

CLK	nRST	N	C	V	Z	PL	JB	BC	JB address	PC	!!!NEXT!!! OPERATION
0	0	0	0	0	0	0	0	0	0	0	RESET ACTIVE
0	0	0	0	0	0	0	0	0	-2	0	JB ADDRESS SET TO -2
0	1	0	0	0	0	0	0	0	-2	1	RESET INACTIVE
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	1	1	0	0	-2	3	BRZ TAKEN
0	1	0	0	0	1	1	0	0	-2	1	BRZ TAKEN
0	1	0	0	0	1	0	0	0	-2	-1	COUNT UP
0	1	0	0	0	1	0	0	0	-2	0	COUNT UP
0	1	0	0	0	0	0	0	0	-2	1	COUNT UP - RESET ZERO BIT
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	0	1	0	0	-2	3	COUNT UP - BRZ NOT TAKEN
0	1	0	0	0	0	1	0	0	-2	4	COUNT UP
0	1	0	0	0	0	0	0	0	-2	5	COUNT UP
0	1	0	0	0	0	0	0	0	-2	6	COUNT UP
0	1	1	0	0	0	1	0	1	-2	7	BRN TAKEN
0	1	1	0	0	0	1	0	1	-2	5	BRN TAKEN AGAIN
0	1	0	0	0	0	0	0	0	-2	3	COUNT UP
0	1	0	0	0	0	0	0	0	-2	4	COUNT UP
0	1	0	0	0	0	1	0	1	-2	5	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-2	6	COUNT UP
0	1	0	0	0	0	0	0	0	-2	7	COUNT UP
0	1	0	0	0	0	0	0	0	-2	8	COUNT UP
0	1	0	0	0	0	0	0	0	0	9	COUNT UP - SET JUMP ADDRESS TO ZERO
0	1	0	0	0	0	0	0	0	0	10	COUNT UP
0	1	0	0	0	0	1	1	0	0	11	JUMP
0	1	0	0	0	0	1	1	0	0	0	JUMP AGAIN
0	1	0	0	0	0	0	0	0	0	0	COUNT UP
0	1	0	0	0	0	0	0	0	0	1	COUNT UP
0	1	0	0	0	0	0	0	0	-8	2	COUNT UP - JB ADDRESS SET TO -8
0	1	0	0	0	0	0	0	0	-8	3	COUNT UP
0	1	1	0	0	0	1	0	1	-8	4	BRN TAKEN
0	1	1	0	0	0	1	0	1	-8	-4	BRN TAKEN AGAIN
0	1	0	0	0	0	1	0	1	-8	-12	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-8	-11	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-10	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-9	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-8	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-7	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-6	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-5	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	0	COUNT UP
0	1	0	0	0	0	1	0	1	-8	1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	5	COUNT UP

CLK	nRST	N	C	V	Z	PL	JB	BC	JB address	PC	!!!NEXT!!! OPERATION
0	0	0	0	0	0	0	0	0	0	0	RESET ACTIVE
0	0	0	0	0	0	0	0	0	-2	0	JB ADDRESS SET TO -2
0	1	0	0	0	0	0	0	0	-2	1	RESET INACTIVE
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	1	1	0	0	-2	3	BRZ TAKEN
0	1	0	0	0	1	1	0	0	-2	1	BRZ TAKEN
0	1	0	0	0	1	0	0	0	-2	-1	COUNT UP
0	1	0	0	0	1	0	0	0	-2	0	COUNT UP
0	1	0	0	0	0	0	0	0	-2	1	COUNT UP - RESET ZERO BIT
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	0	1	0	0	-2	3	COUNT UP - BRZ NOT TAKEN
0	1	0	0	0	0	1	0	0	-2	4	COUNT UP
0	1	0	0	0	0	0	0	0	-2	5	COUNT UP
0	1	0	0	0	0	0	0	0	-2	6	COUNT UP
0	1	1	0	0	0	1	0	1	-2	7	BRN TAKEN
0	1	1	0	0	0	1	0	1	-2	5	BRN TAKEN AGAIN
0	1	0	0	0	0	0	0	0	-2	3	COUNT UP
