

LVT AND RVT

COMPILE			
Report	Parameter	NLDM	CCS
report_cell	Top Module cells	5343	5458
get_cells -hierarchical	Total Cells	8598	9327
report_reference	No of References	71	63
report_qor	Levels of Logic	70.00	60.00
	Critical Path Length	6.36	4.93
	Critical Path Slack	-1.43	0.00
	Total Negative Slack	-13.62	0.00
	No. of Violating Paths	19.00	0.00
report_area	Combinational Area	18679.329838	20642.592267
	Sequential Area	1580.521542	2197.074930
	Buf/Inv Area	10927.684057	10911.418844
	Net Interconnect Area	8977.222396	8570.823434
	Total area (μm^2)	38584.236291	40124.834545
report_power	Internal Power (μW)	1.7865E+03	1.3476E+03
	Switching Power (μW)	6.6952	5.8677
	Total Dynamic Power (mW)	3.1202	1.3535
	Leakage Power (pW)	3.1202E+09	8.3429E+08
	Total Power (μW)	4.9134E+03	2.1878E+03
report_timing	SETUP		
	Data Required Time	5.93	5.93
	Data Arrival Time	-7.36	-5.93
	Slack(max) - Setup	-1.43	0.00
	HOLD		
	Data Required Time	-0.02	-0.02
	Data Arrival Time	-0.11	-0.19
report_threshold_voltage_group	LVT		
	Cell Count	7619 (89.92%)	7768 (84.23%)
	Area	26258.41 (88.69%)	23872.76 (75.66%)
	Leakage (μW)	3.114 (99.80%)	660.927 (79.22%)
	RVT		
	Cell Count	854 (10.08%)	1454 (15.77%)
	Area	3348.60 (11.31%)	7681.25 (24.34%)
report_clock_tree	Leakage (μW)	6.150 (0.20%)	173.367 (20.78%)
	No of Sinks	1599	1599
	Clock Global Skew	0.002	0.004
	Longest Path Delay	0.125	0.113
	Shortest Path Delay	0.123	0.109

In compile, ccs is better than nldm in terms of timing and power but a slightly higher in area
NLDM chose more LVT than CCS

LVT AND RVT

COMPILE_ULTRA			
Report	Parameter	NLDM	CCS
report_cell	Top Module cells	7930	6387
get_cells -hierarchical	Total Cells	10841	9083
report_reference	No of References	98	39
report_qor	Levels of Logic	36.00	43.00
	Critical Path Length	4.92	4.93
	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	23998.309593	19846.359044
	Sequential Area	1639.482953	862.564742
	Buf/Inv Area	10804.932503	10799.595480
	Net Interconnect Area	11317.279926	12944.777122
	Total area (μm^2)	46120.522022	43590.731646
report_power	Internal Power (μW)	1.1339E+03	1.8953E+03
	Switching Power (μW)	6.5549	5.6572
	Total Dynamic Power (mW)	1.1404	1.9009
	Leakage Power (pW)	4.7114E+08	8.1519E+08
	Total Power (μW)	1.6116E+03	2.7161E+03
report_timing	SETUP		
	Data Required Time	5.92	5.93
	Data Arrival Time	-5.92	-5.93
	Slack(max) - Setup	0.00	0.00
	HOLD		
report_threshold_voltage_group	Data Required Time	-0.02	-0.02
	Data Arrival Time	-0.14	-0.16
	Slack(min) - Hold	0.16	0.18
	LVT		
	Cell Count	499 (4.61%)	9056 (99.72%)
report_clock_tree	Area	2375.99 (6.83%)	30607.83 (99.88%)
	Leakage (μW)	414.344 (87.94%)	813.229(99.76%)
	RVT		
	Cell Count	10336 (95.39%)	25 (0.28%)
	Area	32427.25 (93.17%)	38.12 (0.12%)
report_clock_tree	Leakage (μW)	56.797 (12.06%)	1.965 (0.24%)
	No of Sinks	1582	1582
	Clock Global Skew	0.002	0.000
	Longest Path Delay	0.125	0.113
	Shortest Path Delay	0.123	0.113

With Compile_ultra, the ccs is better in terms of timing and area,
But power consumption is more.
CCS chose more LVT cells than in NLDM