COMPLETE COMPUTER DESCRIPTION Microoperations

Q\when we went AR? && where is AR?

R'T0:AR←PC (LD AR)

R'T2:AR←IR(0----11)(LD AR)

D7'IT3:AR←M[AR] (LD AR)

RT0:AR←0(CLR AR)

D5T4:AR←AR+1 (INR AR)

WE USE AR WHEN WE DESGIN THIS CIRCUIT AND REMEMBER THE INPUT AND OUT PUT IS 12BITS

Q\WHEN WE WENT IEN ?&&WHERE IS IEN?

PB7:IEN←1 (I\O INSTRUCTION)

PB6:IEN←0(I\O INSTRUCTION)

RT2:IEN←0 (INTERRUPT)

WE USE JK WHEN WE DESGIN THIS CIRCUIT AND REMERMBER THE P IS D7IT3

Q\WHEN WE WENT IR ? && WHERE IS IR?

R'T1:IR←M[AR] (LD IR)

Q\WHEN WE WENT I ? && WHERE IS I?

R'T2: I ← IR (15) (LD I)

***I THINK WE USE D OR JK FLIPFLOP IN THIS DESIGN**

Q\WHEN WE WENT D0----D7? && WHERE IS D0---D7?

R'T2:D0---D7← IR (12--14)

Q\WHEN WE WENT R? &&WHERE IS R?

T0' T1' T2' (IEN) (FGI+FGO):R←1

RT2: R←0

Q\WHEN WE WENT TR? && WHERE IS TR?

RT0: TR←PC

Q\WHEN WE WENT PC? && WHERE IS PC?

R'T1: PC←PC+1 (INR PC)

RT1: PC←0 (CLR PC)

RT2: PC←PC+1   (INR PC)

D4T4: PC←AR (LD PC)

D5T5: PC←AR (LD PC)

D6T6: IF (DR=0) THEN PC←PC+1 (INR PC)

rB4: if (AC (15) =0) THEN PC←PC+1 (INR PC)

rB3: IF (AC (15) =1) THEN PC←PC+1 (INR PC)

rB2: IF (AC=0) THEN PC←PC+1 (INR PC)

rB1: IF (E=0) THEN PC←PC+1 (INR PC)

PB9: IF (FGI=1) THEN PC←PC+1 (INR PC)

PB8: IF (FGO=1) THEN PC←PC+1 (INR PC)