates 5-stage variant.

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
FIR Filters		
Filtering		
bkfir16x16_process	N: 80; M: 256	2929 (7.0 MACs/cycle)
bkfir16x16_process	N: 2048; M: 8	11539 (1.4 MACs/cycle)
bkfir16x16_process	N: 160; M: 8	919 (1.4 MACs/cycle)
bkfir16x16_process	N: 160; M: 16	1019 (2.5 MACs/cycle)
bkfir16x16_process	N: 1024; M: 32	8595 (3.8 MACs/cycle)
bkfira16x16_process	N: 80; M: 256	2999 (6.8 MACs/cycle)
bkfira16x16_process	N: 2048; M: 8	12839 (1.3 MACs/cycle)
bkfira16x16_process	N: 160; M: 8	1039 (1.2 MACs/cycle)
bkfira16x16_process	N: 160; M: 16	1144 (2.2 MACs/cycle)
bkfira16x16_process	N: 1024; M: 32	9255 (3.5 MACs/cycle)
bkfir24x24p_process	N: 80; M: 256	5440 (3.8 MACs/cycle)
bkfir24x24p_process	N: 80; M: 512	10561 (3.9 MACs/cycle)
bkfir24x24p_process	N: 2048; M: 4	11669 (0.7 MACs/cycle)
bkfir24x24p_process	N: 2048; M: 8	11672 (1.4 MACs/cycle)
bkfir24x24p_process	N: 160; M: 8	931 (1.4 MACs/cycle)
bkfir24x24p_process	N: 160; M: 16	1269 (2.0 MACs/cycle)
bkfir24x24p_process	N: 80; M: 16	642 (2.0 MACs/cycle)
bkfir24x24p_process	N: 512; M: 32	6070 (2.7 MACs/cycle)
bkfir24x24p_process	N: 1024; M: 32	12125 (2.7 MACs/cycle)
bkfir32x16_process	N: 80; M: 256	3629 (5.6 MACs/cycle)
bkfir32x16_process	N: 80; M: 512	6832 (6.0 MACs/cycle)
bkfir32x16_process	N: 2048; M: 4	7711 (1.1 MACs/cycle)
bkfir32x16_process	N: 2048; M: 8	9508 (1.7 MACs/cycle)
bkfir32x16_process	N: 160; M: 8	776 (1.6 MACs/cycle)
bkfir32x16_process	N: 160; M: 16	976 (2.6 MACs/cycle)
bkfir32x16_process	N: 80; M: 16	506 (2.5 MACs/cycle)
bkfir32x16_process	N: 512; M: 32	4324 (3.8 MACs/cycle)
bkfir32x16_process	N: 1024; M: 32	8613 (3.8 MACs/cycle)
bkfir32x32_process	N: 80; M: 256	5398 (3.8 MACs/cycle)
bkfir32x32_process	N: 80; M: 512	10516 (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	836 (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	5776 (2.8 MACs/cycle)
bkfir32x32_process	N: 1024; M: 32	11536 (2.8 MACs/cycle)
bkfir32x32ep_process	N: 80; M: 256	5581 (3.7 MACs/cycle)
bkfir32x32ep_process	N: 80; M: 512	10701 (3.8 MACs/cycle)
bkfir32x32ep_process	N: 2048; M: 4	12821 (0.6 MACs/cycle)
bkfir32x32ep_process	N: 2048; M: 8	15381 (1.1 MACs/cycle)
bkfir32x32ep_process	N: 160; M: 8	1221 (1.0 MACs/cycle)
bkfir32x32ep_process	N: 160; M: 16	1541 (1.7 MACs/cycle)
bkfir32x32ep_process	N: 80; M: 16	781 (1.6 MACs/cycle)
bkfir32x32ep_process	N: 512; M: 32	6933 (2.4 MACs/cycle)
bkfir32x32ep_process	N: 1024; M: 32	13845 (2.4 MACs/cycle)
bkfira32x16_process	N: 80; M: 256	4261 (4.8 MACs/cycle)
bkfira32x16_process	N: 80; M: 512	8101 (5.1 MACs/cycle)
bkfira32x16_process	N: 2048; M: 4	11300 (0.7 MACs/cycle)
bkfira32x16_process	N: 2048; M: 8	13087 (1.3 MACs/cycle)
bkfira32x16_process	N: 160; M: 8	1051 (1.2 MACs/cycle)
bkfira32x16_process	N: 160; M: 16	1291 (2.0 MACs/cycle)
bkfira32x16_process	N: 80; M: 16	661 (1.9 MACs/cycle)
bkfira32x16_process	N: 512; M: 32	5599 (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	10728 (3.8 MACs/cycle)
bkfira32x32_process	N: 2048; M: 4	13347 (0.6 MACs/cycle)
bkfira32x32_process	N: 2048; M: 8	15902 (1.0 MACs/cycle)
bkfira32x32_process	N: 160; M: 8	1270 (1.0 MACs/cycle)
bkfira32x32_process	N: 160; M: 16	1590 (1.6 MACs/cycle)
bkfira32x32_process	N: 80; M: 16	810 (1.6 MACs/cycle)
bkfira32x32_process	N: 512; M: 32	7070 (2.3 MACs/cycle)
bkfira32x32_process	N: 1024; M: 32	14108 (2.3 MACs/cycle)
bkfira32x32ep_process	N: 80; M: 256	5770 (3.5 MACs/cycle)
bkfira32x32ep_process	N: 80; M: 512	10890 (3.8 MACs/cycle)
bkfira32x32ep_process	N: 2048; M: 4	17440 (0.5 MACs/cycle)
bkfira32x32ep_process	N: 2048; M: 8	20000 (0.8 MACs/cycle)
bkfira32x32ep_process	N: 160; M: 8	1592 (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)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
bkfira32x32ep_process	N: 1024; M: 32	16158 (2.0 MACs/cycle)
cxfir16x16_process	N: 80; M: 128	8176 (5.0 MACs/cycle)
cxfir16x16_process	N: 2048; M: 8	24593 (2.7 MACs/cycle)
cxfir16x16_process	N: 160; M: 8	1936 (2.6 MACs/cycle)
cxfir16x16_process	N: 160; M: 16	2896 (3.5 MACs/cycle)
cxfir16x16_process	N: 1024; M: 32	30737 (4.3 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	22547 (1.5 MACs/cycle)
cxfir32x16_process	N: 2048; M: 8	31250 (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	20114 (3.3 MACs/cycle)
cxfir32x16_process	N: 1024; M: 32	40210 (3.3 MACs/cycle)
cxfir32x32_process	N: 80; M: 128	10858 (3.8 MACs/cycle)
cxfir32x32_process	N: 80; M: 512	41578 (3.9 MACs/cycle)
cxfir32x32_process	N: 2048; M: 4	22546 (1.5 MACs/cycle)
cxfir32x32_process	N: 2048; M: 8	31763 (2.1 MACs/cycle)
cxfir32x32_process	N: 160; M: 8	2498 (2.0 MACs/cycle)
cxfir32x32_process	N: 160; M: 16	3778 (2.7 MACs/cycle)
cxfir32x32_process	N: 80; M: 16	1898 (2.7 MACs/cycle)
cxfir32x32_process	N: 512; M: 32	20242 (3.2 MACs/cycle)
cxfir32x32_process	N: 1024; M: 32	40466 (3.2 MACs/cycle)
cxfir32x32ep_process	N: 80; M: 128	11022 (3.7 MACs/cycle)
cxfir32x32ep_process	N: 80; M: 512	41740 (3.9 MACs/cycle)
cxfir32x32ep_process	N: 2048; M: 4	26644 (1.2 MACs/cycle)
cxfir32x32ep_process	N: 2048; M: 8	35860 (1.8 MACs/cycle)
cxfir32x32ep_process	N: 160; M: 8	2820 (1.8 MACs/cycle)
cxfir32x32ep_process	N: 160; M: 16	4100 (2.5 MACs/cycle)
cxfir32x32ep_process	N: 80; M: 16	2060 (2.5 MACs/cycle)
cxfir32x32ep_process	N: 512; M: 32	21268 (3.1 MACs/cycle)
cxfir32x32ep_process	N: 1024; M: 32	42518 (3.1 MACs/cycle)
stereo_bkfir16x16_process	N: 80; M: 256	6161 (6.6 MACs/cycle)
stereo_bkfir16x16_process	N: 2048; M: 8	29448 (1.1 MACs/cycle)
stereo_bkfir16x16_process	N: 160; M: 8	2358 (1.1 MACs/cycle)
stereo_bkfir16x16_process	N: 160; M: 16	2558 (2.0 MACs/cycle)
stereo_bkfir16x16_process	N: 1024; M: 32	20359 (3.2 MACs/cycle)
stereo_bkfir32x32_process	N: 80; M: 256	10914 (3.8 MACs/cycle)
stereo_bkfir32x32_process	N: 2048; M: 8	24591 (1.3 MACs/cycle)
stereo_bkfir32x32_process	N: 160; M: 8	1935 (1.3 MACs/cycle)
stereo_bkfir32x32_process	N: 160; M: 16	2615 (2.0 MACs/cycle)
stereo_bkfir32x32_process	N: 1024; M: 32	24846 (2.6 MACs/cycle)
bkfiraf_process	N: 512; M: 32	7452 (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	18165 (1.8 MACs/cycle)
stereo_bkfirf_process	N: 1024; M: 32	36325 (1.8 MACs/cycle)
stereo_bkfirf_process	N: 1024; M: 256	151013 (3.5 MACs/cycle)
stereo_bkfirf_process	N: 1024; M: 512	282085 (3.7 MACs/cycle)
cxfirf_process	N: 512; M: 32	19211 (3.4 MACs/cycle)
cxfirf_process	N: 512; M: 256	133899 (3.9 MACs/cycle)
Decimation		
firdec16x16_process	N: 1024; M: 2; D: 2	6685 (0.3 MACs/cycle)
firdec16x16_process	N: 1024; M: 256; D: 2	46110 (5.7 MACs/cycle)
firdec16x16_process	N: 1024; M: 260; D: 2	47143 (5.6 MACs/cycle)
firdec16x16_process	N: 1024; M: 261; D: 2	47390 (5.6 MACs/cycle)
firdec16x16_process	N: 80; M: 256; D: 2	3630 (5.6 MACs/cycle)
firdec16x16_process	N: 1024; M: 2; D: 3	7714 (0.3 MACs/cycle)
firdec16x16_process	N: 1024; M: 256; D: 3	80036 (3.3 MACs/cycle)
firdec16x16_process	N: 1024; M: 260; D: 3	81698 (3.3 MACs/cycle)
firdec16x16_process	N: 1024; M: 261; D: 3	82340 (3.2 MACs/cycle)
firdec16x16_process	N: 1024; M: 2; D: 4	7352 (0.3 MACs/cycle)
firdec16x16_process	N: 1024; M: 256; D: 4	39200 (6.7 MACs/cycle)
firdec16x16_process	N: 1024; M: 260; D: 4	39591 (6.7 MACs/cycle)
firdec16x16_process	N: 1024; M: 261; D: 4	40222 (6.6 MACs/cycle)
firdec16x16_process	N: 1024; M: 256; D: 5	67591 (3.9 MACs/cycle)
firdec16x16_process	N: 1024; M: 260; D: 5	67617 (3.9 MACs/cycle)
firdec16x16_process	N: 1024; M: 256; D: 7	83104 (3.2 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
firdec16x16_process	N: 1024; M: 260; D: 7	84771 (3.1 MACs/cycle)
firdec32x16_process	N: 1024; M: 2; D: 2	7462 (0.3 MACs/cycle)
firdec32x16_process	N: 1024; M: 4; D: 2	7462 (0.5 MACs/cycle)
firdec32x16_process	N: 1024; M: 8; D: 2	7974 (1.0 MACs/cycle)
firdec32x16_process	N: 1024; M: 16; D: 2	8235 (2.0 MACs/cycle)
firdec32x16_process	N: 1024; M: 32; D: 2	10534 (3.1 MACs/cycle)
firdec32x16_process	N: 1024; M: 256; D: 2	39206 (6.7 MACs/cycle)
firdec32x16_process	N: 1024; M: 260; D: 2	39718 (6.7 MACs/cycle)
firdec32x16_process	N: 1024; M: 261; D: 2	40230 (6.6 MACs/cycle)
firdec32x16_process	N: 80; M: 256; D: 2	3098 (6.6 MACs/cycle)
firdec32x16_process	N: 1024; M: 2; D: 3	10021 (0.2 MACs/cycle)
firdec32x16_process	N: 1024; M: 4; D: 3	10021 (0.4 MACs/cycle)
firdec32x16_process	N: 1024; M: 8; D: 3	10789 (0.8 MACs/cycle)
firdec32x16_process	N: 1024; M: 16; D: 3	12074 (1.4 MACs/cycle)
firdec32x16_process	N: 1024; M: 256; D: 3	66085 (4.0 MACs/cycle)
firdec32x16_process	N: 1024; M: 260; D: 3	67109 (4.0 MACs/cycle)
firdec32x16_process	N: 1024; M: 261; D: 3	67877 (3.9 MACs/cycle)
firdec32x16_process	N: 1024; M: 2; D: 4	9510 (0.2 MACs/cycle)
firdec32x16_process	N: 1024; M: 4; D: 4	9510 (0.4 MACs/cycle)
firdec32x16_process	N: 1024; M: 8; D: 4	10278 (0.8 MACs/cycle)
firdec32x16_process	N: 1024; M: 256; D: 4	43302 (6.1 MACs/cycle)
firdec32x16_process	N: 1024; M: 260; D: 4	43558 (6.1 MACs/cycle)
firdec32x16_process	N: 1024; M: 261; D: 4	44326 (6.0 MACs/cycle)
firdec32x16_process	N: 1024; M: 256; D: 5	133155 (2.0 MACs/cycle)
firdec32x16_process	N: 1024; M: 260; D: 5	135203 (2.0 MACs/cycle)
firdec32x16_process	N: 1024; M: 256; D: 6	117283 (2.2 MACs/cycle)
firdec32x16_process	N: 1024; M: 260; D: 6	118821 (2.2 MACs/cycle)
firdec32x16_process	N: 1024; M: 256; D: 7	117539 (2.2 MACs/cycle)
firdec32x16_process	N: 1024; M: 260; D: 7	119331 (2.2 MACs/cycle)
firdec32x16_process	N: 80; M: 256; D: 2	3100 (6.6 MACs/cycle)
firdec32x32_process	N: 1024; M: 2; D: 2	6944 (0.3 MACs/cycle)
firdec32x32_process	N: 1024; M: 4; D: 2	6944 (0.6 MACs/cycle)
firdec32x32_process	N: 1024; M: 8; D: 2	8224 (1.0 MACs/cycle)
firdec32x32_process	N: 1024; M: 16; D: 2	10272 (1.6 MACs/cycle)
firdec32x32_process	N: 1024; M: 32; D: 2	14368 (2.3 MACs/cycle)
firdec32x32_process	N: 1024; M: 256; D: 2	71712 (3.7 MACs/cycle)
firdec32x32_process	N: 1024; M: 260; D: 2	72736 (3.7 MACs/cycle)
firdec32x32_process	N: 1024; M: 261; D: 2	73760 (3.6 MACs/cycle)
firdec32x32_process	N: 1024; M: 2; D: 3	10275 (0.2 MACs/cycle)
firdec32x32_process	N: 1024; M: 4; D: 3	10275 (0.4 MACs/cycle)
firdec32x32_process	N: 1024; M: 8; D: 3	11299 (0.7 MACs/cycle)
firdec32x32_process	N: 1024; M: 16; D: 3	12840 (1.3 MACs/cycle)
firdec32x32_process	N: 1024; M: 256; D: 3	74531 (3.5 MACs/cycle)
firdec32x32_process	N: 1024; M: 260; D: 3	75555 (3.5 MACs/cycle)
firdec32x32_process	N: 1024; M: 261; D: 3	76579 (3.5 MACs/cycle)
firdec32x32_process	N: 1024; M: 2; D: 4	10272 (0.2 MACs/cycle)
firdec32x32_process	N: 1024; M: 4; D: 4	10272 (0.4 MACs/cycle)
firdec32x32_process	N: 1024; M: 8; D: 4	11296 (0.7 MACs/cycle)
firdec32x32_process	N: 1024; M: 256; D: 4	74272 (3.5 MACs/cycle)
firdec32x32_process	N: 1024; M: 260; D: 4	75296 (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	125474 (2.1 MACs/cycle)
firdec32x32_process	N: 1024; M: 260; D: 5	127266 (2.1 MACs/cycle)
firdec32x32_process	N: 1024; M: 256; D: 6	125474 (2.1 MACs/cycle)
firdec32x32_process	N: 1024; M: 260; D: 6	127268 (2.1 MACs/cycle)
firdec32x32_process	N: 1024; M: 256; D: 7	126498 (2.1 MACs/cycle)
firdec32x32_process	N: 1024; M: 260; D: 7	128290 (2.1 MACs/cycle)
firdec32x32_process	N: 80; M: 256; D: 2	5632 (3.6 MACs/cycle)
firdec32x32ep_process	N: 80; M: 256; D: 2	6993 (2.9 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 2; D: 2	8225 (0.2 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 4; D: 2	8225 (0.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 8; D: 2	9762 (0.8 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 16; D: 2	12321 (1.3 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 32; D: 2	17441 (1.9 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 256; D: 2	89121 (2.9 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 260; D: 2	90401 (2.9 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 261; D: 2	91681 (2.9 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 2; D: 3	11299 (0.2 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 4; D: 3	11299 (0.4 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 8; D: 3	12068 (0.7 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 16; D: 3	13603 (1.2 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 256; D: 3	75299 (3.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 260; D: 3	76579 (3.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 261; D: 3	77347 (3.5 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
firdec32x32ep_process	N: 1024; M: 2; D: 4	9764 (0.2 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 4; D: 4	9764 (0.4 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 8; D: 4	11044 (0.7 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 256; D: 4	74532 (3.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 260; D: 4	75556 (3.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 261; D: 4	76580 (3.5 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 256; D: 5	126500 (2.1 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 260; D: 5	128292 (2.1 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	127269 (2.1 MACs/cycle)
firdec32x32ep_process	N: 1024; M: 260; D: 7	129060 (2.1 MACs/cycle)
firdec32x32ep_process	N: 80; M: 256; D: 2	6992 (2.9 MACs/cycle)
firdecf_process	N: 1024; M: 256; D: 2	71702 (3.7 MACs/cycle)
firdecf_process	N: 1024; M: 512; D: 2	137240 (3.8 MACs/cycle)
firdecf_process	N: 1024; M: 256; D: 3	99353 (2.6 MACs/cycle)
firdecf_process	N: 1024; M: 512; D: 3	189465 (2.8 MACs/cycle)
firdecf_process	N: 1024; M: 256; D: 4	114713 (2.3 MACs/cycle)
firdecf_process	N: 1024; M: 512; D: 4	213017 (2.5 MACs/cycle)
firdecf_process	N: 1024; M: 256; D: 8	179225 (1.5 MACs/cycle)
firdecf_process	N: 1024; M: 512; D: 8	310296 (1.7 MACs/cycle)
firdecf_process	N: 1024; M: 256; D: 11	247320 (1.1 MACs/cycle)
firdecf_process	N: 1024; M: 512; D: 11	443928 (1.2 MACs/cycle)
firdecf_process	N: 1024; M: 256; D: 23	265752 (1.0 MACs/cycle)
firdecf_process	N: 1024; M: 512; D: 23	462359 (1.1 MACs/cycle)
Interpolation		
firinterp16x16_process	N: 1024; M: 4; D: 2	7710 (1.1 MACs/cycle)
firinterp16x16_process	N: 1024; M: 256; D: 2	88857 (5.9 MACs/cycle)
firinterp16x16_process	N: 1024; M: 260; D: 2	89886 (5.9 MACs/cycle)
firinterp16x16_process	N: 1024; M: 4; D: 3	13089 (0.9 MACs/cycle)
firinterp16x16_process	N: 1024; M: 256; D: 3	134307 (5.9 MACs/cycle)
firinterp16x16_process	N: 1024; M: 260; D: 3	152865 (5.2 MACs/cycle)
firinterp16x16_process	N: 1024; M: 4; D: 4	16420 (1.0 MACs/cycle)
firinterp16x16_process	N: 1024; M: 256; D: 4	178215 (5.9 MACs/cycle)
firinterp16x16_process	N: 1024; M: 260; D: 4	180772 (5.9 MACs/cycle)
firinterp16x16_process	N: 1024; M: 256; D: 5	251942 (5.2 MACs/cycle)
firinterp16x16_process	N: 1024; M: 260; D: 5	258554 (5.1 MACs/cycle)
firinterp16x16_process	N: 1024; M: 256; D: 7	353447 (5.2 MACs/cycle)
firinterp16x16_process	N: 1024; M: 260; D: 7	361114 (5.2 MACs/cycle)
firinterp16x16_process	N: 80; M: 204; D: 2	5649 (5.8 MACs/cycle)
firinterp32x16_process	N: 1024; M: 4; D: 2	8743 (0.9 MACs/cycle)
firinterp32x16_process	N: 1024; M: 8; D: 2	10535 (1.6 MACs/cycle)
firinterp32x16_process	N: 1024; M: 16; D: 2	13351 (2.5 MACs/cycle)
firinterp32x16_process	N: 1024; M: 32; D: 2	18983 (3.5 MACs/cycle)
firinterp32x16_process	N: 1024; M: 256; D: 2	81961 (6.4 MACs/cycle)
firinterp32x16_process	N: 1024; M: 260; D: 2	84009 (6.3 MACs/cycle)
firinterp32x16_process	N: 1024; M: 4; D: 3	17187 (0.7 MACs/cycle)
firinterp32x16_process	N: 1024; M: 8; D: 3	18728 (1.3 MACs/cycle)
firinterp32x16_process	N: 1024; M: 16; D: 3	21035 (2.3 MACs/cycle)
firinterp32x16_process	N: 1024; M: 256; D: 3	121387 (6.5 MACs/cycle)
firinterp32x16_process	N: 1024; M: 260; D: 3	123947 (6.4 MACs/cycle)
firinterp32x16_process	N: 1024; M: 4; D: 4	20523 (0.8 MACs/cycle)
firinterp32x16_process	N: 1024; M: 8; D: 4	21803 (1.5 MACs/cycle)
firinterp32x16_process	N: 1024; M: 256; D: 4	164139 (6.4 MACs/cycle)
firinterp32x16_process	N: 1024; M: 260; D: 4	167467 (6.4 MACs/cycle)
firinterp32x16_process	N: 1024; M: 256; D: 5	244011 (5.4 MACs/cycle)
firinterp32x16_process	N: 1024; M: 260; D: 5	245291 (5.4 MACs/cycle)
firinterp32x16_process	N: 1024; M: 256; D: 6	290348 (5.4 MACs/cycle)
firinterp32x16_process	N: 1024; M: 260; D: 6	293419 (5.4 MACs/cycle)
firinterp32x16_process	N: 1024; M: 256; D: 7	339755 (5.4 MACs/cycle)
firinterp32x16_process	N: 1024; M: 260; D: 7	341547 (5.5 MACs/cycle)
firinterp32x16_process	N: 80; M: 204; D: 8	24882 (5.2 MACs/cycle)
firinterp32x32_process	N: 1024; M: 4; D: 2	10791 (0.8 MACs/cycle)
firinterp32x32_process	N: 1024; M: 8; D: 2	13095 (1.3 MACs/cycle)
firinterp32x32_process	N: 1024; M: 16; D: 2	17192 (1.9 MACs/cycle)
firinterp32x32_process	N: 1024; M: 32; D: 2	25383 (2.6 MACs/cycle)
firinterp32x32_process	N: 1024; M: 256; D: 2	140072 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 260; D: 2	142119 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 4; D: 3	22825 (0.5 MACs/cycle)
firinterp32x32_process	N: 1024; M: 8; D: 3	26664 (0.9 MACs/cycle)
firinterp32x32_process	N: 1024; M: 16; D: 3	32808 (1.5 MACs/cycle)
firinterp32x32_process	N: 1024; M: 256; D: 3	217129 (3.6 MACs/cycle)
firinterp32x32_process	N: 1024; M: 260; D: 3	220201 (3.6 MACs/cycle)
firinterp32x32_process	N: 1024; M: 4; D: 4	28713 (0.6 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements RG2018.9, HiFi4 with VFPU, bd5
firinterp32x32_process	N: 1024; M: 8; D: 4	33834 (1.0 MACs/cycle)
firinterp32x32_process	N: 1024; M: 256; D: 4	287784 (3.6 MACs/cycle)
firinterp32x32_process	N: 1024; M: 260; D: 4	291881 (3.6 MACs/cycle)
firinterp32x32_process	N: 1024; M: 256; D: 5	359721 (3.6 MACs/cycle)
firinterp32x32_process	N: 1024; M: 260; D: 5	364841 (3.6 MACs/cycle)
firinterp32x32_process	N: 1024; M: 256; D: 6	430634 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 260; D: 6	436777 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 256; D: 7	501545 (3.7 MACs/cycle)
firinterp32x32_process	N: 1024; M: 260; D: 7	508713 (3.7 MACs/cycle)
firinterp32x32_process	N: 80; M: 204; D: 8	36441 (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)
firinterp32x32ep_process	N: 1024; M: 260; D: 2	144164 (3.7 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 4; D: 3	25646 (0.5 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 8; D: 3	29482 (0.8 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 16; D: 3	35625 (1.4 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 3	219945 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 260; D: 3	223017 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 4; D: 4	34349 (0.5 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 8; D: 4	39465 (0.8 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 4	293415 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 260; D: 4	297512 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 5	368426 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 260; D: 5	373546 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 6	441130 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 260; D: 6	447274 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 256; D: 7	513834 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 1024; M: 260; D: 7	521002 (3.6 MACs/cycle)
firinterp32x32ep_process	N: 80; M: 204; D: 8	37541 (3.5 MACs/cycle)
firinterpf_process	N: 1024; M: 256; D: 2	134422 (3.9 MACs/cycle)
firinterpf_process	N: 1024; M: 512; D: 2	265495 (3.9 MACs/cycle)
firinterpf_process	N: 1024; M: 256; D: 3	221461 (3.6 MACs/cycle)
firinterpf_process	N: 1024; M: 512; D: 3	418070 (3.8 MACs/cycle)
firinterpf_process	N: 1024; M: 256; D: 4	269336 (3.9 MACs/cycle)
firinterpf_process	N: 1024; M: 512; D: 4	531479 (3.9 MACs/cycle)
firinterpf_process	N: 1024; M: 256; D: 8	591642 (3.5 MACs/cycle)
firinterpf_process	N: 1024; M: 512; D: 8	1115929 (3.8 MACs/cycle)
Correlation, Convolution, Despreading, LMS		
fir_convol16x16	N: 80; M: 56	998 (4.5 MACs/cycle)
fir_convol16x16	N: 80; M: 60	1047 (4.6 MACs/cycle)
fir_convol16x16	N: 256; M: 80	4112 (5.0 MACs/cycle)
fir_convol16x16	N: 256; M: 84	4274 (5.0 MACs/cycle)
fir_convol32x16	N: 80; M: 56	963 (4.7 MACs/cycle)
fir_convol32x16	N: 80; M: 60	988 (4.9 MACs/cycle)
fir_convol32x16	N: 256; M: 80	3799 (5.4 MACs/cycle)
fir_convol32x16	N: 256; M: 84	3868 (5.6 MACs/cycle)
fir_convol32x32	N: 80; M: 56	1296 (3.5 MACs/cycle)
fir_convol32x32	N: 256; M: 80	5626 (3.6 MACs/cycle)
fir_convol32x32ep	N: 80; M: 56	1538 (2.9 MACs/cycle)
fir_convol32x32ep	N: 256; M: 80	6418 (3.2 MACs/cycle)
fir_convola16x16	N=80; M=56	1061 (4.2 MACs/cycle)
fir_convola16x16	N=256; M=80	3937 (5.2 MACs/cycle)
fir_convola32x16	N: 80; M: 56	1138 (3.9 MACs/cycle)
fir_convola32x16	N: 80; M: 60	1221 (3.9 MACs/cycle)
fir_convola32x16	N: 256; M: 80	4130 (5.0 MACs/cycle)
fir_convola32x16	N: 256; M: 84	4389 (4.9 MACs/cycle)
fir_convola32x32	N=80; M=56	1439 (3.1 MACs/cycle)
fir_convola32x32	N=256; M=80	5903 (3.5 MACs/cycle)
fir_convola32x32ep	N=80; M=56	1664 (2.7 MACs/cycle)
fir_convola32x32ep	N=256; M=80	6611 (3.1 MACs/cycle)
cxfir_convol32x16	N: 80; M: 56	3707 (4.8 MACs/cycle)
cxfir_convol32x16	N: 256; M: 80	16456 (5.0 MACs/cycle)
cxfir_convola32x16	N: 80; M: 56	4005 (4.5 MACs/cycle)
cxfir_convola32x16	N: 256; M: 80	17109 (4.8 MACs/cycle)
fir_lconvola16x16	N=80; M=56	1320 (3.4 MACs/cycle)
fir_lconvola16x16	N=256; M=80	4228 (4.8 MACs/cycle)
fir_lconvola32x32	N=80; M=56	3076 (1.5 MACs/cycle)
fir_lconvola32x32	N=256; M=80	11935 (1.7 MACs/cycle)
fir_xcorr16x16	N: 80; M: 56	1084 (4.1 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
fir_xcorr16x16	N: 256; M: 80	4590 (4.5 MACs/cycle)
fir_xcorr32x16	N: 80; M: 56	889 (5.0 MACs/cycle)
fir_xcorr32x16	N: 80; M: 60	993 (4.8 MACs/cycle)
fir_xcorr32x16	N: 256; M: 80	3593 (5.7 MACs/cycle)
fir_xcorr32x16	N: 256; M: 84	3919 (5.5 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	1468 (3.1 MACs/cycle)
fir_xcorr32x32ep	N: 256; M: 80	6216 (3.3 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	1056 (4.2 MACs/cycle)
fir_xcorra16x16	N: 256; M: 80	3932 (5.2 MACs/cycle)
fir_xcorra32x16	N: 80; M: 56	1160 (3.9 MACs/cycle)
fir_xcorra32x16	N: 80; M: 60	1245 (3.9 MACs/cycle)
fir_xcorra32x16	N: 256; M: 80	4164 (4.9 MACs/cycle)
fir_xcorra32x16	N: 256; M: 84	4425 (4.9 MACs/cycle)
fir_xcorra32x32	N: 80; M: 56	1484 (3.0 MACs/cycle)
fir_xcorra32x32	N: 256; M: 80	5972 (3.4 MACs/cycle)
fir_xcorra32x32ep	N: 80; M: 56	1704 (2.6 MACs/cycle)
fir_xcorra32x32ep	N: 256; M: 80	6675 (3.1 MACs/cycle)
fir_lxcorra16x16	N=80; M=56	1327 (3.4 MACs/cycle)
fir_lxcorra16x16	N=256; M=80	4242 (4.8 MACs/cycle)
fir_lxcorra32x32	N=80; M=56	3098 (1.4 MACs/cycle)
fir_lxcorra32x32	N=256; M=80	11970 (1.7 MACs/cycle)
fir_acorr16x16	N: 80	1434 (4.5 MACs/cycle)
fir_acorr16x16	N: 256	12985 (5.0 MACs/cycle)
fir_acorr32x32	N: 80	1758 (3.6 MACs/cycle)
fir_acorr32x32	N: 256	16849 (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	1312 (4.9 MACs/cycle)
fir_acorra16x16	N=256	9695 (6.8 MACs/cycle)
fir_acorra32x32	N: 80	1854 (3.5 MACs/cycle)
fir_acorra32x32	N: 256	17123 (3.8 MACs/cycle)
fir_acorra32x32ep	N: 80	2072 (3.1 MACs/cycle)
fir_acorra32x32ep	N: 256	17823 (3.7 MACs/cycle)
fir_lacorra16x16	N=80	815 (3.9 MACs/cycle)
fir_lacorra16x16	N=256	5303 (6.2 MACs/cycle)
fir_lacorra32x32	N=80	2089 (1.5 MACs/cycle)
fir_lacorra32x32	N=256	17885 (1.8 MACs/cycle)
fir_blms16x16	N: 80; M: 16	856 (3.0 MACs/cycle)
fir_blms16x16	N: 64; M: 16	719 (2.8 MACs/cycle)
fir_blms16x16	N: 64; M: 64	1783 (4.6 MACs/cycle)
fir_blms16x16	N: 80; M: 64	2114 (4.8 MACs/cycle)
fir_blms16x16	N: 80; M: 128	3778 (5.4 MACs/cycle)
fir_blms16x16	N: 64; M: 128	3190 (5.1 MACs/cycle)
fir_blms16x32	N: 80; M: 16	868 (2.9 MACs/cycle)
fir_blms16x32	N: 64; M: 16	722 (2.8 MACs/cycle)
fir_blms16x32	N: 64; M: 64	1734 (4.7 MACs/cycle)
fir_blms16x32	N: 80; M: 64	2069 (4.9 MACs/cycle)
fir_blms16x32	N: 80; M: 128	3677 (5.6 MACs/cycle)
fir_blms16x32	N: 64; M: 128	3086 (5.3 MACs/cycle)
fir_blms32x32	N: 80; M: 16	909 (2.8 MACs/cycle)
fir_blms32x32	N: 64; M: 16	748 (2.7 MACs/cycle)
fir_blms32x32	N: 64; M: 64	2410 (3.4 MACs/cycle)
fir_blms32x32	N: 80; M: 64	2955 (3.5 MACs/cycle)
fir_blms32x32	N: 80; M: 128	5683 (3.6 MACs/cycle)
fir_blms32x32	N: 64; M: 128	4626 (3.5 MACs/cycle)
fir_blms32x32ep	N: 80; M: 16	1148 (2.2 MACs/cycle)
fir_blms32x32ep	N: 64; M: 16	944 (2.2 MACs/cycle)
fir_blms32x32ep	N: 64; M: 64	2733 (3.0 MACs/cycle)
fir_blms32x32ep	N: 80; M: 64	3320 (3.1 MACs/cycle)
fir_blms32x32ep	N: 80; M: 128	6216 (3.3 MACs/cycle)
fir_blms32x32ep	N: 64; M: 128	5117 (3.2 MACs/cycle)
cxfir_blms32x32	N: 80; M: 16	3203 (3.2 MACs/cycle)
cxfir_blms32x32	N: 64; M: 16	2595 (3.2 MACs/cycle)
cxfir_blms32x32	N: 64; M: 64	9099 (3.6 MACs/cycle)
cxfir_blms32x32	N: 80; M: 64	11243 (3.6 MACs/cycle)
cxfir_blms32x32	N: 80; M: 128	21963 (3.7 MACs/cycle)
cxfir_blms32x32	N: 64; M: 128	17771 (3.7 MACs/cycle)
fir_convolf	N: 80; M: 56	1684 (2.7 MACs/cycle)
fir_convolf	N: 256; M: 80	6916 (3.0 MACs/cycle)
fir_convolaf	N: 80; M: 56	1991 (2.3 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
fir_convolaf	N: 256; M: 80	7459 (2.7 MACs/cycle)
fir_xcorrf	N: 80; M: 56	1605 (2.8 MACs/cycle)
fir_xcorrf	N: 256; M: 80	6662 (3.1 MACs/cycle)
cxfir_xcorrf	N: 80; M: 56	4844 (3.7 MACs/cycle)
cxfir_xcorrf	N: 256; M: 80	21636 (3.8 MACs/cycle)
fir_xcorraf	N: 80; M: 56	2025 (2.2 MACs/cycle)
fir_xcorraf	N: 256; M: 80	7504 (2.7 MACs/cycle)
cxfir_xcorraf	N: 80; M: 56	4851 (3.7 MACs/cycle)
cxfir_xcorraf	N: 256; M: 80	21643 (3.8 MACs/cycle)
fir_acorrf	N: 80	2092 (3.1 MACs/cycle)
fir_acorrf	N: 256	17932 (3.7 MACs/cycle)
fir_acorraf	N: 80	2620 (2.4 MACs/cycle)
fir_acorraf	N: 256	19338 (3.4 MACs/cycle)
fir_blmsf	N: 80; M: 16	1398 (1.8 MACs/cycle)
fir_blmsf	N: 64; M: 16	1146 (1.8 MACs/cycle)
fir_blmsf	N: 64; M: 64	3006 (2.7 MACs/cycle)
fir_blmsf	N: 80; M: 64	3644 (2.8 MACs/cycle)
fir_blmsf	N: 80; M: 128	6633 (3.1 MACs/cycle)
fir_blmsf	N: 64; M: 128	5485 (3.0 MACs/cycle)
cxfir_blmsf	N: 80; M: 16	3052 (3.4 MACs/cycle)
cxfir_blmsf	N: 64; M: 16	2466 (3.3 MACs/cycle)
cxfir_blmsf	N: 64; M: 64	8862 (3.7 MACs/cycle)
cxfir_blmsf	N: 80; M: 64	10988 (3.7 MACs/cycle)
cxfir_blmsf	N: 80; M: 128	21561 (3.8 MACs/cycle)
cxfir_blmsf	N: 64; M: 128	17389 (3.8 MACs/cycle)
2D convolution		
conv2d_3x3_8x8	M=3,N=3,P=256,Q=512	341263 (3.5 MACs/cycle)
conv2d_5x5_8x8	M=5,N=5,P=256,Q=512	1339918 (2.4 MACs/cycle)
conv2d_11x7_8x8	M=11,N=7,P=256,Q=512	1793618 (5.6 MACs/cycle)
conv2d_3x3_8x8	M=3,N=3,P=256,Q=256	174607 (3.4 MACs/cycle)
conv2d_5x5_8x8	M=5,N=5,P=256,Q=256	674318 (2.4 MACs/cycle)
conv2d_11x7_8x8	M=11,N=7,P=256,Q=256	906738 (5.6 MACs/cycle)
conv2d_3x3_8x8	M=3,N=3,P=64,Q=64	12727 (2.9 MACs/cycle)
conv2d_5x5_8x8	M=5,N=5,P=64,Q=64	45902 (2.2 MACs/cycle)
conv2d_11x7_8x8	M=11,N=7,P=64,Q=64	62058 (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	1162336 (2.8 MACs/cycle)
conv2d_11x7_8x16	M=11,N=7,P=256,Q=512	1698739 (5.9 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	588256 (2.8 MACs/cycle)
conv2d_11x7_8x16	M=11,N=7,P=256,Q=256	858611 (5.9 MACs/cycle)
conv2d_3x3_8x16	M=3,N=3,P=64,Q=64	10486 (3.5 MACs/cycle)
conv2d_5x5_8x16	M=5,N=5,P=64,Q=64	41344 (2.5 MACs/cycle)
conv2d_11x7_8x16	M=11,N=7,P=64,Q=64	58403 (5.4 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	1160227 (2.8 MACs/cycle)
conv2d_11x7_16x16	M=11,N=7,P=256,Q=512	1698681 (5.9 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	586147 (2.8 MACs/cycle)
conv2d_11x7_16x16	M=11,N=7,P=256,Q=256	858554 (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	40771 (2.5 MACs/cycle)
conv2d_11x7_16x16	M=11,N=7,P=64,Q=64	58346 (5.4 MACs/cycle)
IIR Filters		
Biquad Filters		
bqriir16x16_df1	N=256, M=1, gain=0	812 (3.2 cycles/(biquad*pts)
bqriir16x16_df1	N=256, M=2, gain=1	1310 (2.6 cycles/(biquad*pts)
bqriir16x16_df1	N=256, M=3, gain=0	2008 (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	3199 (2.5 cycles/(biquad*pts)
bqriir16x16_df1	N=256, M=6, gain=1	3700 (2.4 cycles/(biquad*pts)
bqriir16x16_df1	N=256, M=7, gain=0	4390 (2.4 cycles/(biquad*pts)
bqriir16x16_df1	N=256, M=8, gain=1	4892 (2.4 cycles/(biquad*pts)
bqriir16x16_df1	N=80, M=5, gain=0	1087 (2.7 cycles/(biquad*pts)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
bqriir16x16_df1	N=80, M=5, gain=1	1087 (2.7 cycles/(biquad*pts)
bqriir16x16_df2	N=256, M=1, gain=0	798 (3.1 cycles/(biquad*pts)
bqriir16x16_df2	N=256, M=2, gain=1	1319 (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	3183 (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	4377 (2.4 cycles/(biquad*pts)
bqriir16x16_df2	N=256, M=8, gain=1	4897 (2.4 cycles/(biquad*pts)
bqriir16x16_df2	N=80, M=5, gain=0	1070 (2.7 cycles/(biquad*pts)
bqriir16x16_df2	N=80, M=5, gain=1	1070 (2.7 cycles/(biquad*pts)
bqriir32x16_df1	N=256, M=1, gain=0	809 (3.2 cycles/(biquad*pts)
bqriir32x16_df1	N=256, M=2, gain=1	986 (1.9 cycles/(biquad*pts)
bqriir32x16_df1	N=256, M=3, gain=0	1631 (2.1 cycles/(biquad*pts)
bqriir32x16_df1	N=256, M=4, gain=1	1809 (1.8 cycles/(biquad*pts)
bqriir32x16_df1	N=256, M=5, gain=0	2454 (1.9 cycles/(biquad*pts)
bqriir32x16_df1	N=256, M=6, gain=1	2632 (1.7 cycles/(biquad*pts)
bqriir32x16_df1	N=256, M=7, gain=0	3277 (1.8 cycles/(biquad*pts)
bqriir32x16_df1	N=256, M=8, gain=1	3455 (1.7 cycles/(biquad*pts)
bqriir32x16_df1	N=80, M=5, gain=0	870 (2.2 cycles/(biquad*pts)
bqriir32x16_df1	N=80, M=5, gain=1	927 (2.3 cycles/(biquad*pts)
bqriir32x16_df2	N=256, M=1, gain=0	802 (3.1 cycles/(biquad*pts)
bqriir32x16_df2	N=256, M=2, gain=1	1106 (2.2 cycles/(biquad*pts)
bqriir32x16_df2	N=256, M=3, gain=0	1744 (2.3 cycles/(biquad*pts)
bqriir32x16_df2	N=256, M=4, gain=1	2046 (2.0 cycles/(biquad*pts)
bqriir32x16_df2	N=256, M=5, gain=0	2684 (2.1 cycles/(biquad*pts)
bqriir32x16_df2	N=256, M=6, gain=1	2988 (1.9 cycles/(biquad*pts)
bqriir32x16_df2	N=256, M=7, gain=0	3624 (2.0 cycles/(biquad*pts)
bqriir32x16_df2	N=256, M=8, gain=1	3926 (1.9 cycles/(biquad*pts)
bqriir32x16_df2	N=80, M=5, gain=0	924 (2.3 cycles/(biquad*pts)
bqriir32x16_df2	N=80, M=5, gain=1	981 (2.5 cycles/(biquad*pts)
bqriir32x32_df1	N=256, M=1, gain=0	797 (3.1 cycles/(biquad*pts)
bqriir32x32_df1	N=256, M=2, gain=1	977 (1.9 cycles/(biquad*pts)
bqriir32x32_df1	N=256, M=3, gain=0	1607 (2.1 cycles/(biquad*pts)
bqriir32x32_df1	N=256, M=4, gain=1	1782 (1.7 cycles/(biquad*pts)
bqriir32x32_df1	N=256, M=5, gain=0	2413 (1.9 cycles/(biquad*pts)
bqriir32x32_df1	N=256, M=6, gain=1	2586 (1.7 cycles/(biquad*pts)
bqriir32x32_df1	N=256, M=7, gain=0	3214 (1.8 cycles/(biquad*pts)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
bqriir32x32_df1	N=256, M=8, gain=1	3389 (1.7 cycles/(biquad*pts)
bqriir32x32_df1	N=80, M=5, gain=0	829 (2.1 cycles/(biquad*pts)
bqriir32x32_df1	N=80, M=5, gain=1	889 (2.2 cycles/(biquad*pts)
bqriir32x32_df2	N=256, M=1, gain=0	800 (3.1 cycles/(biquad*pts)
bqriir32x32_df2	N=256, M=2, gain=1	1603 (3.1 cycles/(biquad*pts)
bqriir32x32_df2	N=256, M=3, gain=0	2240 (2.9 cycles/(biquad*pts)
bqriir32x32_df2	N=256, M=4, gain=1	3041 (3.0 cycles/(biquad*pts)
bqriir32x32_df2	N=256, M=5, gain=0	3678 (2.9 cycles/(biquad*pts)
bqriir32x32_df2	N=256, M=6, gain=1	4479 (2.9 cycles/(biquad*pts)
bqriir32x32_df2	N=256, M=7, gain=0	5116 (2.9 cycles/(biquad*pts)
bqriir32x32_df2	N=256, M=8, gain=1	5917 (2.9 cycles/(biquad*pts)
bqriir32x32_df2	N=80, M=5, gain=0	1216 (3.0 cycles/(biquad*pts)
bqriir32x32_df2	N=80, M=5, gain=1	1271 (3.2 cycles/(biquad*pts)
stereo_bqriir16x16_df1	N=256, M=1, gain=0	2281 (8.9 cycles/(biquad*pts)
stereo_bqriir16x16_df1	N=256, M=2, gain=1	3250 (6.3 cycles/(biquad*pts)
stereo_bqriir16x16_df1	N=256, M=3, gain=0	4761 (6.2 cycles/(biquad*pts)
stereo_bqriir16x16_df1	N=256, M=4, gain=1	5733 (5.6 cycles/(biquad*pts)
stereo_bqriir16x16_df1	N=256, M=5, gain=0	7221 (5.6 cycles/(biquad*pts)
stereo_bqriir16x16_df1	N=256, M=6, gain=1	8197 (5.3 cycles/(biquad*pts)
stereo_bqriir16x16_df1	N=256, M=7, gain=0	9682 (5.4 cycles/(biquad*pts)
stereo_bqriir16x16_df1	N=256, M=8, gain=1	10661 (5.2 cycles/(biquad*pts)
stereo_bqriir16x16_df1	N=80, M=5, gain=0	2385 (6.0 cycles/(biquad*pts)
stereo_bqriir16x16_df1	N=80, M=5, gain=1	2385 (6.0 cycles/(biquad*pts)
stereo_bqriir32x16_df1	N=256, M=1, gain=0	1598 (6.2 cycles/(biquad*pts)
stereo_bqriir32x16_df1	N=256, M=2, gain=1	3200 (6.3 cycles/(biquad*pts)
stereo_bqriir32x16_df1	N=256, M=3, gain=0	3741 (4.9 cycles/(biquad*pts)
stereo_bqriir32x16_df1	N=256, M=4, gain=1	5345 (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	7490 (4.9 cycles/(biquad*pts)
stereo_bqriir32x16_df1	N=256, M=7, gain=0	8031 (4.5 cycles/(biquad*pts)
stereo_bqriir32x16_df1	N=256, M=8, gain=1	9637 (4.7 cycles/(biquad*pts)
stereo_bqriir32x16_df1	N=80, M=5, gain=0	2015 (5.0 cycles/(biquad*pts)
stereo_bqriir32x16_df1	N=80, M=5, gain=1	2342 (5.9 cycles/(biquad*pts)
stereo_bqriir32x32_df1	N=256, M=1, gain=0	1579 (6.2 cycles/(biquad*pts)
stereo_bqriir32x32_df1	N=256, M=2, gain=1	2900 (5.7 cycles/(biquad*pts)
stereo_bqriir32x32_df1	N=256, M=3, gain=0	3417 (4.4 cycles/(biquad*pts)
stereo_bqriir32x32_df1	N=256, M=4, gain=1	4740 (4.6 cycles/(biquad*pts)
stereo_bqriir32x32_df1	N=256, M=5, gain=0	5259 (4.1 cycles/(biquad*pts)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
stereo_bqriir32x32_df1	N=256, M=6, gain=1	6582 (4.3 cycles/(biquad*pts)
stereo_bqriir32x32_df1	N=256, M=7, gain=0	7099 (4.0 cycles/(biquad*pts)
stereo_bqriir32x32_df1	N=256, M=8, gain=1	8422 (4.1 cycles/(biquad*pts)
stereo_bqriir32x32_df1	N=80, M=5, gain=0	1739 (4.3 cycles/(biquad*pts)
stereo_bqriir32x32_df1	N=80, M=5, gain=1	2068 (5.2 cycles/(biquad*pts)
bqriirf_df1	N=512, M=1	3415 (6.7 cycles/(biquad*pts)
bqriirf_df1	N=512, M=2	4697 (4.6 cycles/(biquad*pts)
bqriirf_df1	N=512, M=3	7800 (5.1 cycles/(biquad*pts)
bqriirf_df1	N=512, M=4	5851 (2.9 cycles/(biquad*pts)
bqriirf_df1	N=512, M=8	11392 (2.8 cycles/(biquad*pts)
bqriirf_df1	N=512, M=12	16933 (2.8 cycles/(biquad*pts)
bqriirf_df1	N=512, M=16	22474 (2.7 cycles/(biquad*pts)
bqriirf_df2	N=512, M=1	2387 (4.7 cycles/(biquad*pts)
bqriirf_df2	N=512, M=2	4473 (4.4 cycles/(biquad*pts)
bqriirf_df2	N=512, M=3	6550 (4.3 cycles/(biquad*pts)
bqriirf_df2	N=512, M=4	5210 (2.5 cycles/(biquad*pts)
bqriirf_df2	N=512, M=8	10114 (2.5 cycles/(biquad*pts)
bqriirf_df2	N=512, M=12	15016 (2.4 cycles/(biquad*pts)
bqriirf_df2	N=512, M=16	19921 (2.4 cycles/(biquad*pts)
bqriirf_df2t	N=512, M=1	4706 (9.2 cycles/(biquad*pts)
bqriirf_df2t	N=512, M=2	4427 (4.3 cycles/(biquad*pts)
bqriirf_df2t	N=512, M=3	8821 (5.7 cycles/(biquad*pts)
bqriirf_df2t	N=512, M=4	4849 (2.4 cycles/(biquad*pts)
bqriirf_df2t	N=512, M=8	9385 (2.3 cycles/(biquad*pts)
bqriirf_df2t	N=512, M=12	13923 (2.3 cycles/(biquad*pts)
bqriirf_df2t	N=512, M=16	18457 (2.3 cycles/(biquad*pts)
bqciirf_df1	N=512, M=1	3134 (6.1 cycles/(biquad*pts)
bqciirf_df1	N=512, M=2	4956 (4.8 cycles/(biquad*pts)
bqciirf_df1	N=512, M=3	7539 (4.9 cycles/(biquad*pts)
bqciirf_df1	N=512, M=4	9866 (4.8 cycles/(biquad*pts)
bqciirf_df1	N=512, M=8	19181 (4.7 cycles/(biquad*pts)
bqciirf_df1	N=512, M=12	28496 (4.6 cycles/(biquad*pts)
bqciirf_df1	N=512, M=16	37813 (4.6 cycles/(biquad*pts)
stereo_bqriirf_df1	N=512, M=1	3139 (6.1 cycles/(biquad*pts)
stereo_bqriirf_df1	N=512, M=2	5738 (5.6 cycles/(biquad*pts)
stereo_bqriirf_df1	N=512, M=3	7823 (5.1 cycles/(biquad*pts)
stereo_bqriirf_df1	N=512, M=4	10421 (5.1 cycles/(biquad*pts)
stereo_bqriirf_df1	N=512, M=8	19787 (4.8 cycles/(biquad*pts)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
stereo_bqriirf_df1	N=512, M=12	29153 (4.7 cycles/(biquad*pts)
stereo_bqriirf_df1	N=512, M=16	38518 (4.7 cycles/(biquad*pts)
Lattice Filters		
latr16x16_process	N=256, M=1	792 (3.1 cycles/(sample*M)
latr16x16_process	N=256, M=2	1566 (3.1 cycles/(sample*M)
latr16x16_process	N=256, M=3	1573 (2.0 cycles/(sample*M)
latr16x16_process	N=256, M=4	1957 (1.9 cycles/(sample*M)
latr16x16_process	N=256, M=5	2090 (1.6 cycles/(sample*M)
latr16x16_process	N=256, M=6	2080 (1.4 cycles/(sample*M)
latr16x16_process	N=256, M=7	2089 (1.2 cycles/(sample*M)
latr16x16_process	N=256, M=8	2601 (1.3 cycles/(sample*M)
latr16x16_process	N=256, M=9	11024 (4.8 cycles/(sample*M)
latr16x16_process	N=80, M=6	673 (1.4 cycles/(sample*M)
latr32x16_process	N=256, M=1	787 (3.1 cycles/(sample*M)
latr32x16_process	N=256, M=2	1042 (2.0 cycles/(sample*M)
latr32x16_process	N=256, M=3	1305 (1.7 cycles/(sample*M)
latr32x16_process	N=256, M=4	1814 (1.8 cycles/(sample*M)
latr32x16_process	N=256, M=5	1815 (1.4 cycles/(sample*M)
latr32x16_process	N=256, M=6	2069 (1.3 cycles/(sample*M)
latr32x16_process	N=256, M=7	2204 (1.2 cycles/(sample*M)
latr32x16_process	N=256, M=8	2592 (1.3 cycles/(sample*M)
latr32x16_process	N=256, M=9	8979 (3.9 cycles/(sample*M)
latr32x16_process	N=80, M=6	662 (1.4 cycles/(sample*M)
latr32x32_process	N=256, M=1	794 (3.1 cycles/(sample*M)
latr32x32_process	N=256, M=2	1300 (2.5 cycles/(sample*M)
latr32x32_process	N=256, M=3	1815 (2.4 cycles/(sample*M)
latr32x32_process	N=256, M=4	1823 (1.8 cycles/(sample*M)
latr32x32_process	N=256, M=5	2072 (1.6 cycles/(sample*M)
latr32x32_process	N=256, M=6	2340 (1.5 cycles/(sample*M)
latr32x32_process	N=256, M=7	2854 (1.6 cycles/(sample*M)
latr32x32_process	N=256, M=8	3101 (1.5 cycles/(sample*M)
latr32x32_process	N=256, M=9	9874 (4.3 cycles/(sample*M)
latrf_process	N=256, M=1	1051 (4.1 cycles/(sample*M)
latrf_process	N=256, M=2	2084 (4.1 cycles/(sample*M)
latrf_process	N=256, M=3	3109 (4.0 cycles/(sample*M)
latrf_process	N=256, M=4	3367 (3.3 cycles/(sample*M)
latrf_process	N=256, M=5	3312 (2.6 cycles/(sample*M)
latrf_process	N=256, M=6	3763 (2.4 cycles/(sample*M)
latrf_process	N=256, M=7	5376 (3.0

