

Flow Navigator

- PROJECT MANAGER
 - Settings
 - Add Sources
 - Language Templates
 - IP Catalog
- IP INTEGRATOR
 - Create Block Design
 - Open Block Design
 - Generate Block Design
- SIMULATION
 - Run Simulation
- RTL ANALYSIS
 - Run Linter
 - Open Elaborated Design
- SYNTHESIS
 - Run Synthesis
 - Open Synthesized Design
- IMPLEMENTATION
 - Run Implementation
 - Open Implemented Design

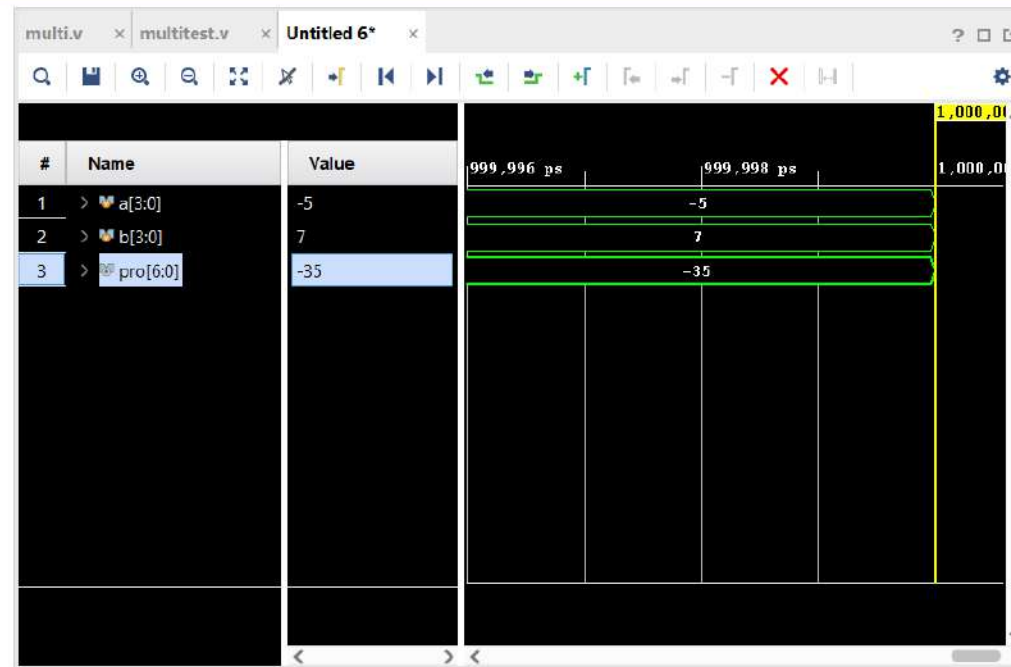
SIMULATION - Behavioral Simulation - Functional - sim_1 - multiterst

Scope Sources

Name	Design Unit	Block Type
multiterst	multiterst	Verilog Module
ut	multi	Verilog Module
glbl	glbl	Verilog Module

Objects Protocol Instanc

Name	Value	Data Type
a[3:0]	b	Array
b[3:0]	7	Array
pro[6:0]	5d	Array



Tcl Console Messages Log

```
# run 1000ns
INFO: [USF-XSim-96] XSim completed. Design snapshot 'multiterst_behav' loaded.
INFO: [USF-XSim-97] XSim simulation ran for 1000ns
launch_simulation: Time (s): cpu = 00:00:02 ; elapsed = 00:00:05 . Memory (MB): peak = 1243.211 ; gain = 0.000
```

Type a Tcl command here

Open Block Design
Generate Block Design

SIMULATION
Run Simulation

RTL ANALYSIS
Run Linter
Open Elaborated Design
Report Methodology
Report DRC
Report Noise
Schematic

