

RVT AND HVT

COMPILE			
Report	Parameter	NLDM	CCS
report_cell	Top Module cells	5453	5317
get_cells -hierarchical	Total Cells		
report_reference	No of Refernces	79	77
report_qor	Levels of Logic	36.00	33.00
	Critical Path Length	5.72	5.33
	Critical Path Slack	-0.81	-0.36
	Total Negative Slack	18.85	-2.80
	No. of Violating Paths	53.00	11.00
report_area	Combinational Area	20871.575957	21446.449618
	Sequential Area	1827.803657	1835.427986
	Buf/Inv Area	10926.667481	11072.546111
	Net Interconnect Area	9290.181642	8698.929529
	Total area (µm²)	41088.425080	41217.925257
report_power	Internal Power (µW)	976.7583	1.0009E+03
	Switching Power (µW)	6.3517	5.5400
	Total Dynamic Power (mW)	983.1182	1.0065
	Leakage Power (pW)	4.1695E+07	8.5468E+08
	Total Power (µW)	1.0248E+03	1.8611E+03
	SETUP		
report_timing	Data Required Time	5.91	5.98
	Data Arrival Time	-6.72	-6.33
	Slack(max) - Setup	-0.81	-0.36
	HOLD		
	Data Required Time	-0.05	-0.02
	Data Arrival Time	-0.18	-0.26
	Slack(min) - Hold	0.24	0.28
report_threshold_voltage_group	HVT		
	Cell Count	1653 (17.46%)	1554 (16.52%)
	Area	7365.86 (23.16%)	7415.16 (22.80%)
	Leakage (µW)	3.955uW (9.49%)	171.332uW (20.05%)
	RVT		
	Cell Count	7815 (82.54%)	7852 (83.48%)
	Area	24432.39 (76.84%)	25103.84 (77.20%)
	Leakage (µW)	37.740uW (90.51%)	683.344uW (79.95%)
report_clock_tree	No of Sinks	1599	1599
	Clock Global Skew	0.022	0.009
	Longest Path Delay	0.124	0.109
	Shortest Path Delay	0.102	0.100

In Compile, CCS is better in terms of timing slightly,
But more area and power consumption
CCS chose more HVT than NLDM

RVT AND HVT

COMPILE_ULTRA			
Report	Parameter	NLDM	CCS
report_cell	Top Module cells	8338	6833
get_cells -hierarchical	Total Cells		
report_reference	No of Refernces	89	47
report_qor	Levels of Logic	15.00	41.00
	Critical Path Length	4.92	4.92
	Critical Path Slack	0.00	0.00
	Total Negative Slack	0.00	0.00
	No. of Violating Paths	0.00	0.00
report_area	Combinational Area	24732.023257	21768.450082
	Sequential Area	1560.190026	945.161542
	Buf/Inv Area	10841.020944	10803.661784
	Net Interconnect Area	11337.617419	12963.716499
	Total area (µm²)	46910.661620	45535.828365
report_power	Internal Power (µW)	991.1247	972.9865
	Switching Power (µW)	5.6776	5.4189
	Total Dynamic Power (mW)	996.8053	978.4088
	Leakage Power (pW)	5.0851E+07	8.6219E+08
	Total Power (µW)	1.0477E+03	1.8406E+03
	SETUP		
report_timing	Data Required Time	5.92	5.92
	Data Arrival Time	-5.92	-5.92
	Slack(max) - Setup	0.00	0.00
	HOLD		
	Data Required Time	0.06	-0.02
	Data Arrival Time	-0.28	-0.26
	Slack(min) - Hold	0.22	0.28
report_threshold_voltage_group	HVT		
	Cell Count	4872 (44.01%)	145 (1.48%)
	Area	11347.78 (31.90%)	383.00 (1.18%)
	Leakage (µW)	2.780uW (5.47%)	10.360uW (1.20%)
	RVT		
	Cell Count	6198 (55.99%)	9630 (98.52%)
	Area	24225.26 (68.10%)	32189.12 (98.82%)
	Leakage (µW)	48.071uW (94.53%)	851.826uW (98.80%)
report_clock_tree	No of Sinks	1582	1582
	Clock Global Skew	0.224	0.009
	Longest Path Delay	1.247	0.109
	Shortest Path Delay	1.023	0.100

With Compile_ultra, CCS is good in terms of timing and area,
But more power consumption
NLDM chose more HVT than CCS