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
		cycles/(sample*M)
latrf_process	N=256, M=8	6401 (3.1 cycles/(sample*M)
latrf_process	N=256, M=9	13159 (5.7 cycles/(sample*M)
latrf_process	N=80, M=6	1210 (2.5 cycles/(sample*M)
Math Functions		
Vectorized Math		
vec_recip16x16	N=200	2015 (10.1 cycles/pts)
vec_recip32x32	N=200	2631 (13.2 cycles/pts)
vec_recip64x64	N=200	4333 (21.7 cycles/pts)
vec_divide16x16	N=200	2020 (10.1 cycles/pts)
vec_divide32x32	N=200	1494 (7.5 cycles/pts)
vec_divide64x32i	N=200	4333 (21.7 cycles/pts)
vec_divide64x64	N=200	6269 (31.3 cycles/pts)
vec_log2_32x32	N=200	928 (4.6 cycles/pts)
vec_logn_32x32	N=200	1032 (5.2 cycles/pts)
vec_log10_32x32	N=200	1032 (5.2 cycles/pts)
vec_antilog2_32x32	N=200	584 (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	9242 (46.2 cycles/pts)
vec_sine32x32	N=200	739 (3.7 cycles/pts)
vec_cosine32x32	N=200	730 (3.6 cycles/pts)
vec_tan32x32	N=200	2945 (14.7 cycles/pts)
vec_atan32x32	N=200	1030 (5.2 cycles/pts)
vec_sqrt16x16	N=200	1192 (6.0 cycles/pts)
vec_sqrt32x16	N=200	1571 (7.9 cycles/pts)
vec_sqrt32x32	N=200	1263 (6.3 cycles/pts)
vec_sqrt64x32	N=200	1245 (6.2 cycles/pts)
vec_rsqrt16x16	N=200	2308 (11.5 cycles/pts)
vec_rsqrt32x32	N=200	2907 (14.5 cycles/pts)
vec_sigmoid32x32	N=200	1170 (5.8 cycles/pts)
vec_softmax32x32	N=200	1080 (5.4 cycles/pts)
vec_tanh32x32	N=200	1167 (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	2997 (15.0 cycles/pts)
vec_cosinef	N=200	2955 (14.8 cycles/pts)
vec_tanf	N=200	3700 (18.5 cycles/pts)
vec_log2f	N=200	2544 (12.7 cycles/pts)
vec_log10f	N=200	2516 (12.6 cycles/pts)
vec_lognf	N=200	2373 (11.9 cycles/pts)
vec_antilog2f	N=200	1145 (5.7 cycles/pts)
vec_antilognf	N=200	1148 (5.7 cycles/pts)
vec_antilog10f	N=200	1337 (6.7 cycles/pts)
vec_atanf	N=200	2445 (12.2 cycles/pts)
vec_atan2f	N=200	3513 (17.6 cycles/pts)
vec_sigmoidf	N=200	3356 (16.8 cycles/pts)
vec_softmaxf	N=200	1845 (9.2 cycles/pts)
vec_tanhf	N=200	4278 (21.4 cycles/pts)
vec_reluf	N=200	216 (1.1 cycles/pts)
Vectorized Fast Math		
vec_divide16x16_fast	N=200	1143 (5.7 cycles/pts)
vec_divide32x32_fast	N=200	1631 (8.2 cycles/pts)
vec_sine32x32_fast	N=200	727 (3.6 cycles/pts)
vec_cosine32x32_fast	N=200	728 (3.6 cycles/pts)
vec_sqrt32x32_fast	N=200	1172 (5.9 cycles/pts)
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		14 (cycles)
scl_antilogn_32x32		18 (cycles)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
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		2 (cycles)
scl_int2float		2 (cycles)
scl_float2int		7 (cycles)
scl_sinef		81 (cycles)
scl_cosinef		81 (cycles)
scl_tanf	x=0.4	82 (cycles)
scl_tanf	x=1.2	100 (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_atanf	x=0.7	44 (cycles)
scl_atanf	x=1.3	62 (cycles)
scl_atan2f		81 (cycles)
scl_sigmoidf		75 (cycles)
scl_tanhf		87 (cycles)
scl_reluf		6 (cycles)
Complex Functions		
Vectorized Complex Math		
vec_complex2mag	N=200	3415 (17.1 cycles/pts)
vec_complex2invmag	N=200	2567 (12.8 cycles/pts)
Scalar Complex Math		
scl_complex2mag		67 (cycles)
scl_complex2invmag		63 (cycles)
Vector Operations		
vec_dot16x16	N=200	118 (0.6 cycles/pts)
vec_dot32x16	x aligned, N=200	119 (0.6 cycles/pts)
vec_dot32x16	x unaligned, N=200	119 (0.6 cycles/pts)
vec_dot32x32	x aligned, N=200	121 (0.6 cycles/pts)
vec_dot32x32	x unaligned, N=200	119 (0.6 cycles/pts)
vec_dot64x32	N=200	221 (1.1 cycles/pts)
vec_dot64x64	N=200	220 (1.1 cycles/pts)
vec_dot64x64i	N=200	213 (1.1 cycles/pts)
vec_dot16x16_fast	N=200	64 (0.3 cycles/pts)
vec_dot32x16_fast	N=200	85 (0.4 cycles/pts)
vec_dot32x32_fast	N=200	114 (0.6 cycles/pts)
vec_dot64x32_fast	N=200	215 (1.1 cycles/pts)
vec_dot64x64_fast	N=200	215 (1.1 cycles/pts)
vec_dot64x64i_fast	N=200	210 (1.0 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	212 (1.1 cycles/pts)
vec_add16x16_fast	N=200	89 (0.4 cycles/pts)
vec_add32x32_fast	N=200	160 (0.8 cycles/pts)
vec_power16x16	x aligned, N=200	42 (0.2 cycles/pts)
vec_power16x16	x unaligned, N=200	55 (0.3 cycles/pts)
vec_power32x32	x aligned, N=200	71 (0.4 cycles/pts)
vec_power32x32	x unaligned, N=200	70 (0.3 cycles/pts)
vec_power16x16_fast	N=200	39 (0.2 cycles/pts)
vec_power32x32_fast	N=200	60 (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	216 (1.1 cycles/pts)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
vec_scale16x16	x aligned, N=200	78 (0.4 cycles/pts)
vec_scale16x16	x unaligned, N=200	89 (0.4 cycles/pts)
vec_scale32x32	x aligned, N=200	120 (0.6 cycles/pts)
vec_scale32x32	x unaligned, N=200	122 (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	62 (0.3 cycles/pts)
vec_scale32x32_fast	N=200	112 (0.6 cycles/pts)
vec_max16x16	x aligned, N=200	125 (0.6 cycles/pts)
vec_max16x16	x unaligned, N=200	125 (0.6 cycles/pts)
vec_min16x16	x aligned, N=200	125 (0.6 cycles/pts)
vec_min16x16	x unaligned, N=200	125 (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	86 (0.4 cycles/pts)
vec_min32x32_fast	N=200	86 (0.4 cycles/pts)
vec_bexp16	N=200	119 (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	95 (0.5 cycles/pts)
scl_bexp16		5 (cycles)
scl_bexp32		3 (cycles)
vec_dotf	N=200	236 (1.2 cycles/pts)
vec_addf	N=200	222 (1.1 cycles/pts)
vec_powerf	N=200	114 (0.6 cycles/pts)
vec_shiftf	N=200	224 (1.1 cycles/pts)
vec_scalef	N=200	214 (1.1 cycles/pts)
vec_scale_sf	N=200	231 (1.2 cycles/pts)
vec_minf	N=200	117 (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	2026 (10.1 cycles/pts)
vec_dot_32x16ef	N=200	1076 (5.4 cycles/pts)
scl_add_32x16ef		23 (cycles)
scl_mul_32x16ef		13 (cycles)
scl_mac_32x16ef		27 (cycles)
Matrix Operations		
mtx_mpy8x8	16x16 x 16x16	4364 (0.9 MACs/cycle)
mtx_mpy8x8	32x32 x 32x32	28290 (1.2 MACs/cycle)
mtx_mpy8x8	40x80 x 80x8	19358 (1.3 MACs/cycle)
mtx_mpy8x8	40x81 x 81x8	20199 (1.3 MACs/cycle)
mtx_mpy8x8	40x82 x 82x8	19799 (1.3 MACs/cycle)
mtx_mpy8x8	40x83 x 83x8	20639 (1.3 MACs/cycle)
mtx_mpy8x8	2x100 x 100x8	1301 (1.2 MACs/cycle)
mtx_mpy8x8	8x80 x 80x2	1128 (1.1 MACs/cycle)
mtx_mpy8x8	8x4 x 4x2	296 (0.2 MACs/cycle)
mtx_mpy8x8	8x16 x 16x2	424 (0.6 MACs/cycle)
mtx_mpy8x8	8x32 x 32x2	599 (0.9 MACs/cycle)
mtx_mpy8x8_fast	16x16 x 16x16	2093 (2.0 MACs/cycle)
mtx_mpy8x8_fast	32x32 x 32x32	12381 (2.6 MACs/cycle)
mtx_mpy8x8_fast	8x80 x 80x4	853 (3.0 MACs/cycle)
mtx_mpy8x8_fast	8x84 x 84x4	845 (3.2 MACs/cycle)
mtx_mpy8x8_fast	8x4 x 4x4	209 (0.6 MACs/cycle)
mtx_mpy8x8_fast	8x16 x 16x4	309 (1.7 MACs/cycle)
mtx_mpy8x8_fast	8x32 x 32x4	445 (2.3 MACs/cycle)
mtx_mpyt8x8	16x16 x 16x16	4642 (0.9 MACs/cycle)
mtx_mpyt8x8	32x32 x 32x32	29327 (1.1 MACs/cycle)
mtx_mpyt8x8	40x80 x 80x8	19740 (1.3 MACs/cycle)
mtx_mpyt8x8	40x81 x 81x8	20484 (1.3 MACs/cycle)
mtx_mpyt8x8	40x82 x 82x8	20300 (1.3 MACs/cycle)
mtx_mpyt8x8	40x83 x 83x8	21020 (1.3 MACs/cycle)
mtx_mpyt8x8	2x100 x 100x8	1340 (1.2 MACs/cycle)
mtx_mpyt8x8	8x80 x 80x2	1123 (1.1 MACs/cycle)
mtx_mpyt8x8	8x4 x 4x2	289 (0.2 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
mtx_mpyt8x8	8x16 x 16x2	419 (0.6 MACs/cycle)
mtx_mpyt8x8	8x32 x 32x2	595 (0.9 MACs/cycle)
mtx_mpyt8x8_fast	16x16 x 16x16	1766 (2.3 MACs/cycle)
mtx_mpyt8x8_fast	32x32 x 32x32	10327 (3.2 MACs/cycle)
mtx_mpyt8x8_fast	8x80 x 80x4	702 (3.6 MACs/cycle)
mtx_mpyt8x8_fast	8x84 x 84x4	606 (4.4 MACs/cycle)
mtx_mpyt8x8_fast	8x4 x 4x4	166 (0.8 MACs/cycle)
mtx_mpyt8x8_fast	8x16 x 16x4	254 (2.0 MACs/cycle)
mtx_mpyt8x8_fast	8x32 x 32x4	366 (2.8 MACs/cycle)
mtx_mpy8x16	16x16 x 16x16	3223 (1.3 MACs/cycle)
mtx_mpy8x16	32x32 x 32x32	17974 (1.8 MACs/cycle)
mtx_mpy8x16	40x80 x 80x8	11212 (2.3 MACs/cycle)
mtx_mpy8x16	40x81 x 81x8	11446 (2.3 MACs/cycle)
mtx_mpy8x16	40x82 x 82x8	11467 (2.3 MACs/cycle)
mtx_mpy8x16	40x83 x 83x8	11709 (2.3 MACs/cycle)
mtx_mpy8x16	2x100 x 100x8	1535 (1.0 MACs/cycle)
mtx_mpy8x16	8x80 x 80x2	1181 (1.1 MACs/cycle)
mtx_mpy8x16	8x4 x 4x2	265 (0.2 MACs/cycle)
mtx_mpy8x16	8x16 x 16x2	413 (0.6 MACs/cycle)
mtx_mpy8x16	8x32 x 32x2	605 (0.8 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	748 (3.4 MACs/cycle)
mtx_mpy8x16_fast	8x84 x 84x4	703 (3.8 MACs/cycle)
mtx_mpy8x16_fast	8x4 x 4x4	147 (0.9 MACs/cycle)
mtx_mpy8x16_fast	8x16 x 16x4	235 (2.2 MACs/cycle)
mtx_mpy8x16_fast	8x32 x 32x4	363 (2.8 MACs/cycle)
mtx_mpyt8x16	16x16 x 16x16	3139 (1.3 MACs/cycle)
mtx_mpyt8x16	32x32 x 32x32	13247 (2.5 MACs/cycle)
mtx_mpyt8x16	40x80 x 80x8	9162 (2.8 MACs/cycle)
mtx_mpyt8x16	40x81 x 81x8	9506 (2.7 MACs/cycle)
mtx_mpyt8x16	40x82 x 82x8	9587 (2.7 MACs/cycle)
mtx_mpyt8x16	40x83 x 83x8	9982 (2.7 MACs/cycle)
mtx_mpyt8x16	2x100 x 100x8	896 (1.8 MACs/cycle)
mtx_mpyt8x16	8x80 x 80x2	1120 (1.1 MACs/cycle)
mtx_mpyt8x16	8x4 x 4x2	362 (0.2 MACs/cycle)
mtx_mpyt8x16	8x16 x 16x2	480 (0.5 MACs/cycle)
mtx_mpyt8x16	8x32 x 32x2	639 (0.8 MACs/cycle)
mtx_mpyt8x16_fast	16x16 x 16x16	1431 (2.9 MACs/cycle)
mtx_mpyt8x16_fast	32x32 x 32x32	8192 (4.0 MACs/cycle)
mtx_mpyt8x16_fast	8x80 x 80x4	529 (4.8 MACs/cycle)
mtx_mpyt8x16_fast	8x84 x 84x4	545 (4.9 MACs/cycle)
mtx_mpyt8x16_fast	8x4 x 4x4	145 (0.9 MACs/cycle)
mtx_mpyt8x16_fast	8x16 x 16x4	205 (2.5 MACs/cycle)
mtx_mpyt8x16_fast	8x32 x 32x4	289 (3.5 MACs/cycle)
mtx_mpy16x16	16x16 x 16x16	1701 (2.4 MACs/cycle)
mtx_mpy16x16	32x32 x 32x32	8427 (3.9 MACs/cycle)
mtx_mpy16x16	40x80 x 80x8	4779 (5.4 MACs/cycle)
mtx_mpy16x16	40x81 x 81x8	5012 (5.2 MACs/cycle)
mtx_mpy16x16	40x82 x 82x8	5020 (5.2 MACs/cycle)
mtx_mpy16x16	40x83 x 83x8	5033 (5.3 MACs/cycle)
mtx_mpy16x16	40x84 x 84x8	5040 (5.3 MACs/cycle)
mtx_mpy16x16	40x85 x 85x8	5193 (5.2 MACs/cycle)
mtx_mpy16x16	40x86 x 86x8	5201 (5.3 MACs/cycle)
mtx_mpy16x16	40x87 x 87x8	5214 (5.3 MACs/cycle)
mtx_mpy16x16	40x88 x 88x8	5141 (5.5 MACs/cycle)
mtx_mpy16x16	2x100 x 100x8	900 (1.8 MACs/cycle)
mtx_mpy16x16	8x80 x 80x2	663 (1.9 MACs/cycle)
mtx_mpy16x16	8x4 x 4x2	199 (0.3 MACs/cycle)
mtx_mpy16x16	8x16 x 16x2	279 (0.9 MACs/cycle)
mtx_mpy16x16	8x32 x 32x2	374 (1.4 MACs/cycle)
mtx_mpy16x16_fast	16x16 x 16x16	1679 (2.4 MACs/cycle)
mtx_mpy16x16_fast	32x32 x 32x32	10576 (3.1 MACs/cycle)
mtx_mpy16x16_fast	8x80 x 80x4	747 (3.4 MACs/cycle)
mtx_mpy16x16_fast	8x84 x 84x4	779 (3.5 MACs/cycle)
mtx_mpy16x16_fast	8x4 x 4x4	143 (0.9 MACs/cycle)
mtx_mpy16x16_fast	8x16 x 16x4	235 (2.2 MACs/cycle)
mtx_mpy16x16_fast	8x32 x 32x4	363 (2.8 MACs/cycle)
mtx_mpyt16x16	16x16 x 16x16	1554 (2.6 MACs/cycle)
mtx_mpyt16x16	32x32 x 32x32	7862 (4.2 MACs/cycle)
mtx_mpyt16x16	40x80 x 80x8	4513 (5.7 MACs/cycle)
mtx_mpyt16x16	40x81 x 81x8	4681 (5.5 MACs/cycle)
mtx_mpyt16x16	40x82 x 82x8	4688 (5.6 MACs/cycle)
mtx_mpyt16x16	40x83 x 83x8	4700 (5.7 MACs/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
mtx_mpyt16x16	2x100 x 100x8	659 (2.4 MACs/cycle)
mtx_mpyt16x16	8x80 x 80x2	589 (2.2 MACs/cycle)
mtx_mpyt16x16	8x4 x 4x2	202 (0.3 MACs/cycle)
mtx_mpyt16x16	8x16 x 16x2	261 (1.0 MACs/cycle)
mtx_mpyt16x16	8x32 x 32x2	342 (1.5 MACs/cycle)
mtx_mpyt16x16_fast	16x16 x 16x16	1463 (2.8 MACs/cycle)
mtx_mpyt16x16_fast	32x32 x 32x32	7808 (4.2 MACs/cycle)
mtx_mpyt16x16_fast	8x80 x 80x4	469 (5.5 MACs/cycle)
mtx_mpyt16x16_fast	8x84 x 84x4	481 (5.6 MACs/cycle)
mtx_mpyt16x16_fast	8x4 x 4x4	145 (0.9 MACs/cycle)
mtx_mpyt16x16_fast	8x16 x 16x4	209 (2.4 MACs/cycle)
mtx_mpyt16x16_fast	8x32 x 32x4	277 (3.7 MACs/cycle)
mtx_mpy32x32	16x16 x 16x16	2870 (1.4 MACs/cycle)
mtx_mpy32x32	32x32 x 32x32	14838 (2.2 MACs/cycle)
mtx_mpy32x32	40x80 x 80x8	9055 (2.8 MACs/cycle)
mtx_mpy32x32	40x81 x 81x8	9319 (2.8 MACs/cycle)
mtx_mpy32x32	40x82 x 82x8	9309 (2.8 MACs/cycle)
mtx_mpy32x32	40x83 x 83x8	9615 (2.8 MACs/cycle)
mtx_mpy32x32	2x100 x 100x8	1443 (1.1 MACs/cycle)
mtx_mpy32x32	8x80 x 80x2	811 (1.6 MACs/cycle)
mtx_mpy32x32	8x4 x 4x2	162 (0.4 MACs/cycle)
mtx_mpy32x32	8x16 x 16x2	267 (1.0 MACs/cycle)
mtx_mpy32x32	8x32 x 32x2	402 (1.3 MACs/cycle)
mtx_mpy32x32_fast	16x16 x 16x16	1838 (2.2 MACs/cycle)
mtx_mpy32x32_fast	32x32 x 32x32	11822 (2.8 MACs/cycle)
mtx_mpy32x32_fast	8x80 x 80x4	824 (3.1 MACs/cycle)
mtx_mpy32x32_fast	8x84 x 84x4	860 (3.1 MACs/cycle)
mtx_mpy32x32_fast	8x4 x 4x4	144 (0.9 MACs/cycle)
mtx_mpy32x32_fast	8x16 x 16x4	248 (2.1 MACs/cycle)
mtx_mpy32x32_fast	8x32 x 32x4	392 (2.6 MACs/cycle)
mtx_mpyt32x32	16x16 x 16x16	3492 (1.2 MACs/cycle)
mtx_mpyt32x32	32x32 x 32x32	19556 (1.7 MACs/cycle)
mtx_mpyt32x32	40x80 x 80x8	12108 (2.1 MACs/cycle)
mtx_mpyt32x32	40x81 x 81x8	12324 (2.1 MACs/cycle)
mtx_mpyt32x32	40x82 x 82x8	12280 (2.1 MACs/cycle)
mtx_mpyt32x32	40x83 x 83x8	12658 (2.1 MACs/cycle)
mtx_mpyt32x32	2x100 x 100x8	1442 (1.1 MACs/cycle)
mtx_mpyt32x32	8x80 x 80x2	760 (1.7 MACs/cycle)
mtx_mpyt32x32	8x4 x 4x2	198 (0.3 MACs/cycle)
mtx_mpyt32x32	8x16 x 16x2	280 (0.9 MACs/cycle)
mtx_mpyt32x32	8x32 x 32x2	400 (1.3 MACs/cycle)
mtx_mpyt32x32_fast	16x16 x 16x16	1711 (2.4 MACs/cycle)
mtx_mpyt32x32_fast	32x32 x 32x32	10768 (3.0 MACs/cycle)
mtx_mpyt32x32_fast	8x80 x 80x4	747 (3.4 MACs/cycle)
mtx_mpyt32x32_fast	8x84 x 84x4	779 (3.5 MACs/cycle)
mtx_mpyt32x32_fast	8x4 x 4x4	148 (0.9 MACs/cycle)
mtx_mpyt32x32_fast	8x16 x 16x4	236 (2.2 MACs/cycle)
mtx_mpyt32x32_fast	8x32 x 32x4	363 (2.8 MACs/cycle)
mtx_vecmpy8x8	16x100 x 100x1	2036 (0.8 MACs/cycle)
mtx_vecmpy8x8	16x104 x 104x1	2108 (0.8 MACs/cycle)
mtx_vecmpy8x8	40x40 x 40x1	2312 (0.7 MACs/cycle)
mtx_vecmpy8x8_fast	16x100 x 100x1	392 (4.1 MACs/cycle)
mtx_vecmpy8x8_fast	16x104 x 104x1	400 (4.2 MACs/cycle)
mtx_vecmpy8x8_fast	40x40 x 40x1	490 (3.3 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	387 (4.1 MACs/cycle)
mtx_vecmpy8x16_fast	16x104 x 104x1	333 (5.0 MACs/cycle)
mtx_vecmpy8x16_fast	40x40 x 40x1	401 (4.0 MACs/cycle)
mtx_vecmpy16x16	16x100 x 100x1	748 (2.1 MACs/cycle)
mtx_vecmpy16x16	16x104 x 104x1	695 (2.4 MACs/cycle)
mtx_vecmpy16x16	40x40 x 40x1	896 (1.8 MACs/cycle)
mtx_vecmpy16x16_fast	16x100 x 100x1	322 (5.0 MACs/cycle)
mtx_vecmpy16x16_fast	16x104 x 104x1	327 (5.1 MACs/cycle)
mtx_vecmpy16x16_fast	40x40 x 40x1	395 (4.1 MACs/cycle)
mtx_vecmpy32x32	16x100 x 100x1	1390 (1.2 MACs/cycle)
mtx_vecmpy32x32	16x101 x 101x1	1387 (1.2 MACs/cycle)
mtx_vecmpy32x32	16x102 x 102x1	1406 (1.2 MACs/cycle)
mtx_vecmpy32x32	16x103 x 103x1	1402 (1.2 MACs/cycle)
mtx_vecmpy32x32	16x104 x 104x1	1438 (1.2 MACs/cycle)
mtx_vecmpy32x32	40x40 x 40x1	1642 (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)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
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	1652 (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	72 (0.89 pts/cycle)
mtx_transpose8x8_fast	M=16,N=16	188 (1.36 pts/cycle)
mtx_transpose8x8_fast	M=32,N=32	586 (1.75 pts/cycle)
mtx_transpose8x8_fast	M=48,N=48	1200 (1.92 pts/cycle)
mtx_transpose16x16	M=16,N=16	534 (0.48 pts/cycle)
mtx_transpose16x16	M=27,N=27	1301 (0.56 pts/cycle)
mtx_transpose16x16	M=32,N=32	1630 (0.63 pts/cycle)
mtx_transpose16x16	M=39,N=39	2338 (0.65 pts/cycle)
mtx_transpose16x16	M=48,N=48	3302 (0.70 pts/cycle)
mtx_transpose16x16_fast	M=8,N=8	65 (0.98 pts/cycle)
mtx_transpose16x16_fast	M=16,N=16	195 (1.31 pts/cycle)
mtx_transpose16x16_fast	M=32,N=32	567 (1.81 pts/cycle)
mtx_transpose16x16_fast	M=48,N=48	1159 (1.99 pts/cycle)
mtx_transpose32x32	M=16,N=16	436 (0.59 pts/cycle)
mtx_transpose32x32	M=27,N=27	985 (0.74 pts/cycle)
mtx_transpose32x32	M=32,N=32	1502 (0.68 pts/cycle)
mtx_transpose32x32	M=39,N=39	1884 (0.81 pts/cycle)
mtx_transpose32x32	M=48,N=48	3204 (0.72 pts/cycle)
mtx_transpose32x32_fast	M=8,N=8	81 (0.79 pts/cycle)
mtx_transpose32x32_fast	M=16,N=16	248 (1.03 pts/cycle)
mtx_transpose32x32_fast	M=32,N=32	876 (1.17 pts/cycle)
mtx_transpose32x32_fast	M=48,N=48	1888 (1.22 pts/cycle)
mtx_mpyf	16x16 x 16x16	1909 (2.1 MACs/cycle)
mtx_mpyf	32x32 x 32x32	13002 (2.5 MACs/cycle)
mtx_mpyf	40x80 x 80x8	9524 (2.7 MACs/cycle)
mtx_mpyf	40x81 x 81x8	9643 (2.7 MACs/cycle)
mtx_mpyf	40x82 x 82x8	9724 (2.7 MACs/cycle)
mtx_mpyf	40x83 x 83x8	9864 (2.7 MACs/cycle)
mtx_mpyf	2x100 x 100x8	2903 (0.6 MACs/cycle)
mtx_mpyf	8x80 x 80x2	845 (1.5 MACs/cycle)
mtx_mpyf	8x4 x 4x2	159 (0.4 MACs/cycle)
mtx_mpyf	8x16 x 16x2	268 (1.0 MACs/cycle)
mtx_mpyf	8x32 x 32x2	413 (1.2 MACs/cycle)
mtx_mpyf_fast	16x16 x 16x16	2077 (2.0 MACs/cycle)
mtx_mpyf_fast	32x32 x 32x32	13260 (2.5 MACs/cycle)
mtx_mpyf_fast	8x80 x 80x4	918 (2.8 MACs/cycle)
mtx_mpyf_fast	8x84 x 84x4	959 (2.8 MACs/cycle)
mtx_mpyf_fast	8x4 x 4x4	155 (0.8 MACs/cycle)
mtx_mpyf_fast	8x16 x 16x4	278 (1.8 MACs/cycle)
mtx_mpyf_fast	8x32 x 32x4	439 (2.3 MACs/cycle)
mtx_mpytf	16x16 x 16x16	2065 (2.0 MACs/cycle)
mtx_mpytf	32x32 x 32x32	11957 (2.7 MACs/cycle)
mtx_mpytf	40x80 x 80x8	7911 (3.2 MACs/cycle)
mtx_mpytf	40x81 x 81x8	7999 (3.2 MACs/cycle)
mtx_mpytf	40x82 x 82x8	8043 (3.3 MACs/cycle)
mtx_mpytf	40x83 x 83x8	8031 (3.3 MACs/cycle)
mtx_mpytf	2x100 x 100x8	1729 (0.9 MACs/cycle)
mtx_mpytf	8x80 x 80x2	784 (1.6 MACs/cycle)
mtx_mpytf	8x4 x 4x2	176 (0.4 MACs/cycle)
mtx_mpytf	8x16 x 16x2	272 (0.9 MACs/cycle)
mtx_mpytf	8x32 x 32x2	399 (1.3 MACs/cycle)
mtx_mpytf_fast	16x16 x 16x16	2005 (2.0 MACs/cycle)
mtx_mpytf_fast	32x32 x 32x32	11933 (2.7 MACs/cycle)
mtx_mpytf_fast	8x80 x 80x4	784 (3.3 MACs/cycle)
mtx_mpytf_fast	8x84 x 84x4	817 (3.3 MACs/cycle)
mtx_mpytf_fast	8x4 x 4x4	175 (0.7 MACs/cycle)
mtx_mpytf_fast	8x16 x 16x4	271 (1.9 MACs/cycle)
mtx_mpytf_fast	8x32 x 32x4	399 (2.6 MACs/cycle)
mtx_vecmpyf	16x100 x 100x1	1065 (1.5 MACs/cycle)
mtx_vecmpyf	16x101 x 101x1	1016 (1.6 MACs/cycle)
mtx_vecmpyf	16x102 x 102x1	1083 (1.5 MACs/cycle)
mtx_vecmpyf	16x103 x 103x1	1035 (1.6 MACs/cycle)
mtx_vecmpyf	16x104 x 104x1	1101 (1.5 MACs/cycle)
mtx_vecmpyf	40x40 x 40x1	1264 (1.3 MACs/cycle)
mtx_vecmpyf_fast	16x100 x 100x1	614 (2.6 MACs/cycle)
mtx_vecmpyf_fast	16x104 x 104x1	634 (2.6 MACs/cycle)
mtx_vecmpyf_fast	40x40 x 40x1	770 (2.1 MACs/cycle)
mtx_transposef	M=16,N=16	444 (0.58 pts/cycle)

