

Quartus II - C:/Users/aken1229.YZ/Desktop/adder4/adder4 - adder4

File Edit View Project Assignments Processing Tools Window Help

adder4

adder4.v

Compilation Report - Flow Summary

Waveform1.vwf

Project Navigator

Entity	Combinational ALUTs	ALMs	Dedicated
Stratix II: AUTO			
adder...	6 (0)	3 (0)	0 (0)

Hierarchy Files Design Units

Tasks

Flow: Full Design

Task	Time
Start Project	
Advisors	
Create Design	
Assign Constraints	
Compile Design	00:00:1
Analysis & Synthesis	00:00:0
Fitter (Place & Route)	00:00:0
Assembler (Generate programming files)	00:00:0
Classic Timing Analysis	00:00:0
EDA Netlist Writer	
Program Device (Open Programmer)	
Verify Design	
Export Database	
Archive Project	

adder4.v

Compilation Report - Flow Summary

Waveform1.vwf

Master Time Bar: 27.25 ns Pointer: 150 ps Interval: -27.1 ns Start: End:

Name	Value at 27.25 ns
------	-------------------

Insert Node or Bus

Name:

Type: INPUT

Value type: 9-Level

Radix: ASCII

Bus width:

Start index:

☐ Display graph

OK

Cancel

Node Finder...

View Quartus II Information

Documentation

Type Message

Info: Quartus II Assembler was successful. 0 errors, 0 warnings

Info: Running Quartus II Classic Timing Analyzer

Info: Command: quartus\_tan --read\_settings\_files=off --write\_settings\_files=off adder4 -c adder4 --timing\_analysis\_only

Info: Longest tpd from source pin "b[1]" to destination pin "sum[3]" is 10.980 ns



























Info: Quartus II Classic Timing Analyzer was successful. 0 errors, 0 warnings

Info: Quartus II Full Compilation was successful. 0 errors, 5 warnings

System (2) Processing (51) Extra Info Info (46) Warning (4) Critical Warning (1) Error Suppressed (6) Flag

Message: 0 of 123 Location:

Ready

Task 	Time 
 Start Project	
 Advisors	
 Create Design	
 Assign Constraints	
  Compile Design	00:00:1
   Analysis & Synthesis	00:00:0
   Fitter (Place & Route)	00:00:0
   Assembler (Generate programming files)	00:00:0
   Classic Timing Analysis	00:00:0
  EDA Netlist Writer	
 Program Device (Open Programmer)	
 Verify Design	
 Export Database	
 Archive Project	

The screenshot shows the Node Finder dialog box in the Quartus II IDE. The dialog is used to search for and select nodes in the design. The 'Look in' field is set to 'adder4'. The 'Nodes Found' list contains the following nodes and their assignments:

Name	Assignments
a	Unassigned
a[0]	Unassigned
a[1]	Unassigned
a[2]	Unassigned
a[3]	Unassigned
b	Unassigned
b[0]	Unassigned
b[1]	Unassigned
b[2]	Unassigned
b[3]	Unassigned
c_in	Unassigned
c_out	Unassigned
sum	Unassigned
sum[0]	Unassigned
sum[1]	Unassigned
sum[2]	Unassigned
sum[3]	Unassigned

The 'Selected Nodes' list is currently empty. The background window shows the 'Waveform1.vwf' window with a timing diagram. The timing diagram has a Master Time Bar at 27.25 ns, a Pointer at 150 ps, and an Interval of -27.1 ns. The diagram shows a signal 'a' with a value of 27.25 ns at the selected time.

