```
LIST Q = 37
DEVICE SX28L, TURBO, STACKX, OSCXT2
IRC_CAL IRC_FAST
FREQ 50_000_000

RESET   START

TRIS            equ $0F
WKED            equ $0A
WKPND           equ $09

org     $08

Counter1        ds 1
Counter2        ds 1
Counter3        ds 1

org     $50

Pulse
        mode    TRIS            ;initialize port direction
        mov     !rc, #$7F       ;configure bit rc.7 as output
        mov     rc, #$80        ;set rc.7 to high 'pulse on'
        mov     Counter2, #$0F  ;modify Counter2 setting to change pulse width
:delay
        decsz Counter3          ;==============================
                jmp :delay      ;
        decsz Counter2          ;Pulse 'On' Delay Counter
                jmp :delay      ;==============================
```

```
        mov     rc, #$00        ;set rc.7 to low 'pulse off'
        Mode    WKED            ;initialize edge configuration
        mov     !rb, #$01       ;set rb.0 as falling edge
        mode    WKPND           ;initialize wake pending
        mov     !rb, #$00       ;clear register rb before returning to MAIN
        ret
START
        mode    WKED            ;initialize register b 'wake edge pending'
        mov     !rb, #$01       ;configure resister rb.0 pin to falling edge active latch-on
        mode    TRIS            ;initialize register direction
        mov     !rb, #$01       ;configure register rb.0 as input

MAIN
:loop
        Mode    WKED            ;initialize register b 'wake edge pending'
        mov     !rb, #$01       ;configure resister rb.0 pin to falling edge active latch-on
        mode    WKPND           ;initialize wake pending
        clr     w               ;clear W to reset for edge polling
        mov     !rb, w          ;=======================================================
        and     w, #%00000001   ;test for high bit in register rb that indicates positive falling edge event
        sz                      ;=======================================================
        call    pulse           ;initiate pulse sub routine on positive edge falling event else repeat loop
        clr     w
        jmp :loop
```