

Zainab Hussein

Lab 8 Prelab

State (Name)	PCWrite	MemWrite	IRWrite	RegWrite	ALUSrcA	Branch	lOrd	MentoReg	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)	0	0	0	0	1	0	0	0	0	10	00	00	0x0420
3 (MemRd)	0	0	0	0	0	0	1	0	0	00	00	00	0x0100
4 (MemWB)	0	0	0	1	0	0	0	1	0	00	00	00	0x0880
5 (MemWr)	0	1	0	0	0	0	1	0	0	00	00	00	0x2100
6 (RtypeEx)	0	0	0	0	1	0	0	0	0	00	00	10	0x0402
7 (RtypeWB)	0	0	0	1	0	0	0	0	1	00	00	00	0x0840
8 (BeqEx)	0	0	0	0	1	1	0	0	0	00	01	01	0x0605
9 (AddiEx)	0	0	0	0	1	0	0	0	0	10	00	00	0x0420
10 (AddiWB)	0	0	0	1	0	0	0	0	0	00	00	00	0x0800
11 (JEx)	1	0	0	0	0	0	0	0	0	00	10	00	0x4008

Table 1. Main Decoder Control Output