Function name	Invocation parameters	Cycles Measurements RG2018.9, HiFi4 with VFPU, bd5
mtx_transposef	M=27,N=27	993 (0.73 pts/cycle)
mtx_transposef	M=32,N=32	1508 (0.68 pts/cycle)
mtx_transposef	M=39,N=39	1892 (0.80 pts/cycle)
mtx_transposef	M=48,N=48	3212 (0.72 pts/cycle)
mtx_transposef_fast	M=8,N=8	89 (0.72 pts/cycle)
mtx_transposef_fast	M=16,N=16	256 (1.00 pts/cycle)
mtx_transposef_fast	M=32,N=32	884 (1.16 pts/cycle)
mtx_transposef_fast	M=48,N=48	1894 (1.22 pts/cycle)
Matrix Decomposition and Inversion		
cmtx_inv2x2_32x32		361 (361.0 cycles/matrix)
cmtx_inv3x3_32x32		683 (683.0 cycles/matrix)
cmtx_inv4x4_32x32		1240 (1240.0 cycles/matrix)
cmtx_inv6x6_32x32		3269 (3269.0 cycles/matrix)
cmtx_inv8x8_32x32		6524 (6524.0 cycles/matrix)
cmtx_inv10x10_32x32		11520 (11520.0 cycles/matrix)
mtx_inv2x2_32x32		38 (38.0 cycles/matrix)
mtx_inv3x3_32x32		431 (431.0 cycles/matrix)
mtx_inv4x4_32x32		668 (668.0 cycles/matrix)
mtx_inv6x6_32x32		1713 (1713.0 cycles/matrix)
mtx_inv8x8_32x32		3266 (3266.0 cycles/matrix)
mtx_inv10x10_32x32		5728 (5728.0 cycles/matrix)
cmtx_gjelim2x2_32x32		314 (314.0 cycles/matrix)
cmtx_gjelim3x3_32x32		521 (521.0 cycles/matrix)
cmtx_gjelim4x4_32x32		993 (993.0 cycles/matrix)
cmtx_gjelim6x6_32x32		2147 (2147.0 cycles/matrix)
cmtx_gjelim8x8_32x32		3856 (3856.0 cycles/matrix)
cmtx_gjelim10x10_32x32		6262 (6262.0 cycles/matrix)
mtx_gjelim2x2_32x32		38 (38.0 cycles/matrix)
mtx_gjelim3x3_32x32		422 (422.0 cycles/matrix)
mtx_gjelim4x4_32x32		593 (593.0 cycles/matrix)
mtx_gjelim6x6_32x32		1466 (1466.0 cycles/matrix)
mtx_gjelim8x8_32x32		2451 (2451.0 cycles/matrix)
mtx_gjelim10x10_32x32		3895 (3895.0 cycles/matrix)
mtx_inv2x2f		32 (32.0 cycles/matrix)
mtx_inv3x3f		171 (171.0 cycles/matrix)
mtx_inv4x4f		276 (276.0 cycles/matrix)
mtx_inv6x6f		864 (864.0 cycles/matrix)
mtx_inv8x8f		1722 (1722.0 cycles/matrix)
mtx_inv10x10f		2958 (2958.0 cycles/matrix)
Fitting and Interpolation		
Polynomial Fitting		
vec_poly4_32x32	N=200	401 (2.0 cycles/pts)
vec_poly8_32x32	N=200	648 (3.2 cycles/pts)
vec_poly4f	N=200	408 (2.0 cycles/pts)
vec_poly8f	N=200	788 (3.9 cycles/pts)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
FFT Routines		
Complex FFT		
fft_cplx16x16	N=16, scaling=3	137 (0.117 pts/cycle)
fft_cplx16x16	N=16, scaling=2	173 (0.092 pts/cycle)
fft_cplx16x16	N=32, scaling=3	192 (0.167 pts/cycle)
fft_cplx16x16	N=32, scaling=2	245 (0.131 pts/cycle)
fft_cplx16x16	N=64, scaling=3	432 (0.148 pts/cycle)
fft_cplx16x16	N=64, scaling=2	540 (0.119 pts/cycle)
fft_cplx16x16	N=128, scaling=3	849 (0.151 pts/cycle)
fft_cplx16x16	N=128, scaling=2	1020 (0.125 pts/cycle)
fft_cplx16x16	N=256, scaling=3	1780 (0.144 pts/cycle)
fft_cplx16x16	N=256, scaling=2	2156 (0.119 pts/cycle)
fft_cplx16x16	N=512, scaling=3	3888 (0.132 pts/cycle)
fft_cplx16x16	N=512, scaling=2	4547 (0.113 pts/cycle)
fft_cplx16x16	N=1024, scaling=3	8203 (0.125 pts/cycle)
fft_cplx16x16	N=1024, scaling=2	9735 (0.105 pts/cycle)
fft_cplx16x16	N=2048, scaling=3	18349 (0.112 pts/cycle)
fft_cplx16x16	N=2048, scaling=2	21149 (0.097 pts/cycle)
fft_cplx16x16	N=4096, scaling=3	38731 (0.106 pts/cycle)
fft_cplx16x16	N=4096, scaling=2	45318 (0.090 pts/cycle)
fft_cplx32x16	N=16, scaling=3	142 (0.113 pts/cycle)
fft_cplx32x16	N=16, scaling=2	194 (0.082 pts/cycle)
fft_cplx32x16	N=32, scaling=3	211 (0.152 pts/cycle)
fft_cplx32x16	N=32, scaling=2	265 (0.121 pts/cycle)
fft_cplx32x16	N=64, scaling=3	426 (0.150 pts/cycle)
fft_cplx32x16	N=64, scaling=2	520 (0.123 pts/cycle)
fft_cplx32x16	N=128, scaling=3	828 (0.155 pts/cycle)
fft_cplx32x16	N=128, scaling=2	935 (0.137 pts/cycle)
fft_cplx32x16	N=256, scaling=3	1744 (0.147 pts/cycle)
fft_cplx32x16	N=256, scaling=2	1941 (0.132 pts/cycle)
fft_cplx32x16	N=512, scaling=3	3738 (0.137 pts/cycle)
fft_cplx32x16	N=512, scaling=2	4031 (0.127 pts/cycle)
fft_cplx32x16	N=1024, scaling=3	8008 (0.128 pts/cycle)
fft_cplx32x16	N=1024, scaling=2	8607 (0.119 pts/cycle)
fft_cplx32x16	N=2048, scaling=3	17509 (0.117 pts/cycle)
fft_cplx32x16	N=2048, scaling=2	18511 (0.111 pts/cycle)
fft_cplx32x16	N=4096, scaling=3	37458 (0.109 pts/cycle)
fft_cplx32x16	N=4096, scaling=2	39635 (0.103 pts/cycle)
fft_cplx32x32	N=16, scaling=3	161 (0.099 pts/cycle)
fft_cplx32x32	N=16, scaling=2	187 (0.086 pts/cycle)
fft_cplx32x32	N=32, scaling=3	218 (0.147 pts/cycle)
fft_cplx32x32	N=32, scaling=2	342 (0.094 pts/cycle)
fft_cplx32x32	N=64, scaling=3	444 (0.144 pts/cycle)
fft_cplx32x32	N=64, scaling=2	537 (0.119 pts/cycle)
fft_cplx32x32	N=128, scaling=3	776 (0.165 pts/cycle)
fft_cplx32x32	N=128, scaling=2	1087 (0.118 pts/cycle)
fft_cplx32x32	N=256, scaling=3	1665 (0.154 pts/cycle)
fft_cplx32x32	N=256, scaling=2	1982 (0.129 pts/cycle)
fft_cplx32x32	N=512, scaling=3	3366 (0.152 pts/cycle)
fft_cplx32x32	N=512, scaling=2	4401 (0.116 pts/cycle)
fft_cplx32x32	N=1024, scaling=3	7390 (0.139 pts/cycle)
fft_cplx32x32	N=1024, scaling=2	8576 (0.119 pts/cycle)
fft_cplx32x32	N=2048, scaling=3	15517 (0.132 pts/cycle)
fft_cplx32x32	N=2048, scaling=2	19426 (0.105 pts/cycle)
fft_cplx32x32	N=4096, scaling=3	34004 (0.120 pts/cycle)
fft_cplx32x32	N=4096, scaling=2	38640 (0.106 pts/cycle)
ifft_cplx16x16	N=16, scaling=3	147 (0.109 pts/cycle)
ifft_cplx16x16	N=16, scaling=2	195 (0.082 pts/cycle)
ifft_cplx16x16	N=32, scaling=3	203 (0.158 pts/cycle)
ifft_cplx16x16	N=32, scaling=2	267 (0.120 pts/cycle)
ifft_cplx16x16	N=64, scaling=3	446 (0.143 pts/cycle)
ifft_cplx16x16	N=64, scaling=2	561 (0.114 pts/cycle)
ifft_cplx16x16	N=128, scaling=3	868 (0.147 pts/cycle)
ifft_cplx16x16	N=128, scaling=2	1041 (0.123 pts/cycle)
ifft_cplx16x16	N=256, scaling=3	1806 (0.142 pts/cycle)
ifft_cplx16x16	N=256, scaling=2	2179 (0.117 pts/cycle)
ifft_cplx16x16	N=512, scaling=3	3931 (0.130 pts/cycle)
ifft_cplx16x16	N=512, scaling=2	4568 (0.112 pts/cycle)
ifft_cplx16x16	N=1024, scaling=3	8279 (0.124 pts/cycle)
ifft_cplx16x16	N=1024, scaling=2	9757 (0.105 pts/cycle)
ifft_cplx16x16	N=2048, scaling=3	18487 (0.111 pts/cycle)
ifft_cplx16x16	N=2048, scaling=2	21172 (0.097 pts/cycle)
ifft_cplx16x16	N=4096, scaling=3	38998 (0.105 pts/cycle)
ifft_cplx16x16	N=4096, scaling=2	45340 (0.090 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
ifft_cplx32x16	N=16, scaling=3	147 (0.109 pts/cycle)
ifft_cplx32x16	N=16, scaling=2	206 (0.078 pts/cycle)
ifft_cplx32x16	N=32, scaling=3	212 (0.151 pts/cycle)
ifft_cplx32x16	N=32, scaling=2	287 (0.111 pts/cycle)
ifft_cplx32x16	N=64, scaling=3	428 (0.150 pts/cycle)
ifft_cplx32x16	N=64, scaling=2	551 (0.116 pts/cycle)
ifft_cplx32x16	N=128, scaling=3	830 (0.154 pts/cycle)
ifft_cplx32x16	N=128, scaling=2	982 (0.130 pts/cycle)
ifft_cplx32x16	N=256, scaling=3	1745 (0.147 pts/cycle)
ifft_cplx32x16	N=256, scaling=2	2020 (0.127 pts/cycle)
ifft_cplx32x16	N=512, scaling=3	3740 (0.137 pts/cycle)
ifft_cplx32x16	N=512, scaling=2	4173 (0.123 pts/cycle)
ifft_cplx32x16	N=1024, scaling=3	8010 (0.128 pts/cycle)
ifft_cplx32x16	N=1024, scaling=2	8878 (0.115 pts/cycle)
ifft_cplx32x16	N=2048, scaling=3	17511 (0.117 pts/cycle)
ifft_cplx32x16	N=2048, scaling=2	19038 (0.108 pts/cycle)
ifft_cplx32x16	N=4096, scaling=3	37460 (0.109 pts/cycle)
ifft_cplx32x16	N=4096, scaling=2	40672 (0.101 pts/cycle)
ifft_cplx32x32	N=16, scaling=3	146 (0.110 pts/cycle)
ifft_cplx32x32	N=16, scaling=2	189 (0.085 pts/cycle)
ifft_cplx32x32	N=32, scaling=3	212 (0.151 pts/cycle)
ifft_cplx32x32	N=32, scaling=2	337 (0.095 pts/cycle)
ifft_cplx32x32	N=64, scaling=3	449 (0.143 pts/cycle)
ifft_cplx32x32	N=64, scaling=2	525 (0.122 pts/cycle)
ifft_cplx32x32	N=128, scaling=3	805 (0.159 pts/cycle)
ifft_cplx32x32	N=128, scaling=2	1057 (0.121 pts/cycle)
ifft_cplx32x32	N=256, scaling=3	1742 (0.147 pts/cycle)
ifft_cplx32x32	N=256, scaling=2	1920 (0.133 pts/cycle)
ifft_cplx32x32	N=512, scaling=3	3536 (0.145 pts/cycle)
ifft_cplx32x32	N=512, scaling=2	4273 (0.120 pts/cycle)
ifft_cplx32x32	N=1024, scaling=3	7751 (0.132 pts/cycle)
ifft_cplx32x32	N=1024, scaling=2	8319 (0.123 pts/cycle)
ifft_cplx32x32	N=2048, scaling=3	16263 (0.126 pts/cycle)
ifft_cplx32x32	N=2048, scaling=2	18913 (0.108 pts/cycle)
ifft_cplx32x32	N=4096, scaling=3	35519 (0.115 pts/cycle)
ifft_cplx32x32	N=4096, scaling=2	37614 (0.109 pts/cycle)
Real FFT		
fft_real16x16	N=32, scaling=3	263 (0.122 pts/cycle)
fft_real16x16	N=32, scaling=2	299 (0.107 pts/cycle)
fft_real16x16	N=64, scaling=3	346 (0.185 pts/cycle)
fft_real16x16	N=64, scaling=2	399 (0.160 pts/cycle)
fft_real16x16	N=128, scaling=3	650 (0.197 pts/cycle)
fft_real16x16	N=128, scaling=2	758 (0.169 pts/cycle)
fft_real16x16	N=256, scaling=3	1195 (0.214 pts/cycle)
fft_real16x16	N=256, scaling=2	1366 (0.187 pts/cycle)
fft_real16x16	N=512, scaling=3	2382 (0.215 pts/cycle)
fft_real16x16	N=512, scaling=2	2758 (0.186 pts/cycle)
fft_real16x16	N=1024, scaling=3	5002 (0.205 pts/cycle)
fft_real16x16	N=1024, scaling=2	5661 (0.181 pts/cycle)
fft_real16x16	N=2048, scaling=3	10341 (0.198 pts/cycle)
fft_real16x16	N=2048, scaling=2	11873 (0.172 pts/cycle)
fft_real16x16	N=4096, scaling=3	22534 (0.182 pts/cycle)
fft_real16x16	N=4096, scaling=2	25335 (0.162 pts/cycle)
fft_real16x16	N=8192, scaling=3	47014 (0.174 pts/cycle)
fft_real16x16	N=8192, scaling=2	53600 (0.153 pts/cycle)
fft_real32x16	N=32, scaling=3	249 (0.129 pts/cycle)
fft_real32x16	N=32, scaling=2	301 (0.106 pts/cycle)
fft_real32x16	N=64, scaling=3	341 (0.188 pts/cycle)
fft_real32x16	N=64, scaling=2	395 (0.162 pts/cycle)
fft_real32x16	N=128, scaling=3	606 (0.211 pts/cycle)
fft_real32x16	N=128, scaling=2	697 (0.184 pts/cycle)
fft_real32x16	N=256, scaling=3	1103 (0.232 pts/cycle)
fft_real32x16	N=256, scaling=2	1211 (0.211 pts/cycle)
fft_real32x16	N=512, scaling=3	2209 (0.232 pts/cycle)
fft_real32x16	N=512, scaling=2	2407 (0.213 pts/cycle)
fft_real32x16	N=1024, scaling=3	4591 (0.223 pts/cycle)
fft_real32x16	N=1024, scaling=2	4879 (0.210 pts/cycle)
fft_real32x16	N=2048, scaling=3	9627 (0.213 pts/cycle)
fft_real32x16	N=2048, scaling=2	10226 (0.200 pts/cycle)
fft_real32x16	N=4096, scaling=3	20663 (0.198 pts/cycle)
fft_real32x16	N=4096, scaling=2	21665 (0.189 pts/cycle)
fft_real32x16	N=8192, scaling=3	43685 (0.188 pts/cycle)
fft_real32x16	N=8192, scaling=2	45859 (0.179 pts/cycle)
fft_real32x32	N=32, scaling=3	245 (0.131 pts/cycle)