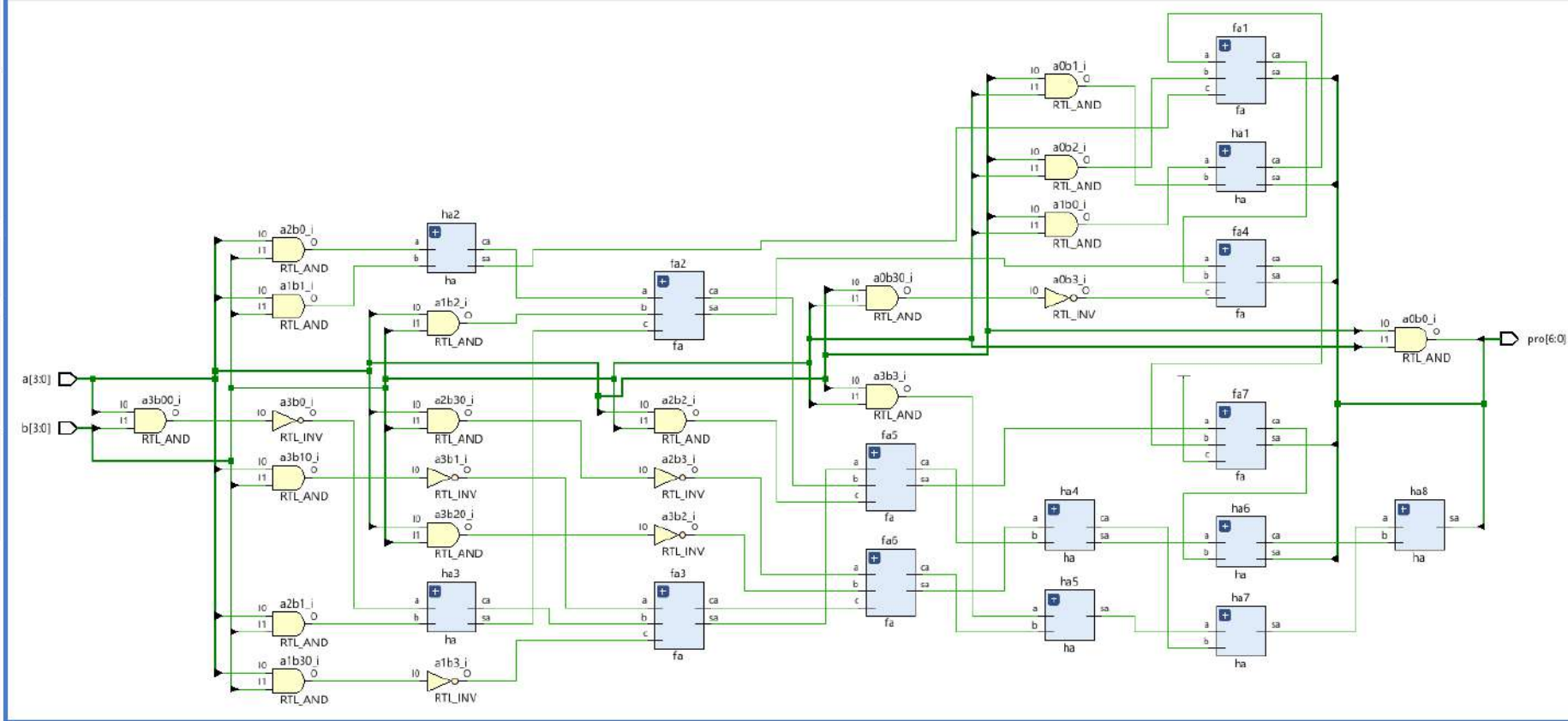
SYNTHESIS
Run Synthesis
Open Synthesized Design

IMPLEMENTATION
Run Implementation
Open Implemented Design
Constraints Wizard
Open Dataflow Design
Edit Timing Constraints
Report Timing Summary

