

INSTRUCTION			TYPE_BIT	FUNCTION	alu_ctrl
					op
ADD	R-TYPE	ADDITION	00	00	01
ADC	R-TYPE	ADDITION	00	10	01
ADZ	R-TYPE	ADDITION	00	01	01
ADL	R-TYPE	ADDITION	00	11	01
NDU	R-TYPE	NAND	00	00	00
NDC	R-TYPE	NAND	00	10	00
NDZ	R-TYPE	NAND	00	01	00
ADI	I-TYPE	ADDITION	01	XX	01
LW	I-TYPE	ADDITION	01	XX	01
SW	I-TYPE	ADDITION	01	XX	01
BEQ	I-TYPE	SUBTRACTION	01	XX	10
JLR	I-TYPE	XXX	01	XX	XX
LHI	J-TYPE	XXX	11	XX	XX
LM	J-TYPE	ADDITION	11	XX	01
SM	J-TYPE	ADDITION	11	XX	01
JAL	J-TYPE	ADDITION	11	XX	01
JRI	J-TYPE	ADDITION	11	XX	01