ISim P.20131013 (signature 0x7708f090)

WARNING: A WEBPACK license was found.

WARNING: Please use Xilinx License Configuration Manager to check out a full ISim license.

WARNING: ISim will run in Lite mode. Please refer to the ISim documentation for more information on the differences between the Lite and the Full version.

This is a Lite version of ISim.

Time resolution is 1 ps

Simulator is doing circuit initialization process.

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CECS 440 A\_L\_U Testbench Results

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Finished circuit initialization process.

PASS S tests

t= 21.0 ps S=00000025, T=0000001d Op= 0 || Yhi=00000000 Ylo=00000025 c=0 v=0 n=0 z=0

t= 31.0 ps S=0000020d, T=ffffffe3 Op= 0 || Yhi=00000000 Ylo=0000020d c=0 v=0 n=0 z=0

t= 41.0 ps S=ffffffc9, T=0000000d Op= 0 || Yhi=00000000 Ylo=ffffffc9 c=0 v=0 n=1 z=0

t= 51.0 ps S=ffffff9c, T=ffffff9d Op= 0 || Yhi=00000000 Ylo=ffffff9c c=0 v=0 n=1 z=0

PASS T tests

t= 61.0 ps S=00000025, T=0000001d Op= 1 || Yhi=00000000 Ylo=0000001d c=0 v=0 n=0 z=0

t= 71.0 ps S=0000020d, T=ffffffe3 Op= 1 || Yhi=00000000 Ylo=ffffffe3 c=0 v=0 n=1 z=0

t= 81.0 ps S=ffffffc9, T=0000000d Op= 1 || Yhi=00000000 Ylo=0000000d c=0 v=0 n=0 z=0

t= 91.0 ps S=ffffff9c, T=ffffff9d Op= 1 || Yhi=00000000 Ylo=ffffff9d c=0 v=0 n=1 z=0

ADD tests

t= 101.0 ps S=00000025, T=0000001d Op= 2 || Yhi=00000000 Ylo=00000042 c=0 v=0 n=0 z=0

t= 111.0 ps S=0000020d, T=ffffffe3 Op= 2 || Yhi=00000000 Ylo=000001f0 c=1 v=0 n=0 z=0

t= 121.0 ps S=ffffffc9, T=0000000d Op= 2 || Yhi=00000000 Ylo=ffffffd6 c=0 v=0 n=1 z=0

t= 131.0 ps S=ffffff9c, T=ffffff9d Op= 2 || Yhi=00000000 Ylo=ffffff39 c=1 v=0 n=1 z=0

SUB tests

t= 141.0 ps S=00000025, T=0000001d Op= 3 || Yhi=00000000 Ylo=00000008 c=0 v=0 n=0 z=0

t= 151.0 ps S=0000020d, T=ffffffe3 Op= 3 || Yhi=00000000 Ylo=0000022a c=1 v=0 n=0 z=0

t= 161.0 ps S=ffffffc9, T=0000000d Op= 3 || Yhi=00000000 Ylo=ffffffbc c=0 v=0 n=1 z=0

t= 171.0 ps S=ffffff9c, T=ffffff9d Op= 3 || Yhi=00000000 Ylo=ffffffff c=1 v=0 n=1 z=0

ADDU tests

t= 181.0 ps S=00000025, T=0000001d Op= 4 || Yhi=00000000 Ylo=00000042 c=0 v=0 n=0 z=0

t= 191.0 ps S=0000020d, T=ffffffe3 Op= 4 || Yhi=00000000 Ylo=000001f0 c=1 v=1 n=0 z=0

t= 201.0 ps S=ffffffc9, T=0000000d Op= 4 || Yhi=00000000 Ylo=ffffffd6 c=0 v=0 n=0 z=0

t= 211.0 ps S=ffffff9c, T=ffffff9d Op= 4 || Yhi=00000000 Ylo=ffffff39 c=1 v=1 n=0 z=0

SUBU tests

t= 221.0 ps S=00000025, T=0000001d Op= 5 || Yhi=00000000 Ylo=00000008 c=0 v=0 n=0 z=0

t= 231.0 ps S=0000020d, T=ffffffe3 Op= 5 || Yhi=00000000 Ylo=0000022a c=1 v=1 n=0 z=0

t= 241.0 ps S=ffffffc9, T=0000000d Op= 5 || Yhi=00000000 Ylo=ffffffbc c=0 v=0 n=0 z=0

t= 251.0 ps S=ffffff9c, T=ffffff9d Op= 5 || Yhi=00000000 Ylo=ffffffff c=1 v=1 n=0 z=0

SLT tests

t= 261.0 ps S=00000025, T=0000001d Op= 6 || Yhi=00000000 Ylo=00000000 c=x v=x n=x z=x

t= 271.0 ps S=0000020d, T=ffffffe3 Op= 6 || Yhi=00000000 Ylo=00000000 c=x v=x n=x z=x

t= 281.0 ps S=ffffffc9, T=0000000d Op= 6 || Yhi=00000000 Ylo=00000001 c=x v=x n=x z=x

t= 291.0 ps S=ffffff9c, T=ffffff9d Op= 6 || Yhi=00000000 Ylo=00000000 c=x v=x n=x z=x

