

8-bit Ripple Carry Adder using Verilog HDL

Quartus II - C:/altera/91sp2/quartus/A3_1_1/A3_1_1 - A3_1_1 - [A3_1_1.vwf]

File Edit View Project Assignments Processing Tools Window Help

A3_1_1

Tasks

Flow: Compilation

Task

- Compile Design
- Analysis & Synthesis
 - Edit Settings
 - View Report
- Analysis & Elaboration
 - Partition Merge
- Netlist Viewer
- RTL View
- State Machine
- Technology Map
- Design Assistant
- I/O Assignment
- Early Timing Editor
- Fitter (Place & Route)
- Assembler (General)
- Classic Timing Analyzer
- EDA Netlist Writer
- Program Device (Open)

A3_1_1.v

Compilation Report - Flow Summary

A3_1_1.vwf

RTL Viewer

Simulation Report - Simulation Waveforms

Master Time Bar: 22.95 ns

Pointer: 33.25 ns

Interval: 10.3 ns

Start: 0 ps

End: 1.0 us

Name	Val
a	B 10
b	B 01
cin	1
cout	0
sum	B XX

0 ps 10.0 ns 20.0 ns 30.0 ns 40.0 ns 50.0 ns

22.95 ns

10101010

01011111

XXXXXXXX

Type Message

- Info: Using vector source file "C:/altera/91sp2/quartus/A3_1_1/A3_1_1.vwf"
- Info: Option to preserve fewer signal transitions to reduce memory requirements is enabled
- Info: Simulation partitioned into 1 sub-simulations
- Info: Simulation coverage is 0.00 %
- Info: Number of transitions in simulation is 0
- Info: Quartus II Simulator was successful. 0 errors, 0 warnings

System (35) Processing (9) Extra Info Info (9) Warning Critical Warning Error Suppressed Flag

Message: 0 of 16

Location: Locate

For Help, press F1

ENG 17:56 01.03.2019

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A3_1_1

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- Early Timing Analysis
- Fitter (Place & Route)
- Assembler (Generate Verilog)
- Classic Timing Analysis
- EDA Netlist Writer
- Program Device (Open)

Simulation Report

- Legal Notice
- Flow Summary
- Flow Settings
- Simulator
 - Summary
 - Settings
 - Simulation Waveforms
 - Simulation Coverage
 - INI Usage
 - Messages

Simulation Waveforms

Simulation mode: Timing

Master Time Bar: 22.95 ns Pointer: 10.19 ns Interval: -12.76 ns Start: End:

0 ps 10.0 ns

Name	Value
a	B 101
b	B 010
cin	B
cout	B
sum	B 000

10101010

01011111

00001001

Messages

Type Message

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Message: 0 of 16

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For Help, press F1

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Tasks

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- I/O Assignment
- Early Timing Estimation
- Fitter (Place & Route)
- Assembler (General)
- Classic Timing Analyzer
- EDA Netlist Writer
- Program Device (Open)

Hierarchy

Hierarchy List

- A3_1_1
 - Instances
 - Pins
 - Nets

Page Title: A3_1_1

Page: 1 of 1

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A3_1_1

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- Fitter (Place & Rou
- Assembler (Gener
- Classic Timing An
- EDA Netlist Writ
- Program Device (Oper

A3_1_1.v

```
1 module A3_1_1(a, b, cin, sum, cout);
2   input [07:0] a;
3   input [07:0] b;
4   input cin;
5   output [7:0] sum;
6   output cout;
7   wire[6:0] c;
8   fulladd a1(a[0],b[0],cin,sum[0],c[0]);
9   fulladd a2(a[1],b[1],c[0],sum[1],c[1]);
10  fulladd a3(a[2],b[2],c[1],sum[2],c[2]);
11  fulladd a4(a[3],b[3],c[2],sum[3],c[3]);
12  fulladd a5(a[4],b[4],c[3],sum[4],c[4]);
13  fulladd a6(a[5],b[5],c[4],sum[5],c[5]);
14  fulladd a7(a[6],b[6],c[5],sum[6],c[6]);
15  fulladd a8(a[7],b[7],c[6],sum[7],cout);
16 endmodule
17
18 module fulladd(a, b, cin, sum, cout);
19   input a,b,cin;
20   output sum,cout;
21   assign sum=(a^b^cin);
22   assign cout=((a&b) | (b&cin) | (a&cin));
23 endmodule
```

Compilation Report - Flow Summary

A3_1_1.vwf

RTL Viewer

Simulation Report - Simulation Waveforms

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