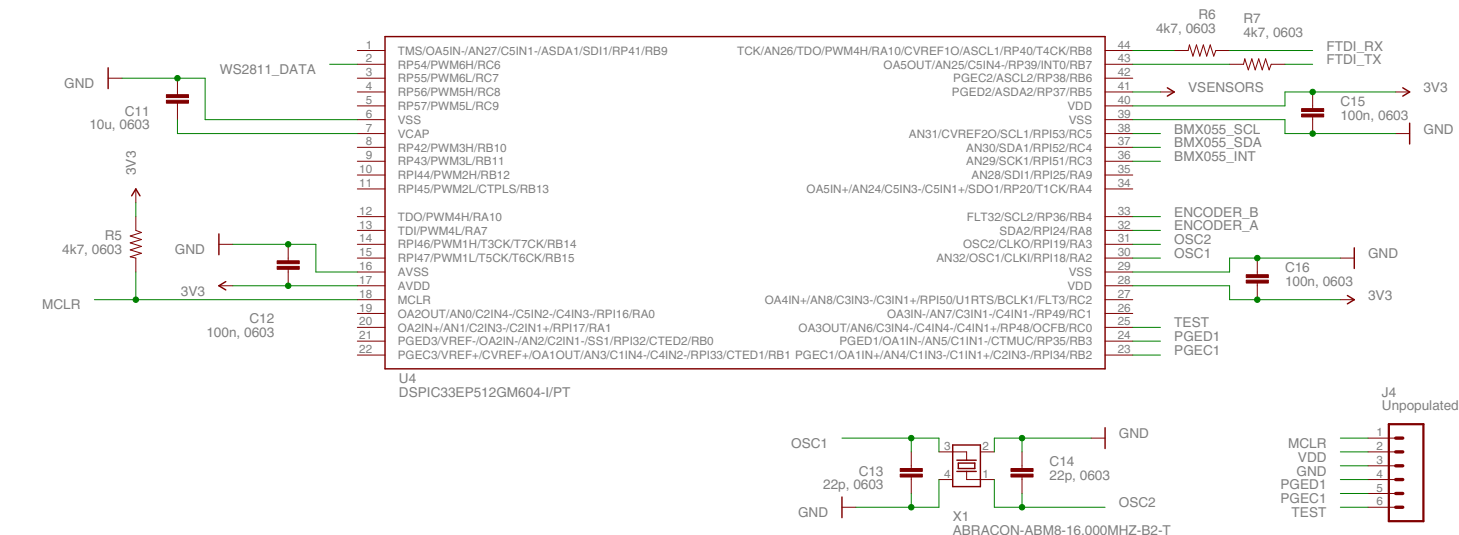


dsPIC33EP



RB8 and RB7 are not 5V tolerant but can clamp up to 5 mA (see page 1 of DSPIC33EP512GM604 datasheet)  
RA8 (ENCODER\_A) and RB4 (ENCODER\_B) are 5V tolerant pins

[illegible]

BMX055 circuit based on page 159 of datasheet  
 BMX055 accelerometer I2C slave address = 0x68 (because SDO2 is pulled low)  
 BMX055 gyroscope I2C slave address = 0x18 (because CBS3 is pulled low)  
 BMX055 magnetometer I2C slave address = 0x10 (because SDO1 is pulled low)

Avago Technologies HEDS-5600-A06

The schematic diagram illustrates the WS2811 driver circuit. It consists of two WS2811 chips, U5 and U6, connected to a 5V supply and ground. Each chip has VDD and VSS pins connected to the 5V and GND rails, respectively. The DI (Data In) pins of both chips are connected to the WS2811\_DATA signal line. The DO (Data Out) pins of both chips are also connected to the WS2811\_DATA signal line. The RGB pins of each chip are connected to the corresponding RGB pins of the LEDs.

Sparkfun: PRT-00116

J5

5

4

3

2

1

BMX055\_INT

BMX055\_SCL

BMX055\_SDA

VSENSORS VSENSORS VSENSORS

R8 4k7, 0603

R9 4k7, 0603

Seb Madgwick  
x-io Technologies  
Rev. 2



Human Harp Player	
02/03/2015 15:17:42	
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