









LDA #7E

Q5

INCA

Q6

JMP 22

Q5

*FO*  
03  
08  
*E1*  
10  
24  
*FA*  
33  
22

-

-



38

10

24

F9

21

23

$2^3 = 38$

$2^4 = 10$

$2^5 = 24$

$2^6 = 20$

$2^7 = 21$

$2^8 = 21$



Q4  $(Q_4 \cdot I_{DF})$   $M(PC) \rightarrow TA; PC + I \rightarrow PC, LD_{TA}; INC_{PC}; MR,$   
Q5  $(Q5 \cdot F_{DF})$   $M(PC) \rightarrow R; PC + I \rightarrow PC, LD_R; INC_{PC}; MR; f2,$   
Q6  $(Q6 \cdot I_{DF})$   $R \rightarrow M(TA) \quad OE_R; g_{14} ; MW,$



05

07

EF

20

02

21

21

20

05

07

EF

20

02

21

21

20



OP | Adr | Data

- Q4  $(Q_4 \cdot I_{EF})$   $M(PC) \xrightarrow{\substack{M(Adr) \\ (\# Data)}} R ; PC+1 \rightarrow PC, LD_R; INC_{PC}; f_3; f_0; MR,$
- Q5  $(Q_5 \cdot I_{EF})$   $M(PC) \xrightarrow{T} T ; PC+1 \rightarrow PC, MR; LD_T; INC_{PC},$
- Q6  $(Q_6 \cdot I_{EF})$   $A-T; ALU(z) \rightarrow CC$   $f_3; f_2; OE_A; g_0; LD_{CC}; g_9; g_8; g_5; g_4; g_3; g_2$
- Q7  $(Q_7 \cdot I_{EF})$   $\begin{cases} f & (z=1) \\ M(R) \rightarrow PC & \end{cases}$   $(OE_R; LD_{SP}) \cdot z$