0	1	0	0	0	0	0	0	0	-2	4	COUNT UP
0	1	0	0	0	0	1	0	1	-2	5	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-2	6	COUNT UP
0	1	0	0	0	0	0	0	0	-2	7	COUNT UP
0	1	0	0	0	0	0	0	0	-2	8	COUNT UP
0	1	0	0	0	0	0	0	0	0	9	COUNT UP - SET JUMP ADDRESS TO ZERO
0	1	0	0	0	0	0	0	0	0	10	COUNT UP
0	1	0	0	0	0	1	1	0	0	11	JUMP
0	1	0	0	0	0	1	1	0	0	0	JUMP AGAIN
0	1	0	0	0	0	0	0	0	0	0	COUNT UP
0	1	0	0	0	0	0	0	0	0	1	COUNT UP
0	1	0	0	0	0	0	0	0	-8	2	COUNT UP - JB ADDRESS SET TO -8
0	1	0	0	0	0	0	0	0	-8	3	COUNT UP
0	1	1	0	0	0	1	0	1	-8	4	BRN TAKEN
0	1	1	0	0	0	1	0	1	-8	-4	BRN TAKEN AGAIN
0	1	0	0	0	0	1	0	1	-8	-12	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-8	-11	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-10	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-9	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-8	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-7	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-6	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-5	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	0	COUNT UP
0	1	0	0	0	0	1	0	1	-8	1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	5	COUNT UP

CLK	nRST	N	C	V	Z	PL	JB	BC	JB_address	PC	!!!NEXT!!! OPERATION
0	0	0	0	0	0	0	0	0	0	0	RESET ACTIVE
0	0	0	0	0	0	0	0	0	-2	0	JB ADDRESS SET TO -2
0	1	0	0	0	0	0	0	0	-2	1	RESET INACTIVE
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	1	1	0	0	-2	3	BRZ TAKEN
0	1	0	0	0	1	1	0	0	-2	1	BRZ TAKEN
0	1	0	0	0	1	0	0	0	-2	-1	COUNT UP
0	1	0	0	0	1	0	0	0	-2	0	COUNT UP
0	1	0	0	0	0	0	0	0	-2	1	COUNT UP - RESET ZERO BIT
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	0	1	0	0	-2	3	COUNT UP - BRZ NOT TAKEN
0	1	0	0	0	0	1	0	0	-2	4	COUNT UP
0	1	0	0	0	0	0	0	0	-2	5	COUNT UP
0	1	0	0	0	0	0	0	0	-2	6	COUNT UP
0	1	1	0	0	0	1	0	1	-2	7	BRN TAKEN
0	1	1	0	0	0	1	0	1	-2	5	BRN TAKEN AGAIN
0	1	0	0	0	0	0	0	0	-2	3	COUNT UP
0	1	0	0	0	0	0	0	0	-2	4	COUNT UP
0	1	0	0	0	0	1	0	1	-2	5	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-2	6	COUNT UP
0	1	0	0	0	0	0	0	0	-2	7	COUNT UP
0	1	0	0	0	0	0	0	0	-2	8	COUNT UP
0	1	0	0	0	0	0	0	0	0	9	COUNT UP - SET JUMP ADDRESS TO ZERO
0	1	0	0	0	0	0	0	0	0	10	COUNT UP
0	1	0	0	0	0	1	1	0	0	11	JUMP
0	1	0	0	0	0	1	1	0	0	0	JUMP AGAIN
0	1	0	0	0	0	0	0	0	0	0	COUNT UP
0	1	0	0	0	0	0	0	0	0	1	COUNT UP
0	1	0	0	0	0	0	0	0	-8	2	COUNT UP - JB ADDRESS SET TO -8
0	1	0	0	0	0	0	0	0	-8	3	COUNT UP
0	1	1	0	0	0	1	0	1	-8	4	BRN TAKEN
0	1	1	0	0	0	1	0	1	-8	-4	BRN TAKEN AGAIN
