



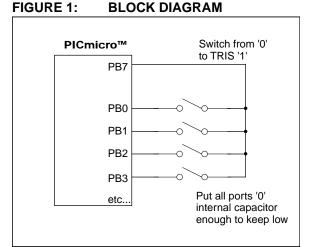
## Software Switch Pull-ups

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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.



## 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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