ELABORATED DESIGN - xc7a200tisbg484-1L

Project Summary x Device x multi.v x multitest.v x Schematic x

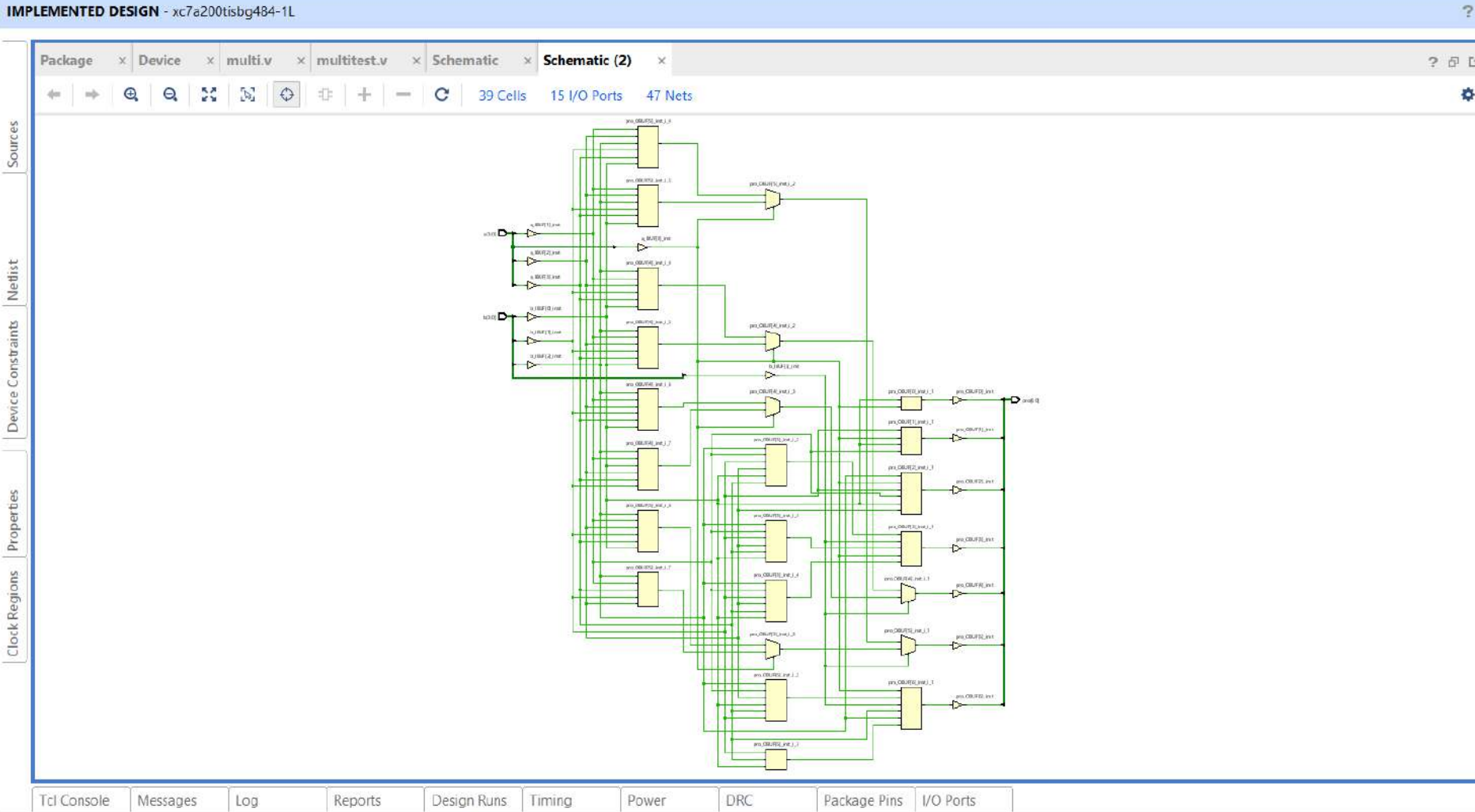
37 Cells 15 I/O Ports 58 Nets



Tcl Console Messages Log Reports Design Runs I/O Ports

Flow Navigator

- SYNTHESIS
 - Run Synthesis
 - Open Synthesized Design
- IMPLEMENTATION
 - Run Implementation
 - Open Implemented Design
 - Constraints Wizard
 - Open Dataflow Design
 - Edit Timing Constraints
 - Report Timing Summary
 - Report Clock Networks
 - Report Clock Interaction
 - Report Methodology
 - Report DRC
 - Report Noise
 - Report Utilization
 - Report Power
 - Schematic
- PROGRAM AND DEBUG
 - Generate Bitstream
 - Open Hardware Manager



