Synthesis and Implementation

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Adder (full_1bit):
Slice Logic:
LUT - 53200(available) 1(used) <0.01% utilization
Registers - 106400(av) 0(used) 0.00% utilization (both after synth and impl)
IOB – 5(used) 200(av) 2.50% utilization;
Primitives: Ibuf-3 Obuf-2 LUT3 – 2
Timing: Not using a clk(setup,hold,pw times are NA)
LUT utilization: 1% I/O utilization: 2.5%
Total reg = 0
DSPs = 0
Power: Total on-chip power 1.023W
Junction Temperature: 36.8 oC Thermal Margin: 48.2oC (4.0 W)
Dynamic Power: 0.903 Total Device Static Power: 0.120
On-chip signals: 5

Multiplier:
Slice Logic:
LUT - 53200(available) 30(used) 0.05% utilization
Registers - 106400(av) 42(used) 0.04% utilization (both after synth and impl)
IOB – 9(used) 200(av) 4.50% utilization;
DSPs = 0
Timing:
Worst Negative Slack: 2.852 ns
Worst Hold Slack: 0.014
Total End Points: 72
Power: Total on-chip power 0.103W
Junction Temperature: 26.2 oC Thermal Margin: 58.8oC (4.9 W)
Dynamic Power: 0.051 Total Device Static Power: 0.052

GCD:
Slice Logic:
LUT - 53200(available) 168(used) 0.32% utilization
Registers - 106400(av) 131(used) 0.12% utilization (both after synth and impl)
IOB – 100used) 200(av) 50% utilization;
Timing:
Worst Negative Slack: 0.942 ns
Worst Hold Slack: 0.204 ns

Total End Points: 193
DSPs = 0
Power: Total on-chip power 1.03W
Junction Temperature: 28.6 oC Thermal Margin: 58.2oC (4.9 W)
Dynamic Power: 0.04 Total Device Static Power: 0.99

Divider:
Slice Logic:
LUT - 53200(available) 31(used) 0.06% utilization
Registers - 106400(av) 24(used) 0.03% utilization (both after synth and impl)
IOB – 19(used) 200(av) 9.50% utilization;
Timing:
Worst Negative Slack: 1.831
Worst Hold Slack: 0.85
Total End Points: 39
DSPs = 0
Power: Total on-chip power 0.108W
Junction Temperature: 36.3 oC Thermal Margin: 39.2oC (4.0 W)
Dynamic Power: 0.007 Total Device Static Power: 0.101