0	1	0	0	0	0	1	0	1	-8	-12	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-8	-11	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-10	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-9	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-8	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-7	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-6	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-5	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	0	COUNT UP
0	1	0	0	0	0	1	0	1	-8	1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	5	COUNT UP

CLK	nRST	N	C	V	Z	PL	JB	BC	JB_address	PC	!!!NEXT!!! OPERATION
0	0	0	0	0	0	0	0	0	0	0	RESET ACTIVE
0	0	0	0	0	0	0	0	0	-2	0	JB ADDRESS SET TO -2
0	1	0	0	0	0	0	0	0	-2	1	RESET INACTIVE
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	1	1	0	0	-2	3	BRZ TAKEN
0	1	0	0	0	1	1	0	0	-2	1	BRZ TAKEN
0	1	0	0	0	1	0	0	0	-2	-1	COUNT UP
0	1	0	0	0	1	0	0	0	-2	0	COUNT UP
0	1	0	0	0	0	0	0	0	-2	1	COUNT UP - RESET ZERO BIT
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	0	1	0	0	-2	3	COUNT UP - BRZ NOT TAKEN
0	1	0	0	0	0	1	0	0	-2	4	COUNT UP
0	1	0	0	0	0	0	0	0	-2	5	COUNT UP
0	1	0	0	0	0	0	0	0	-2	6	COUNT UP
0	1	1	0	0	0	1	0	1	-2	7	BRN TAKEN
0	1	1	0	0	0	1	0	1	-2	5	BRN TAKEN AGAIN
0	1	0	0	0	0	0	0	0	-2	3	COUNT UP
0	1	0	0	0	0	0	0	0	-2	4	COUNT UP
0	1	0	0	0	0	1	0	1	-2	5	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-2	6	COUNT UP
0	1	0	0	0	0	0	0	0	-2	7	COUNT UP
0	1	0	0	0	0	0	0	0	-2	8	COUNT UP
0	1	0	0	0	0	0	0	0	0	9	COUNT UP - SET JUMP ADDRESS TO ZERO
0	1	0	0	0	0	0	0	0	0	10	COUNT UP
0	1	0	0	0	0	1	1	0	0	11	JUMP
0	1	0	0	0	0	1	1	0	0	0	JUMP AGAIN
0	1	0	0	0	0	0	0	0	0	0	COUNT UP
0	1	0	0	0	0	0	0	0	0	1	COUNT UP
0	1	0	0	0	0	0	0	0	-8	2	COUNT UP - JB ADDRESS SET TO -8
0	1	0	0	0	0	0	0	0	-8	3	COUNT UP
0	1	1	0	0	0	1	0	1	-8	4	BRN TAKEN
0	1	1	0	0	0	1	0	1	-8	-4	BRN TAKEN AGAIN
0	1	0	0	0	0	1	0	1	-8	-12	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-8	-11	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-10	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-9	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-8	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-7	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-6	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-5	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	0	COUNT UP
0	1	0	0	0	0	1	0	1	-8	1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	5	COUNT UP

CLK	nRST	N	C	V	Z	PL	JB	BC	JB_address	PC	!!!NEXT!!! OPERATION
0	0	0	0	0	0	0	0	0	0	0	RESET ACTIVE
0	0	0	0	0	0	0	0	0	-2	0	JB ADDRESS SET TO -2
0	1	0	0	0	0	0	0	0	-2	1	RESET INACTIVE
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	1	1	0	0	-2	3	BRZ TAKEN
0	1	0	0	0	1	1	0	0	-2	1	BRZ TAKEN