Function name	Invocation parameters	Cycles Measurements RG2018.9, HiFi4 with VFPU, bd5
fft_real32x32	N=32, scaling=2	285 (0.112 pts/cycle)
fft_real32x32	N=64, scaling=3	326 (0.196 pts/cycle)
fft_real32x32	N=64, scaling=2	468 (0.137 pts/cycle)
fft_real32x32	N=128, scaling=3	607 (0.211 pts/cycle)
fft_real32x32	N=128, scaling=2	727 (0.176 pts/cycle)
fft_real32x32	N=256, scaling=3	1051 (0.244 pts/cycle)
fft_real32x32	N=256, scaling=2	1405 (0.182 pts/cycle)
fft_real32x32	N=512, scaling=3	2164 (0.237 pts/cycle)
fft_real32x32	N=512, scaling=2	2556 (0.200 pts/cycle)
fft_real32x32	N=1024, scaling=3	4313 (0.237 pts/cycle)
fft_real32x32	N=1024, scaling=2	5488 (0.187 pts/cycle)
fft_real32x32	N=2048, scaling=3	9234 (0.222 pts/cycle)
fft_real32x32	N=2048, scaling=2	10687 (0.192 pts/cycle)
fft_real32x32	N=4096, scaling=3	19153 (0.214 pts/cycle)
fft_real32x32	N=4096, scaling=2	23585 (0.174 pts/cycle)
fft_real32x32	N=8192, scaling=3	41224 (0.199 pts/cycle)
fft_real32x32	N=8192, scaling=2	46895 (0.175 pts/cycle)
ifft_real16x16	N=32, scaling=3	281 (0.114 pts/cycle)
ifft_real16x16	N=32, scaling=2	340 (0.094 pts/cycle)
ifft_real16x16	N=64, scaling=3	368 (0.174 pts/cycle)
ifft_real16x16	N=64, scaling=2	457 (0.140 pts/cycle)
ifft_real16x16	N=128, scaling=3	675 (0.190 pts/cycle)
ifft_real16x16	N=128, scaling=2	839 (0.153 pts/cycle)
ifft_real16x16	N=256, scaling=3	1225 (0.209 pts/cycle)
ifft_real16x16	N=256, scaling=2	1495 (0.171 pts/cycle)
ifft_real16x16	N=512, scaling=3	2419 (0.212 pts/cycle)
ifft_real16x16	N=512, scaling=2	2985 (0.172 pts/cycle)
ifft_real16x16	N=1024, scaling=3	5056 (0.203 pts/cycle)
ifft_real16x16	N=1024, scaling=2	6078 (0.168 pts/cycle)
ifft_real16x16	N=2048, scaling=3	10428 (0.196 pts/cycle)
ifft_real16x16	N=2048, scaling=2	12675 (0.162 pts/cycle)
ifft_real16x16	N=4096, scaling=3	22684 (0.181 pts/cycle)
ifft_real16x16	N=4096, scaling=2	26905 (0.152 pts/cycle)
ifft_real16x16	N=8192, scaling=3	47291 (0.173 pts/cycle)
ifft_real16x16	N=8192, scaling=2	56707 (0.144 pts/cycle)
ifft_real32x16	N=32, scaling=3	210 (0.152 pts/cycle)
ifft_real32x16	N=32, scaling=2	271 (0.118 pts/cycle)
ifft_real32x16	N=64, scaling=3	308 (0.208 pts/cycle)
ifft_real32x16	N=64, scaling=2	388 (0.165 pts/cycle)
ifft_real32x16	N=128, scaling=3	590 (0.217 pts/cycle)
ifft_real32x16	N=128, scaling=2	727 (0.176 pts/cycle)
ifft_real32x16	N=256, scaling=3	1120 (0.229 pts/cycle)
ifft_real32x16	N=256, scaling=2	1302 (0.197 pts/cycle)
ifft_real32x16	N=512, scaling=3	2292 (0.223 pts/cycle)
ifft_real32x16	N=512, scaling=2	2629 (0.195 pts/cycle)
ifft_real32x16	N=1024, scaling=3	4799 (0.213 pts/cycle)
ifft_real32x16	N=1024, scaling=2	5358 (0.191 pts/cycle)
ifft_real32x16	N=2048, scaling=3	10094 (0.203 pts/cycle)
ifft_real32x16	N=2048, scaling=2	11216 (0.183 pts/cycle)
ifft_real32x16	N=4096, scaling=3	21642 (0.189 pts/cycle)
ifft_real32x16	N=4096, scaling=2	23680 (0.173 pts/cycle)
ifft_real32x16	N=8192, scaling=3	45689 (0.179 pts/cycle)
ifft_real32x16	N=8192, scaling=2	49924 (0.164 pts/cycle)
ifft_real32x32	N=32, scaling=3	233 (0.137 pts/cycle)
ifft_real32x32	N=32, scaling=2	286 (0.112 pts/cycle)
ifft_real32x32	N=64, scaling=3	332 (0.193 pts/cycle)
ifft_real32x32	N=64, scaling=2	471 (0.136 pts/cycle)
ifft_real32x32	N=128, scaling=3	633 (0.202 pts/cycle)
ifft_real32x32	N=128, scaling=2	731 (0.175 pts/cycle)
ifft_real32x32	N=256, scaling=3	1117 (0.229 pts/cycle)
ifft_real32x32	N=256, scaling=2	1409 (0.182 pts/cycle)
ifft_real32x32	N=512, scaling=3	2312 (0.221 pts/cycle)
ifft_real32x32	N=512, scaling=2	2560 (0.200 pts/cycle)
ifft_real32x32	N=1024, scaling=3	4618 (0.222 pts/cycle)
ifft_real32x32	N=1024, scaling=2	5492 (0.186 pts/cycle)
ifft_real32x32	N=2048, scaling=3	9860 (0.208 pts/cycle)
ifft_real32x32	N=2048, scaling=2	10690 (0.192 pts/cycle)
ifft_real32x32	N=4096, scaling=3	20420 (0.201 pts/cycle)
ifft_real32x32	N=4096, scaling=2	23590 (0.174 pts/cycle)
ifft_real32x32	N=8192, scaling=3	43774 (0.187 pts/cycle)
ifft_real32x32	N=8192, scaling=2	46899 (0.175 pts/cycle)
Mixed Radix Complex FFT		
fft_cplx32x32	N=12, scaling=3	157 (0.076 pts/cycle)
fft_cplx32x32	N=12, scaling=2	186 (0.065 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
fft_cplx32x32	N=24, scaling=3	225 (0.107 pts/cycle)
fft_cplx32x32	N=24, scaling=2	402 (0.060 pts/cycle)
fft_cplx32x32	N=36, scaling=3	438 (0.082 pts/cycle)
fft_cplx32x32	N=36, scaling=2	548 (0.066 pts/cycle)
fft_cplx32x32	N=48, scaling=3	433 (0.111 pts/cycle)
fft_cplx32x32	N=48, scaling=2	507 (0.095 pts/cycle)
fft_cplx32x32	N=60, scaling=3	630 (0.095 pts/cycle)
fft_cplx32x32	N=60, scaling=2	762 (0.079 pts/cycle)
fft_cplx32x32	N=72, scaling=3	856 (0.084 pts/cycle)
fft_cplx32x32	N=72, scaling=2	1184 (0.061 pts/cycle)
fft_cplx32x32	N=80, scaling=3	628 (0.127 pts/cycle)
fft_cplx32x32	N=80, scaling=2	753 (0.106 pts/cycle)
fft_cplx32x32	N=96, scaling=3	1127 (0.085 pts/cycle)
fft_cplx32x32	N=96, scaling=2	1305 (0.074 pts/cycle)
fft_cplx32x32	N=100, scaling=3	1063 (0.094 pts/cycle)
fft_cplx32x32	N=100, scaling=2	1216 (0.082 pts/cycle)
fft_cplx32x32	N=108, scaling=3	1297 (0.083 pts/cycle)
fft_cplx32x32	N=108, scaling=2	1550 (0.070 pts/cycle)
fft_cplx32x32	N=120, scaling=3	1502 (0.080 pts/cycle)
fft_cplx32x32	N=120, scaling=2	1741 (0.069 pts/cycle)
fft_cplx32x32	N=144, scaling=3	1367 (0.105 pts/cycle)
fft_cplx32x32	N=144, scaling=2	1682 (0.086 pts/cycle)
fft_cplx32x32	N=160, scaling=3	1343 (0.119 pts/cycle)
fft_cplx32x32	N=160, scaling=2	1572 (0.102 pts/cycle)
fft_cplx32x32	N=180, scaling=3	2064 (0.087 pts/cycle)
fft_cplx32x32	N=180, scaling=2	2346 (0.077 pts/cycle)
fft_cplx32x32	N=192, scaling=3	1704 (0.113 pts/cycle)
fft_cplx32x32	N=192, scaling=2	1996 (0.096 pts/cycle)
fft_cplx32x32	N=200, scaling=3	2361 (0.085 pts/cycle)
fft_cplx32x32	N=200, scaling=2	2739 (0.073 pts/cycle)
fft_cplx32x32	N=216, scaling=3	2737 (0.079 pts/cycle)
fft_cplx32x32	N=216, scaling=2	3554 (0.061 pts/cycle)
fft_cplx32x32	N=240, scaling=3	2336 (0.103 pts/cycle)
fft_cplx32x32	N=240, scaling=2	2720 (0.088 pts/cycle)
fft_cplx32x32	N=288, scaling=3	3306 (0.087 pts/cycle)
fft_cplx32x32	N=288, scaling=2	3913 (0.074 pts/cycle)
fft_cplx32x32	N=300, scaling=3	3330 (0.090 pts/cycle)
fft_cplx32x32	N=300, scaling=2	3884 (0.077 pts/cycle)
fft_cplx32x32	N=320, scaling=3	3008 (0.106 pts/cycle)
fft_cplx32x32	N=320, scaling=2	3394 (0.094 pts/cycle)
fft_cplx32x32	N=324, scaling=3	4302 (0.075 pts/cycle)
fft_cplx32x32	N=324, scaling=2	4804 (0.067 pts/cycle)
fft_cplx32x32	N=360, scaling=3	4591 (0.078 pts/cycle)
fft_cplx32x32	N=360, scaling=2	4931 (0.073 pts/cycle)
fft_cplx32x32	N=384, scaling=3	3088 (0.124 pts/cycle)
fft_cplx32x32	N=384, scaling=2	3603 (0.107 pts/cycle)
fft_cplx32x32	N=400, scaling=3	3905 (0.102 pts/cycle)
fft_cplx32x32	N=400, scaling=2	4623 (0.087 pts/cycle)
fft_cplx32x32	N=432, scaling=3	4773 (0.091 pts/cycle)
fft_cplx32x32	N=432, scaling=2	5652 (0.076 pts/cycle)
fft_cplx32x32	N=480, scaling=3	5375 (0.089 pts/cycle)
fft_cplx32x32	N=480, scaling=2	6235 (0.077 pts/cycle)
fft_cplx32x32	N=540, scaling=3	7158 (0.075 pts/cycle)
fft_cplx32x32	N=540, scaling=2	7697 (0.070 pts/cycle)
fft_cplx32x32	N=576, scaling=3	5455 (0.106 pts/cycle)
fft_cplx32x32	N=576, scaling=2	6547 (0.088 pts/cycle)
fft_cplx32x32	N=600, scaling=3	6592 (0.091 pts/cycle)
fft_cplx32x32	N=600, scaling=2	7695 (0.078 pts/cycle)
fft_cplx32x32	N=768, scaling=3	6314 (0.122 pts/cycle)
fft_cplx32x32	N=768, scaling=2	7196 (0.107 pts/cycle)
fft_cplx32x32	N=960, scaling=3	9195 (0.104 pts/cycle)
fft_cplx32x32	N=960, scaling=2	10788 (0.089 pts/cycle)
ifft_cplx32x32	N=12, scaling=3	170 (0.071 pts/cycle)
ifft_cplx32x32	N=12, scaling=2	187 (0.064 pts/cycle)
ifft_cplx32x32	N=24, scaling=3	230 (0.104 pts/cycle)
ifft_cplx32x32	N=24, scaling=2	403 (0.060 pts/cycle)
ifft_cplx32x32	N=36, scaling=3	427 (0.084 pts/cycle)
ifft_cplx32x32	N=36, scaling=2	542 (0.066 pts/cycle)
ifft_cplx32x32	N=48, scaling=3	432 (0.111 pts/cycle)
ifft_cplx32x32	N=48, scaling=2	497 (0.097 pts/cycle)
ifft_cplx32x32	N=60, scaling=3	610 (0.098 pts/cycle)
ifft_cplx32x32	N=60, scaling=2	755 (0.079 pts/cycle)
ifft_cplx32x32	N=72, scaling=3	863 (0.083 pts/cycle)
ifft_cplx32x32	N=72, scaling=2	1167 (0.062 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
ifft_cplx32x32	N=80, scaling=3	640 (0.125 pts/cycle)
ifft_cplx32x32	N=80, scaling=2	736 (0.109 pts/cycle)
ifft_cplx32x32	N=96, scaling=3	1142 (0.084 pts/cycle)
ifft_cplx32x32	N=96, scaling=2	1284 (0.075 pts/cycle)
ifft_cplx32x32	N=100, scaling=3	1030 (0.097 pts/cycle)
ifft_cplx32x32	N=100, scaling=2	1203 (0.083 pts/cycle)
ifft_cplx32x32	N=108, scaling=3	1260 (0.086 pts/cycle)
ifft_cplx32x32	N=108, scaling=2	1535 (0.070 pts/cycle)
ifft_cplx32x32	N=120, scaling=3	1526 (0.079 pts/cycle)
ifft_cplx32x32	N=120, scaling=2	1714 (0.070 pts/cycle)
ifft_cplx32x32	N=144, scaling=3	1401 (0.103 pts/cycle)
ifft_cplx32x32	N=144, scaling=2	1647 (0.087 pts/cycle)
ifft_cplx32x32	N=160, scaling=3	1385 (0.116 pts/cycle)
ifft_cplx32x32	N=160, scaling=2	1535 (0.104 pts/cycle)
ifft_cplx32x32	N=180, scaling=3	1998 (0.090 pts/cycle)
ifft_cplx32x32	N=180, scaling=2	2323 (0.077 pts/cycle)
ifft_cplx32x32	N=192, scaling=3	1736 (0.111 pts/cycle)
ifft_cplx32x32	N=192, scaling=2	1995 (0.096 pts/cycle)
ifft_cplx32x32	N=200, scaling=3	2418 (0.083 pts/cycle)
ifft_cplx32x32	N=200, scaling=2	2692 (0.074 pts/cycle)
ifft_cplx32x32	N=216, scaling=3	2796 (0.077 pts/cycle)
ifft_cplx32x32	N=216, scaling=2	3502 (0.062 pts/cycle)
ifft_cplx32x32	N=240, scaling=3	2376 (0.101 pts/cycle)
ifft_cplx32x32	N=240, scaling=2	2719 (0.088 pts/cycle)
ifft_cplx32x32	N=288, scaling=3	3394 (0.085 pts/cycle)
ifft_cplx32x32	N=288, scaling=2	3842 (0.075 pts/cycle)
ifft_cplx32x32	N=300, scaling=3	3380 (0.089 pts/cycle)
ifft_cplx32x32	N=300, scaling=2	3884 (0.077 pts/cycle)
ifft_cplx32x32	N=320, scaling=3	3007 (0.106 pts/cycle)
ifft_cplx32x32	N=320, scaling=2	3369 (0.095 pts/cycle)
ifft_cplx32x32	N=324, scaling=3	4183 (0.077 pts/cycle)
ifft_cplx32x32	N=324, scaling=2	4761 (0.068 pts/cycle)
ifft_cplx32x32	N=360, scaling=3	4422 (0.081 pts/cycle)
ifft_cplx32x32	N=360, scaling=2	4937 (0.073 pts/cycle)
ifft_cplx32x32	N=384, scaling=3	3214 (0.119 pts/cycle)
ifft_cplx32x32	N=384, scaling=2	3509 (0.109 pts/cycle)
ifft_cplx32x32	N=400, scaling=3	4037 (0.099 pts/cycle)
ifft_cplx32x32	N=400, scaling=2	4526 (0.088 pts/cycle)
ifft_cplx32x32	N=432, scaling=3	4913 (0.088 pts/cycle)
ifft_cplx32x32	N=432, scaling=2	5545 (0.078 pts/cycle)
ifft_cplx32x32	N=480, scaling=3	5534 (0.087 pts/cycle)
ifft_cplx32x32	N=480, scaling=2	6115 (0.078 pts/cycle)
ifft_cplx32x32	N=540, scaling=3	6957 (0.078 pts/cycle)
ifft_cplx32x32	N=540, scaling=2	7627 (0.071 pts/cycle)
ifft_cplx32x32	N=576, scaling=3	5649 (0.102 pts/cycle)
ifft_cplx32x32	N=576, scaling=2	6404 (0.090 pts/cycle)
ifft_cplx32x32	N=600, scaling=3	6693 (0.090 pts/cycle)
ifft_cplx32x32	N=600, scaling=2	7695 (0.078 pts/cycle)
ifft_cplx32x32	N=768, scaling=3	6581 (0.117 pts/cycle)
ifft_cplx32x32	N=768, scaling=2	7005 (0.110 pts/cycle)
ifft_cplx32x32	N=960, scaling=3	9534 (0.101 pts/cycle)
ifft_cplx32x32	N=960, scaling=2	10549 (0.091 pts/cycle)
fft_cplx32x16	N=160, scaling=3	1229 (0.130 pts/cycle)
fft_cplx32x16	N=160, scaling=2	1379 (0.116 pts/cycle)
fft_cplx32x16	N=192, scaling=3	1510 (0.127 pts/cycle)
fft_cplx32x16	N=192, scaling=2	1711 (0.112 pts/cycle)
fft_cplx32x16	N=240, scaling=3	2159 (0.111 pts/cycle)
fft_cplx32x16	N=240, scaling=2	2342 (0.102 pts/cycle)
fft_cplx32x16	N=320, scaling=3	2478 (0.129 pts/cycle)
fft_cplx32x16	N=320, scaling=2	2778 (0.115 pts/cycle)
fft_cplx32x16	N=384, scaling=3	3353 (0.115 pts/cycle)
fft_cplx32x16	N=384, scaling=2	3692 (0.104 pts/cycle)
fft_cplx32x16	N=480, scaling=3	4639 (0.103 pts/cycle)
fft_cplx32x16	N=480, scaling=2	4930 (0.097 pts/cycle)
ifft_cplx32x16	N=160, scaling=3	1275 (0.125 pts/cycle)
ifft_cplx32x16	N=160, scaling=2	1385 (0.116 pts/cycle)
ifft_cplx32x16	N=192, scaling=3	1401 (0.137 pts/cycle)
ifft_cplx32x16	N=192, scaling=2	1720 (0.112 pts/cycle)
ifft_cplx32x16	N=240, scaling=3	2018 (0.119 pts/cycle)
ifft_cplx32x16	N=240, scaling=2	2351 (0.102 pts/cycle)
ifft_cplx32x16	N=320, scaling=3	2553 (0.125 pts/cycle)
ifft_cplx32x16	N=320, scaling=2	2783 (0.115 pts/cycle)
ifft_cplx32x16	N=384, scaling=3	3111 (0.123 pts/cycle)
ifft_cplx32x16	N=384, scaling=2	3698 (0.104 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
ifft_cplx32x16	N=480, scaling=3	4335 (0.111 pts/cycle)
ifft_cplx32x16	N=480, scaling=2	4936 (0.097 pts/cycle)
fft_cplx16x16	N=160, scaling=3	1296 (0.123 pts/cycle)
fft_cplx16x16	N=160, scaling=2	1655 (0.097 pts/cycle)
fft_cplx16x16	N=192, scaling=3	1627 (0.118 pts/cycle)
fft_cplx16x16	N=192, scaling=2	2037 (0.094 pts/cycle)
fft_cplx16x16	N=240, scaling=3	2058 (0.117 pts/cycle)
fft_cplx16x16	N=240, scaling=2	2501 (0.096 pts/cycle)
fft_cplx16x16	N=320, scaling=3	2624 (0.122 pts/cycle)
fft_cplx16x16	N=320, scaling=2	3265 (0.098 pts/cycle)
fft_cplx16x16	N=384, scaling=3	3246 (0.118 pts/cycle)
fft_cplx16x16	N=384, scaling=2	4110 (0.093 pts/cycle)
fft_cplx16x16	N=480, scaling=3	4087 (0.117 pts/cycle)
fft_cplx16x16	N=480, scaling=2	5155 (0.093 pts/cycle)
ifft_cplx16x16	N=160, scaling=3	1341 (0.119 pts/cycle)
ifft_cplx16x16	N=160, scaling=2	1690 (0.095 pts/cycle)
ifft_cplx16x16	N=192, scaling=3	1628 (0.118 pts/cycle)
ifft_cplx16x16	N=192, scaling=2	2027 (0.095 pts/cycle)
ifft_cplx16x16	N=240, scaling=3	2111 (0.114 pts/cycle)
ifft_cplx16x16	N=240, scaling=2	2536 (0.095 pts/cycle)
ifft_cplx16x16	N=320, scaling=3	2683 (0.119 pts/cycle)
ifft_cplx16x16	N=320, scaling=2	3298 (0.097 pts/cycle)
ifft_cplx16x16	N=384, scaling=3	3245 (0.118 pts/cycle)
ifft_cplx16x16	N=384, scaling=2	4080 (0.094 pts/cycle)
ifft_cplx16x16	N=480, scaling=3	4162 (0.115 pts/cycle)
ifft_cplx16x16	N=480, scaling=2	5185 (0.093 pts/cycle)
Mixed Radix Real FFT		
fft_real32x32	N=12, scaling=3	184 (0.065 pts/cycle)
fft_real32x32	N=12, scaling=2	211 (0.057 pts/cycle)
fft_real32x32	N=24, scaling=3	230 (0.104 pts/cycle)
fft_real32x32	N=24, scaling=2	272 (0.088 pts/cycle)
fft_real32x32	N=30, scaling=3	278 (0.108 pts/cycle)
fft_real32x32	N=30, scaling=2	329 (0.091 pts/cycle)
fft_real32x32	N=36, scaling=3	432 (0.083 pts/cycle)
fft_real32x32	N=36, scaling=2	504 (0.071 pts/cycle)
fft_real32x32	N=48, scaling=3	319 (0.150 pts/cycle)
fft_real32x32	N=48, scaling=2	512 (0.094 pts/cycle)
fft_real32x32	N=60, scaling=3	487 (0.123 pts/cycle)
fft_real32x32	N=60, scaling=2	618 (0.097 pts/cycle)
fft_real32x32	N=72, scaling=3	552 (0.130 pts/cycle)
fft_real32x32	N=72, scaling=2	682 (0.106 pts/cycle)
fft_real32x32	N=90, scaling=3	649 (0.139 pts/cycle)
fft_real32x32	N=90, scaling=2	800 (0.112 pts/cycle)
fft_real32x32	N=96, scaling=3	568 (0.169 pts/cycle)
fft_real32x32	N=96, scaling=2	665 (0.144 pts/cycle)
fft_real32x32	N=108, scaling=3	889 (0.121 pts/cycle)
fft_real32x32	N=108, scaling=2	1112 (0.097 pts/cycle)
fft_real32x32	N=120, scaling=3	786 (0.153 pts/cycle)
fft_real32x32	N=120, scaling=2	945 (0.127 pts/cycle)
fft_real32x32	N=144, scaling=3	1034 (0.139 pts/cycle)
fft_real32x32	N=144, scaling=2	1390 (0.104 pts/cycle)
fft_real32x32	N=160, scaling=3	820 (0.195 pts/cycle)
fft_real32x32	N=160, scaling=2	976 (0.164 pts/cycle)
fft_real32x32	N=180, scaling=3	1328 (0.136 pts/cycle)
fft_real32x32	N=180, scaling=2	1578 (0.114 pts/cycle)
fft_real32x32	N=192, scaling=3	1346 (0.143 pts/cycle)
fft_real32x32	N=192, scaling=2	1560 (0.123 pts/cycle)
fft_real32x32	N=216, scaling=3	1538 (0.140 pts/cycle)
fft_real32x32	N=216, scaling=2	1829 (0.118 pts/cycle)
fft_real32x32	N=240, scaling=3	1763 (0.136 pts/cycle)
fft_real32x32	N=240, scaling=2	2044 (0.117 pts/cycle)
fft_real32x32	N=288, scaling=3	1671 (0.172 pts/cycle)
fft_real32x32	N=288, scaling=2	2032 (0.142 pts/cycle)
fft_real32x32	N=300, scaling=3	2202 (0.136 pts/cycle)
fft_real32x32	N=300, scaling=2	2508 (0.120 pts/cycle)
fft_real32x32	N=320, scaling=3	1675 (0.191 pts/cycle)
fft_real32x32	N=320, scaling=2	1955 (0.164 pts/cycle)
fft_real32x32	N=324, scaling=3	2586 (0.125 pts/cycle)
fft_real32x32	N=324, scaling=2	2995 (0.108 pts/cycle)
fft_real32x32	N=360, scaling=3	2430 (0.148 pts/cycle)
fft_real32x32	N=360, scaling=2	2769 (0.130 pts/cycle)
fft_real32x32	N=384, scaling=3	2092 (0.184 pts/cycle)
fft_real32x32	N=384, scaling=2	2442 (0.157 pts/cycle)
fft_real32x32	N=432, scaling=3	3167 (0.136 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
fft_real32x32	N=432, scaling=2	4050 (0.107 pts/cycle)
fft_real32x32	N=480, scaling=3	2808 (0.171 pts/cycle)
fft_real32x32	N=480, scaling=2	3262 (0.147 pts/cycle)
fft_real32x32	N=540, scaling=3	4173 (0.129 pts/cycle)
fft_real32x32	N=540, scaling=2	4646 (0.116 pts/cycle)
fft_real32x32	N=576, scaling=3	3863 (0.149 pts/cycle)
fft_real32x32	N=576, scaling=2	4553 (0.127 pts/cycle)
fft_real32x32	N=720, scaling=3	5273 (0.137 pts/cycle)
fft_real32x32	N=720, scaling=2	5715 (0.126 pts/cycle)
fft_real32x32	N=768, scaling=3	5044 (0.152 pts/cycle)
fft_real32x32	N=768, scaling=2	5779 (0.133 pts/cycle)
fft_real32x32	N=960, scaling=3	6268 (0.153 pts/cycle)
fft_real32x32	N=960, scaling=2	7258 (0.132 pts/cycle)
fft_real32x32	N=1152, scaling=3	6515 (0.177 pts/cycle)
fft_real32x32	N=1152, scaling=2	7763 (0.148 pts/cycle)
fft_real32x32	N=1440, scaling=3	9316 (0.155 pts/cycle)
fft_real32x32	N=1440, scaling=2	10660 (0.135 pts/cycle)
fft_real32x32	N=1536, scaling=3	7711 (0.199 pts/cycle)
fft_real32x32	N=1536, scaling=2	8796 (0.175 pts/cycle)
fft_real32x32	N=1920, scaling=3	10928 (0.176 pts/cycle)
fft_real32x32	N=1920, scaling=2	12771 (0.150 pts/cycle)
ifft_real32x32	N=12, scaling=3	197 (0.061 pts/cycle)
ifft_real32x32	N=12, scaling=2	232 (0.052 pts/cycle)
ifft_real32x32	N=24, scaling=3	248 (0.097 pts/cycle)
ifft_real32x32	N=24, scaling=2	276 (0.087 pts/cycle)
ifft_real32x32	N=30, scaling=3	289 (0.104 pts/cycle)
ifft_real32x32	N=30, scaling=2	336 (0.089 pts/cycle)
ifft_real32x32	N=36, scaling=3	451 (0.080 pts/cycle)
ifft_real32x32	N=36, scaling=2	516 (0.070 pts/cycle)
ifft_real32x32	N=48, scaling=3	334 (0.144 pts/cycle)
ifft_real32x32	N=48, scaling=2	519 (0.092 pts/cycle)
ifft_real32x32	N=60, scaling=3	509 (0.118 pts/cycle)
ifft_real32x32	N=60, scaling=2	631 (0.095 pts/cycle)
ifft_real32x32	N=72, scaling=3	556 (0.129 pts/cycle)
ifft_real32x32	N=72, scaling=2	686 (0.105 pts/cycle)
ifft_real32x32	N=90, scaling=3	672 (0.134 pts/cycle)
ifft_real32x32	N=90, scaling=2	813 (0.111 pts/cycle)
ifft_real32x32	N=96, scaling=3	584 (0.164 pts/cycle)
ifft_real32x32	N=96, scaling=2	668 (0.144 pts/cycle)
ifft_real32x32	N=108, scaling=3	918 (0.118 pts/cycle)
ifft_real32x32	N=108, scaling=2	1132 (0.095 pts/cycle)
ifft_real32x32	N=120, scaling=3	787 (0.152 pts/cycle)
ifft_real32x32	N=120, scaling=2	952 (0.126 pts/cycle)
ifft_real32x32	N=144, scaling=3	1066 (0.135 pts/cycle)
ifft_real32x32	N=144, scaling=2	1394 (0.103 pts/cycle)
ifft_real32x32	N=160, scaling=3	856 (0.187 pts/cycle)
ifft_real32x32	N=160, scaling=2	979 (0.163 pts/cycle)
ifft_real32x32	N=180, scaling=3	1366 (0.132 pts/cycle)
ifft_real32x32	N=180, scaling=2	1607 (0.112 pts/cycle)
ifft_real32x32	N=192, scaling=3	1393 (0.138 pts/cycle)
ifft_real32x32	N=192, scaling=2	1564 (0.123 pts/cycle)
ifft_real32x32	N=216, scaling=3	1534 (0.141 pts/cycle)
ifft_real32x32	N=216, scaling=2	1843 (0.117 pts/cycle)
ifft_real32x32	N=240, scaling=3	1825 (0.132 pts/cycle)
ifft_real32x32	N=240, scaling=2	2048 (0.117 pts/cycle)
ifft_real32x32	N=288, scaling=3	1748 (0.165 pts/cycle)
ifft_real32x32	N=288, scaling=2	2036 (0.141 pts/cycle)
ifft_real32x32	N=300, scaling=3	2255 (0.133 pts/cycle)
ifft_real32x32	N=300, scaling=2	2552 (0.118 pts/cycle)
ifft_real32x32	N=320, scaling=3	1761 (0.182 pts/cycle)
ifft_real32x32	N=320, scaling=2	1958 (0.163 pts/cycle)
ifft_real32x32	N=324, scaling=3	2643 (0.123 pts/cycle)
ifft_real32x32	N=324, scaling=2	3043 (0.106 pts/cycle)
ifft_real32x32	N=360, scaling=3	2417 (0.149 pts/cycle)
ifft_real32x32	N=360, scaling=2	2792 (0.129 pts/cycle)
ifft_real32x32	N=384, scaling=3	2179 (0.176 pts/cycle)
ifft_real32x32	N=384, scaling=2	2492 (0.154 pts/cycle)
ifft_real32x32	N=432, scaling=3	3290 (0.131 pts/cycle)
ifft_real32x32	N=432, scaling=2	4055 (0.107 pts/cycle)
ifft_real32x32	N=480, scaling=3	2915 (0.165 pts/cycle)
ifft_real32x32	N=480, scaling=2	3324 (0.144 pts/cycle)
ifft_real32x32	N=540, scaling=3	4257 (0.127 pts/cycle)
ifft_real32x32	N=540, scaling=2	4721 (0.114 pts/cycle)
ifft_real32x32	N=576, scaling=3	4031 (0.143 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
ifft_real32x32	N=576, scaling=2	4558 (0.126 pts/cycle)
ifft_real32x32	N=720, scaling=3	5203 (0.138 pts/cycle)
ifft_real32x32	N=720, scaling=2	5815 (0.124 pts/cycle)
ifft_real32x32	N=768, scaling=3	5274 (0.146 pts/cycle)
ifft_real32x32	N=768, scaling=2	5786 (0.133 pts/cycle)
ifft_real32x32	N=960, scaling=3	6557 (0.146 pts/cycle)
ifft_real32x32	N=960, scaling=2	7263 (0.132 pts/cycle)
ifft_real32x32	N=1152, scaling=3	6863 (0.168 pts/cycle)
ifft_real32x32	N=1152, scaling=2	7768 (0.148 pts/cycle)
ifft_real32x32	N=1440, scaling=3	9756 (0.148 pts/cycle)
ifft_real32x32	N=1440, scaling=2	10667 (0.135 pts/cycle)
ifft_real32x32	N=1536, scaling=3	8179 (0.188 pts/cycle)
ifft_real32x32	N=1536, scaling=2	8802 (0.175 pts/cycle)
ifft_real32x32	N=1920, scaling=3	11516 (0.167 pts/cycle)
ifft_real32x32	N=1920, scaling=2	12776 (0.150 pts/cycle)
fft_real32x16	N=160, scaling=3	798 (0.201 pts/cycle)
fft_real32x16	N=160, scaling=2	915 (0.175 pts/cycle)
fft_real32x16	N=192, scaling=3	1008 (0.190 pts/cycle)
fft_real32x16	N=192, scaling=2	1108 (0.173 pts/cycle)
fft_real32x16	N=240, scaling=3	1441 (0.167 pts/cycle)
fft_real32x16	N=240, scaling=2	1533 (0.157 pts/cycle)
fft_real32x16	N=320, scaling=3	1554 (0.206 pts/cycle)
fft_real32x16	N=320, scaling=2	1701 (0.188 pts/cycle)
fft_real32x16	N=384, scaling=3	1885 (0.204 pts/cycle)
fft_real32x16	N=384, scaling=2	2081 (0.185 pts/cycle)
fft_real32x16	N=480, scaling=3	2606 (0.184 pts/cycle)
fft_real32x16	N=480, scaling=2	2786 (0.172 pts/cycle)
ifft_real32x16	N=160, scaling=3	815 (0.196 pts/cycle)
ifft_real32x16	N=160, scaling=2	930 (0.172 pts/cycle)
ifft_real32x16	N=192, scaling=3	961 (0.200 pts/cycle)
ifft_real32x16	N=192, scaling=2	1136 (0.169 pts/cycle)
ifft_real32x16	N=240, scaling=3	1388 (0.173 pts/cycle)
ifft_real32x16	N=240, scaling=2	1581 (0.152 pts/cycle)
ifft_real32x16	N=320, scaling=3	1629 (0.196 pts/cycle)
ifft_real32x16	N=320, scaling=2	1779 (0.180 pts/cycle)
ifft_real32x16	N=384, scaling=3	1820 (0.211 pts/cycle)
ifft_real32x16	N=384, scaling=2	2185 (0.176 pts/cycle)
ifft_real32x16	N=480, scaling=3	2533 (0.189 pts/cycle)
ifft_real32x16	N=480, scaling=2	2922 (0.164 pts/cycle)
fft_real16x16	N=160, scaling=3	928 (0.172 pts/cycle)
