

1 Benchmarks

1.1 Stencils

1.1.1 Jacobi-1d-imper

	classic	my_version	diff
LUT	3875	1378	−67%
FF	1970	1005	−49%
DSP	3	3	0%
BRAM	0	0	0%
SRL	64	0	−100%
Cycles	37×10^6	24×10^6	−35%
Frequency	114MHz	134MHz	+18%

1.1.2 Seidel-2d

	classic	my_version	diff
LUT	4075	1586	−61%
FF	2074	1119	−46%
DSP	7	7	0%
BRAM	0	0	0%
SRL	65	0	−100%
Cycles	1.35×10^9	1.24×10^9	−8%
Frequency	119MHz	146MHz	+23%

1.1.3 Fdtd-2d

	classic	my_version	diff
LUT	1398	1477	+6%
FF	1435	1556	+8%
DSP	17	17	0%
BRAM	0	0	0%
SRL	0	0	0%
Cycles	3.65×10^9	3.25×10^9	−11%
Frequency	116MHz	117MHz	+1%

1.1.4 Jacobi-2d-imper

	classic	my_version	diff
LUT	1118	1743	+55%
FF	1052	1072	+2%
DSP	18	7	−61%
BRAM	0	0	0%
SRL	0	0	0%
Cycles	717×10^6	677×10^6	−6%
Frequency	111MHz	79MHz	−29%