SLTU tests

t= 301.0 ps S=00000025, T=0000001d Op= 7 || Yhi=00000000 Ylo=00000000 c=x v=x n=x z=x

t= 311.0 ps S=0000020d, T=ffffffe3 Op= 7 || Yhi=00000000 Ylo=00000001 c=x v=x n=x z=x

t= 321.0 ps S=ffffffc9, T=0000000d Op= 7 || Yhi=00000000 Ylo=00000000 c=x v=x n=x z=x

t= 331.0 ps S=ffffff9c, T=ffffff9d Op= 7 || Yhi=00000000 Ylo=00000001 c=x v=x n=x z=x

AND test

t= 341.0 ps S=f0f03c3c, T=bf0ff5f5 Op= 8 || Yhi=00000000 Ylo=b0003434 c=x v=x n=x z=0

OR test

t= 351.0 ps S=f0f03c3c, T=bf0ff5f5 Op= 9 || Yhi=00000000 Ylo=fffffdfd c=x v=x n=x z=0

XOR test

t= 361.0 ps S=f0f03c3c, T=bf0ff5f5 Op=10 || Yhi=00000000 Ylo=4fffc9c9 c=x v=x n=x z=0

NOR test

t= 371.0 ps S=f0f03c3c, T=bf0ff5f5 Op=11 || Yhi=00000000 Ylo=00000202 c=x v=x n=x z=0

SLL test

t= 381.0 ps S=f0f03c3c, T=bf0ff5f5 Op=12 || Yhi=00000000 Ylo=7e1febea c=1 v=x n=0 z=0

SRL test

t= 391.0 ps S=f0f03c3c, T=bf0ff5f5 Op=13 || Yhi=00000000 Ylo=5f87fafa c=1 v=x n=0 z=0

SRA test

t= 401.0 ps S=f0f03c3c, T=bf0ff5f5 Op=14 || Yhi=00000000 Ylo=9f87fafa c=1 v=x n=1 z=0

INC test

t= 411.0 ps S=f0f03c3c, T=bf0ff5f5 Op=15 || Yhi=00000000 Ylo=f0f03c3d c=0 v=0 n=1 z=0

DEC test

t= 421.0 ps S=f0f03c3c, T=bf0ff5f5 Op=16 || Yhi=00000000 Ylo=f0f03c3b c=0 v=0 n=1 z=0

INC4 test

t= 431.0 ps S=f0f03c3c, T=bf0ff5f5 Op=17 || Yhi=00000000 Ylo=f0f03c40 c=0 v=0 n=1 z=0

DEC4 test

t= 441.0 ps S=f0f03c3c, T=bf0ff5f5 Op=18 || Yhi=00000000 Ylo=f0f03c38 c=0 v=0 n=1 z=0

ZEROS test

t= 451.0 ps S=f0f03c3c, T=bf0ff5f5 Op=19 || Yhi=00000000 Ylo=00000000 c=x v=x n=0 z=1

ONES test

t= 461.0 ps S=f0f03c3c, T=bf0ff5f5 Op=20 || Yhi=00000000 Ylo=ffffffff c=x v=x n=1 z=0

SP\_INIT test

t= 471.0 ps S=f0f03c3c, T=bf0ff5f5 Op=21 || Yhi=00000000 Ylo=000003fc c=x v=x n=0 z=0

ANDI test

t= 481.0 ps S=f0f03c3c, T=bf0ff5f5 Op=22 || Yhi=00000000 Ylo=00003434 c=x v=x n=0 z=0

ORI test

t= 491.0 ps S=f0f03c3c, T=bf0ff5f5 Op=23 || Yhi=00000000 Ylo=f0f0fdfd c=x v=x n=1 z=0

LUI test

t= 501.0 ps S=f0f03c3c, T=bf0ff5f5 Op=24 || Yhi=00000000 Ylo=f5f50000 c=x v=x n=1 z=0

XORI test

t= 511.0 ps S=f0f03c3c, T=bf0ff5f5 Op=25 || Yhi=00000000 Ylo=f0f0c9c9 c=x v=x n=1 z=0

MULT tests

t= 526.0 ps S=00000025, T=0000001d Op=30 || Yhi=00000000 Ylo=00000431 c=x v=x n=0 z=0

t= 536.0 ps S=0000020d, T=ffffffe3 Op=30 || Yhi=ffffffff Ylo=ffffc487 c=x v=x n=1 z=0

t= 546.0 ps S=ffffffc9, T=0000000d Op=30 || Yhi=ffffffff Ylo=fffffd35 c=x v=x n=1 z=0

t= 556.0 ps S=ffffff9d, T=ffffff9c Op=30 || Yhi=00000000 Ylo=000026ac c=x v=x n=0 z=0

DIV tests

t= 566.0 ps S=00000025, T=0000001d Op=31 || Yhi=00000008 Ylo=00000001 c=x v=0 n=0 z=0

t= 576.0 ps S=0000020d, T=ffffffe3 Op=31 || Yhi=00000003 Ylo=ffffffee c=x v=0 n=1 z=0

t= 586.0 ps S=ffffffc9, T=0000000d Op=31 || Yhi=fffffffd Ylo=fffffffc c=x v=0 n=1 z=0

t= 596.0 ps S=ffffff9d, T=ffffff9c Op=31 || Yhi=ffffff9d Ylo=00000000 c=x v=0 n=0 z=0

Stopped at time : 596 ns : [File "C:/Users/NAO/Desktop/CECS440/assignments/CECS440\_lab1/alu\_32\_tb.v" Line 199](|C:/Users/NAO/Desktop/CECS440/assignments/CECS440_lab1/alu_32_tb.v|%20Line%20199%20)

**ISim>**