fft_real16x16	N=160, scaling=2	1099 (0.146 pts/cycle)
fft_real16x16	N=192, scaling=3	1148 (0.167 pts/cycle)
fft_real16x16	N=192, scaling=2	1388 (0.138 pts/cycle)
fft_real16x16	N=240, scaling=3	1529 (0.157 pts/cycle)
fft_real16x16	N=240, scaling=2	1781 (0.135 pts/cycle)
fft_real16x16	N=320, scaling=3	1709 (0.187 pts/cycle)
fft_real16x16	N=320, scaling=2	2065 (0.155 pts/cycle)
fft_real16x16	N=384, scaling=3	2103 (0.183 pts/cycle)
fft_real16x16	N=384, scaling=2	2511 (0.153 pts/cycle)
fft_real16x16	N=480, scaling=3	2631 (0.182 pts/cycle)
fft_real16x16	N=480, scaling=2	3069 (0.156 pts/cycle)
ifft_real16x16	N=160, scaling=3	971 (0.165 pts/cycle)
ifft_real16x16	N=160, scaling=2	1203 (0.133 pts/cycle)
ifft_real16x16	N=192, scaling=3	1157 (0.166 pts/cycle)
ifft_real16x16	N=192, scaling=2	1466 (0.131 pts/cycle)
ifft_real16x16	N=240, scaling=3	1576 (0.152 pts/cycle)
ifft_real16x16	N=240, scaling=2	1915 (0.125 pts/cycle)
ifft_real16x16	N=320, scaling=3	1762 (0.182 pts/cycle)
ifft_real16x16	N=320, scaling=2	2233 (0.143 pts/cycle)
ifft_real16x16	N=384, scaling=3	2114 (0.182 pts/cycle)
ifft_real16x16	N=384, scaling=2	2655 (0.145 pts/cycle)
ifft_real16x16	N=480, scaling=3	2692 (0.178 pts/cycle)
ifft_real16x16	N=480, scaling=2	3296 (0.146 pts/cycle)
Complex FFT with Optimized Memory		
fft_cplx16x16_ie	N=128	1284 (0.100 pts/cycle)
fft_cplx16x16_ie	N=256	2370 (0.108 pts/cycle)
fft_cplx16x16_ie	N=512	5115 (0.100 pts/cycle)
fft_cplx16x16_ie	N=1024	10213 (0.100 pts/cycle)
fft_cplx32x16_ie	N=256, scaling=3	2115 (0.121 pts/cycle)
fft_cplx32x16_ie	N=256, scaling=2	2286 (0.112 pts/cycle)
fft_cplx32x16_ie	N=512, scaling=3	5059 (0.101 pts/cycle)
fft_cplx32x16_ie	N=512, scaling=2	5370 (0.095 pts/cycle)
fft_cplx32x16_ie	N=1024, scaling=3	10005 (0.102 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
fft_cplx32x16_ie	N=1024, scaling=2	10596 (0.097 pts/cycle)
fft_cplx32x32_ie	N=128, scaling=3	984 (0.130 pts/cycle)
fft_cplx32x32_ie	N=128, scaling=2	1195 (0.107 pts/cycle)
fft_cplx32x32_ie	N=256, scaling=3	1660 (0.154 pts/cycle)
fft_cplx32x32_ie	N=256, scaling=2	2049 (0.125 pts/cycle)
fft_cplx32x32_ie	N=512, scaling=3	4144 (0.124 pts/cycle)
fft_cplx32x32_ie	N=512, scaling=2	4878 (0.105 pts/cycle)
fft_cplx32x32_ie	N=1024, scaling=3	7440 (0.138 pts/cycle)
fft_cplx32x32_ie	N=1024, scaling=2	8880 (0.115 pts/cycle)
ifft_cplx16x16_ie	N=128	1282 (0.100 pts/cycle)
ifft_cplx16x16_ie	N=256	2366 (0.108 pts/cycle)
ifft_cplx16x16_ie	N=512	5113 (0.100 pts/cycle)
ifft_cplx16x16_ie	N=1024	10209 (0.100 pts/cycle)
ifft_cplx32x16_ie	N=256, scaling=3	2187 (0.117 pts/cycle)
ifft_cplx32x16_ie	N=256, scaling=2	2541 (0.101 pts/cycle)
ifft_cplx32x16_ie	N=512, scaling=3	5119 (0.100 pts/cycle)
ifft_cplx32x16_ie	N=512, scaling=2	5818 (0.088 pts/cycle)
ifft_cplx32x16_ie	N=1024, scaling=3	10269 (0.100 pts/cycle)
ifft_cplx32x16_ie	N=1024, scaling=2	11653 (0.088 pts/cycle)
ifft_cplx32x32_ie	N=128, scaling=3	1014 (0.126 pts/cycle)
ifft_cplx32x32_ie	N=128, scaling=2	1167 (0.110 pts/cycle)
ifft_cplx32x32_ie	N=256, scaling=3	1738 (0.147 pts/cycle)
ifft_cplx32x32_ie	N=256, scaling=2	1989 (0.129 pts/cycle)
ifft_cplx32x32_ie	N=512, scaling=3	4320 (0.119 pts/cycle)
ifft_cplx32x32_ie	N=512, scaling=2	4754 (0.108 pts/cycle)
ifft_cplx32x32_ie	N=1024, scaling=3	7808 (0.131 pts/cycle)
ifft_cplx32x32_ie	N=1024, scaling=2	8630 (0.119 pts/cycle)
stereo_fft_cplx16x16_ie	N=128	1767 (0.072 pts/cycle)
stereo_fft_cplx16x16_ie	N=256	3613 (0.071 pts/cycle)
stereo_fft_cplx16x16_ie	N=512	8319 (0.062 pts/cycle)
stereo_fft_cplx16x16_ie	N=1024	17271 (0.059 pts/cycle)
stereo_fft_cplx32x16_ie	N=256, scaling=3	3808 (0.067 pts/cycle)
stereo_fft_cplx32x16_ie	N=256, scaling=2	4106 (0.062 pts/cycle)
stereo_fft_cplx32x16_ie	N=512, scaling=3	8947 (0.057 pts/cycle)
stereo_fft_cplx32x16_ie	N=512, scaling=2	9152 (0.056 pts/cycle)
stereo_fft_cplx32x16_ie	N=1024, scaling=3	18518 (0.055 pts/cycle)
stereo_fft_cplx32x16_ie	N=1024, scaling=2	18916 (0.054 pts/cycle)
stereo_fft_cplx32x32_ie	N=128, scaling=3	1955 (0.065 pts/cycle)
stereo_fft_cplx32x32_ie	N=128, scaling=2	2233 (0.057 pts/cycle)
stereo_fft_cplx32x32_ie	N=256, scaling=3	3954 (0.065 pts/cycle)
stereo_fft_cplx32x32_ie	N=256, scaling=2	4477 (0.057 pts/cycle)
stereo_fft_cplx32x32_ie	N=512, scaling=3	9418 (0.054 pts/cycle)
stereo_fft_cplx32x32_ie	N=512, scaling=2	10481 (0.049 pts/cycle)
stereo_fft_cplx32x32_ie	N=1024, scaling=3	19273 (0.053 pts/cycle)
stereo_fft_cplx32x32_ie	N=1024, scaling=2	21303 (0.048 pts/cycle)
stereo_ifft_cplx16x16_ie	N=128	1790 (0.072 pts/cycle)
stereo_ifft_cplx16x16_ie	N=256	3662 (0.070 pts/cycle)
stereo_ifft_cplx16x16_ie	N=512	8422 (0.061 pts/cycle)
stereo_ifft_cplx16x16_ie	N=1024	17480 (0.059 pts/cycle)
stereo_ifft_cplx32x16_ie	N=256, scaling=3	3633 (0.070 pts/cycle)
stereo_ifft_cplx32x16_ie	N=256, scaling=2	3931 (0.065 pts/cycle)
stereo_ifft_cplx32x16_ie	N=512, scaling=3	9077 (0.056 pts/cycle)
stereo_ifft_cplx32x16_ie	N=512, scaling=2	9282 (0.055 pts/cycle)
stereo_ifft_cplx32x16_ie	N=1024, scaling=3	17767 (0.058 pts/cycle)
stereo_ifft_cplx32x16_ie	N=1024, scaling=2	18165 (0.056 pts/cycle)
stereo_ifft_cplx32x32_ie	N=128, scaling=3	2014 (0.064 pts/cycle)
stereo_ifft_cplx32x32_ie	N=128, scaling=2	2354 (0.054 pts/cycle)
stereo_ifft_cplx32x32_ie	N=256, scaling=3	4077 (0.063 pts/cycle)
stereo_ifft_cplx32x32_ie	N=256, scaling=2	4710 (0.054 pts/cycle)
stereo_ifft_cplx32x32_ie	N=512, scaling=3	9669 (0.053 pts/cycle)
stereo_ifft_cplx32x32_ie	N=512, scaling=2	10938 (0.047 pts/cycle)
stereo_ifft_cplx32x32_ie	N=1024, scaling=3	19780 (0.052 pts/cycle)
stereo_ifft_cplx32x32_ie	N=1024, scaling=2	22208 (0.046 pts/cycle)
fft_cplxf_ie	N=8	56 (0.143 pts/cycle)
fft_cplxf_ie	N=16	118 (0.136 pts/cycle)
fft_cplxf_ie	N=32	217 (0.147 pts/cycle)
fft_cplxf_ie	N=64	591 (0.108 pts/cycle)
fft_cplxf_ie	N=128	1092 (0.117 pts/cycle)
fft_cplxf_ie	N=256	2837 (0.090 pts/cycle)
fft_cplxf_ie	N=512	5483 (0.093 pts/cycle)
fft_cplxf_ie	N=1024	13628 (0.075 pts/cycle)
fft_cplxf_ie	N=2048	26675 (0.077 pts/cycle)
fft_cplxf_ie	N=4096	64068 (0.064 pts/cycle)
ifft_cplxf_ie	N=8	61 (0.131 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
ifft_cplxf_ie	N=16	132 (0.121 pts/cycle)
ifft_cplxf_ie	N=32	219 (0.146 pts/cycle)
ifft_cplxf_ie	N=64	594 (0.108 pts/cycle)
ifft_cplxf_ie	N=128	1079 (0.119 pts/cycle)
ifft_cplxf_ie	N=256	2850 (0.090 pts/cycle)
ifft_cplxf_ie	N=512	5407 (0.095 pts/cycle)
ifft_cplxf_ie	N=1024	13674 (0.075 pts/cycle)
ifft_cplxf_ie	N=2048	26344 (0.078 pts/cycle)
ifft_cplxf_ie	N=4096	64242 (0.064 pts/cycle)
stereo_fft_cplxf_ie	N=8	126 (0.063 pts/cycle)
stereo_fft_cplxf_ie	N=16	189 (0.085 pts/cycle)
stereo_fft_cplxf_ie	N=32	585 (0.055 pts/cycle)
stereo_fft_cplxf_ie	N=64	969 (0.066 pts/cycle)
stereo_fft_cplxf_ie	N=128	2869 (0.045 pts/cycle)
stereo_fft_cplxf_ie	N=256	4977 (0.051 pts/cycle)
stereo_fft_cplxf_ie	N=512	13805 (0.037 pts/cycle)
stereo_fft_cplxf_ie	N=1024	24633 (0.042 pts/cycle)
stereo_fft_cplxf_ie	N=2048	64822 (0.032 pts/cycle)
stereo_fft_cplxf_ie	N=4096	117825 (0.035 pts/cycle)
stereo_ifft_cplxf_ie	N=8	138 (0.058 pts/cycle)
stereo_ifft_cplxf_ie	N=16	195 (0.082 pts/cycle)
stereo_ifft_cplxf_ie	N=32	576 (0.056 pts/cycle)
stereo_ifft_cplxf_ie	N=64	1008 (0.063 pts/cycle)
stereo_ifft_cplxf_ie	N=128	2774 (0.046 pts/cycle)
stereo_ifft_cplxf_ie	N=256	5145 (0.050 pts/cycle)
stereo_ifft_cplxf_ie	N=512	13359 (0.038 pts/cycle)
stereo_ifft_cplxf_ie	N=1024	25315 (0.040 pts/cycle)
stereo_ifft_cplxf_ie	N=2048	62968 (0.033 pts/cycle)
stereo_ifft_cplxf_ie	N=4096	120555 (0.034 pts/cycle)
Real FFT with Optimized Memory		
fft_real16x16_ie	N=256	1660 (0.154 pts/cycle)
fft_real16x16_ie	N=512	3034 (0.169 pts/cycle)
fft_real16x16_ie	N=1024	6356 (0.161 pts/cycle)
fft_real32x16_ie	N=256, scaling=3	1431 (0.179 pts/cycle)
fft_real32x16_ie	N=256, scaling=2	1519 (0.169 pts/cycle)
fft_real32x16_ie	N=512, scaling=3	2683 (0.191 pts/cycle)
fft_real32x16_ie	N=512, scaling=2	2825 (0.181 pts/cycle)
fft_real32x16_ie	N=1024, scaling=3	6106 (0.168 pts/cycle)
fft_real32x16_ie	N=1024, scaling=2	6357 (0.161 pts/cycle)
fft_real32x32_ie	N=256, scaling=3	1335 (0.192 pts/cycle)
fft_real32x32_ie	N=256, scaling=2	1694 (0.151 pts/cycle)
fft_real32x32_ie	N=512, scaling=3	2283 (0.224 pts/cycle)
fft_real32x32_ie	N=512, scaling=2	2948 (0.174 pts/cycle)
fft_real32x32_ie	N=1024, scaling=3	5314 (0.193 pts/cycle)
fft_real32x32_ie	N=1024, scaling=2	6578 (0.156 pts/cycle)
ifft_real16x16_ie	N=256	1736 (0.147 pts/cycle)
ifft_real16x16_ie	N=512	3172 (0.161 pts/cycle)
ifft_real16x16_ie	N=1024	6625 (0.155 pts/cycle)
ifft_real32x16_ie	N=256, scaling=3	1468 (0.174 pts/cycle)
ifft_real32x16_ie	N=256, scaling=2	1805 (0.142 pts/cycle)
ifft_real32x16_ie	N=512, scaling=3	2810 (0.182 pts/cycle)
ifft_real32x16_ie	N=512, scaling=2	3462 (0.148 pts/cycle)
ifft_real32x16_ie	N=1024, scaling=3	6286 (0.163 pts/cycle)
ifft_real32x16_ie	N=1024, scaling=2	7571 (0.135 pts/cycle)
ifft_real32x32_ie	N=256, scaling=3	1332 (0.192 pts/cycle)
ifft_real32x32_ie	N=256, scaling=2	1646 (0.156 pts/cycle)
ifft_real32x32_ie	N=512, scaling=3	2296 (0.223 pts/cycle)
ifft_real32x32_ie	N=512, scaling=2	2852 (0.180 pts/cycle)
ifft_real32x32_ie	N=1024, scaling=3	5358 (0.191 pts/cycle)
ifft_real32x32_ie	N=1024, scaling=2	6385 (0.160 pts/cycle)
fft_realf_ie	N=8	41 (0.195 pts/cycle)
fft_realf_ie	N=16	133 (0.120 pts/cycle)
fft_realf_ie	N=32	226 (0.142 pts/cycle)
fft_realf_ie	N=64	368 (0.174 pts/cycle)
fft_realf_ie	N=128	826 (0.155 pts/cycle)
fft_realf_ie	N=256	1495 (0.171 pts/cycle)
fft_realf_ie	N=512	3577 (0.143 pts/cycle)
fft_realf_ie	N=1024	6894 (0.149 pts/cycle)
fft_realf_ie	N=2048	16384 (0.125 pts/cycle)
fft_realf_ie	N=4096	32117 (0.128 pts/cycle)
ifft_realf_ie	N=8	42 (0.190 pts/cycle)
ifft_realf_ie	N=16	137 (0.117 pts/cycle)
ifft_realf_ie	N=32	242 (0.132 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
ifft_realf_ie	N=64	370 (0.173 pts/cycle)
ifft_realf_ie	N=128	830 (0.154 pts/cycle)
ifft_realf_ie	N=256	1482 (0.173 pts/cycle)
ifft_realf_ie	N=512	3590 (0.143 pts/cycle)
ifft_realf_ie	N=1024	6818 (0.150 pts/cycle)
ifft_realf_ie	N=2048	16431 (0.125 pts/cycle)
ifft_realf_ie	N=4096	31788 (0.129 pts/cycle)
DCT		
dct_32x16	N=32, scalingOpt=3	153 (cycles)
dct_32x16	N=64, scalingOpt=3	300 (cycles)
dct_32x32	N=32, scalingOpt=3	173 (cycles)
dct_32x32	N=64, scalingOpt=3	291 (cycles)
dct_16x16	N=32, scalingOpt=3	206 (cycles)
dct_16x16	N=64, scalingOpt=3	381 (cycles)
dct4_32x16	N=32, scalingOpt=3	238 (cycles)
dct4_32x16	N=64, scalingOpt=3	602 (cycles)
dct4_32x16	N=128, scalingOpt=3	1256 (cycles)
dct4_32x16	N=256, scalingOpt=3	2114 (cycles)
dct4_32x16	N=512, scalingOpt=3	4905 (cycles)
dct4_32x32	N=32, scalingOpt=3	271 (cycles)
dct4_32x32	N=64, scalingOpt=3	644 (cycles)
dct4_32x32	N=128, scalingOpt=3	1315 (cycles)
dct4_32x32	N=256, scalingOpt=3	2299 (cycles)
dct4_32x32	N=512, scalingOpt=3	5174 (cycles)
mdct_32x16	N=32, scalingOpt=3	332 (cycles)
mdct_32x16	N=64, scalingOpt=3	737 (cycles)
mdct_32x16	N=128, scalingOpt=3	1471 (cycles)
mdct_32x16	N=256, scalingOpt=3	2489 (cycles)
mdct_32x16	N=512, scalingOpt=3	5600 (cycles)
mdct_32x32	N=32, scalingOpt=3	368 (cycles)
mdct_32x32	N=64, scalingOpt=3	781 (cycles)
mdct_32x32	N=128, scalingOpt=3	1532 (cycles)
mdct_32x32	N=256, scalingOpt=3	2677 (cycles)
mdct_32x32	N=512, scalingOpt=3	5871 (cycles)
imdct_32x16	N=32, scalingOpt=3	338 (cycles)
imdct_32x16	N=64, scalingOpt=3	743 (cycles)
imdct_32x16	N=128, scalingOpt=3	1479 (cycles)
imdct_32x16	N=256, scalingOpt=3	2495 (cycles)
imdct_32x16	N=512, scalingOpt=3	5608 (cycles)
imdct_32x32	N=32, scalingOpt=3	372 (cycles)
imdct_32x32	N=64, scalingOpt=3	785 (cycles)
imdct_32x32	N=128, scalingOpt=3	1536 (cycles)
imdct_32x32	N=256, scalingOpt=3	2681 (cycles)
imdct_32x32	N=512, scalingOpt=3	5877 (cycles)
dct2d_8x16	N=8, L=1, scalingOpt=0	271 (271.0 cycles/block)
dct2d_8x16	N=8, L=32, scalingOpt=0	8300 (259.4 cycles/block)
dct2d_8x16	N=8, L=1024, scalingOpt=0	265228 (259.0 cycles/block)
idct2d_16x8	N=8, L=1, scalingOpt=0	272 (272.0 cycles/block)
idct2d_16x8	N=8, L=32, scalingOpt=0	8240 (257.5 cycles/block)
idct2d_16x8	N=8, L=1024, scalingOpt=0	263183 (257.0 cycles/block)
dctf	N=32	240 (cycles)
dctf	N=64	477 (cycles)
FFT power spectrum functions		
fft_spectrum16x32	N=2[mode=0 bexp=-1]	112 (0.02 pts/cycle)
fft_spectrum16x32	N=4[mode=0 bexp=-1]	130 (0.03 pts/cycle)
fft_spectrum16x32	N=8[mode=0 bexp=-1]	171 (0.05 pts/cycle)
fft_spectrum16x32	N=16[mode=0 bexp=-1]	249 (0.06 pts/cycle)
fft_spectrum16x32	N=32[mode=0 bexp=-1]	393 (0.08 pts/cycle)
fft_spectrum16x32	N=64[mode=0 bexp=-1]	682 (0.09 pts/cycle)
fft_spectrum16x32	N=128[mode=0 bexp=-1]	1257 (0.10 pts/cycle)
fft_spectrum16x32	N=256[mode=0 bexp=-1]	2482 (0.10 pts/cycle)
fft_spectrum16x32	N=512[mode=0 bexp=-1]	4928 (0.10 pts/cycle)
fft_spectrum16x32	N=2048[mode=0 bexp=-1]	19617 (0.10 pts/cycle)
fft_spectrum16x32	N=4096[mode=0 bexp=-1]	39201 (0.10 pts/cycle)
fft_spectrum16x32	N=8192[mode=0 bexp=-1]	78369 (0.10 pts/cycle)
fft_spectrum16x32	N=16384[mode=0 bexp=-1]	156705 (0.10 pts/cycle)
fft_spectrum16x32	N=32768[mode=0 bexp=-1]	313378 (0.10 pts/cycle)
fft_spectrum16x32	N=65536[mode=0 bexp=-1]	626722 (0.10 pts/cycle)
fft_spectrum16x32	N=1024[mode=0 bexp=-1]	9826 (0.10 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
fft_spectrum16x32	N=2[mode=1 bexp=-1]	111 (0.02 pts/cycle)
fft_spectrum16x32	N=4[mode=1 bexp=-1]	190 (0.02 pts/cycle)
fft_spectrum16x32	N=8[mode=1 bexp=-1]	207 (0.04 pts/cycle)
fft_spectrum16x32	N=16[mode=1 bexp=-1]	249 (0.06 pts/cycle)
fft_spectrum16x32	N=32[mode=1 bexp=-1]	325 (0.10 pts/cycle)
fft_spectrum16x32	N=64[mode=1 bexp=-1]	470 (0.14 pts/cycle)
fft_spectrum16x32	N=128[mode=1 bexp=-1]	758 (0.17 pts/cycle)
fft_spectrum16x32	N=256[mode=1 bexp=-1]	1334 (0.19 pts/cycle)
fft_spectrum16x32	N=512[mode=1 bexp=-1]	2559 (0.20 pts/cycle)
fft_spectrum16x32	N=2048[mode=1 bexp=-1]	9902 (0.21 pts/cycle)
fft_spectrum16x32	N=4096[mode=1 bexp=-1]	19695 (0.21 pts/cycle)
fft_spectrum16x32	N=8192[mode=1 bexp=-1]	39278 (0.21 pts/cycle)
fft_spectrum16x32	N=16384[mode=1 bexp=-1]	78447 (0.21 pts/cycle)
fft_spectrum16x32	N=32768[mode=1 bexp=-1]	156782 (0.21 pts/cycle)
fft_spectrum16x32	N=65536[mode=1 bexp=-1]	313455 (0.21 pts/cycle)
fft_spectrum16x32	N=1024[mode=1 bexp=-1]	5006 (0.20 pts/cycle)
fft_spectrum16x32	N=2[mode=0 bexp=-1 inplace]	112 (0.02 pts/cycle)
fft_spectrum16x32	N=4[mode=0 bexp=-1 inplace]	128 (0.03 pts/cycle)
fft_spectrum16x32	N=8[mode=0 bexp=-1 inplace]	170 (0.05 pts/cycle)
fft_spectrum16x32	N=16[mode=0 bexp=-1 inplace]	247 (0.06 pts/cycle)
fft_spectrum16x32	N=32[mode=0 bexp=-1 inplace]	392 (0.08 pts/cycle)
fft_spectrum16x32	N=64[mode=0 bexp=-1 inplace]	680 (0.09 pts/cycle)
fft_spectrum16x32	N=128[mode=0 bexp=-1 inplace]	1256 (0.10 pts/cycle)
fft_spectrum16x32	N=256[mode=0 bexp=-1 inplace]	2480 (0.10 pts/cycle)
fft_spectrum16x32	N=512[mode=0 bexp=-1 inplace]	4929 (0.10 pts/cycle)
fft_spectrum16x32	N=2048[mode=0 bexp=-1 inplace]	19616 (0.10 pts/cycle)
fft_spectrum16x32	N=4096[mode=0 bexp=-1 inplace]	39200 (0.10 pts/cycle)
fft_spectrum16x32	N=8192[mode=0 bexp=-1 inplace]	78368 (0.10 pts/cycle)
fft_spectrum16x32	N=16384[mode=0 bexp=-1 inplace]	156704 (0.10 pts/cycle)
fft_spectrum16x32	N=32768[mode=0 bexp=-1 inplace]	313376 (0.10 pts/cycle)
fft_spectrum16x32	N=65536[mode=0 bexp=-1 inplace]	626720 (0.10 pts/cycle)
fft_spectrum16x32	N=1024[mode=0 bexp=-1 inplace]	9824 (0.10 pts/cycle)
fft_spectrum16x32	N=2[mode=1 bexp=-1 inplace]	111 (0.02 pts/cycle)
fft_spectrum16x32	N=4[mode=1 bexp=-1 inplace]	189 (0.02 pts/cycle)
fft_spectrum16x32	N=8[mode=1 bexp=-1 inplace]	206 (0.04 pts/cycle)
fft_spectrum16x32	N=16[mode=1 bexp=-1 inplace]	249 (0.06 pts/cycle)
fft_spectrum16x32	N=32[mode=1 bexp=-1 inplace]	326 (0.10 pts/cycle)
fft_spectrum16x32	N=64[mode=1 bexp=-1 inplace]	471 (0.14 pts/cycle)
fft_spectrum16x32	N=128[mode=1 bexp=-1 inplace]	759 (0.17 pts/cycle)
fft_spectrum16x32	N=256[mode=1 bexp=-1 inplace]	1335 (0.19 pts/cycle)
fft_spectrum16x32	N=512[mode=1 bexp=-1 inplace]	2559 (0.20 pts/cycle)
fft_spectrum16x32	N=2048[mode=1 bexp=-1 inplace]	9903 (0.21 pts/cycle)
fft_spectrum16x32	N=4096[mode=1 bexp=-1 inplace]	19695 (0.21 pts/cycle)
fft_spectrum16x32	N=8192[mode=1 bexp=-1 inplace]	39279 (0.21 pts/cycle)
fft_spectrum16x32	N=16384[mode=1 bexp=-1 inplace]	78447 (0.21 pts/cycle)
fft_spectrum16x32	N=32768[mode=1 bexp=-1 inplace]	156783 (0.21 pts/cycle)
fft_spectrum16x32	N=65536[mode=1 bexp=-1 inplace]	313455 (0.21 pts/cycle)
fft_spectrum16x32	N=1024[mode=1 bexp=-1 inplace]	5007 (0.20 pts/cycle)
fft_spectrum32x32	N=2[mode=0 bexp=-1]	135 (0.01 pts/cycle)
fft_spectrum32x32	N=4[mode=0 bexp=-1]	176 (0.02 pts/cycle)
fft_spectrum32x32	N=8[mode=0 bexp=-1]	222 (0.04 pts/cycle)
fft_spectrum32x32	N=16[mode=0 bexp=-1]	308 (0.05 pts/cycle)
fft_spectrum32x32	N=32[mode=0 bexp=-1]	474 (0.07 pts/cycle)
fft_spectrum32x32	N=64[mode=0 bexp=-1]	814 (0.08 pts/cycle)
fft_spectrum32x32	N=128[mode=0 bexp=-1]	1600 (0.08 pts/cycle)
fft_spectrum32x32	N=256[mode=0 bexp=-1]	3172 (0.08 pts/cycle)
fft_spectrum32x32	N=512[mode=0 bexp=-1]	6316 (0.08 pts/cycle)
fft_spectrum32x32	N=2048[mode=0 bexp=-1]	25180 (0.08 pts/cycle)
fft_spectrum32x32	N=4096[mode=0 bexp=-1]	50333 (0.08 pts/cycle)
fft_spectrum32x32	N=8192[mode=0 bexp=-1]	100636 (0.08 pts/cycle)
fft_spectrum32x32	N=16384[mode=0 bexp=-1]	201245 (0.08 pts/cycle)
fft_spectrum32x32	N=32768[mode=0 bexp=-1]	402460 (0.08 pts/cycle)
fft_spectrum32x32	N=65536[mode=0 bexp=-1]	804893 (0.08 pts/cycle)
fft_spectrum32x32	N=1024[mode=0 bexp=-1]	12605 (0.08 pts/cycle)
fft_spectrum32x32	N=2[mode=1 bexp=-1]	135 (0.01 pts/cycle)
fft_spectrum32x32	N=4[mode=1 bexp=-1]	241 (0.02 pts/cycle)
fft_spectrum32x32	N=8[mode=1 bexp=-1]	283 (0.03 pts/cycle)
fft_spectrum32x32	N=16[mode=1 bexp=-1]	327 (0.05 pts/cycle)
fft_spectrum32x32	N=32[mode=1 bexp=-1]	414 (0.08 pts/cycle)
fft_spectrum32x32	N=64[mode=1 bexp=-1]	579 (0.11 pts/cycle)
fft_spectrum32x32	N=128[mode=1 bexp=-1]	920 (0.14 pts/cycle)
fft_spectrum32x32	N=256[mode=1 bexp=-1]	1704 (0.15 pts/cycle)
fft_spectrum32x32	N=512[mode=1 bexp=-1]	3275 (0.16 pts/cycle)
fft_spectrum32x32	N=2048[mode=1 bexp=-1]	12700 (0.16 pts/cycle)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
fft_spectrum32x32	N=4096[mode=1 bexp=-1]	25260 (0.16 pts/cycle)
fft_spectrum32x32	N=8192[mode=1 bexp=-1]	50380 (0.16 pts/cycle)
fft_spectrum32x32	N=16384[mode=1 bexp=-1]	100615 (0.16 pts/cycle)
fft_spectrum32x32	N=32768[mode=1 bexp=-1]	201095 (0.16 pts/cycle)
fft_spectrum32x32	N=65536[mode=1 bexp=-1]	402055 (0.16 pts/cycle)
fft_spectrum32x32	N=1024[mode=1 bexp=-1]	6419 (0.16 pts/cycle)
fft_spectrum32x32	N=2[mode=0 bexp=-1 inplace]	135 (0.01 pts/cycle)
fft_spectrum32x32	N=4[mode=0 bexp=-1 inplace]	176 (0.02 pts/cycle)
fft_spectrum32x32	N=8[mode=0 bexp=-1 inplace]	222 (0.04 pts/cycle)
fft_spectrum32x32	N=16[mode=0 bexp=-1 inplace]	308 (0.05 pts/cycle)
fft_spectrum32x32	N=32[mode=0 bexp=-1 inplace]	474 (0.07 pts/cycle)
fft_spectrum32x32	N=64[mode=0 bexp=-1 inplace]	814 (0.08 pts/cycle)
fft_spectrum32x32	N=128[mode=0 bexp=-1 inplace]	1600 (0.08 pts/cycle)
fft_spectrum32x32	N=256[mode=0 bexp=-1 inplace]	3172 (0.08 pts/cycle)
fft_spectrum32x32	N=512[mode=0 bexp=-1 inplace]	6316 (0.08 pts/cycle)
fft_spectrum32x32	N=2048[mode=0 bexp=-1 inplace]	25180 (0.08 pts/cycle)
fft_spectrum32x32	N=4096[mode=0 bexp=-1 inplace]	50332 (0.08 pts/cycle)
fft_spectrum32x32	N=8192[mode=0 bexp=-1 inplace]	100636 (0.08 pts/cycle)
fft_spectrum32x32	N=16384[mode=0 bexp=-1 inplace]	201244 (0.08 pts/cycle)
fft_spectrum32x32	N=32768[mode=0 bexp=-1 inplace]	402460 (0.08 pts/cycle)
fft_spectrum32x32	N=65536[mode=0 bexp=-1 inplace]	804892 (0.08 pts/cycle)
fft_spectrum32x32	N=1024[mode=0 bexp=-1 inplace]	12604 (0.08 pts/cycle)
fft_spectrum32x32	N=2[mode=1 bexp=-1 inplace]	134 (0.01 pts/cycle)
fft_spectrum32x32	N=4[mode=1 bexp=-1 inplace]	241 (0.02 pts/cycle)
fft_spectrum32x32	N=8[mode=1 bexp=-1 inplace]	282 (0.03 pts/cycle)
fft_spectrum32x32	N=16[mode=1 bexp=-1 inplace]	327 (0.05 pts/cycle)
fft_spectrum32x32	N=32[mode=1 bexp=-1 inplace]	413 (0.08 pts/cycle)
fft_spectrum32x32	N=64[mode=1 bexp=-1 inplace]	579 (0.11 pts/cycle)
fft_spectrum32x32	N=128[mode=1 bexp=-1 inplace]	919 (0.14 pts/cycle)
fft_spectrum32x32	N=256[mode=1 bexp=-1 inplace]	1704 (0.15 pts/cycle)
fft_spectrum32x32	N=512[mode=1 bexp=-1 inplace]	3274 (0.16 pts/cycle)
fft_spectrum32x32	N=2048[mode=1 bexp=-1 inplace]	12699 (0.16 pts/cycle)
fft_spectrum32x32	N=4096[mode=1 bexp=-1 inplace]	25259 (0.16 pts/cycle)
fft_spectrum32x32	N=8192[mode=1 bexp=-1 inplace]	50379 (0.16 pts/cycle)
fft_spectrum32x32	N=16384[mode=1 bexp=-1 inplace]	100614 (0.16 pts/cycle)
fft_spectrum32x32	N=32768[mode=1 bexp=-1 inplace]	201094 (0.16 pts/cycle)
fft_spectrum32x32	N=65536[mode=1 bexp=-1 inplace]	402055 (0.16 pts/cycle)
fft_spectrum32x32	N=1024[mode=1 bexp=-1 inplace]	6418 (0.16 pts/cycle)
fft_spectrumf	N=2[mode=0]	107 (0.02 pts/cycle)
fft_spectrumf	N=4[mode=0]	138 (0.03 pts/cycle)
fft_spectrumf	N=8[mode=0]	225 (0.04 pts/cycle)
fft_spectrumf	N=16[mode=0]	362 (0.04 pts/cycle)
fft_spectrumf	N=32[mode=0]	638 (0.05 pts/cycle)
fft_spectrumf	N=64[mode=0]	1190 (0.05 pts/cycle)
fft_spectrumf	N=128[mode=0]	2294 (0.06 pts/cycle)
fft_spectrumf	N=256[mode=0]	4576 (0.06 pts/cycle)
fft_spectrumf	N=512[mode=0]	9140 (0.06 pts/cycle)
fft_spectrumf	N=2048[mode=0]	36525 (0.06 pts/cycle)
fft_spectrumf	N=4096[mode=0]	73037 (0.06 pts/cycle)
fft_spectrumf	N=8192[mode=0]	146061 (0.06 pts/cycle)
fft_spectrumf	N=16384[mode=0]	292109 (0.06 pts/cycle)
fft_spectrumf	N=32768[mode=0]	584205 (0.06 pts/cycle)
fft_spectrumf	N=65536[mode=0]	1168397 (0.06 pts/cycle)
fft_spectrumf	N=1024[mode=0]	18268 (0.06 pts/cycle)
fft_spectrumf	N=2[mode=1]	106 (0.02 pts/cycle)
fft_spectrumf	N=4[mode=1]	201 (0.02 pts/cycle)
fft_spectrumf	N=8[mode=1]	237 (0.03 pts/cycle)
fft_spectrumf	N=16[mode=1]	319 (0.05 pts/cycle)
fft_spectrumf	N=32[mode=1]	456 (0.07 pts/cycle)
fft_spectrumf	N=64[mode=1]	732 (0.09 pts/cycle)
fft_spectrumf	N=128[mode=1]	1284 (0.10 pts/cycle)
fft_spectrumf	N=256[mode=1]	2388 (0.11 pts/cycle)
fft_spectrumf	N=512[mode=1]	4670 (0.11 pts/cycle)
fft_spectrumf	N=2048[mode=1]	18363 (0.11 pts/cycle)
fft_spectrumf	N=4096[mode=1]	36619 (0.11 pts/cycle)
fft_spectrumf	N=8192[mode=1]	73131 (0.11 pts/cycle)
fft_spectrumf	N=16384[mode=1]	146155 (0.11 pts/cycle)
fft_spectrumf	N=32768[mode=1]	292203 (0.11 pts/cycle)
fft_spectrumf	N=65536[mode=1]	584299 (0.11 pts/cycle)
fft_spectrumf	N=1024[mode=1]	9235 (0.11 pts/cycle)
fft_spectrumf	N=2[mode=0 inplace]	107 (0.02 pts/cycle)
fft_spectrumf	N=4[mode=0 inplace]	138 (0.03 pts/cycle)
fft_spectrumf	N=8[mode=0 inplace]	225 (0.04 pts/cycle)
fft_spectrumf	N=16[mode=0 inplace]	362 (0.04 pts/cycle)

