

## Design Timing Summary

Setup	Hold	Pulse Width
Worst Negative Slack (WNS): 2.780 ns	Worst Hold Slack (WHS): 0.228 ns	Worst Pulse Width Slack (WPWS): 19.500 ns
Total Negative Slack (TNS): 0.000 ns	Total Hold Slack (THS): 0.000 ns	Total Pulse Width Negative Slack (TPWS): 0.000 ns
Number of Failing Endpoints: 0	Number of Failing Endpoints: 0	Number of Failing Endpoints: 0
Total Number of Endpoints: 6130	Total Number of Endpoints: 6130	Total Number of Endpoints: 3220

All user specified timing constraints are met.

After synthesis:

Name	Slice LUTs (63400)	Slice Registers (126800)	F7 Muxes (31700)	F8 Muxes (15850)	Bonded IOB (210)	BUFGCTRL (32)
✓ <b>N</b> MIPS_Processor	5530	3409	1113	90	173	1
DM (Data_Memory)	2864	2240	609	2	0	0
DU (Decode_Unit)	72	63	0	0	0	0
Mux1 (Mux2_1_32bit)	16	0	0	0	0	0
Mux2 (Mux2_1_32bit_0)	24	0	0	0	0	0
Mux3_1 (Mux3_1_32bit)	37	31	0	0	0	0
PC (Program_Counter)	1398	51	248	24	0	0
PCB (PCBranch)	30	0	0	0	0	0
RF (Register_file)	1089	1024	256	64	0	0

## Utilization

## Post-Synthesis | Post-Implementation

Graph | Table

Resource	Estimation	Available	Utilization...
LUT	5530	63400	8.72
FF	3219	126800	2.54
IO	173	210	82.38
BUFG	1	32	3.13

After impl:

Name	Slice LUTs (63400)	Slice Registers (126800)	F7 Muxes (31700)	F8 Muxes (15850)	Slice (15850)	LUT as Logic (63400)	LUT Flip Flop Pairs (63400)	Bonded IOB (210)	BUFGCTRL (32)
▼ <b>N</b> MIPS_Processor	5675	3409	963	90	2831	5675	365	173	2
DM (Data_Memory)	2862	2240	609	2	2079	2862	3	0	0
DU (Decode_Unit)	70	63	0	0	59	70	0	0	0
Mux1 (Mux2_1_32bit)	16	0	0	0	15	16	0	0	0
Mux2 (Mux2_1_32bit_0)	24	0	0	0	24	24	0	0	0
Mux3_1 (Mux3_1_32bit)	37	31	0	0	36	37	0	0	0
PC (Program_Counter)	1548	51	98	24	649	1548	1	0	1
PCB (PCBranch)	30	0	0	0	8	30	0	0	0
RF (Register_file)	1089	1024	256	64	859	1089	0	0	0

Utilization			
Post-Synthesis   Post-Implementation			
Graph   Table			
Resource	Utilization	Available	Utilization...
LUT	5675	63400	8.95
FF	3219	126800	2.54
IO	173	210	82.38
BUFG	2	32	6.25