

Instruction	Opcode	PCWR	MEM1RD	MUX9	RFRD	RFWR	MUX1	MUX2	MUX3	MUX4	MUX5	MUX7	S11	S12	CMP	CIN	ZIN	MUX6	MUX10	CV	EN	MEM2RD	MEM2WR	MUX8
ADA	0001	1	1	0	1	1	1	0	01	1	11	01	0	0	0	0	0	1	10	00	11	0	0	0
ADC	0001	1	1	0	1	1	1	0	01	1	11	01	0	0	0	1	0	1	10	00	11	0	0	0
ADZ	0001	1	1	0	1	1	1	0	01	1	11	01	0	0	0	0	1	1	10	00	11	0	0	0
AWC	0001	1	1	0	1	1	1	0	01	1	11	01	0	0	0	1	1	1	11	00	11	0	0	0
ACA	0001	1	1	0	1	1	1	0	01	1	11	01	0	0	1	0	0	1	11	00	11	0	0	0
ACC	0001	1	1	0	1	1	1	0	01	1	11	01	0	0	1	1	0	1	11	00	11	0	0	0
ACZ	0001	1	1	0	1	1	1	0	01	1	11	01	0	0	1	0	1	1	11	00	11	0	0	0
ACW	0001	1	1	0	1	1	1	0	01	1	11	01	0	0	1	1	1	1	11	00	11	0	0	0
ADI	0000	1	1	0	1	1	1	X	10	1	10	01	0	0	0	X	X	1	10	00	11	0	0	0
NDU	0010	1	1	0	1	1	1	0	01	1	11	01	0	0	0	0	0	1	10	01	01	0	0	0
NDC	0010	1	1	0	1	1	1	0	01	1	11	01	0	0	0	1	0	1	10	01	01	0	0	0
NDZ	0010	1	1	0	1	1	1	0	01	1	11	01	0	0	0	0	1	1	10	01	01	0	0	0
NCU	0010	1	1	0	1	1	1	0	01	1	11	01	0	0	1	0	0	1	10	01	01	0	0	0
NCC	0010	1	1	0	1	1	1	0	01	1	11	01	0	0	1	1	0	1	10	01	01	0	0	0
NCZ	0010	1	1	0	1	1	1	0	01	1	11	01	0	0	1	0	1	1	10	01	01	0	0	0
LLI	0011	1	1	0	0	1	X	X	11	0	00	01	0	0	0	X	X	1	10	00	00	0	0	0
LW	0100	1	1	0	1	1	0	X	11	1	10	01	0	0	0	X	X	1	X	00	00	1	1	1
SW	0101	1	1	0	1	1	0	1	00	1	11	01	0	0	0	X	X	1	01	00	00	1	1	0
LM	0110																							
SM	0111																							
BEQ	1000	1	1	NA	1	0	1	0	X	1	11	11	0	0	0	X	X	1	X	00	00	0	0	X
BLT	1001	1	1	NA	1	0	1	0	X	1	11	11	0	0	0	X	X	1	X	00	00	0	0	X
BLE	1001	1	1	NA	1	0	1	0	X	1	11	11	0	0	0	X	X	1	X	00	00	0	0	X
JAL	1100	1	1	1	0	1	X	X	11	X	X	10	0	0	0	X	X	1	01	X	00	0	0	0
JLR	1101	1	1	1	1	1	0	X	11	X	X	01	0	0	0	X	X	1	01	X	00	0	0	0
JRI	1111	1	1	1	X	0	1	X	X	1	01	01	0	0	0	X	X	1	X	X	00	0	0	X