0	1	0	0	0	1	0	0	0	-2	-1	COUNT UP
0	1	0	0	0	1	0	0	0	-2	0	COUNT UP
0	1	0	0	0	0	0	0	0	-2	1	COUNT UP - RESET ZERO BIT
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	0	1	0	0	-2	3	COUNT UP - BRZ NOT TAKEN
0	1	0	0	0	0	1	0	0	-2	4	COUNT UP
0	1	0	0	0	0	0	0	0	-2	5	COUNT UP
0	1	0	0	0	0	0	0	0	-2	6	COUNT UP
0	1	1	0	0	0	1	0	1	-2	7	BRN TAKEN
0	1	1	0	0	0	1	0	1	-2	5	BRN TAKEN AGAIN
0	1	0	0	0	0	0	0	0	-2	3	COUNT UP
0	1	0	0	0	0	0	0	0	-2	4	COUNT UP
0	1	0	0	0	0	1	0	1	-2	5	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-2	6	COUNT UP
0	1	0	0	0	0	0	0	0	-2	7	COUNT UP
0	1	0	0	0	0	0	0	0	-2	8	COUNT UP
0	1	0	0	0	0	0	0	0	0	9	COUNT UP - SET JUMP ADDRESS TO ZERO
0	1	0	0	0	0	0	0	0	0	10	COUNT UP
0	1	0	0	0	0	1	1	0	0	11	JUMP
0	1	0	0	0	0	1	1	0	0	0	JUMP AGAIN
0	1	0	0	0	0	0	0	0	0	0	COUNT UP
0	1	0	0	0	0	0	0	0	0	1	COUNT UP
0	1	0	0	0	0	0	0	0	-8	2	COUNT UP - JB ADDRESS SET TO -8
0	1	0	0	0	0	0	0	0	-8	3	COUNT UP
0	1	1	0	0	0	1	0	1	-8	4	BRN TAKEN
0	1	1	0	0	0	1	0	1	-8	-4	BRN TAKEN AGAIN
0	1	0	0	0	0	1	0	1	-8	-12	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-8	-11	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-10	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-9	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-8	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-7	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-6	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-5	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	0	COUNT UP
0	1	0	0	0	0	1	0	1	-8	1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	5	COUNT UP

CLK	nRST	N	C	V	Z	PL	JB	BC	JB address	PC	!!!NEXT!!! OPERATION
0	0	0	0	0	0	0	0	0	0	0	RESET ACTIVE
0	0	0	0	0	0	0	0	0	-2	0	JB ADDRESS SET TO -2
0	1	0	0	0	0	0	0	0	-2	1	RESET INACTIVE
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	1	1	0	0	-2	3	BRZ TAKEN
0	1	0	0	0	1	1	0	0	-2	1	BRZ TAKEN
0	1	0	0	0	1	0	0	0	-2	-1	COUNT UP
0	1	0	0	0	1	0	0	0	-2	0	COUNT UP
0	1	0	0	0	0	0	0	0	-2	1	COUNT UP - RESET ZERO BIT
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	0	1	0	0	-2	3	COUNT UP - BRZ NOT TAKEN
0	1	0	0	0	0	1	0	0	-2	4	COUNT UP
0	1	0	0	0	0	0	0	0	-2	5	COUNT UP
0	1	0	0	0	0	0	0	0	-2	6	COUNT UP
0	1	1	0	0	0	1	0	1	-2	7	BRN TAKEN
0	1	1	0	0	0	1	0	1	-2	5	BRN TAKEN AGAIN
0	1	0	0	0	0	0	0	0	-2	3	COUNT UP
0	1	0	0	0	0	0	0	0	-2	4	COUNT UP
0	1	0	0	0	0	1	0	1	-2	5	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-2	6	COUNT UP
0	1	0	0	0	0	0	0	0	-2	7	COUNT UP
0	1	0	0	0	0	0	0	0	-2	8	COUNT UP
0	1	0	0	0	0	0	0	0	0	9	COUNT UP - SET JUMP ADDRESS TO ZERO
0	1	0	0	0	0	0	0	0	0	10	COUNT UP
