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1  //*****//
2  // This document contains information proprietary to the //
3  // CSULB student that created the file - any reuse without //
4  // adequate approval and documentation is prohibited //
5  // //
6  // Class: CECS 460 //
7  // Project name: TRAMBLAZE PROCESSOR //
8  // File name: tramelblaze_top.v //
9  // Release: 1.0 Release Date 17Feb2016 //
10 // //
11 // Created by John Tramel on 20February2016 //
12 // Copyright 2016 John Tramel. All rights reserved. //
13 // Copyright 2017 John Tramel. All rights reserved. //
14 // //
15 // Abstract: Top level for TRAMBLAZE processor //
16 // Edit history: 2016JAN25 - created //
17 // 20FEB - top created for processor and memory //
18 //      tramelblaze_top //
19 //      - tramelblaze //
20 //      - tramelblaze_mem //
21 // //
22 // 02march2017 release 3.0 //
23 // //
24 // In submitting this file for class work at CSULB //
25 // I am confirming that this is my work and the work //
26 // of no one else. //
27 // //
28 // In the event other code sources are utilized I will //
29 // document which portion of code and who is the author //
30 // //
31 // In submitting this code I acknowledge that plagiarism //
32 // in student project work is subject to dismissal from the class //
33 //*****//
34
35 `timescale 1ns/1ns
36
37 module tramelblaze_top (CLK, RESET, IN_PORT, INTERRUPT,
38                        OUT_PORT, PORT_ID, READ_STROBE, WRITE_STROBE, INTERRUPT_ACK);
39
40 input      CLK;
41 input      RESET;
42 input [15:0] IN_PORT;
43 input      INTERRUPT;
44
45 output [15:0] OUT_PORT;
46 output [15:0] PORT_ID;
47 output      READ_STROBE;
48 output      WRITE_STROBE;
49 output      INTERRUPT_ACK;
50
51 wire [15:0] INSTRUCTION;
52 wire [11:0] ADDRESS;
53
54 tramelblaze tramelblaze
55 (
56     .CLK(CLK),
57     .RESET(RESET),
```

```
58     .IN_PORT(IN_PORT),
59     .INTERRUPT(INTERRUPT),
60
61     .OUT_PORT(OUT_PORT),
62     .PORT_ID(PORT_ID),
63     .READ_STROBE(READ_STROBE),
64     .WRITE_STROBE(WRITE_STROBE),
65     .INTERRUPT_ACK(INTERRUPT_ACK),
66
67     .ADDRESS(ADDRESS),
68     .INSTRUCTION(INSTRUCTION)
69 );
70
71 tb_rom your_instance_name
72 (
73     .clka(CLK), // input clka
74     .addra(ADDRESS), // input [11 : 0] addra
75     .douta(INSTRUCTION) // output [15 : 0] douta
76 );
77
78 endmodule
79
```