

Instruction list

000000	NOOP	
010000	MOV	$R1 = R2$
010001	NOT	$R1 = \sim R2$
010010	ADD	$R1 = R2 + R3$
010011	SUB	$R1 = R2 - R3$
010101	AND	$R1 = R2 \& R3$
010110	XOR	$R1 = R2 \wedge R3$
010111	SLT	$R1 = \text{set if } R2 < R3 \text{ else clear}$
000001	J	$PC \leftarrow PC + SE(Limm)$
000010	JAL	$\$31 = PC + 4, PC \leftarrow PC + SE(Limm)$
000011	JR	$PC \leftarrow R1$
100000	BEQ	$PC \leftarrow PC + SE(IMM) \text{ if } R1 = R2$
100001	BNE	$PC \leftarrow PC + SE(IMM) \text{ if } R1 \neq R2$
100010	BLT	$PC \leftarrow PC + SE(IMM) \text{ if } R1 < R2$
100011	BLE	$PC \leftarrow PC + SE(IMM) \text{ if } R1 \leq R2$
110010	ADDI	$R1 = R2 + SE(IMM)$
110011	SUBI	$R1 = R2 - SE(IMM)$
110100	ORI	$R1 = R2 ZE(IMM)$
110101	ANDI	$R1 = R2 \& ZE(IMM)$
110110	XORI	$R1 = R2 \wedge ZE(IMM)$
110111	SLTI	$R1 = \text{set if } R2 < SE(IMM) \text{ else clear}$
111001	LI	$R1[15:0] = ZE(IMM)$
111010	LUI	$R[31:16] = ZE(IMM)$
111011	LWI	$R1 \leftarrow M[ZE(IMM)]$
111100	SWI	$M[ZE(IMM)] \leftarrow R1$
111101	LW	$R1 \leftarrow M[R2 + SE(IMM)]$
111110	SW	$M[R2 + SE(IMM)] \leftarrow R1$