0	1	0	0	0	0	1	1	0	0	11	JUMP
0	1	0	0	0	0	1	1	0	0	0	JUMP AGAIN
0	1	0	0	0	0	0	0	0	0	0	COUNT UP
0	1	0	0	0	0	0	0	0	0	1	COUNT UP
0	1	0	0	0	0	0	0	0	-8	2	COUNT UP - JB ADDRESS SET TO -8
0	1	0	0	0	0	0	0	0	-8	3	COUNT UP
0	1	1	0	0	0	1	0	1	-8	4	BRN TAKEN
0	1	1	0	0	0	1	0	1	-8	-4	BRN TAKEN AGAIN
0	1	0	0	0	0	1	0	1	-8	-12	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-8	-11	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-10	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-9	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-8	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-7	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-6	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-5	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	0	COUNT UP
0	1	0	0	0	0	1	0	1	-8	1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	5	COUNT UP

CLK	nRST	N	C	V	Z	PL	JB	BC	JB_address	PC	!!!NEXT!!! OPERATION
0	0	0	0	0	0	0	0	0	0	0	RESET ACTIVE
0	0	0	0	0	0	0	0	0	-2	0	JB ADDRESS SET TO -2
0	1	0	0	0	0	0	0	0	-2	1	RESET INACTIVE
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	1	1	0	0	-2	3	BRZ TAKEN
0	1	0	0	0	1	1	0	0	-2	1	BRZ TAKEN
0	1	0	0	0	1	0	0	0	-2	-1	COUNT UP
0	1	0	0	0	1	0	0	0	-2	0	COUNT UP
0	1	0	0	0	0	0	0	0	-2	1	COUNT UP - RESET ZERO BIT
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	0	1	0	0	-2	3	COUNT UP - BRZ NOT TAKEN
0	1	0	0	0	0	1	0	0	-2	4	COUNT UP
0	1	0	0	0	0	0	0	0	-2	5	COUNT UP
0	1	0	0	0	0	0	0	0	-2	6	COUNT UP
0	1	1	0	0	0	1	0	1	-2	7	BRN TAKEN
0	1	1	0	0	0	1	0	1	-2	5	BRN TAKEN AGAIN
0	1	0	0	0	0	0	0	0	-2	3	COUNT UP
0	1	0	0	0	0	0	0	0	-2	4	COUNT UP
0	1	0	0	0	0	1	0	1	-2	5	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-2	6	COUNT UP
0	1	0	0	0	0	0	0	0	-2	7	COUNT UP
0	1	0	0	0	0	0	0	0	-2	8	COUNT UP
0	1	0	0	0	0	0	0	0	0	9	COUNT UP - SET JUMP ADDRESS TO ZERO
0	1	0	0	0	0	0	0	0	0	10	COUNT UP
0	1	0	0	0	0	1	1	0	0	11	JUMP
0	1	0	0	0	0	1	1	0	0	0	JUMP AGAIN
0	1	0	0	0	0	0	0	0	0	0	COUNT UP
0	1	0	0	0	0	0	0	0	0	1	COUNT UP
0	1	0	0	0	0	0	0	0	-8	2	COUNT UP - JB ADDRESS SET TO -8
0	1	0	0	0	0	0	0	0	-8	3	COUNT UP
0	1	1	0	0	0	1	0	1	-8	4	BRN TAKEN
0	1	1	0	0	0	1	0	1	-8	-4	BRN TAKEN AGAIN
0	1	0	0	0	0	1	0	1	-8	-12	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-8	-11	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-10	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-9	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-8	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-7	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-6	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-5	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	0	COUNT UP