Ready Idle NUM

Quartus II - C:/Users/aken1229.YZ/Desktop/adder4/adder4 - adder4

File Edit View Project Assignments Processing Tools Window Help

adder4

adder4.v

Compilation Report - Flow Summary

Waveform1.vwf

Project Navigator

Entity	Combinational ALUTs	ALMs	Dedicated
Stratix II: AUTO			
adder4	6 (0)	3 (0)	0 (0)

Hierarchy Files Design Units

Tasks

Flow: Full Design

Task	Time
Start Project	
Advisors	
Create Design	
Assign Constraints	
Compile Design	00:00:1
Analysis & Synthesis	00:00:0
Fitter (Place & Route)	00:00:0
Assembler (Generate programming files)	00:00:0
Classic Timing Analysis	00:00:0
EDA Netlist Writer	
Program Device (Open Programmer)	
Verify Design	
Export Database	
Archive Project	

adder4.v

Compilation Report - Flow Summary

Waveform1.vwf

Master Time Bar: 27.25 ns Pointer: 150 ps Interval: -27.1 ns Start: End:

Name	Value at 27.25 ns

Node Finder

Named: \* Filter: Pins: all Customize... List Stop OK Cancel

Look in: adder4 Include subentities

Nodes Found:

Name	Assignments
a	Unassigned
a[0]	Unassigned
a[1]	Unassigned
a[2]	Unassigned
a[3]	Unassigned
b	Unassigned
b[0]	Unassigned
b[1]	Unassigned
b[2]	Unassigned
b[3]	Unassigned
c_in	Unassigned
c_out	Unassigned
sum	Unassigned
sum[0]	Unassigned
sum[1]	Unassigned
sum[2]	Unassigned
sum[3]	Unassigned

Selected Nodes:

Name	Assignments
adder4a	Unassigned
adder4b	Unassigned
adder4c_in	Unassigned
adder4c_out	Unassigned
adder4sum	Unassigned

View Quartus II Information

Documentation

Messages


Type	Message
Info	Quartus II Assembler was successful. 0 errors, 0 warnings
Info	Running Quartus II Classic Timing Analyzer
Info	Command: quartus_tan --read_settings_files=off --write_settings_files=off adder4 -c adder4 --timing_analysis_only
Info	Longest tpd from source pin "b[1]" to destination pin "sum[3]" is 10.980 ns
Info	Quartus II Classic Timing Analyzer was successful. 0 errors, 0 warnings
Info	Quartus II Full Compilation was successful. 0 errors, 5 warnings



System (2) Processing (51) Extra Info Info (45) Warning (4) Critical Warning (1) Error Suppressed (6) Flag

Message: 0 of 123 Location: Locate

Ready

Tasks ▲ x

Task <input checked="" type="checkbox"/>	Time
  Start Project	

+  Create Design	
+  Assign Constraints	

✓	+	Analysis & Synthesis	00:00:00
✓	+	Fitter (Place & Route)	00:00:00



✓	+	Classic Timing Analysis	00:00:00
	+	EDA Netlist Writer	

	Vennly Design	
	Export Database	

Type	Message
...	...

```
+ Info: Running Quartus II Classic
  Info: Command: quartus tan --rea
```

Info: Quartus II Classic Timing  
Info: Quartus II Full Compilation

Message: 0 of 123   Location:


---

abc adder4.v



Value at	0 ps	10.0 ns	20.0 ns
----------	------	---------	---------

[illegible]





















Name:

Value type: 9-Level

Bus width:

☐ Display gray code count as binary count

Successful. 0 errors, 0 warnings

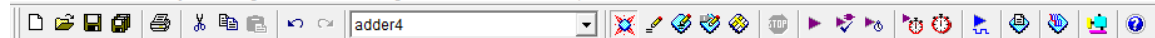
```
settings_files=off --write_settings_files=off adder4 -c adder4 --timing_analysis_only
"b[11]" to destination pin "sum[31]" is 10.980 ns
```

```
was successful. 0 errors, 5 warnings
```

---

System (2) **Processing (51)** [Extra Info](#) [Info \(46\)](#) [Warning \(4\)](#) [Critical Warning \(1\)](#) [Error](#) [Suppressed \(6\)](#) [Flag](#)

[illegible]



Project Navigator

Entity	Combinational ALUTs	ALMs	Dedicated
Stratix II: AUTO			
add...	6 (0)	3 (0)	0 (0)