Function name	Invocation parameters	Cycles Measurements RG2018.9, HiFi4 with VFPU, bd5
fft_spectrumf	N=32[mode=0 inplace]	638 (0.05 pts/cycle)
fft_spectrumf	N=64[mode=0 inplace]	1190 (0.05 pts/cycle)
fft_spectrumf	N=128[mode=0 inplace]	2294 (0.06 pts/cycle)
fft_spectrumf	N=256[mode=0 inplace]	4576 (0.06 pts/cycle)
fft_spectrumf	N=512[mode=0 inplace]	9140 (0.06 pts/cycle)
fft_spectrumf	N=2048[mode=0 inplace]	36524 (0.06 pts/cycle)
fft_spectrumf	N=4096[mode=0 inplace]	73036 (0.06 pts/cycle)
fft_spectrumf	N=8192[mode=0 inplace]	146060 (0.06 pts/cycle)
fft_spectrumf	N=16384[mode=0 inplace]	292108 (0.06 pts/cycle)
fft_spectrumf	N=32768[mode=0 inplace]	584204 (0.06 pts/cycle)
fft_spectrumf	N=65536[mode=0 inplace]	1168396 (0.06 pts/cycle)
fft_spectrumf	N=1024[mode=0 inplace]	18268 (0.06 pts/cycle)
fft_spectrumf	N=2[mode=1 inplace]	106 (0.02 pts/cycle)
fft_spectrumf	N=4[mode=1 inplace]	201 (0.02 pts/cycle)
fft_spectrumf	N=8[mode=1 inplace]	237 (0.03 pts/cycle)
fft_spectrumf	N=16[mode=1 inplace]	319 (0.05 pts/cycle)
fft_spectrumf	N=32[mode=1 inplace]	456 (0.07 pts/cycle)
fft_spectrumf	N=64[mode=1 inplace]	732 (0.09 pts/cycle)
fft_spectrumf	N=128[mode=1 inplace]	1284 (0.10 pts/cycle)
fft_spectrumf	N=256[mode=1 inplace]	2388 (0.11 pts/cycle)
fft_spectrumf	N=512[mode=1 inplace]	4670 (0.11 pts/cycle)
fft_spectrumf	N=2048[mode=1 inplace]	18362 (0.11 pts/cycle)
fft_spectrumf	N=4096[mode=1 inplace]	36618 (0.11 pts/cycle)
fft_spectrumf	N=8192[mode=1 inplace]	73130 (0.11 pts/cycle)
fft_spectrumf	N=16384[mode=1 inplace]	146154 (0.11 pts/cycle)
fft_spectrumf	N=32768[mode=1 inplace]	292202 (0.11 pts/cycle)
fft_spectrumf	N=65536[mode=1 inplace]	584297 (0.11 pts/cycle)
fft_spectrumf	N=1024[mode=1 inplace]	9232 (0.11 pts/cycle)
MFCC features extraction		
logmel32x32_process	Fs: 8000; fftSize: 256; Range: 133.3-3700.0 Hz; Bands: 20; Flavor: HTK	1916 (cycles per STFT hop)
logmel32x32_process	Fs: 16000; fftSize: 512; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	2768 (cycles per STFT hop)
logmel32x32_process	Fs: 24000; fftSize: 1024; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	3409 (cycles per STFT hop)
logmel32x32_process	Fs: 32000; fftSize: 2048; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	5088 (cycles per STFT hop)
logmel32x32_process	Fs: 8000; fftSize: 256; Range: 133.3-3700.0 Hz; Bands: 40; Flavor: AUDITORY	2505 (cycles per STFT hop)
logmel32x32_process	Fs: 16000; fftSize: 512; Range: 133.3-6853.8 Hz; Bands: 40; Flavor: AUDITORY	3432 (cycles per STFT hop)
logmel32x32_process	Fs: 24000; fftSize: 1024; Range: 133.3-6853.8 Hz; Bands: 40; Flavor: AUDITORY	4353 (cycles per STFT hop)
logmel32x32_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	5167 (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	8315 (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	13145 (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	21484 (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	5203 (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	7880 (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:	11883 (cycles per STFT hop)

