

```

%-----
% KNIGHT_RIDER-1
% VER 1.0
%
% MOVING LIGHT DISPLAY LIKE 'KNIGHT RIDER' FOR PERSEUS-7 (CPU:R6502) AND PARALLEL INTERFACE LEDES
% ('KNIGHT RIDER' IS NBC TV DRAMA IN USA 1982)
% HAND ASSEMBLED
%
% MITSURU YAMADA 07/FEB/2020
%
%-----

```

```

          SYMBOL          DATA          PARALLEL INTERFACE ADDRESS (R/W)
          PORT          $4000
%-----

```

```

%-----
% ADDRESS(HEX) DATA(HEX)
% RESET VECTOR
% .ORIGIN $3FC
%          3FC  00 02
%-----

```

```

% KNIGHT RIDER LIKE DISPLAY
% .ORIGIN $200
%
K_RIDER_01  CLC          200  18          CLEAR CARRY FLAG
            LDX #$FF    201  A2 FF
            TXS          203  9A          INIT. STACK POINTER
            LDA #$01    204  A9 01          INITIAL DISPLAY PATTERN
LOOP_2      STA PORT    206  8D 00 40      OUTPUT PATTERN TO PARALLEL PORT
            JSR TIMER_01 209  20 20 02      TIMER
            ASL          20C  0A          SHIFT LEFT PATTERN
            BPL LOOP_2   20D  10 F7          REPEAT IF PATTERN IS NOT LEFT END
LOOP_3      STA PORT    20F  8D 00 40      OUTPUT PATTERN TO PARALLEL PORT
            LSR          212  4A          SHIFT RIGHT PATTERN
            JSR TIMER_01 213  20 20 02      TIMER
            CMP #$01    216  C9 01          REPEAT IF PATTERN IS NOT RIGHT END
            BNE LOOP_3   218  D0 F5
            BNE LOOP_2   21A  F0 EA          WHOLE REPEAT
%
%-----

```

```

% TIMER SUBROUTINE
% .ORIGIN $220
TIMER_01    LDX #$00    220  A2 00          SET TIMER VALUE X
LOOP_5      LDY PORT    222  AC 00 40      INPUT TIMER VALUE Y FROM PORT
LOOP_6      DEY          225  88          Y -1
            BNE LOOP_6   226  D0 FD          REPEAT INNER LOOP UNTIL Y=0
            DEX          228  CA          X -1
            BNE LOOP_5   229  D0 F7          REPEAT OUTER LOOP UNTIL X=0
            RTS          22B  60
%
%-----

```

```

% END OF PROGRAM
%-----

```