

XLINIX REPORT

Device utilization summary:

Selected Device : 5vlx50tff1136-2

Slice Logic Utilization:

Number of Slice Registers: 30 out of 28800 0%

Number of Slice LUTs: 30 out of 28800 0%

Number used as Logic: 30 out of 28800 0%

Slice Logic Distribution:

Number of LUT Flip Flop pairs used: 30

Number with an unused Flip Flop: 0 out of 30 0%

Number with an unused LUT: 0 out of 30 0%

Number of fully used LUT-FF pairs: 30 out of 30 100%

Number of unique control sets: 1

IO Utilization:

Number of IOs: 34

Number of bonded IOBs: 34 out of 480 7%

Specific Feature Utilization:

Number of BUFG/BUFGCTRLs: 1 out of 32 3%

Partition Resource Summary:

No Partitions were found in this design.

TIMING REPORT

NOTE: THESE TIMING NUMBERS ARE ONLY A SYNTHESIS ESTIMATE.

FOR ACCURATE TIMING INFORMATION PLEASE REFER TO THE TRACE REPORT
GENERATED AFTER PLACE-and-ROUTE.

Clock Information:

Clock Signal	Clock buffer(FF name)	Load
clk	BUFGP	30

Asynchronous Control Signals Information:

Control Signal	Buffer(FF name)	Load
reset	IBUF	30

Timing Summary:

Speed Grade: -2

Minimum period: 2.140ns (Maximum Frequency: 467.322MHz)

Minimum input arrival time before clock: No path found

Maximum output required time after clock: 2.830ns

Maximum combinational path delay: No path found

Timing Detail:

All values displayed in nanoseconds (ns)

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Timing constraint: Default period analysis for Clock 'clk'

Clock period: 2.140ns (frequency: 467.322MHz)

Total number of paths / destination ports: 465 / 30

Delay: 2.140ns (Levels of Logic = 31)

Source: core/pc_2 (FF)

Destination: core/pc_31 (FF)

Source Clock: clk rising

Destination Clock: clk rising

Data Path: core/pc_2 to core/pc_31

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Timing constraint: Default OFFSET OUT AFTER for Clock 'clk'

Total number of paths / destination ports: 30 / 30

Offset: 2.830ns (Levels of Logic = 1)

Source: core/pc_31 (FF)

Destination: pc_out<31> (PAD)

Source Clock: clk rising

Data Path: core/pc_31 to pc_out<31>

Cell:in->out	fanout	Gate	Net	Delay	Delay	Logical Name (Net Name)
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FDC:C->Q	2	0.396	0.290	core/pc_31	(core/pc_31)	(core/pc_31)
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Total		2.830ns	(2.540ns logic, 0.290ns route)			
			(89.8% logic, 10.2% route)			

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Total REAL time to Xst completion: 5.00 secs

Total CPU time to Xst completion: 5.70 secs

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Total memory usage is 4563536 kilobytes

Number of errors : 0 (0 filtered)

Number of warnings : 19 (0 filtered)

Number of infos : 2 (0 filtered)

top_riscv Project Status (10/31/2025 - 11:15:26)			
Project File:	jeyawin.xise	Parser Errors:	No Errors
Module Name:	top_riscv	Implementation State:	Placed and Routed
Target Device:	xc5vlx50t-2ff1136	• Errors:	No Errors
Product Version:	ISE 14.6	• Warnings:	19 Warnings (8 new)
Design Goal:	Balanced	• Routing Results:	All Signals Completely Routed
Design Strategy:	Xilinx Default (unlocked)	• Timing Constraints:	All Constraints Met
Environment:	System Settings	• Final Timing Score:	0 (Timing Report)

DEVICE UTILIZATION SUMMARY

Device Utilization Summary					[+]
Slice Logic Utilization		Used	Available	Utilization	Note(s)
Number of Slice Registers	30	28,800		1%	
Number used as Flip Flops	30				
Number of Slice LUTs	30	28,800		1%	
Number used as logic	29	28,800		1%	
Number using O5 output only	28				
Number using O5 and O6	1				
Number used as exclusive route-thru	1				
Number of route-thrus	29				
Number using O6 output only	29				
Number of occupied Slices	8	7,200		1%	
Number of LUT Flip Flop pairs used	30				
Number with an unused Flip Flop	0	30		0%	
Number with an unused LUT	0	30		0%	
Number of fully used LUT-FF pairs	30	30		100%	
Number of unique control sets	1				
Number of slice register sites lost to control set restrictions	2	28,800		1%	
Number of bonded IOBs	34	480		7%	
Number of BUFG/BUFGCTRLs	1	32		3%	
Number used as BUFGs	1				
Average Fanout of Non-Clock Nets	2.51				

Performance Summary				[+]
Final Timing Score:	0 (Setup: 0, Hold: 0)	Pinout Data:	Pinout Report	
Routing Results:	All Signals Completely Routed	Clock Data:	Clock Report	
Timing Constraints:	All Constraints Met			

Detailed Reports						[+]
Report Name	Status	Generated	Errors	Warnings	Infos	
Synthesis Report	Current	Fri 31. Oct 11:14:05 2025	0	19 Warnings (8 new)	2 Infos (0 new)	
Translation Report	Current	Fri 31. Oct	0	0	0	

		11:14:52 2025			
<u>Map Report</u>	Current	Fri 31. Oct 11:15:04 2025	0	0	<u>6 Infos (6 new)</u>
<u>Place and Route Report</u>	Current	Fri 31. Oct 11:15:17 2025	0	0	<u>3 Infos (3 new)</u>
Power Report					
<u>Post-PAR Static Timing Report</u>	Current	Fri 31. Oct 11:15:25 2025	0	0	<u>4 Infos (4 new)</u>
Bitgen Report					

Secondary Reports			L1
Report Name	Status	Generated	

Date Generated: 10/31/2025 - 11:15:26