

State (Name)	PCWrite	MemWrite	IRWrite	RegWrite	ALUSrcA	Branch	lOrd	MemtoReg	RegDst	ALUSrcB[1:0]	PCRsc[1:0]	ALUOp[1:0]	FSM Control Word
0 (Fetch)	1	0	1	0	0	0	0	0	0	01	00	00	0x5010
1 (Decode)	0	0	0	0	0	0	0	0	0	11	00	00	0x0030
2 (MemAdr)													
3 (MemRd)													
4 (MemWB)													
5 (MemWr)													
6 (RtypeEx)													
7 (RtypeWB)													
8 (BeqEx)													
9 (AddiEx)													
10 (AddiWB)													
11 (JEx)													

**Table 4. Main Decoder Control output**