SL No.	Signal	Test_Name	Description	Constraint	Expected Result	State
1	RST	alu_rst	check for outputs when reset is asserted	-	0	not started
2	CE	alu_ce	check for outputs when CE is deasserted	-	latches to previous value	not started
	MODE	general	ckeck for our output when mode is 0 or 1			
3	0	ADD	add two random numbers when inp_valid is 11	INP_valid == 2'b11	as per randomized input.	not started
4	0		add two random numbers when inp_valid is 10	INP_valid == 2'b11	as per randomized input.	not started
5	0		add two random numbers when inp_valid is 01	INP_valid == 2'b11	as per randomized input.	not started
6	0	SUB	sub two random numbers when inp_valid is 11	INP_valid == 2'b11	as per randomized input.	not started
7	0		sub two random numbers when inp_valid is 10	INP_valid == 2'b11	as per randomized input.	not started
8	0		sub two random numbers when inp_valid is 01	INP_valid == 2'b11	as per randomized input.	not started
9	0	ADD_CIN	add two random numbers when inp_valid is 11 and cin is not given	INP_valid == 2'b11	as per randomized input.	not started
10	0		add two random numbers when inp_valid is 11 and cin is given	INP_valid == 2'b11	as per randomized input.	not started
11	0		add two random numbers when inp_valid is 10 and cin is given	INP_valid == 2'b11	as per randomized input.	not started
12	0		add two random numbers when inp_valid is 01 and cin is given	INP_valid == 2'b11	as per randomized input.	not started
13	0	SUB_IN	sub two random numbers when inp_valid is 11 when cin is given	INP_valid == 2'b11	as per randomized input.	not started
14	0		sub two random numbers when inp_valid is 11 when cin is not given	INP_valid == 2'b11	as per randomized input.	not started
15	0		sub two random numbers when inp_valid is 01	INP_valid == 2'b11	as per randomized input.	not started
16	0		sub two random numbers when inp_valid is 10	INP_valid == 2'b11	as per randomized input.	not started
17	0	INC_A	increment opa when num is max by 1	INP_valid == 2'b11	as per randomized input.	not started
18	0	DEC_A	decrement opa by 1 when opa is min	INP_valid == 2'b11	as per randomized input.	not started
19	0	INC_B	increment opb when num is max by 1	INP_valid == 2'b11	as per randomized input.	not started
20	0	DEC_B	decrement opb by 1 when opa is min	INP_valid == 2'b11	as per randomized input.	not started
21	0	CMP	compare a opa > opb	INP_valid == 2'b11	as per randomized input.	not started
22	0		compare a opa < opb	INP_valid == 2'b11	as per randomized input.	not started
23	0		compare opa == opb	INP_valid == 2'b11	as per randomized input.	not started
24	0	ADD_MUL	add and mul two small numbers	INP_valid == 2'b11	as per randomized input.	not started
25	0		add and mul two max numbers	INP_valid == 2'b11	as per randomized input.	not started
26	0	SHIFTL_MUL	shift a max opa and mul	INP_valid == 2'b11	as per randomized input.	not started
27	0		shift a 0 opa and mul	INP_valid == 2'b11	as per randomized input.	not started
28	0		shift and mul a random number	INP_valid == 2'b11	as per randomized input.	not started
29	0	ADD_SIG	add a signed and unsigned value	INP_valid == 2'b11	as per randomized input.	not started
30	0		add two signed values	INP_valid == 2'b11	as per randomized input.	not started
31	0		add two unsigned values	INP_valid == 2'b11	as per randomized input.	not started
32	0	SUB_SIG	sub a signed and unsigned value	INP_valid == 2'b11	as per randomized input.	not started
33	0		sub two signed value	INP_valid == 2'b11	as per randomized input.	not started
34	0		sub two unsigned values	INP_valid == 2'b11	as per randomized input.	not started
35	1	AND	and two random values	INP_valid == 2'b11	as per randomized input.	not started
36	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
37	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
38	1	OR	or two random vlaues	INP_valid == 2'b11	as per randomized input.	not started
39	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
40	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
41	1	NAND	nand two random vlaues	INP_valid == 2'b11	as per randomized input.	not started
42	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
43	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
44	1	NOR	nor two random vlaues	INP_valid == 2'b11	as per randomized input.	not started
45	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
46	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
47	1	XOR	nor two random vlaues	INP_valid == 2'b11	as per randomized input.	not started
48	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
49	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
50	1	X_NOR	nor two random vlaues	INP_valid == 2'b11	as per randomized input.	not started
51	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
52	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
53	1	NOT_A	toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
54	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
55	1	NOT_B	toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
56	1		toggle all and bits	INP_valid == 2'b11	as per randomized input.	not started
57	1	SHR1_A	shift exceeding limit	INP_valid == 2'b11	as per randomized input.	not started
58	1		Shift when 0	INP_valid == 2'b11	as per randomized input.	not started
59	1	SHL1_A	shift exceeding limit	INP_valid == 2'b11	as per randomized input.	not started
60	1		Shift when 0	INP_valid == 2'b11	as per randomized input.	not started
61	1	SHR1_B	shift exceeding limit	INP_valid == 2'b11	as per randomized input.	not started
62	1		Shift when 0	INP_valid == 2'b11	as per randomized input.	not started
63	1	SHL1_B	shift exceeding limit	INP_valid == 2'b11	as per randomized input.	not started
64	1		Shift when 0	INP_valid == 2'b11	as per randomized input.	not started
65	1	ROL_A_B	ror by 7	INP_valid == 2'b11	as per randomized input.	not started
66	1		ror by 6	INP_valid == 2'b11	as per randomized input.	not started
67	1		ror by 5	INP_valid == 2'b11	as per randomized input.	not started
68	1		ror by 4	INP_valid == 2'b11	as per randomized input.	not started
69	1		rol by 3	INP_valid == 2'b11	as per randomized input.	not started
70	1		rol by 2	INP_valid == 2'b11	as per randomized input.	not started
71	1		rol by 1	INP_valid == 2'b11	as per randomized input.	not started
72	1		give error and rotate	INP_valid == 2'b11	as per randomized input.	not started
73	1		give error and rotate	INP_valid == 2'b11	as per randomized input.	not started
74	1		give error and rotate	INP_valid == 2'b11	as per randomized input.	not started
75	1		give error and rotate	INP_valid == 2'b11	as per randomized input.	not started
76	1	ROR_A_B	ror by 7	INP_valid == 2'b11	as per randomized input.	not started
77	1		ror by 6	INP_valid == 2'b11	as per randomized input.	not started
78	1		ror by 5	INP_valid == 2'b11	as per randomized input.	not started
79	1		ror by 4	INP_valid == 2'b11	as per randomized input.	not started
80	1		rol by 3	INP_valid == 2'b11	as per randomized input.	not started
81	1		rol by 2	INP_valid == 2'b11	as per randomized input.	not started
82	1		rol by 1	INP_valid == 2'b11	as per randomized input.	not started
83	1		give error and rotate	INP_valid == 2'b11	as per randomized input.	not started
84	1		give error and rotate	INP_valid == 2'b11	as per randomized input.	not started
85	1		give error and rotate	INP_valid == 2'b11	as per randomized input.	not started
86	1		give error and rotate	INP_valid == 2'b11	as per randomized input.	not started