

# Min PIC16C84 hardware for in-system downloads

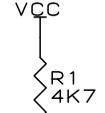
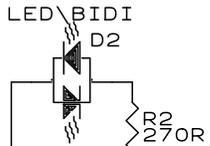
BEAR IN MIND  
THE RESET PIN WILL BE  
PULLED UP TO 12V AND  
DOWN TO GROUND DURING  
IN-SYSTEM DOWNLOADING

CERAMIC RESONATORS  
ARE MUCH CHEAPER  
AND SMALLER THAN  
CRYSTALS. THIS ONE  
EVEN HAS BUILT-IN  
LOAD CAPS  
USE XT OSC MODE

CERAMIC RES  
CST4.00MGW  
FARNELL  
295-346

CENTRE PIN  
(OF 3) IS GND

LED INCLUDED ONLY FOR DEMO PURPOSES



IN-SYSTEM  
PROGRAMMING  
AND EXPANSION  
SOCKET

CX FILTERS EXTERNAL  
CLOCK INPUT FOR  
SOFTWARE DOWNLOADS

RA4 IS ALSO THE EXTERNAL  
TIMER SOURCE AND HAS A  
SCHMIDT TRIGGER INPUT BUFFER  
AND OPEN-DRAIN OUTPUT BUFFER

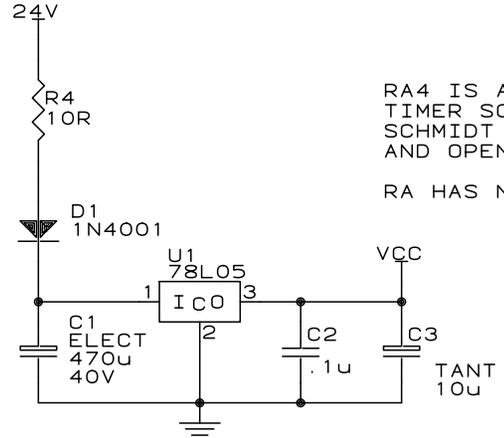
RA HAS NO PASSIVE INPUT PULL-UPS

RB4-7 CAN  
GENERATE  
INTERRUPT  
ON CHANGE

RB0 CAN BE AN  
INTERRUPT INPUT

RB HAS OPTIONAL WEAK  
PASSIVE PULL-UPS IN  
INPUT MODE

RB6 & RB7 CAN BE USED  
FOR IN-SYSTEM DOWNLOADS  
THEY ALSO HAVE SCHMIDT  
TRIGGER INPUT BUFFERS



10R = 10 ohms  
1n = 1 nano farad = 1000pF

PIC16C84 DEMO DESIGN		
Size	Document Number	REV
A	PIC84	C
Date:	April 8, 1997	Sheet 1 of 1