

# DEVELOPMENT BOARD

+5V R6 33 VREF = 4.096V

U2  
LM4040

USB\_POWER

U1/P1

VDD VDD  
OSC2/CLKOUT  
RA0/AN0  
RA1/AN1  
RA2/AN2/VREF-/CVREF  
RA3/AN3/VREF+  
RA4/T0CK1/C1OUT  
RA5/AN4/SS/HLVDIN/C2OUT

RB0/INT0/FLT0/AN12  
RB1/INT1/AN10  
RB2/INT2/AN8  
RB3/AN9/CCP2  
RB4/KBI0/AN11  
RB5/KBI1/PGM  
RB6/KBI2/PGC  
RB7/KBI3/PGD

RC0/T1/OSI/T13CK1  
RC1/T1/OSI/CCP2  
RC2/CCP1/P1A  
RC3/SCK/SCL  
RC4/SDI/SDA  
RC5/SDO  
RC6/TX/CK  
RC7/RX/DT

RD0/PSP0  
RD1/PSP1  
RD2/PSP2  
RD3/PSP3  
RD4/PSP4  
RD5/PSP5/P1B  
RD6/PSP6/P1C  
RD7/PSP7/P1D

RE0/RD/AN5  
RE1/WR/AN6  
RE2/CS/AN7

PIC18F4321

JP1  
HEADER 6

USB\_POWER

MCLR/Vpp  
OSC1/CLKIN/RA7

Vss  
Vss

+5V

R5  
33K 1%

VL0

PR1  
PHOTO RESISTOR

NSPED\_SW  
NSLT\_SW  
EWPED\_SW  
EWLT\_SW

RA1  
RA2  
RA3  
RA4

SW1  
SW DIP-4

MODE SENSOR

MODE LED

D6

LED

+5V

LED1  
UPPER

7-SEGMENT LED

LED2  
LOWER

7-SEGMENT LED

SEC\_LED

D5

LED

+5V

a  
b  
c  
d  
e  
f  
g  
dp

+5V

a  
b  
c  
d  
e  
f  
g  
dp

ECE3301L SESSION 3  
LAB 7

LED\_RGB COMMON CATHODE  
PORTA.5 1 R-  
PORTB.0 3 B-  
4 B-  
2

D1

LED\_RGB COMMON CATHODE  
PORTB.1 1 R-  
PORTB.2 3 B-  
4 B-  
2

D3

LED\_RGB COMMON CATHODE  
PORTB.1 1 R-  
PORTB.2 3 B-  
4 B-  
2

D3

LED\_RGB COMMON CATHODE  
PORTB.4 1 R-  
PORTB.5 3 B-  
4 B-  
2

D2

LED\_RGB COMMON CATHODE  
PORTE.0 1 R-  
PORTE.2 3 B-  
4 B-  
2

D4

LED\_RGB COMMON CATHODE  
PORTE.0 1 R-  
PORTE.2 3 B-  
4 B-  
2

D4

+5V

R7

100

BZ1

BUZZER

Q1

2N3904

GE 2N2222