Hierarchy Files Design Units

Tasks

Task	Time
Start Project	
Advisors	
Create Design	
Assign Constraints	
Compile Design	00:00:1
Analysis & Synthesis	00:00:0
Fitter (Place & Route)	00:00:0
Assembler (Generate programming files)	00:00:0
Classic Timing Analysis	00:00:0
EDA Netlist Writer	
Program Device (Open Programmer)	
Verify Design	
Export Database	
Archive Project	

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

adder4.v

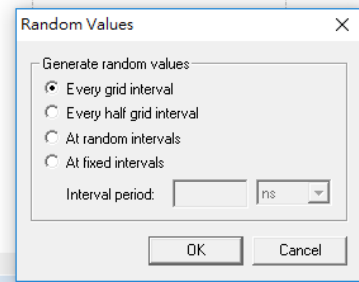

adder4.v

adder4.v

adder4.v

Hierarchy Files Design Units

Flow: Full Design

 Documentation

System (2) Processing (51) Extra Info Info (46) Warning (4) Critical Warning (1) Error Suppressed (6) Flag

For Help, press F1



Project Navigator

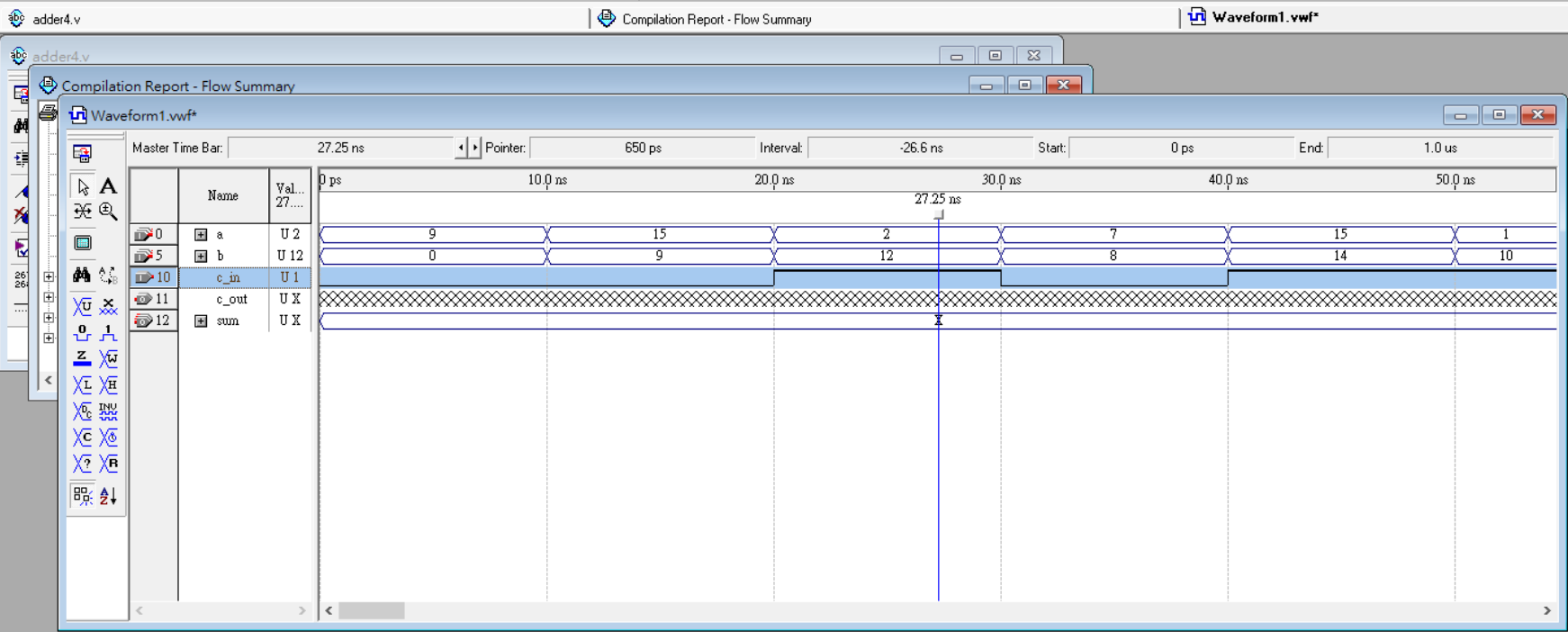
Entity	Combinational ALUTs	ALMs	Dedicated
Stratix II: AUTO			
adder4	6 (0)	3 (0)	0 (0)

