Tablo I: Bilgisayar komutlarının tamamının çalışmasını tanımlayan tüm mikroişlemler

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Fetch
                           R′T₀:
                                                  AR \leftarrow PC
                                                  IR \leftarrow M[AR], PC \leftarrow PC + 1
                           R′T₁:
                                                  D0, ..., D7 ← Decode IR(12 ~ 14),
Decode
                           R'T<sub>2</sub>:
                                                                AR \leftarrow IR(0 \sim 11), I \leftarrow IR(15)
                                                  AR \leftarrow M[AR]
Indirect
                           D<sub>7</sub>'IT<sub>3</sub>:
Interrupt
      T_0'T_1'T_2'(IEN)(FGI + FGO):
                                                  R ←1
                                                  AR \leftarrow 0, TR \leftarrow PC
                           RT₀:
                           RT₁:
                                                  M[AR] \leftarrow TR. PC \leftarrow 0
                           RT<sub>2</sub>:
                                                  PC \leftarrow PC + 1, IEN \leftarrow 0, R \leftarrow 0, SC \leftarrow 0
Memory-Reference
   AND
                           D_0T_4:
                                                  DR \leftarrow M[AR]
                                                  AC \leftarrow AC \land DR, SC \leftarrow 0
                           D_0T_5:
   ADD
                           D_1T_4:
                                                  DR \leftarrow M[AR]
                                                  AC \leftarrow AC + DR, E \leftarrow C_{out}, SC \leftarrow 0
                           D<sub>1</sub>T<sub>5</sub>:
   LDA
                           D_2T_4:
                                                  DR \leftarrow M[AR]
                                                  AC \leftarrow DR, SC \leftarrow 0
                           D_2T_5:
                                                  M[AR] \leftarrow AC, SC \leftarrow 0
   STA
                           D_3T_4:
                           D_4T_4:
   BUN
                                                  PC \leftarrow AR, SC \leftarrow 0
   BSA
                           D_5T_4:
                                                  M[AR] \leftarrow PC, AR \leftarrow AR + 1
                                                  PC \leftarrow AR, SC \leftarrow 0
                           D_5T_5:
                           D_6T_4:
                                                  DR \leftarrow M[AR]
   ISZ
                                                  DR \leftarrow DR + 1
                           D_6T_5:
                                                  M[AR] \leftarrow DR, if (DR=0) then (PC \leftarrow PC + 1),
                           D_6T_6:
                                                  SC \leftarrow 0
Register-Reference
                            D_7I'T_3 = r
                                                  (Common to all register-reference instr)
                            IR(i) = B_i
                                                  (i = 0,1,2,...,11)
                                                  SC \leftarrow 0
                              r:
    CLA
                              rB₁₁:
                                                 AC \leftarrow 0
    CLE
                                                 E \leftarrow 0
                              rB<sub>10</sub>:
                                                 AC ← AC'
    CMA
                              rB<sub>9</sub>:
    CME
                              rB<sub>8</sub>:
                                                 E \leftarrow E'
    CIR
                                                 AC \leftarrow shr AC, AC(15) \leftarrow E, E \leftarrow AC(0)
                              rB<sub>7</sub>:
    CIL
                              rB<sub>6</sub>:
                                                 AC \leftarrow shl AC, AC(0) \leftarrow E, E \leftarrow AC(15)
                                                 AC \leftarrow AC + 1
    INC
                              rB<sub>5</sub>:
                                                 If(AC(15) =0) then (PC \leftarrow PC + 1)
    SPA
                              rB₄:
    SNA
                                                 If(AC(15) = 1) then (PC \leftarrow PC + 1)
                              rB<sub>3</sub>:
                                                 If(AC = 0) then (PC \leftarrow PC + 1)
    SZA
                              rB<sub>2</sub>:
    SZE
                                                 If(E=0) then (PC \leftarrow PC + 1)
                              rB₁:
    HLT
                                                 S ← 0
                              rB₀:
Input-Output
                            D_7IT_3 = p
                                                  (Common to all input-output instructions)
                                                  (i = 6,7,8,9,10,11)
                            IR(i) = B_i
                                                  SC \leftarrow 0
                              p:
    INP
                              pB₁₁:
                                                 AC(0-7) \leftarrow INPR, FGI \leftarrow 0
                                                 OUTR \leftarrow AC(0-7), FGO \leftarrow 0
    OUT
                              pB<sub>10</sub>:
                                                 If(FGI=1) then (PC ← PC + 1)
    SKI
                              pB<sub>9</sub>:
                                                 If(FGO=1) then (PC \leftarrow PC + 1)
    SKO
                              pB<sub>8</sub>:
    ION
                              pB_7:
                                                 IEN \leftarrow 1
                                                 IEN \leftarrow 0
    IOF
                              pB<sub>6</sub>:
```