

DEVELOPMENT BOARD

+5V R6 33k VREF = 4.096V

U2
LM4040

USB_POWER

U1/P1

PIC18F4321

OSC2/CLKOUT 14
RA0/AN0 2
RA1/AN1 3
RA2/AN2/VREF-/CVREF 4
RA3/AN3/VREF+ 5
RA4/T0CKI/C1OUT 6
RA5/AN4/SS/HLVDIN/C2OUT 7
RB0/INT0/FLT0/AN12 33
RB1/INT1/AN10 34
RB2/INT2/AN8 35
RB3/AN9/CCP2 36
RB4/KBI0/AN11 37
RB5/KBI1/PGM 38
RB6/KBI2/PGC 39
RB7/KBI3/PGD 40
RC0/T1OSO/T13CKI 15
RC1/T1OSI/CCP2 16
RC2/CCP1/P1A 17
RC3/SCK/SCL 23
RC4/SDI/SDA 24
RC5/SDO 25
RC6/TX/CK 26
RC7/RX/DT 27
RD0/PSPO 19
RD1/PSPI 20
RD2/PSPI 21
RD3/PSPI 22
RD4/PSPI 28
RD5/PSPI/P1B 29
RD6/PSPI/P1C 30
RD7/PSPI/P1D 31
RE0/RD/AN5 8
RE1/WR/AN6 9
RE2/CS/AN7 10

JP1
HEADER 6

R5 33K 1%
PR1 PHOTO_RESISTOR

U3
IR Receiver

LED_RGB COMMON CATHODE

D1

ALARM MODE
SW1 SW_PUSHBUTTON

PWM / BLUE 4

2 TACH / GREEN

Q2 2N7000
or ZVN4206AVSTZ

2N7000 TOP VIEW
VOUT
D G S
3 2 1

JP1
HEADER 16

LED_RGB COMMON CATHODE
PORTB.4 1
PORTB.5 3
PORTB.6 4

LED_RGB COMMON CATHODE
PORTE.0 1
PORTE.1 3
PORTE.2 4

R7 100

BZ1 BUZZER

Q1 2N3904
or 2N2222

R112 4.7K
R111 4.7K

DS3231 BOARD
RTC_ALARM# 1
SCL 2
SDA 3
SCL 4
SDA 5
SCL 6

DS1621 BOARD
SCL 1
SDA 2
SCL 3
SDA 4
SCL 5
SDA 6
SCL 7
SDA 8

ECE3301L SESSION 4
LAB FINAL