Hierarchy Files Design Units

Tasks

Flow: Full Design

Task	Time
Start Project	
Advisors	
Create Design	
Assign Constraints	
Compile Design	00:00:1
Analysis & Synthesis	00:00:0
Fitter (Place & Route)	00:00:0
Assembler (Generate programming files)	00:00:0
Classic Timing Analysis	00:00:0
EDA Netlist Writer	
Program Device (Open Programmer)	
Verify Design	
Export Database	
Archive Project	



View Quartus II Information

Documentation

Messages

Type	Message
Info	Quartus II Assembler was successful. 0 errors, 0 warnings
Info	Running Quartus II Classic Timing Analyzer
Info	Command: quartus_tan --read_settings_files=off --write_settings_files=off adder4 -c adder4 --timing_analysis_only
Info	Longest tpd from source pin "b[1]" to destination pin "sum[3]" is 10.980 ns
Info	Quartus II Classic Timing Analyzer was successful. 0 errors, 0 warnings
Info	Quartus II Full Compilation was successful. 0 errors, 5 warnings

System (2) Processing (51) Extra Info Info (46) Warning (4) Critical Warning (1) Error Suppressed (6) Flag

Message: 0 of 123

Location:

For Help, press F1

Idle NUM

Project Navigator

Entity	Combinational ALU
Stratix II: AUTO	
adder4	6 (0)