Function name	Invocation parameters	Cycles Measurements
		RG2018.9, HiFi4 with VFPU, bd5
	AUDITORY	
mfcc32x32_process	Fs: 32000; fftSize: 2048; Win: 30 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 40; Ceps: 13; Flavor: AUDITORY	21034 (cycles per STFT hop)
logmelf_process	Fs: 8000; fftSize: 256; Range: 133.3-3700.0 Hz; Bands: 20; Flavor: HTK	2633 (cycles per STFT hop)
logmelf_process	Fs: 16000; fftSize: 512; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	3917 (cycles per STFT hop)
logmelf_process	Fs: 24000; fftSize: 1024; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	4854 (cycles per STFT hop)
logmelf_process	Fs: 32000; fftSize: 2048; Range: 133.3-6853.8 Hz; Bands: 20; Flavor: HTK	6730 (cycles per STFT hop)
logmelf_process	Fs: 8000; fftSize: 256; Range: 133.3-3700.0 Hz; Bands: 40; Flavor: AUDITORY	3538 (cycles per STFT hop)
logmelf_process	Fs: 16000; fftSize: 512; Range: 133.3-6853.8 Hz; Bands: 40; Flavor: AUDITORY	4913 (cycles per STFT hop)
logmelf_process	Fs: 24000; fftSize: 1024; Range: 133.3-6853.8 Hz; Bands: 40; Flavor: AUDITORY	5866 (cycles per STFT hop)
logmelf_process	Fs: 32000; fftSize: 2048; Range: 133.3-6853.8 Hz; Bands: 40; Flavor: AUDITORY	7655 (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	5998 (cycles per STFT hop)
mfccf_process	Fs: 16000; fftSize: 512; Win: 25 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 20; Ceps: 13; Flavor: HTK	10561 (cycles per STFT hop)
mfccf_process	Fs: 24000; fftSize: 1024; Win: 25 ms; Hop: 10 ms; Range: 133.3-6853.8 Hz; Bands: 20; Ceps: 13; Flavor: HTK	16180 (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	29968 (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	6031 (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	9899 (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	14714 (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	27663 (cycles per STFT hop)

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 with xcc compiler and c99 as language option.

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 wil be defined by the sum of corresponding cells from the second column.

Below, we presented data for RG-2018.9 HiFi4 core with VFPU (bd5).

Object file	Code size	Data size	Symbols	
			Global	Referenced
bqriir16x16_df1_hifi4.o	1719		bqriir16x16_df1, bqriir16x16_df1_alloc, bqriir16x16_df1_init	
bqriir16x16_df2_hifi4.o	1903		bqriir16x16_df2, bqriir16x16_df2_alloc, bqriir16x16_df2_init	
bqriir32x16_df1_hifi4.o	239		bqriir32x16_df1_alloc, bqriir32x16_df1_init	
bqriir32x16_df1_process_hifi4.o	1485		bqriir32x16_df1	
bqriir32x16_df2_hifi4.o	214		bqriir32x16_df2_alloc, bqriir32x16_df2_init	
bqriir32x16_df2_process_hifi4.o	1069		bqriir32x16_df2	
bqriir32x32_df1_hifi4.o	443		bqriir32x32_df1_alloc, bqriir32x32_df1_init	
bqriir32x32_df1_process_hifi4.o	1821		bqriir32x32_df1	
bqriir32x32_df2_hifi4.o	151		bqriir32x32_df2_alloc, bqriir32x32_df2_init	
bqriir32x32_df2_process_hifi4.o	1229		bqriir32x32_df2	
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	1302		fft_spectrumf	
fft_spectrum16x32_hifi4.o	1749	24	fft_spectrum16x32	
fft_spectrum32x32_hifi4.o	2108	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	1391		vec_dot_32x16ef	
dct_16x16_cffts_hifi4.o	1754	16	fft16_16x16, NatureDSP_Signal_522	
dct_16x16_hifi4.o	1004		dct_16x16	fft16_16x16, NatureDSP_Signal_522
dct_32x16_cffts_hifi4.o	1528	16	NatureDSP_Signal_016, NatureDSP_Signal_521	
dct_32x16_hifi4.o	498		dct_32x16	NatureDSP_Signal_016, NatureDSP_Signal_521
dct_32x32_cffts_hifi4.o	1466	24	fft16_32x32, NatureDSP_Signal_520	
dct_32x32_hifi4.o	498		dct_32x32	fft16_32x32, NatureDSP_Signal_520
dct4_32x16_hifi4.o	4647		dct4_32x16	
dct4_32x32_hifi4.o	4708		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_cplxf_ie
fft_cplx_16x16_hifi4.o	329		fft_cplx16x16	NatureDSP_Signal_523, NatureDSP_Signal_524
fft_cplx_16x16_stages_scl2_r2_r3_r5_hifi4.o	5087	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	4798	96	NatureDSP_Signal_510, NatureDSP_Signal_524, NatureDSP_Signal_563, NatureDSP_Signal_566, NatureDSP_Signal_567, NatureDSP_Signal_571, NatureDSP_Signal_578	__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	4621	96	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	335		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	3951	96	NatureDSP_Signal_503, NatureDSP_Signal_519, NatureDSP_Signal_532, NatureDSP_Signal_538,	__divsi3, NatureDSP_Signal_502,

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_540, NatureDSP_Signal_549, NatureDSP_Signal_550, NatureDSP_Signal_558	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
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	3234	96	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	313		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_32x32_hifi4.o	4731	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_32x32_hifi4.o	4374	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	1159		fft_real16x16	fft_cplx16x16
fft_real_32x16_hifi4.o	389		fft_real32x16	fft_cplx32x16
fft_real_32x32_hifi4.o	927		fft_real32x32	
ifft_cplx_16x16_hifi4.o	322		ifft_cplx16x16	NatureDSP_Signal_523, NatureDSP_Signal_524
ifft_cplx_32x16_hifi4.o	333		ifft_cplx32x16	NatureDSP_Signal_518, NatureDSP_Signal_519
ifft_cplx_32x32_hifi4.o	307		ifft_cplx32x32	
ifft_real_16x16_hifi4.o	1476		ifft_real16x16	ifft_cplx16x16
ifft_real_32x16_hifi4.o	641		ifft_real32x16	NatureDSP_Signal_518, NatureDSP_Signal_519
ifft_real_32x32_hifi4.o	777		ifft_real32x32	
fft_cplx16x16_ie_hifi4.o	1638		fft_cplx16x16_ie	__divsi3, NatureDSP_Signal_340
fft_cplx32x16_ie_hifi4.o	2439		fft_cplx32x16_ie	
fft_cplx32x32_ie_hifi4.o	310		fft_cplx32x32_ie	NatureDSP_Signal_341, NatureDSP_Signal_348, NatureDSP_Signal_349, NatureDSP_Signal_363, NatureDSP_Signal_368,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_369, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_real16x16_ie_hifi4.o	644		fft_real16x16_ie	fft_cplx16x16_ie
fft_real32x16_ie_hifi4.o	565		fft_real32x16_ie	fft_cplx32x16_ie
fft_real32x32_ie_hifi4.o	500		fft_real32x32_ie	fft_cplx32x32_ie
fft_stage_inner_DFT4_16x16_ie_hifi4.o	639		NatureDSP_Signal_340	__divsi3
ifft_cplx16x16_ie_hifi4.o	1565		ifft_cplx16x16_ie	__divsi3, NatureDSP_Signal_340
ifft_cplx32x16_ie_hifi4.o	2592		ifft_cplx32x16_ie	
ifft_cplx32x32_ie_hifi4.o	310		ifft_cplx32x32_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_real16x16_ie_hifi4.o	639		ifft_real16x16_ie	ifft_cplx16x16_ie
ifft_real32x16_ie_hifi4.o	537		ifft_real32x16_ie	ifft_cplx32x16_ie
ifft_real32x32_ie_hifi4.o	415		ifft_real32x32_ie	ifft_cplx32x32_ie
fft_cplxf_ie_hifi4.o	1934	4	fft_cplxf_ie	
fft_realf_ie_hifi4.o	783		fft_realf_ie	fft_cplxf_ie
ifft_cplxf_ie_hifi4.o	2356	4	ifft_cplxf_ie	
ifft_realf_ie_hifi4.o	794		ifft_realf_ie	ifft_cplxf_ie
stereo_fft_cplx16x16_ie_hifi4.o	2085		stereo_fft_cplx16x16_ie	
stereo_fft_cplx32x16_ie_hifi4.o	605		stereo_fft_cplx32x16_ie	NatureDSP_Signal_800
stereo_fft_cplx32x32_ie_hifi4.o	951		stereo_fft_cplx32x32_ie	NatureDSP_Signal_801, NatureDSP_Signal_802
stereo_fft_cplxf_ie_hifi4.o	1183		stereo_fft_cplxf_ie	
stereo_ifft_cplx16x16_ie_hifi4.o	2043		stereo_ifft_cplx16x16_ie	
stereo_ifft_cplx32x16_ie_hifi4.o	964		stereo_ifft_cplx32x16_ie	NatureDSP_Signal_800
stereo_ifft_cplx32x32_ie_hifi4.o	1366		stereo_ifft_cplx32x32_ie	NatureDSP_Signal_801, NatureDSP_Signal_802
stereo_ifft_cplxf_ie_hifi4.o	1320		stereo_ifft_cplxf_ie	
stereo_fft_cplx32x16_ie_inner_hifi4.o	2503		NatureDSP_Signal_800	
stereo_fft_cplx32x32_ie_inner_hifi4.o	2150		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	
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_hif	514		stereo_bkfir32x32_process	

Object file	Code size	Data size	Symbols	
			Global	Referenced
i4.o				
stereo_bqriir16x16_df1_hifi4.o	141		stereo_bqriir16x16_df1_alloc, 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	383		stereo_bqriir32x16_df1_alloc, stereo_bqriir32x16_df1_init	
stereo_bqriir32x16_df1_process_hifi4.o	1757		stereo_bqriir32x16_df1	
stereo_bqriir32x32_df1_hifi4.o	808		stereo_bqriir32x32_df1_alloc, stereo_bqriir32x32_df1_init	
stereo_bqriir32x32_df1_process_hifi4.o	1184		stereo_bqriir32x32_df1	
stereo_bqriirf_df1_hifi4.o	223		stereo_bqriirf_df1_alloc, stereo_bqriirf_df1_init	
stereo_bqriirf_df1_process_hifi4.o	1711		stereo_bqriirf_df1	
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	317		cxfir32x32ep_process	
cxfir32x32_hifi4.o	267		cxfir32x32_alloc, cxfir32x32_init	
cxfir32x32_process_hifi4.o	274		cxfir32x32_process	
bkfiraf_hifi4.o	158		bkfiraf_alloc, bkfiraf_init	
bkfiraf_process_hifi4.o	684		bkfiraf_process	
bkfirf_hifi4.o	153		bkfirf_alloc, bkfirf_init	
bkfirf_process_hifi4.o	306		bkfirf_process	
cxfirf_hifi4.o	154		cxfirf_alloc, cxfirf_init	
cxfirf_process_hifi4.o	256		cxfirf_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	614		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	567		NatureDSP_Signal_194	
firdec32x32ep_D4_hifi4.o	402		NatureDSP_Signal_195	
firdec32x32ep_DX_hifi4.o	408		NatureDSP_Signal_196	