0	1	0	0	0	0	1	0	1	-8	1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	5	COUNT UP

CLK	nRST	N	C	V	Z	PL	JB	BC	JB address	PC	!!!NEXT!!! OPERATION
0	0	0	0	0	0	0	0	0	0	0	RESET ACTIVE
0	0	0	0	0	0	0	0	0	-2	0	JB ADDRESS SET TO -2
0	1	0	0	0	0	0	0	0	-2	1	RESET INACTIVE
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	1	1	0	0	-2	3	BRZ TAKEN
0	1	0	0	0	1	1	0	0	-2	1	BRZ TAKEN
0	1	0	0	0	1	0	0	0	-2	-1	COUNT UP
0	1	0	0	0	1	0	0	0	-2	0	COUNT UP
0	1	0	0	0	0	0	0	0	-2	1	COUNT UP - RESET ZERO BIT
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	0	1	0	0	-2	3	COUNT UP - BRZ NOT TAKEN
0	1	0	0	0	0	1	0	0	-2	4	COUNT UP
0	1	0	0	0	0	0	0	0	-2	5	COUNT UP
0	1	0	0	0	0	0	0	0	-2	6	COUNT UP
0	1	1	0	0	0	1	0	1	-2	7	BRN TAKEN
0	1	1	0	0	0	1	0	1	-2	5	BRN TAKEN AGAIN
0	1	0	0	0	0	0	0	0	-2	3	COUNT UP
0	1	0	0	0	0	0	0	0	-2	4	COUNT UP
0	1	0	0	0	0	1	0	1	-2	5	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-2	6	COUNT UP
0	1	0	0	0	0	0	0	0	-2	7	COUNT UP
0	1	0	0	0	0	0	0	0	-2	8	COUNT UP
0	1	0	0	0	0	0	0	0	0	9	COUNT UP - SET JUMP ADDRESS TO ZERO
0	1	0	0	0	0	0	0	0	0	10	COUNT UP
0	1	0	0	0	0	1	1	0	0	11	JUMP
0	1	0	0	0	0	1	1	0	0	0	JUMP AGAIN
0	1	0	0	0	0	0	0	0	0	0	COUNT UP
0	1	0	0	0	0	0	0	0	0	1	COUNT UP
0	1	0	0	0	0	0	0	0	-8	2	COUNT UP - JB ADDRESS SET TO -8
0	1	0	0	0	0	0	0	0	-8	3	COUNT UP
0	1	1	0	0	0	1	0	1	-8	4	BRN TAKEN
0	1	1	0	0	0	1	0	1	-8	-4	BRN TAKEN AGAIN
0	1	0	0	0	0	1	0	1	-8	-12	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-8	-11	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-10	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-9	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-8	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-7	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-6	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-5	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	0	COUNT UP
0	1	0	0	0	0	1	0	1	-8	1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	5	COUNT UP

CLK	nRST	N	C	V	Z	PL	JB	BC	JB_address	PC	!!!NEXT!!! OPERATION
0	0	0	0	0	0	0	0	0	0	0	RESET ACTIVE
0	0	0	0	0	0	0	0	0	-2	0	JB ADDRESS SET TO -2
0	1	0	0	0	0	0	0	0	-2	1	RESET INACTIVE
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	1	1	0	0	-2	3	BRZ TAKEN
0	1	0	0	0	1	1	0	0	-2	1	BRZ TAKEN
0	1	0	0	0	1	0	0	0	-2	-1	COUNT UP
0	1	0	0	0	1	0	0	0	-2	0	COUNT UP
0	1	0	0	0	0	0	0	0	-2	1	COUNT UP - RESET ZERO BIT
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	0	1	0	0	-2	3	COUNT UP - BRZ NOT TAKEN
0	1	0	0	0	0	1	0	0	-2	4	COUNT UP
0	1	0	0	0	0	0	0	0	-2	5	COUNT UP