Hierarchy Files Design Units

Tasks

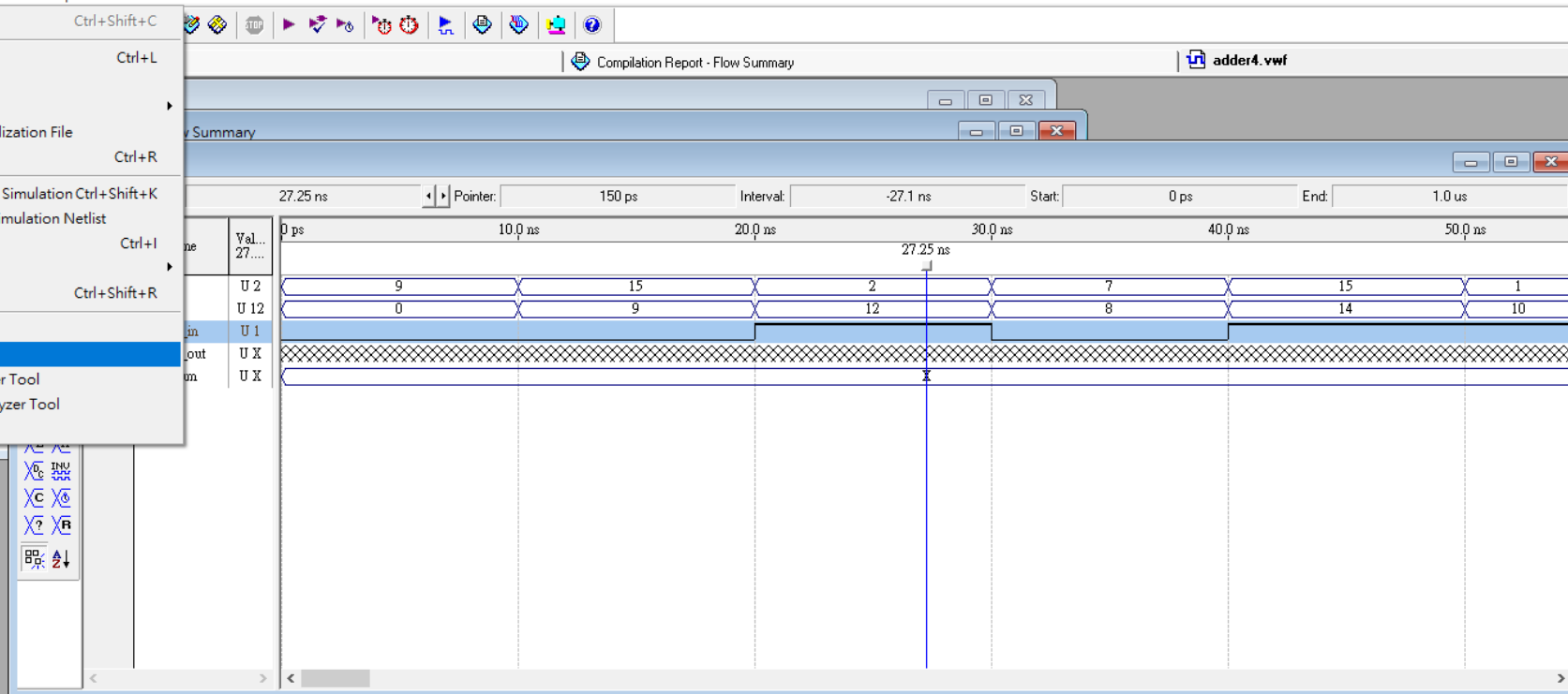
Flow: Full Design

Task

- Start Project
- Advisors
- Create Design
- Assign Constraints
- Compile Design
- Analysis & Synthesis 00:00:0
- Fitter (Place & Route) 00:00:0
- Assembler (Generate programming files) 00:00:0
- Classic Timing Analysis 00:00:0
- EDA Netlist Writer
- Program Device (Open Programmer)
- Verify Design
- Export Database
- Archive Project

Processing

- Start Compilation Ctrl+L
- Analyze Current File
- Start
- Update Memory Initialization File
- Compilation Report Ctrl+R
- Start Compilation and Simulation Ctrl+Shift+K
- Generate Functional Simulation Netlist
- Start Simulation Ctrl+I
- Simulation Debug
- Simulation Report Ctrl+Shift+R
- Compiler Tool
- Simulator Tool
- Classic Timing Analyzer Tool
- PowerPlay Power Analyzer Tool
- SSN Analyzer Tool

[View Quartus II Information](#)[Documentation](#)

Type Message

Info: Started Full Compilation at Mon Mar 11 08:41:33 2019 台北標準時間

Info: Ended Full Compilation at Mon Mar 11 08:41:44 2019 台北標準時間

Info: Vector file adder4.vwf is saved in text format. You can compress it into Compressed Vector Waveform File format in order to reduce file size

System (3) Processing (51) Extra Info Info (46) Warning (4) Critical Warning (1) Error Suppressed (6) Flag

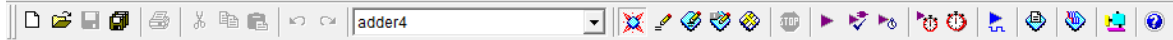
Message: 0 of 3 Location:

Opens the Simulator Tool window or brings it to the foreground

Idle

NUM





Project Navigator

Entity	Combinational ALUTs	ALMs	Dedicated
Stratix II: AUTO			
adder4	6 (0)	3 (0)	0 (0)

Hierarchy Files Design Units

Tasks

Flow: Full Design

Task	Time
Start Project	
Advisors	
Create Design	
Assign Constraints	
Compile Design	00:00:1
Analysis & Synthesis	00:00:0
Fitter (Place & Route)	00:00:0
Assembler (Generate programming files)	00:00:0
Classic Timing Analysis	00:00:0
EDA Netlist Writer	
Program Device (Open Programmer)	
Verify Design	
Export Database	
Archive Project	

