RISC-V 32I 共 47 条指令，这里选择实现主要的 37 条指令。

指令	类型	Inst[31:25]	Inst[24:20]	Inst[19:15]	Inst[14:12]	Inst[11:7]	Inst[6:0]
LUI	U	imm[31:12]				rd	0110111
AUIPC	U	imm[31:12]				rd	0010111
JAL	J	imm[20|10:1|11|19:12]				rd	1101111
JALR	I	imm[11:0]		rs1	000	rd	1100111
BEQ	B	imm[12|10:5]	rs2	rs1	000	imm[4:1|11]	1100011
BNE	B	imm[12|10:5]	rs2	rs1	001	imm[4:1|11]	1100011
BLT	B	imm[12|10:5]	rs2	rs1	100	imm[4:1|11]	1100011
BGE	B	imm[12|10:5]	rs2	rs1	101	imm[4:1|11]	1100011
BLTU	B	imm[12|10:5]	rs2	rs1	110	imm[4:1|11]	1100011
BGEU	B	imm[12|10:5]	rs2	rs1	111	imm[4:1|11]	1100011
LB	I	imm[11:0]		rs1	000	rd	0000011
LH	I	imm[11:0]		rs1	001	rd	0000011
LW	I	imm[11:0]		rs1	010	rd	0000011
LBU	I	imm[11:0]		rs1	100	rd	0000011
LHU	I	imm[11:0]		rs1	101	rd	0000011
SB	S	imm[11:5]	rs2	rs1	000	imm[4:0]	0100011
SH	S	imm[11:5]	rs2	rs1	001	imm[4:0]	0100011
SW	S	imm[11:5]	rs2	rs1	010	imm[4:0]	0100011
ADDI	I	imm[11:0]		rs1	000	rd	0010011
SLTI	I	imm[11:0]		rs1	010	rd	0010011
SLTIU	I	imm[11:0]		rs1	011	rd	0010011
XORI	I	imm[11:0]		rs1	100	rd	0010011
ORI	I	imm[11:0]		rs1	110	rd	0010011
ANDI	I	imm[11:0]		rs1	111	rd	0010011
SLLI	I	0000000	shamt	rs1	001	rd	0010011
SRLI	I	0000000	shamt	rs1	101	rd	0010011
SRAI	I	0100000	shamt	rs1	101	rd	0010011
ADD	R	0000000	rs2	rs1	000	rd	0110011
SUB	R	0100000	rs2	rs1	000	rd	0110011
SLL	R	0000000	rs2	rs1	001	rd	0110011
SLT	R	0000000	rs2	rs1	010	rd	0110011
SLTU	R	0000000	rs2	rs1	011	rd	0110011
XOR	R	0000000	rs2	rs1	100	rd	0110011
SRL	R	0000000	rs2	rs1	101	rd	0110011
SRA	R	0100000	rs2	rs1	101	rd	0110011
OR	R	0000000	rs2	rs1	110	rd	0110011
AND	R	0000000	rs2	rs1	111	rd	0110011

	RS1	RS2	RD	Jump
LUI	——	Imm	ALUout	——
AUIPC	PC	Imm	ALUout	——
JAL	——	——	PC+4	PC+Imm
JALR	Reg	Imm	PC+4	Reg+Imm
Reg Reg	Reg	Reg	ALUout	——
Reg Imm	Reg	Imm	ALUout	——
Branch	Reg	Reg	——	PC+Imm