				Inputs					Control Outputs						Input Bits				Output Bits		
INUM	Instruction	Mnemonic	Format	opcode	funct3	funct7	funct6	RFW	ALUOp	ALUSrcA	ALUSrcB	PCsel	WDsel	opcode	funt3	funct7	funct6		Part1	Part2	
0	addi	ADDI	1	0010011	000	XXXXXXX	XXXXXX	1	000	0	01	0	0	0b0010011	0b000	0bxxxxxxxx	0bxxxxxx	0b100001	0x21	0b100000100	0x104
1	add	ADDR	R	0110011	000	0000000	XXXXXX	1	000	0	00	0	0	0b0110011	0b000	0b0000000	0bxxxxxx	0b100000	0x20	0b100000000	0x100
2	jal	JAL	J	1101111	xxx	XXXXXXX	XXXXXX	1	000	1	10	1	1	0b1101111	0bxxx	0bxxxxxxx	0bxxxxxx	0b100010	0x22	0b100011011	0x11B
3	ialr	JALR	1	1100111	000	XXXXXXXX	XXXXXXX	1	000	0	01	1	1	0b1100111	0b000	0bxxxxxxxx	0bxxxxxxx	0b100001	0x21	0b100000111	0x107