Messages

Type	Message
Info	Info: Started Full Compilation at Mon Mar 11 08:41:33 2019 台北標準時間
Info	Info: Ended Full Compilation at Mon Mar 11 08:41:44 2019 台北標準時間
Info	Info: Vector file adder4.vwf is saved in text format. You can compress it into Compressed Vector Waveform File format in order to reduce file size

System (3) Processing (51) Extra Info Info (46) Warning (4) Critical Warning (1) Error Suppressed (6) Flag

Message: 0 of 3

Location:

adder4.vwf

Compilation Report - Flow Summary

adder4.vwf

Simulator Tool

Simulation mode: Functional Generate Functional Simulation Netlist

Simulation input: adder4.vwf Generate Functional Simulation Netlist

Simulation period:

- Run simulation until all vector stimuli are used
- End simulation at: 100 ns

Simulation options:

- Automatically add pins to simulation output waveforms
- Check outputs: Waveform Comparison Settings...
- Setup and hold time violation detection
- Glitch detection: 1.0 ns
- Overwrite simulation input file with simulation results
- Generate Signal Activity File: ...
- Generate VCD File: ...

0 % 00:00:00

Start Stop Open Report

ns Interval: -12.3 ns Start: 0 ps End: 1.0 us

20.0 ns 30.0 ns 40.0 ns 50.0 ns

27.25 ns

15	2	7	15	1
9	12	8	14	10



Project Navigator

Entity	Combinational ALUTs	ALMs	Dedicated
Stratix II: AUTO			
adder4	6 (0)	3 (0)	0 (0)

Hierarchy Files Design Units

Tasks

Flow: Full Design

Task	Time
Start Project	
Advisors	
Create Design	
Assign Constraints	
Compile Design	
Analysis & Synthesis	
Fitter (Place & Route)	
Assembler (Generate programming files)	
Classic Timing Analysis	
EDA Netlist Writer	
Program Device (Open Programmer)	
Verify Design	
Simulate Design	
On-chip Debugging	
PowerPlay Power Analyzer	
SSN Analyzer	
Engineering Change Order (ECO)	
Export Database	
Archive Project	

adder4.v Compilation Report - Flow Summary adder4.vwf

Simulator Tool

Simulation mode: Functional Generate Functional Simulation Netlist

Simulation input: adder4.vwf Add Multiple Files...

Simulation period

☒ Run simulation until all vector stimuli are used

☐ End simulation at: 100 ns

Simulation options

☒ Automatically add pins to simulation output waveforms

☐ Check outputs Waveform Comparison Settings...

☐ Setup and hold time violation detection

☐ Glitch detection: 1.0 ns

☐ Overwrite simulation input file with simulation results

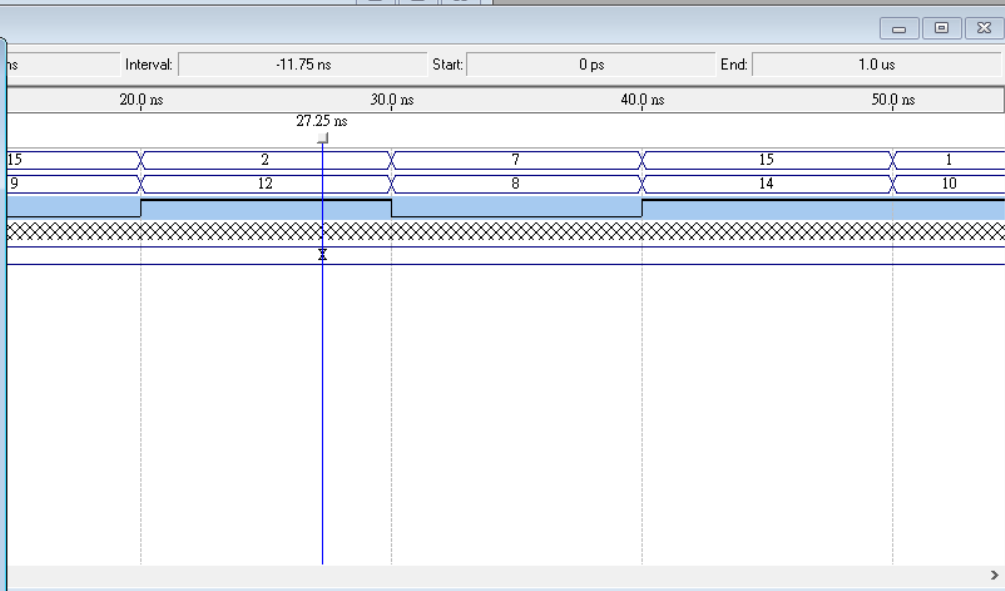
☐ Generate Signal Activity File: ...

