

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 Refernces | 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 (µm²) | 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 |
| | SETUP | | |
| report_timing | 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 |
| | Slack(min) - Hold | 0.13 | 0.21 |
| | | | |
| 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%) |
| | Leakage (µW) | 6.150 (0.20%) | 173.367 (20.78%) |
| | | | |
| report_clock_tree | 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 Refernces | 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 (µm²) | 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 |
| | SETUP | | |
| report_timing | Data Required Time | 5.92 | 5.93 |
| | Data Arrival Time | -5.92 | -5.93 |
| | Slack(max) - Setup | 0.00 | 0.00 |
| | HOLD | | |
| | Data Required Time | -0.02 | -0.02 |
| | Data Arrival Time | -0.14 | -0.16 |
| | Slack(min) - Hold | 0.16 | 0.18 |
| | | | |
| report_threshold_voltage_group | LVT | | |
| | Cell Count | 499 (4.61%) | 9056 (99.72%) |
| | 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%) |
| | Leakage (µW) | 56.797 (12.06%) | 1.965 (0.24%) |
| | | | |
| report_clock_tree | 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