

Simulation and Testing Table

Test	ALUControl[1:0]	A	B	Y	ALUFlags
ADD 0+0	0	00000000	00000000	00000000	4
ADD 0 + (-1)	0	00000000	FFFFFFFF	FFFFFFFF	8
ADD 1 + (-1)	0	00000001	FFFFFFFF	00000000	6
ADD FF+1	0	000000FF	00000001	00000100	0
SUB 0-0	1	00000000	00000000	00000000	6
SUB 0 – (-1)	1	00000000	FFFFFFFF	00000001	0
SUB 1-1	1	00000001	00000001	00000000	6
SUB 100-1	1	00000100	00000001	000000FF	2
AND FFFFFFFF, FFFFFFFF	2	FFFFFFFF	FFFFFFFF	FFFFFFFF	8
AND FFFFFFFF, 12345678	2	FFFFFFFF	12345678	12345678	0
AND 12345678, 87654321	2	12345678	87654321	02244220	0
AND 00000000, FFFFFFFF	2	00000000	FFFFFFFF	00000000	4
OR FFFFFFFF, FFFFFFFF	3	FFFFFFFF	FFFFFFFF	FFFFFFFF	8
OR 12345678, 87654321	3	12345678	87654321	97755779	8
OR 00000000, FFFFFFFF	3	00000000	FFFFFFFF	FFFFFFFF	8
OR 00000000, 00000000	3	00000000	00000000	00000000	4