☐ Generate VCD File: ...

0 % 00:00:00

Start Stop Open Report

Start Simulation



View Quartus II Information

Documentation

Messages

Type	Message
Info	Running Quartus II Functional Simulation Netlist Generation
Info	Command: quartus_map --read_settings_files=on --write_settings_files=off adder4 -c adder4 --generate_functional_sim_netlist
Info	Found 2 design units, including 2 entities, in source file adder4.v
Info	Elaborating entity "adder4" for the top level hierarchy
Info	Elaborating entity "fulladder" for hierarchy "fulladder:fal"
Info	Quartus II Functional Simulation Netlist Generation was successful. 0 errors, 0 warnings

System (5) Processing (7) Extra Info Info (7) Warning Critical Warning Error Suppressed Flag

Message: 0 of 15 Location:

Quartus II - C:/Users/aken1229.YZ/Desktop/adder4/adder4 - adder4

File Edit View Project Assignments Processing Tools Window Help

adder4

Project Navigator

Entity	Combinational ALUTs	ALMs	Dedicated
Stratix II: AUTO			
adder4	6 (0)	3 (0)	0 (0)

Hierarchy Files Design Units

Tasks

Flow: Full Design

Task

Task	Time
Start Project	
Advisors	
Create Design	
Assign Constraints	
Compile Design	
Analysis & Synthesis	
Fitter (Place & Route)	
Assembler (Generate programming files)	
Classic Timing Analysis	
EDA Netlist Writer	
Program Device (Open Programmer)	
Verify Design	
Simulate Design	
Quartus II Simulator (Functional)	00:00:02
EDA RTL Simulation	
EDA Gate Level Simulation	
On-chip Debugging	
PowerPlay Power Analyzer	
SSN Analyzer	
Engineering Change Order (ECO)	
Export Database	
Archive Project	

adder4.v

Compilation Report - Flow Summary

adder4.vwf

Simulator Tool

Simulation mode: Functional Generate Functional Simulation Netlist

Simulation input: adder4.vwf Add Multiple Files...

Simulation period

Run simulation until all vector stimuli are used

End simulation at: 100 ns

Simulation options

Automatically add pins to simulation output waveforms

Check outputs Waveform Comparison Settings...

Setup and hold time violation detection

Glitch detection: 1.0 ns

Overwrite simulation input file with simulation results

Generate Signal Activity File:

Generate VCD File:

Start Stop Open Report

Quartus II

Simulator was successful

確定

ns Interval: -11.75 ns Start: 0 ps End: 1.0 us

20.0 ns 30.0 ns 40.0 ns 50.0 ns

15 2 7 15 1

9 12 8 14 10

View Quartus II Information

Documentation

Messages

Type	Message
Info	Info: Using vector source file "C:/Users/aken1229.YZ/Desktop/adder4/adder4.vwf"
Info	Info: Option to preserve fewer signal transitions to reduce memory requirements is enabled
Info	Info: Simulation partitioned into 1 sub-simulations
Info	Info: Simulation coverage is 100.00 %
Info	Info: Number of transitions in simulation is 2336
Info	Info: Quartus II Simulator was successful. 0 errors, 0 warnings

System (7) Processing (9) Extra Info Info (9) Warning Critical Warning Error Suppressed Flag

Message: 0 of 16

Location:

For Help, press F1

Idle NUM

Tasks: ▲ x  
Flow: Full Design ▼