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			Global	Referenced
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
firinterpf_hifi4.o	443	12	firinterpf_alloc, firinterpf_init, firinterpf_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_convol32x16_hifi4.o	305		cxfir_convol32x16	
cxfir_convola32x16_hifi4.o	1082		cxfir_convola32x16	
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_acorra16x16_hifi4.o	279		fir_acorra16x16	NatureDSP_Signal_382
fir_acorra32x32ep_hifi4.o	178		fir_acorra32x32ep	fir_xcorra32x32ep, NatureDSP_Signal_187
fir_acorra32x32_hifi4.o	178		fir_acorra32x32	fir_xcorra32x32, 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_convol16x16_hifi4.o	675		fir_convol16x16	

Object file	Code size	Data size	Symbols	
			Global	Referenced
fir_convol32x16_hifi4.o	1355		fir_convol32x16	
fir_convol32x32ep_hifi4.o	331		fir_convol32x32ep	
fir_convol32x32_hifi4.o	439		fir_convol32x32	
fir_convola16x16_hifi4.o	312		fir_convola16x16	NatureDSP_Signal_382
fir_convola32x16_hifi4.o	339		fir_convola32x16	NatureDSP_Signal_449
fir_convola32x32ep_hifi4.o	317		fir_convola32x32ep	NatureDSP_Signal_187
fir_convola32x32_hifi4.o	295		fir_convola32x32	NatureDSP_Signal_383
fir_lacorra16x16_hifi4.o	1288		fir_lacorra16x16	
fir_lacorra32x32_hifi4.o	764		fir_lacorra32x32	
fir_lconvola16x16_hifi4.o	238		fir_lconvola16x16	NatureDSP_Signal_384
fir_lconvola32x32_hifi4.o	246		fir_lconvola32x32	NatureDSP_Signal_385
fir_lxcorra16x16_hifi4.o	235		fir_lxcorra16x16	NatureDSP_Signal_384
fir_lxcorra32x32_hifi4.o	218		fir_lxcorra32x32	NatureDSP_Signal_385
fir_xcorr16x16_hifi4.o	661		fir_xcorr16x16	
fir_xcorr32x16_hifi4.o	1049		fir_xcorr32x16	
fir_xcorr32x32ep_hifi4.o	260		fir_xcorr32x32ep	
fir_xcorr32x32_hifi4.o	343		fir_xcorr32x32	
cxfir_xcorr32x32_hifi4.o	213		cxfir_xcorr32x32	
cxfir_xcorra32x32_hifi4.o	351		cxfir_xcorra32x32	
fir_xcorra16x16_hifi4.o	285		fir_xcorra16x16	NatureDSP_Signal_382
fir_xcorra32x16_hifi4.o	291		fir_xcorra32x16	NatureDSP_Signal_449
fir_xcorra32x32ep_hifi4.o	285		fir_xcorra32x32ep	NatureDSP_Signal_187
fir_xcorra32x32_hifi4.o	275		fir_xcorra32x32	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_xcorraf_hifi4.o	427		cxfir_xcorraf	
cxfir_xcorrf_hifi4.o	236		cxfir_xcorrf	
fir_acorraf_hifi4.o	29		fir_acorraf	fir_xcorraf
fir_acorrf_hifi4.o	25		fir_acorrf	fir_xcorrf
fir_blmsf_hifi4.o	612		fir_blmsf	
cxfir_blmsf_hifi4.o	527		cxfir_blmsf	
fir_convolaf_hifi4.o	331		fir_convolaf	NatureDSP_Signal_256
fir_convolf_hifi4.o	265		fir_convolf	
fir_xcorraf_hifi4.o	246		fir_xcorraf	NatureDSP_Signal_256
fir_xcorrf_hifi4.o	252		fir_xcorrf	
raw_corrf_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	
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	751		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,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				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	176		bqciirf_df1_alloc, bqciirf_df1_init	
bqciirf_df1_process_hifi4.o	1671		bqciirf_df1	
bqriirf_df1_hifi4.o	255		bqriirf_df1_alloc, bqriirf_df1_init	
bqriirf_df1_process_hifi4.o	1660		bqriirf_df1	
bqriirf_df2t_hifi4.o	248		bqriirf_df2t_alloc, bqriirf_df2t_init	
bqriirf_df2t_process_hifi4.o	1925		bqriirf_df2t	
bqriirf_df2_hifi4.o	248		bqriirf_df2_alloc, bqriirf_df2_init	
bqriirf_df2_process_hifi4.o	1360		bqriirf_df2	
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, 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	922	4	vec_log10_32x32	NatureDSP_Signal_011
vec_log2_32x32_hifi4.o	818		vec_log2_32x32	NatureDSP_Signal_011
vec_logn_32x32_hifi4.o	922	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	1378		vec_rsqrt32x32	

Object file	Code size	Data size	Symbols	
			Global	Referenced
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	985		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, 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,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				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	2215		vec_atan2f	NatureDSP_Signal_209, NatureDSP_Signal_210, NatureDSP_Signal_241, NatureDSP_Signal_244, NatureDSP_Signal_246, NatureDSP_Signal_249
vec_atanf_hifi4.o	1818		vec_atanf	NatureDSP_Signal_209, NatureDSP_Signal_210, NatureDSP_Signal_244, NatureDSP_Signal_246
vec_cosinef_hifi4.o	1764	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	1802	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,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				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
mtx_inv2x2f_hifi4.o	99		mtx_inv2x2f, mtx_inv2x2f_getScratchSize	
mtx_inv3x3f_hifi4.o	429		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	3033		cmtx_gjelim10x10_32x32, cmtx_gjelim10x10_32x32_getScratchSize	
cmtx_gjelim2x2_32x32_hifi4.o	1041		cmtx_gjelim2x2_32x32, cmtx_gjelim2x2_32x32_getScratchSize	
cmtx_gjelim3x3_32x32_hifi4.o	1232		cmtx_gjelim3x3_32x32, cmtx_gjelim3x3_32x32_getScratchSize	
cmtx_gjelim4x4_32x32_hifi4.o	1513		cmtx_gjelim4x4_32x32, cmtx_gjelim4x4_32x32_getScratchSize	
cmtx_gjelim6x6_32x32_hifi4.o	1996		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	1207		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	2648		mtx_mpy32x32, mtx_mpy32x32_getScratchSize	
mtx_mpy8x16_fast_hifi4.o	476		mtx_mpy8x16_fast, mtx_mpy8x16_fast_getScratchSize	
mtx_mpy8x16_hifi4.o	10663		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	

Object file	Code size	Data size	Symbols	
			Global	Referenced
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	9095		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
mtx_transposef_hifi4.o	23		mtx_transposef	mtx_transpose32x32
mtx_vecmpy16x16_fast_hifi4.o	555		mtx_vecmpy16x16_fast	
mtx_vecmpy16x16_hifi4.o	1236		mtx_vecmpy16x16	
mtx_vecmpy32x32_fast_hifi4.o	338		mtx_vecmpy32x32_fast	
mtx_vecmpy32x32_hifi4.o	534		mtx_vecmpy32x32	
mtx_vecmpy8x16_fast_hifi4.o	1198		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	2677		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	153		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	122		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	287		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	287		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	

Object file	Code size	Data size	Symbols	
			Global	Referenced
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_shiftf_hifi4.o	442		vec_shiftf	
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	
inff_tbl.o		12	NatureDSP_Signal_243, NatureDSP_Signal_244, NatureDSP_Signal_245	
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	2548	68	logmel32x32_alloc, logmel32x32_init	memset, NatureDSP_Signal_806, NatureDSP_Signal_807, NatureDSP_Signal_809, vec_recip32x32
logmelf_hifi4.o	1685		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,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				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_16_tbl.o		144	cfft16_16, cifft16_16, NatureDSP_Signal_759, NatureDSP_Signal_784	
fft_cplx_twd16_32_tbl.o		192	cfft16_32, cifft16_32, NatureDSP_Signal_753, NatureDSP_Signal_778	
fft_cplx_twd16_64_tbl.o		352	cfft16_64, cifft16_64, NatureDSP_Signal_750, NatureDSP_Signal_775	
fft_cplx_twd16_128_tbl.o		592	cfft16_128, cifft16_128, NatureDSP_Signal_760, NatureDSP_Signal_785	
fft_cplx_twd16_160_tbl.o		752	cinfft16_160, cnfft16_160, NatureDSP_Signal_758, NatureDSP_Signal_783	
fft_cplx_twd16_192_tbl.o		864	cinfft16_192, cnfft16_192, NatureDSP_Signal_757, NatureDSP_Signal_782	
fft_cplx_twd16_240_tbl.o		1056	cinfft16_240, cnfft16_240, NatureDSP_Signal_755, NatureDSP_Signal_780	
fft_cplx_twd16_256_tbl.o		1136	cfft16_256, cifft16_256, NatureDSP_Signal_754, NatureDSP_Signal_779	
fft_cplx_twd16_320_tbl.o		1376	cinfft16_320, cnfft16_320	
fft_cplx_twd16_384_tbl.o		1664	cinfft16_384, cnfft16_384	
fft_cplx_twd16_480_tbl.o		2048	cinfft16_480, cnfft16_480	
fft_cplx_twd16_512_tbl.o		2144	cfft16_512, cifft16_512, NatureDSP_Signal_751, NatureDSP_Signal_776	
fft_cplx_twd16_1024_tbl.o		4224	cfft16_1024, cifft16_1024, NatureDSP_Signal_761, NatureDSP_Signal_786	
fft_cplx_twd16_2048_tbl.o		8304	cfft16_2048, cifft16_2048, NatureDSP_Signal_756, NatureDSP_Signal_781	
fft_cplx_twd16_4096_tbl.o		16528	cfft16_4096, cifft16_4096, NatureDSP_Signal_752, NatureDSP_Signal_777	
fft_real_twd16_32_tbl.o		56	rfft16_32, rifft16_32	NatureDSP_Signal_759, NatureDSP_Signal_784
fft_real_twd16_64_tbl.o		88	rfft16_64, rifft16_64	NatureDSP_Signal_753, NatureDSP_Signal_778
fft_real_twd16_128_tbl.o		152	rfft16_128, rifft16_128	NatureDSP_Signal_750, NatureDSP_Signal_775
fft_real_twd16_160_tbl.o		576	rinfft16_160, rnfft16_160	
fft_real_twd16_192_tbl.o		704	rinfft16_192, rnfft16_192	
fft_real_twd16_240_tbl.o		848	rinfft16_240, rnfft16_240	
fft_real_twd16_256_tbl.o		280	rfft16_256, rifft16_256	NatureDSP_Signal_760, NatureDSP_Signal_785
fft_real_twd16_320_tbl.o		344	rinfft16_320, rnfft16_320	NatureDSP_Signal_758, NatureDSP_Signal_783
fft_real_twd16_384_tbl.o		408	rinfft16_384, rnfft16_384	NatureDSP_Signal_757, NatureDSP_Signal_782
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, rifft16_512	NatureDSP_Signal_754, NatureDSP_Signal_779
fft_real_twd16_1024_tbl.o		1048	rfft16_1024, rifft16_1024	NatureDSP_Signal_751, NatureDSP_Signal_776
fft_real_twd16_2048_tbl.o		2072	rfft16_2048, rifft16_2048	NatureDSP_Signal_761, NatureDSP_Signal_786
fft_real_twd16_4096_tbl.o		4120	rfft16_4096, rifft16_4096	NatureDSP_Signal_756, NatureDSP_Signal_781
fft_real_twd16_8192_tbl.o		8216	rfft16_8192, rifft16_8192	NatureDSP_Signal_752, NatureDSP_Signal_777
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,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_377
fft_real_twd32_24_tbl.o		72	rinfft32_24, rnfft32_24	NatureDSP_Signal_282, NatureDSP_Signal_315
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_32_tbl.o		88	rfft32_32, rifft32_32	NatureDSP_Signal_273, NatureDSP_Signal_306
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_48_tbl.o		120	rinfft32_48, rnfft32_48	NatureDSP_Signal_283, NatureDSP_Signal_316
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, rifft32_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_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_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
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, rifft32_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_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_216_tbl.o		456	rinfft32_216, rnfft32_216	NatureDSP_Signal_289, NatureDSP_Signal_322
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, rifft32_256	NatureDSP_Signal_276, NatureDSP_Signal_309
fft_real_twd32_288_tbl.o		600	rinfft32_288, rnfft32_288	NatureDSP_Signal_291, NatureDSP_Signal_324

Object file	Code size	Data size	Symbols	
			Global	Referenced
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_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, NatureDSP_Signal_364, NatureDSP_Signal_366, NatureDSP_Signal_375
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_432_tbl.o		888	rinfft32_432, rnfft32_432	NatureDSP_Signal_294, NatureDSP_Signal_327
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, rifft32_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_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_960_tbl.o		1944	rinfft32_960, rnfft32_960	NatureDSP_Signal_301, NatureDSP_Signal_334
fft_real_twd32_1024_tbl.o		2072	rfft32_1024, rifft32_1024	NatureDSP_Signal_278, NatureDSP_Signal_311
fft_real_twd32_1152_tbl.o		2328	rinfft32_1152, rnfft32_1152	NatureDSP_Signal_303, NatureDSP_Signal_336
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_1920_tbl.o		3864	rinfft32_1920, rnfft32_1920	NatureDSP_Signal_305, NatureDSP_Signal_338
fft_real_twd32_2048_tbl.o		4120	rfft32_2048, rifft32_2048	NatureDSP_Signal_279, NatureDSP_Signal_312
fft_real_twd32_4096_tbl.o		8216	rfft32_4096, rifft32_4096	NatureDSP_Signal_280, NatureDSP_Signal_313
fft_real_twd32_8192_tbl.o		16408	rfft32_8192, rifft32_8192	NatureDSP_Signal_281,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_314
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_16_tbl.o		208	cfft32_16, cifft32_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_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_32_tbl.o		320	cfft32_32, cifft32_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_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_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_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_64_tbl.o		520	cfft32_64, cifft32_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_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_288, NatureDSP_Signal_321	NatureDSP_Signal_342, NatureDSP_Signal_346,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				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_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_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_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, 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	cfft32_128, cifft32_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_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,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				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_216_tbl.o		1896	cinfft32_216, cnfft32_216, NatureDSP_Signal_294, NatureDSP_Signal_327	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_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	cfft32_256, cifft32_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_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, NatureDSP_Signal_368,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				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_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_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, NatureDSP_Signal_418, NatureDSP_Signal_421
fft_cplx_twd32_512_tbl.o		3248	cfft32_512, cifft32_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,

Object file	Code size	Data size	Symbols	
			Global	Referenced
				NatureDSP_Signal_418, NatureDSP_Signal_421
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_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_960_tbl.o		7824	cinfft32_960, cnfft32_960, NatureDSP_Signal_305, NatureDSP_Signal_338	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_1024_tbl.o		6328	cfft32_1024, cifft32_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_2048_tbl.o		12488	cfft32_2048, cifft32_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_4096_tbl.o		24784	cfft32_4096, cifft32_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_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_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, 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
NatureDSP_Signal_complex_id.o		236	NatureDSP_Signal_annotation_scl_complex2invmag,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			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_real16x16, NatureDSP_Signal_annotation_fft_real16x16_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_spectrum16x32, 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_real16x16, NatureDSP_Signal_annotation_ifft_real16x16_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, NatureDSP_Signal_annotation_mdct_24x24, NatureDSP_Signal_annotation_mdct_32x16, NatureDSP_Signal_annotation_mdct_32x32,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_annotation_stereo_fft_cplx16x16_ie, NatureDSP_Signal_annotation_stereo_fft_cplx32x16_ie, NatureDSP_Signal_annotation_stereo_fft_cplx32x32_ie, NatureDSP_Signal_annotation_stereo_fft_cplxf_ie, NatureDSP_Signal_annotation_stereo_ifft_cplx16x16_ie, NatureDSP_Signal_annotation_stereo_ifft_cplx32x16_ie, NatureDSP_Signal_annotation_stereo_ifft_cplx32x32_ie, NatureDSP_Signal_annotation_stereo_ifft_cplxf_ie	
NatureDSP_Signal_fir_id.o		8807	NatureDSP_Signal_annotation_bkfir16x16_process, NatureDSP_Signal_annotation_bkfir24x24_process, NatureDSP_Signal_annotation_bkfir24x24p_process, NatureDSP_Signal_annotation_bkfir32x16_process, NatureDSP_Signal_annotation_bkfir32x32_process, NatureDSP_Signal_annotation_bkfir32x32ep_process, NatureDSP_Signal_annotation_bkfira16x16_process, NatureDSP_Signal_annotation_bkfira24x24_process, NatureDSP_Signal_annotation_bkfira32x16_process, NatureDSP_Signal_annotation_bkfira32x32_process, NatureDSP_Signal_annotation_bkfira32x32ep_process, NatureDSP_Signal_annotation_bkfiraf_process, NatureDSP_Signal_annotation_bkfirf_process, NatureDSP_Signal_annotation_conv2d_11x7_16x16, NatureDSP_Signal_annotation_conv2d_11x7_8x16, NatureDSP_Signal_annotation_conv2d_11x7_8x8, NatureDSP_Signal_annotation_conv2d_3x3_16x16, NatureDSP_Signal_annotation_conv2d_3x3_8x16, NatureDSP_Signal_annotation_conv2d_3x3_8x8, NatureDSP_Signal_annotation_conv2d_5x5_16x16, NatureDSP_Signal_annotation_conv2d_5x5_8x16, NatureDSP_Signal_annotation_conv2d_5x5_8x8, NatureDSP_Signal_annotation_cxfir_blms32x32, NatureDSP_Signal_annotation_cxfir_blmsf, NatureDSP_Signal_annotation_cxfir_convol32x16, NatureDSP_Signal_annotation_cxfir_convola32x16, NatureDSP_Signal_annotation_cxfir_xcorr32x32, NatureDSP_Signal_annotation_cxfir_xcorra32x32, NatureDSP_Signal_annotation_cxfir_xcorraf, NatureDSP_Signal_annotation_cxfir_xcorrf, NatureDSP_Signal_annotation_cxfir16x16_process, NatureDSP_Signal_annotation_cxfir24x24_process, NatureDSP_Signal_annotation_cxfir32x16_process, NatureDSP_Signal_annotation_cxfir32x32_process, NatureDSP_Signal_annotation_cxfir32x32ep_process, NatureDSP_Signal_annotation_cxfirf_process, NatureDSP_Signal_annotation_fir_acorr16x16, NatureDSP_Signal_annotation_fir_acorr24x24,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			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_convol16x16, NatureDSP_Signal_annotation_fir_convol24x24, NatureDSP_Signal_annotation_fir_convol32x16, NatureDSP_Signal_annotation_fir_convol32x32, NatureDSP_Signal_annotation_fir_convol32x32ep, 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_convolaf, 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, NatureDSP_Signal_annotation_firinterp32x16_process, NatureDSP_Signal_annotation_firinterp32x32_process, NatureDSP_Signal_annotation_firinterp32x32ep_process,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_annotation_firinterpf_process, NatureDSP_Signal_annotation_stereo_bkfir16x16_process, NatureDSP_Signal_annotation_stereo_bkfir32x32_process, NatureDSP_Signal_annotation_stereo_bkfirf_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		2124	NatureDSP_Signal_annotation_bqciirf_df1, NatureDSP_Signal_annotation_bqriir16x16_df1, NatureDSP_Signal_annotation_bqriir16x16_df2, NatureDSP_Signal_annotation_bqriir24x24_df1, NatureDSP_Signal_annotation_bqriir24x24_df2, NatureDSP_Signal_annotation_bqriir32x16_df1, NatureDSP_Signal_annotation_bqriir32x16_df2, NatureDSP_Signal_annotation_bqriir32x32_df1, NatureDSP_Signal_annotation_bqriir32x32_df2, NatureDSP_Signal_annotation_bqriirf_df1, NatureDSP_Signal_annotation_bqriirf_df2, NatureDSP_Signal_annotation_bqriirf_df2t, 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_bqriir32x16_df1, NatureDSP_Signal_annotation_stereo_bqriir32x32_df1, NatureDSP_Signal_annotation_stereo_bqriirf_df1	
NatureDSP_Signal_math_id.o		4963	NatureDSP_Signal_annotation_scl_antilog10_24x24, NatureDSP_Signal_annotation_scl_antilog10_32x32, NatureDSP_Signal_annotation_scl_antilog10f, NatureDSP_Signal_annotation_scl_antilog2_24x24, 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,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			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_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_24 x24, NatureDSP_Signal_annotation_vec_antilog10_32 x32, NatureDSP_Signal_annotation_vec_antilog10f, NatureDSP_Signal_annotation_vec_antilog2_24x 24, NatureDSP_Signal_annotation_vec_antilog2_32x 32, NatureDSP_Signal_annotation_vec_antilog2f, NatureDSP_Signal_annotation_vec_antilogn_24x 24, NatureDSP_Signal_annotation_vec_antilogn_32x 32, 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_ 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_recip16x16,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_annotation_vec_recip24x24, NatureDSP_Signal_annotation_vec_recip32x32, NatureDSP_Signal_annotation_vec_recip64x64, NatureDSP_Signal_annotation_vec_relu32x32, NatureDSP_Signal_annotation_vec_reluf, 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		1836	NatureDSP_Signal_annotation_cmtx_gjelim10x10 _32x32, NatureDSP_Signal_annotation_cmtx_gjelim2x2_3 2x32, NatureDSP_Signal_annotation_cmtx_gjelim3x3_3 2x32, NatureDSP_Signal_annotation_cmtx_gjelim4x4_3 2x32, NatureDSP_Signal_annotation_cmtx_gjelim6x6_3 2x32, NatureDSP_Signal_annotation_cmtx_gjelim8x8_3 2x32, NatureDSP_Signal_annotation_cmtx_inv10x10_32 x32, NatureDSP_Signal_annotation_cmtx_inv2x2_32x3 2, NatureDSP_Signal_annotation_cmtx_inv3x3_32x3 2, NatureDSP_Signal_annotation_cmtx_inv4x4_32x3 2, NatureDSP_Signal_annotation_cmtx_inv6x6_32x3 2, NatureDSP_Signal_annotation_cmtx_inv8x8_32x3 2, NatureDSP_Signal_annotation_mtx_gjelim10x10_ 32x32, NatureDSP_Signal_annotation_mtx_gjelim2x2_32 x32, NatureDSP_Signal_annotation_mtx_gjelim3x3_32 x32, NatureDSP_Signal_annotation_mtx_gjelim4x4_32 x32, NatureDSP_Signal_annotation_mtx_gjelim6x6_32 x32, NatureDSP_Signal_annotation_mtx_gjelim8x8_32 x32, NatureDSP_Signal_annotation_mtx_inv10x10_32x 32, 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,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			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, 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_transposef, NatureDSP_Signal_annotation_mtx_transposef_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		2861	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_dot16x16, NatureDSP_Signal_annotation_vec_dot16x16_fast, NatureDSP_Signal_annotation_vec_dot32x16,	

Object file	Code size	Data size	Symbols	
			Global	Referenced
			NatureDSP_Signal_annotation_vec_dot32x16_fast, NatureDSP_Signal_annotation_vec_dot32x32, NatureDSP_Signal_annotation_vec_dot32x32_fast, NatureDSP_Signal_annotation_vec_dot64x32, NatureDSP_Signal_annotation_vec_dot64x32_fast, NatureDSP_Signal_annotation_vec_dot64x64, NatureDSP_Signal_annotation_vec_dot64x64_fast, NatureDSP_Signal_annotation_vec_dot64x64i, NatureDSP_Signal_annotation_vec_dot64x64i_fast, NatureDSP_Signal_annotation_vec_dotf, NatureDSP_Signal_annotation_vec_mac_32x16ef, NatureDSP_Signal_annotation_vec_max16x16, NatureDSP_Signal_annotation_vec_max16x16_fast, NatureDSP_Signal_annotation_vec_max32x32, NatureDSP_Signal_annotation_vec_max32x32_fast, NatureDSP_Signal_annotation_vec_maxf, NatureDSP_Signal_annotation_vec_min16x16, NatureDSP_Signal_annotation_vec_min16x16_fast, NatureDSP_Signal_annotation_vec_min32x32, NatureDSP_Signal_annotation_vec_min32x32_fast, NatureDSP_Signal_annotation_vec_minf, NatureDSP_Signal_annotation_vec_mul_32x16ef, NatureDSP_Signal_annotation_vec_power16x16, NatureDSP_Signal_annotation_vec_power16x16_fast, NatureDSP_Signal_annotation_vec_power32x32, NatureDSP_Signal_annotation_vec_power32x32_fast, NatureDSP_Signal_annotation_vec_powerf, NatureDSP_Signal_annotation_vec_scale_sf, NatureDSP_Signal_annotation_vec_scale16x16, NatureDSP_Signal_annotation_vec_scale16x16_fast, NatureDSP_Signal_annotation_vec_scale32x24_fast, NatureDSP_Signal_annotation_vec_scale32x32, NatureDSP_Signal_annotation_vec_scale32x32_fast, NatureDSP_Signal_annotation_vec_scalef, NatureDSP_Signal_annotation_vec_shift16x16, NatureDSP_Signal_annotation_vec_shift16x16_fast, NatureDSP_Signal_annotation_vec_shift32x32, NatureDSP_Signal_annotation_vec_shift32x32_fast, NatureDSP_Signal_annotation_vec_shiftf	
NatureDSP_Signal_mfcc_id.o		384	NatureDSP_Signal_annotation_logmel32x32_process, NatureDSP_Signal_annotation_logmelf_process, NatureDSP_Signal_annotation_mfcc32x32_process, NatureDSP_Signal_annotation_mfccf_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	2548	68	logmel32x32_alloc, logmel32x32_init	memset, NatureDSP_Signal_806, NatureDSP_Signal_807, NatureDSP_Signal_809, vec_recip32x32
logmel32x32_process_hifi4.o	3218	42	logmel32x32_getScratchSize, logmel32x32_process	NatureDSP_Signal_010, NatureDSP_Signal_806, NatureDSP_Signal_807, vec_bexp32, vec_shift32x32
logmel_common_hifi4.o	302		NatureDSP_Signal_806, NatureDSP_Signal_807, NatureDSP_Signal_809	vec_recip32x32
logmelf_hifi4.o	1685		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

Object file	Code size	Data size	Symbols	
			Global	Referenced
mfcc32x32_compDctMatrix_hifi4.o	1234		NatureDSP_Signal_810	NatureDSP_Signal_816, scl_sqrt64x32, vec_recip32x32
mfcc32x32_compLifterCoefs_hifi4.o	1063		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	797		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	719		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