# QUICKCODE™

# Software Switch Pull-ups
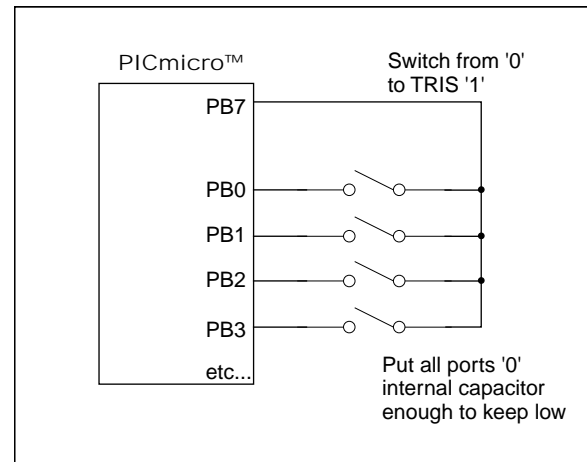
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## INTRODUCTION

Configuration switches without pull-ups can be polled with this technique.

Connect the switches as shown in the block diagram.

**FIGURE 1:    BLOCK DIAGRAM**



### Code: To Read the Switches

```
movlw    0
movwf    PORTB        ; drive all pins low
tris     PORTB        ; make sure they are outputs
nop                   ; delay to discharge external capacitances
nop
movlw    0x7F         ; make switches lines inputs
tris     PORTB        ; common is still an output
bsf      PORTB,7      ; raise common line and any closed switches
movf     PORTB,W      ; read switches
movwf    Switchstate  ; save switch results
movlw    0            ; keep port pins
movwf    PORTB        ; as low outputs the rest of the time
tris     PORTB
```

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