Hex Digit/ Unit	Bit	Signal	Connection
0 Mcode	00	+1	To BUS2
	01	IR Address/Literal	To BUS1
	02	IR Address/Literal	To BUS2
	03	Microcode Operand	To MPC
1 Mcode	04	Select ~CC0	
	05	Select CC1	
	06	Execute if true	
	07	Execute if false	
2 MPC	08	Input1	From MPC
	09	Input2	+1
	10	Input3	From Mcode
	11	Output2	To Mcode
3 PC	12	Input1	From PC
	13	Input2	+1
	14	Input3	From BUS2
	15	Output2	To I_Memory
4 Registers	16	Swap: Input to RS1 Output2 = (RD)	
	17	Input [to RD]	From ALU
	18	Output1 (RS1)	To BUS1
	19	Output2 (RS2)	To BUS2
5 Data Memory	20	MAR Input	From BUS2
	21	MBR Input	From BUS1
	22	Read/Write	
	23	MBR Output	To BUS1
6 ALU	24	Input1	From BUS1
	25	Input2	From BUS2
	26	Output1	To Registers
	27	Output2	To BUS2
7 ALU	28	Not used	
	29	Function	
	30	Function	
	31	Function	

M-Format

Hex Digit/ Unit	Bit	Signal	Connection
0 Mcode	00	+1	To BUS2
	01	IR Address/Literal	To BUS1
	02	IR Address/Literal	To BUS2
	03	Microcode Operand	To MPC
1 Mcode	04	Select ~CC0	
	05	Select CC1	
	06	Execute if true	
	07	Execute if false	
2 MPC	08	Input1	From MPC
	09	Input2	+ 1
	10	Input3	From Mcode
	11	Output2	To Mcode
3 PC	12	Input1	From PC
	13	Input2	+ 1
	14	Input3	From BUS2
	15	Output2	To I_Memory
4 Registers	16	Swap: Input to RS1 Output2 = (RD)	
	17	Input [to RD]	From ALU
	18	Output1 (RS1)	To BUS1
	19	Output2 (RS2)	To BUS2
5 ALU	20	Inhibit A to alu	internal
	21	Inhibit B to alu	internal
	22	Enable ACC to alu	internal
	23	Inhibit B to ALU if INPUTA<31> = 0	internal
6 ALU	24	Input1	From BUS1
	25	Input2	From BUS2
	26	Output1	To Registers
	27	Output2	To BUS2
7 ALU	28	Function	
	29	Function	
	30	Function	
	31	Function	

A-Format