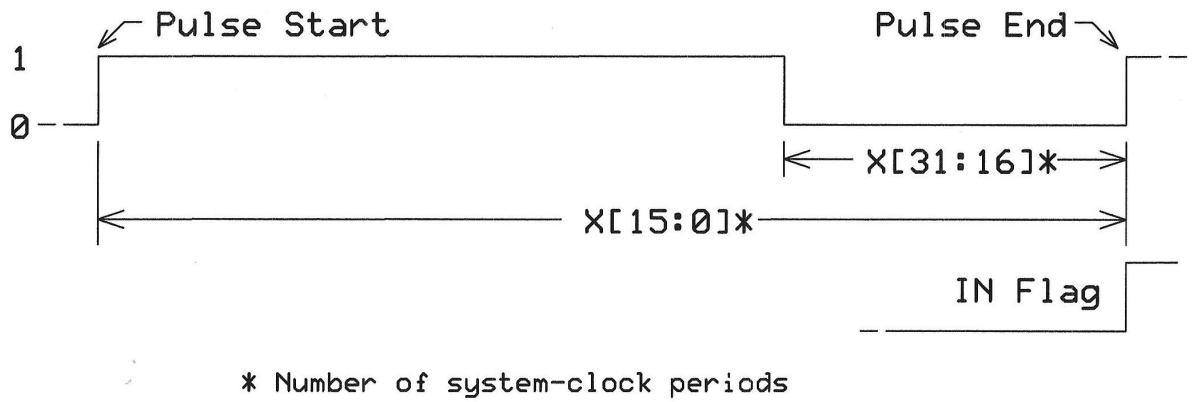
%00100 = pulse/cycle output

This command lets a Smart-Pin produce a series of logic-1 pulses. (If you need logic-0 pulses you can create them instead.) Software sets the pulse period, X[15:0], and the length of the logic-0 state, X[31:16], as shown in the figure below. These values represent the number of *system-clock periods* in each pulse section. Load the Y register Y[31:0] with the number of pulses you need. The Y value decrements by 1 for each pulse. When it decreases to 0, the Smart-Pin raises its IN flag. This mode overrides OUT, and controls the pin's output state.



* Number of system-clock periods

The following code example creates 16 logic-1 pulses:

```
CON
dat
       org  0
       dirl     #20                  'Setup Smart-Pin at P20
       wrpin    PulseConfig,  #20    'Set configuration for pulse/cycle
       wxpin    PulseTiming,  #20    'Set cycle time and logic-0 period
       dirh     #20                  'Finished setup

       wypin      Cycles,     #20    'Send pulse count to Y register
       nop                            'Delay two clocks for IN to drop
.myloop
       jmp  #.myloop                 'Program waits forever

PulseConfig long  %0000_0000_000_00000_00000000_11_00100_0  'Pulse/cycle

Cycles      long  $0010              'Pulse count of 16
PulseTiming long  $01F4_05DC         '60 usec pulse, 20 usec logic-0
```

To put out logic-0 pulses, replace the `dirl` instruction with `dirh` and change the `PulseConfig` Mode value P5 bit to a 1:

```
%0000_0000_000_00000_001_00000_11_00100_0
                        ^
```