- SYNTHESIS
 - Run Synthesis
 - Open Synthesized Design
- IMPLEMENTATION
 - Run Implementation
 - Open Implemented Design
 - Constraints Wizard
 - Open Dataflow Design
 - Edit Timing Constraints
 - Report Timing Summary
 - Report Clock Networks
 - Report Clock Interaction
 - Report Methodology
 - Report DRC
 - Report Noise
 - Report Utilization
 - Report Power
 - Schematic
- PROGRAM AND DEBUG
 - Generate Bitstream
 - Open Hardware Manager

IMPLEMENTED DESIGN - xc7a200tisbg484-1L

Tcl Console Messages Log Reports Design Runs Timing Power x DRC Package Pins I/O Ports

Summary

Settings

- Summary (3.546 W, Margin: N/A)
- Power Supply
- Utilization Details
 - Hierarchical (3.424 W)
 - Signals (0.101 W)
 - Data (0.101 W)
 - Logic (0.07 W)
 - I/O (3.253 W)

Power analysis from Implemented netlist. Activity derived from constraints files, simulation files or vectorless analysis.

Total On-Chip Power:	3.546 W
Design Power Budget:	Not Specified
Process:	typical
Power Budget Margin:	N/A
Junction Temperature:	36.8°C
Thermal Margin:	63.2°C (18.7 W)
Ambient Temperature:	25.0 °C
Effective θ JA:	3.3°C/W
Power supplied to off-chip devices:	0 W
Confidence level:	Low

[Launch Power Constraint Advisor](#) to find and fix invalid switching activity

On-Chip Power

Dynamic:	3.424 W	(97%)
Signals:	0.101 W	(3%)
Logic:	0.070 W	(2%)
I/O:	3.253 W	(95%)
Device Static:	0.123 W	(3%)

impl_1 (saved) x power_1 x

Flow Navigator

- SYNTHESIS
 - Run Synthesis
 - Open Synthesized Design
- IMPLEMENTATION
 - Run Implementation
 - Open Implemented Design
 - Constraints Wizard
 - Open Dataflow Design
 - Edit Timing Constraints
 - Report Timing Summary
 - Report Clock Networks
 - Report Clock Interaction
 - Report Methodology
 - Report DRC
 - Report Noise
 - Report Utilization
 - Report Power
 - Schematic
- PROGRAM AND DEBUG
 - Generate Bitstream
 - Open Hardware Manager

IMPLEMENTED DESIGN - xc7a200tisbg484-1L

Utilization

Hierarchy

Name	Slice LUTs (134600)	F7 Muxes (67300)	F8 Muxes (33650)	Slice (33650)	LUT as Logic (134600)	Bonded IOB (285)
multi	17	4	2	5	17	15

Sources

Netlist

Device Constraints

Properties

Clock Regions

utilization_1

Tcl Console Messages Log Reports Design Runs Timing Power DRC Package Pins I/O Ports

Flow Navigator

- PROJECT MANAGER
 - Settings
 - Add Sources
 - Language Templates
 - IP Catalog
- IP INTEGRATOR
 - Create Block Design
 - Open Block Design
 - Generate Block Design
- SIMULATION
 - Run Simulation
- RTL ANALYSIS
 - Run Linter
 - Open Elaborated Design
 - Report Methodology
 - Report DRC
 - Schematic
- SYNTHESIS
 - Run Synthesis
 - Open Synthesized Design
 - Constraints Wizard

SIMULATION Behavioral Simulation - Functional - sim_1 - multiterst Post-Synthesis Simulation - Functional - sim_1 - multiterst

multi.v x multitest.v x Untitled 7* x

100 us

#	Name	Value
1	a[3:0]	-5
2	b[3:0]	7
3	pro[6:0]	-35

0.000 ns 200.000 ns 400.000 ns 600.000 ns 800.000 ns 1,000.000 ns

x x x

-5 7 -35

Tcl Console Messages Log