0	1	0	0	0	0	0	0	0	-2	6	COUNT UP
0	1	1	0	0	0	1	0	1	-2	7	BRN TAKEN
0	1	1	0	0	0	1	0	1	-2	5	BRN TAKEN AGAIN
0	1	0	0	0	0	0	0	0	-2	3	COUNT UP
0	1	0	0	0	0	0	0	0	-2	4	COUNT UP
0	1	0	0	0	0	1	0	1	-2	5	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-2	6	COUNT UP
0	1	0	0	0	0	0	0	0	-2	7	COUNT UP
0	1	0	0	0	0	0	0	0	-2	8	COUNT UP
0	1	0	0	0	0	0	0	0	0	9	COUNT UP - SET JUMP ADDRESS TO ZERO
0	1	0	0	0	0	0	0	0	0	10	COUNT UP
0	1	0	0	0	0	1	1	0	0	11	JUMP
0	1	0	0	0	0	1	1	0	0	0	JUMP AGAIN
0	1	0	0	0	0	0	0	0	0	0	COUNT UP
0	1	0	0	0	0	0	0	0	0	1	COUNT UP
0	1	0	0	0	0	0	0	0	-8	2	COUNT UP - JB ADDRESS SET TO -8
0	1	0	0	0	0	0	0	0	-8	3	COUNT UP
0	1	1	0	0	0	1	0	1	-8	4	BRN TAKEN
0	1	1	0	0	0	1	0	1	-8	-4	BRN TAKEN AGAIN
0	1	0	0	0	0	1	0	1	-8	-12	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-8	-11	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-10	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-9	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-8	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-7	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-6	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-5	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	0	COUNT UP
0	1	0	0	0	0	1	0	1	-8	1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	5	COUNT UP

CLK	nRST	N	C	V	Z	PL	JB	BC	JB_address	PC	!!!NEXT!!! OPERATION
0	0	0	0	0	0	0	0	0	0	0	RESET ACTIVE
0	0	0	0	0	0	0	0	0	-2	0	JB ADDRESS SET TO -2
0	1	0	0	0	0	0	0	0	-2	1	RESET INACTIVE
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	1	1	0	0	-2	3	BRZ TAKEN
0	1	0	0	0	1	1	0	0	-2	1	BRZ TAKEN
0	1	0	0	0	1	0	0	0	-2	-1	COUNT UP
0	1	0	0	0	1	0	0	0	-2	0	COUNT UP
0	1	0	0	0	0	0	0	0	-2	1	COUNT UP - RESET ZERO BIT
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	0	1	0	0	-2	3	COUNT UP - BRZ NOT TAKEN
0	1	0	0	0	0	1	0	0	-2	4	COUNT UP
0	1	0	0	0	0	0	0	0	-2	5	COUNT UP
0	1	0	0	0	0	0	0	0	-2	6	COUNT UP
0	1	1	0	0	0	1	0	1	-2	7	BRN TAKEN
0	1	1	0	0	0	1	0	1	-2	5	BRN TAKEN AGAIN
0	1	0	0	0	0	0	0	0	-2	3	COUNT UP
0	1	0	0	0	0	0	0	0	-2	4	COUNT UP
0	1	0	0	0	0	1	0	1	-2	5	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-2	6	COUNT UP
0	1	0	0	0	0	0	0	0	-2	7	COUNT UP
0	1	0	0	0	0	0	0	0	-2	8	COUNT UP
0	1	0	0	0	0	0	0	0	0	9	COUNT UP - SET JUMP ADDRESS TO ZERO
0	1	0	0	0	0	0	0	0	0	10	COUNT UP
0	1	0	0	0	0	1	1	0	0	11	JUMP
0	1	0	0	0	0	1	1	0	0	0	JUMP AGAIN
0	1	0	0	0	0	0	0	0	0	0	COUNT UP
0	1	0	0	0	0	0	0	0	0	1	COUNT UP
0	1	0	0	0	0	0	0	0	-8	2	COUNT UP - JB ADDRESS SET TO -8
0	1	0	0	0	0	0	0	0	-8	3	COUNT UP
0	1	1	0	0	0	1	0	1	-8	4	BRN TAKEN
0	1	1	0	0	0	1	0	1	-8	-4	BRN TAKEN AGAIN
