**ISA :**

**Register Mode :**

Opcode(2bit+1bit)+Register RA(3bit)+Register RB(3bit)+Unused(7bit) 🡪Opcode 1st 2bit=00 + Last 1bit= SHR(0),SHL(1)

Register Mode **SHR**= 0001000110000000 ,

Register Mode **SHL**=0011000110000000

**Immediate Mode:** Opcode(2bit+1bit)+Register RA(3bit)+Immediate Value(3bit)+Unused(7bit) 🡪Opcode 1st 2bit=01 + Last 1bit= SHR(0),SHL(1)

Immediate Mode **SHR**= 0101000110000000 ,

Register Mode **SHL**= 0111000110000000

**Branching Mode:** Opcode(2bit+1bit)+ Address(3bit)+ Unused(10bit) 🡪Opcode 1st 2bit=10 + Last 1bit= JNC(0)

Branching Mode (**JNC**)= 1001100000000000