

```

; The EPROM code will reside at 0H in RAM on the board with the diagnostic
; code above the basic hardware. RAM is at 800H-0FFFH
;
FALSE EQU    0
TRUE  EQU    NOT FALSE
;
LF     EQU    0AH
CR     EQU    0DH
BELL   EQU    07H
SPACE  EQU    20H
TAB    EQU    09H          ;TAB ACROSS (8 SPACES FOR SD-BOARD)
;
;
OLD_BOARD EQU    FALSE

STACK      EQU    0FFFH ;Stack at top of RAM
;
IF      OLD_BOARD
CONT$A    EQU    0F9H  ;CTRL port for output to Video board keyboard
input port
CONT$B    EQU    0FBH  ;CTRL port for IBM Keyboard input
CONT$C    EQU    0F5H  ;CTRL port for data port KEYCLEAR
CONT$D    EQU    0F7H  ;CTRL port for port KEYSTAT

KEYOUT    EQU    0F8H  ;Data port for output to Video board keyboard
input port
KEYIN     EQU    0FAH  ;Data port for IMB keyboard input
KEYCLEAR  EQU    0F4H  ;Pulsing bit 0 high clears 74LS161 Shift Regs
KEYSTAT   EQU    0F6H  ;Input bit 0 is zero if IBMPC Key char ready
;to be read and translated

ELSE

CONT$A    EQU    0F5H  ;CTRL port for output to Video board keyboard
input port
CONT$B    EQU    0F7H  ;CTRL port for IBM Keyboard input
CONT$C    EQU    0F9H  ;CTRL port for data port KEYCLEAR
CONT$D    EQU    0FBH  ;CTRL port for port KEYSTAT

KEYOUT    EQU    0F4H  ;Data port for output to Video board keyboard
input port
KEYIN     EQU    0F6H  ;Data port for IMB keyboard input
KEYCLEAR  EQU    0F8H  ;Pulsing bit 0 high clears 74LS161 Shift Regs
KEYSTAT   EQU    0FAH  ;Input bit 0 is zero if IBMPC Key char ready
ENDIF
;
; Bit flags for PIO#2: Port Stat:-
;
;          Bit 0  not used (used to clear 74LS161 shift regs)
;          Bit 1  Strobe for data into Video board keyboard port
;          Bit 2  = 1 if Upper Case Lock is ON
;          Bit 3  = 1 if Shift key is currently HELD down
;          Bit 4  = 1 if Ctrl key is currently HELD down
;          Bit 5  = 1 if NUM LOCK is ON
;
;
ORG      0H          ;The EPROM code will start here
;

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DI          ;Just in case
LD  A,0FH  ;First setup the two Zilog PIO's
OUT (CONT$A),A ;Mode 0 Output
LD  A,03H
OUT (CONT$A),A

LD  A,4FH  ;Mode 1 Input
OUT (CONT$B),A
LD  A,03H
OUT (CONT$B),A

LD  A,0FH  ;Mode 0 Output
OUT (CONT$C),A
LD  A,03H
OUT (CONT$C),A

LD  A,4FH  ;Mode 1 Input
OUT (CONT$D),A
LD  A,03H
OUT (CONT$D),A

IN  A,(KEYIN) ;PIO Check
LD  C,A
LOOP: LD B,80H
LOOP2: LD A,0FFH
LOOP1: DEC A
      JP NZ,LOOP1
      DJNZ LOOP2
      LD A,C
      OUT (KEYOUT),A
      INC C
      JP LOOP

;
;END

```