INSTRUCTION		OPCODE INPUT	MUX_1 S1	MUX_2 S2	MUX_3 S3	MUX_4 S4	MUX_5 S5	MUX_6 S6	MUX_7 S7	MUX_8 P1	MUX_8 P0	MUX_9 S9	MUX_10 M1	MUX_10 M0	MUX_11 S11	MUX_12 S12	MUX_13 S13	MUX_14 S14	MUX_15 S15	MUX_16 S16	MUX_17 S17	MEM MR	MEM MW	IR IW	DR DW	RF RW	ResA AW	ResB BW	ResC CW
ADD	R-TYPE	0001	0	0	0	0	0	×	×	0	0	0	0	0	×	×	×	0	0	×	0	1	0	1	0	1	1	1	1
ADC	R-TYPE	0001	0	0	0	0	0	×	×	0	0	0	0	0	×	×	×	0	0	×	0	1	0	1	0	1	1	1	1
ADZ	R-TYPE	0001	0	0	0	0	0	×	×	0	0	0	0	0	×	×	×	0	0	×	0	1	0	1	0	1	1	1	1
ADL	R-TYPE	0001	0	0	0	0	0	×	×	0	0	0	0	0	×	×	×	0	0	×	0	1	0	1	0	1	1	1	1
NDU	R-TYPE	0010	0	0	0	0	0	×	×	0	0	0	0	0	×	×	×	0	0	×	0	1	0	1	0	1	1	1	1
NDC	R-TYPE	0010	0	0	0	0	0	×	×	0	0	0	0	0	×	×	×	0	0	×	0	1	0	1	0	1	1	1	1
NDZ	R-TYPE	0010	0	0	0	0	0	×	×	0	0	0	0	0	×	×	×	0	0	×	0	1	0	1	0	1	1	1	1
ADI	I-TYPE	0000	0	0	0	×	0	0	×	0	0	0	1	0	0	0	0	0	0	×	0	1	0	1	×	1	1	1	1
LW	I-TYPE	0111	0	×	0	×	0	0	×	0	0	0	1	0	0	0	0	1	0	×	×	×	×	×	1	1	1	×	1
SW	I-TYPE	0101	0	×	0	1	0	0	×	0	0	0	1	0	0	0	0	1	0	×	×	1	1	1	1	0	1	1	1
BEQ	I-TYPE	1000	0	×	0	1	×	0	×	×	×	0	1	1	×	×	×	×	×	×	1	1	0	1	×	1	1	1	×
JLR	I-TYPE	1010	×	×	×	×	0	×	×	1	1	×	×	×	1	×	1	0	0	×	×	1	×	1	×	1	×	0	×
LHI	J-TYPE	0000	0	0	×	×	0	1	×	×	×	×	×	×	×	×	×	1	1	×	×	1	×	1	1	1	×	×	×
LM	J-TYPE	1100	0	0	1	1	1	×	×	×	×	×	×	×	1	1	1	×	×	×	×	1	×	1	1	1	×	1	×
SM	J-TYPE	1101	0	×	1	1	×	1	×	×	×	×	1	×	1	1	×	×	0	×	×	1	1	1	1	1	1	1	×
JAL	J-TYPE	1001	0	0	×	×	0	1	×	1	1	×	1	×	×	×	×	0	0	×	1	1	0	1	×	1	1	1	1
JRI	J-TYPE	1011	0	0	×	1	×	1	×	0	0	0	1	0	×	×	×	×	×	×	1	1	0	1	×	×	1	×	1