0	1	0	0	0	0	1	0	1	-8	-12	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-8	-11	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-10	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-9	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-8	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-7	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-6	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-5	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	0	COUNT UP
0	1	0	0	0	0	1	0	1	-8	1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	5	COUNT UP

CLK	nRST	N	C	V	Z	PL	JB	BC	JB address	PC	!!!NEXT!!! OPERATION
0	0	0	0	0	0	0	0	0	0	0	RESET ACTIVE
0	0	0	0	0	0	0	0	0	-2	0	JB ADDRESS SET TO -2
0	1	0	0	0	0	0	0	0	-2	1	RESET INACTIVE
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	1	1	0	0	-2	3	BRZ TAKEN
0	1	0	0	0	1	1	0	0	-2	1	BRZ TAKEN
0	1	0	0	0	1	0	0	0	-2	-1	COUNT UP
0	1	0	0	0	1	0	0	0	-2	0	COUNT UP
0	1	0	0	0	0	0	0	0	-2	1	COUNT UP - RESET ZERO BIT
0	1	0	0	0	0	0	0	0	-2	2	COUNT UP
0	1	0	0	0	0	1	0	0	-2	3	COUNT UP - BRZ NOT TAKEN
0	1	0	0	0	0	1	0	0	-2	4	COUNT UP
0	1	0	0	0	0	0	0	0	-2	5	COUNT UP
0	1	0	0	0	0	0	0	0	-2	6	COUNT UP
0	1	1	0	0	0	1	0	1	-2	7	BRN TAKEN
0	1	1	0	0	0	1	0	1	-2	5	BRN TAKEN AGAIN
0	1	0	0	0	0	0	0	0	-2	3	COUNT UP
0	1	0	0	0	0	0	0	0	-2	4	COUNT UP
0	1	0	0	0	0	1	0	1	-2	5	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-2	6	COUNT UP
0	1	0	0	0	0	0	0	0	-2	7	COUNT UP
0	1	0	0	0	0	0	0	0	-2	8	COUNT UP
0	1	0	0	0	0	0	0	0	0	9	COUNT UP - SET JUMP ADDRESS TO ZERO
0	1	0	0	0	0	0	0	0	0	10	COUNT UP
0	1	0	0	0	0	1	1	0	0	11	JUMP
0	1	0	0	0	0	1	1	0	0	0	JUMP AGAIN
0	1	0	0	0	0	0	0	0	0	0	COUNT UP
0	1	0	0	0	0	0	0	0	0	1	COUNT UP
0	1	0	0	0	0	0	0	0	-8	2	COUNT UP - JB ADDRESS SET TO -8
0	1	0	0	0	0	0	0	0	-8	3	COUNT UP
0	1	1	0	0	0	1	0	1	-8	4	BRN TAKEN
0	1	1	0	0	0	1	0	1	-8	-4	BRN TAKEN AGAIN
0	1	0	0	0	0	1	0	1	-8	-12	COUNT UP - BRN NOT TAKEN
0	1	0	0	0	0	1	0	1	-8	-11	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-10	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-9	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-8	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-7	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-6	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-5	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	-1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	0	COUNT UP
0	1	0	0	0	0	1	0	1	-8	1	COUNT UP
0	1	0	0	0	0	1	0	1	-8	2	COUNT UP
0	1	0	0	0	0	1	0	1	-8	3	COUNT UP
0	1	0	0	0	0	1	0	1	-8	4	COUNT UP
0	1	0	0	0	0	1	0	1	-8	5	COUNT UP

IDEAL

[illegible]