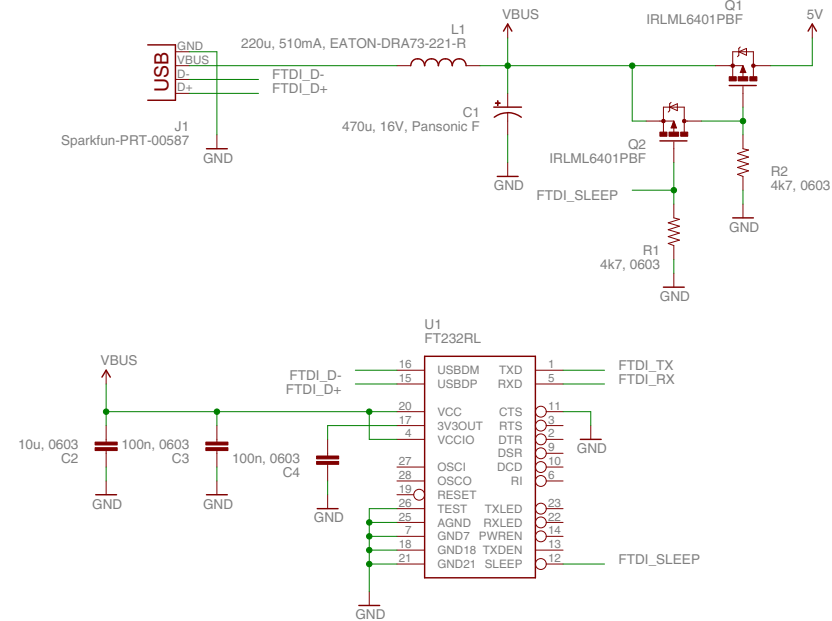
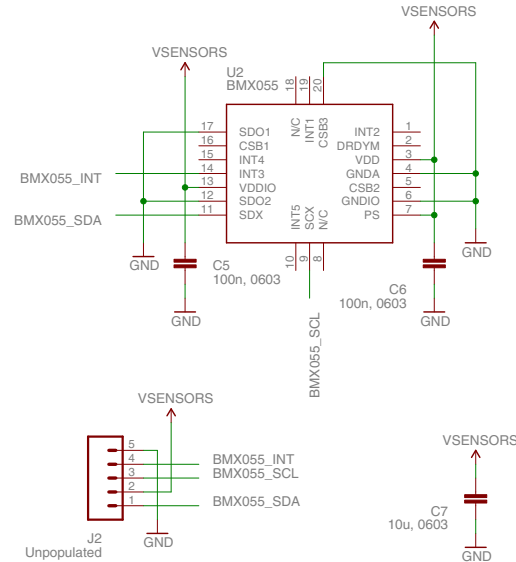


USB interface



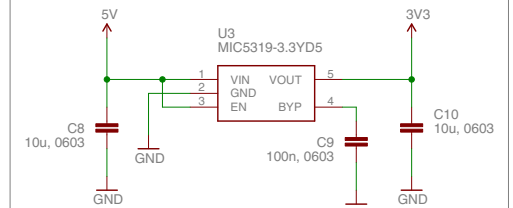
5V enabled when FTDI_SLEEP is low
FTDI CTS input pulled low to ensure FTDI transmission when hardware flow control enabled

IMU daughterboard

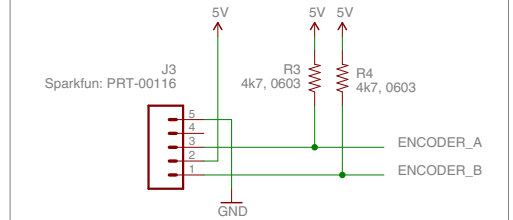


BMX055 circuit based on page 159 of datasheet
BMX055 gyroscope I2C slave address = 0x68 (because SDO2 is pulled low)
BMX055 accelerometer I2C slave address = 0x18 (because CBS3 is pulled low)
BMX055 magnetometer I2C slave address = 0x10 (because SDO1 is pulled low)

Voltage regulator

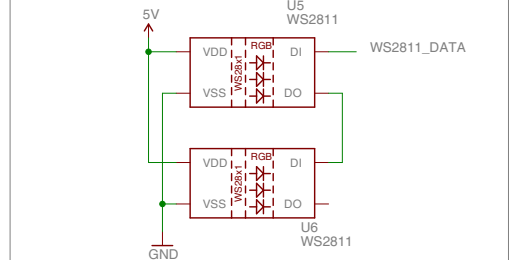


Encoder header

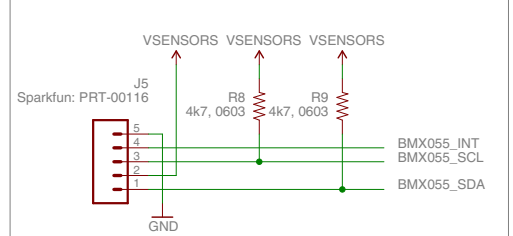


Avago Technologies HEDS-5600-A06

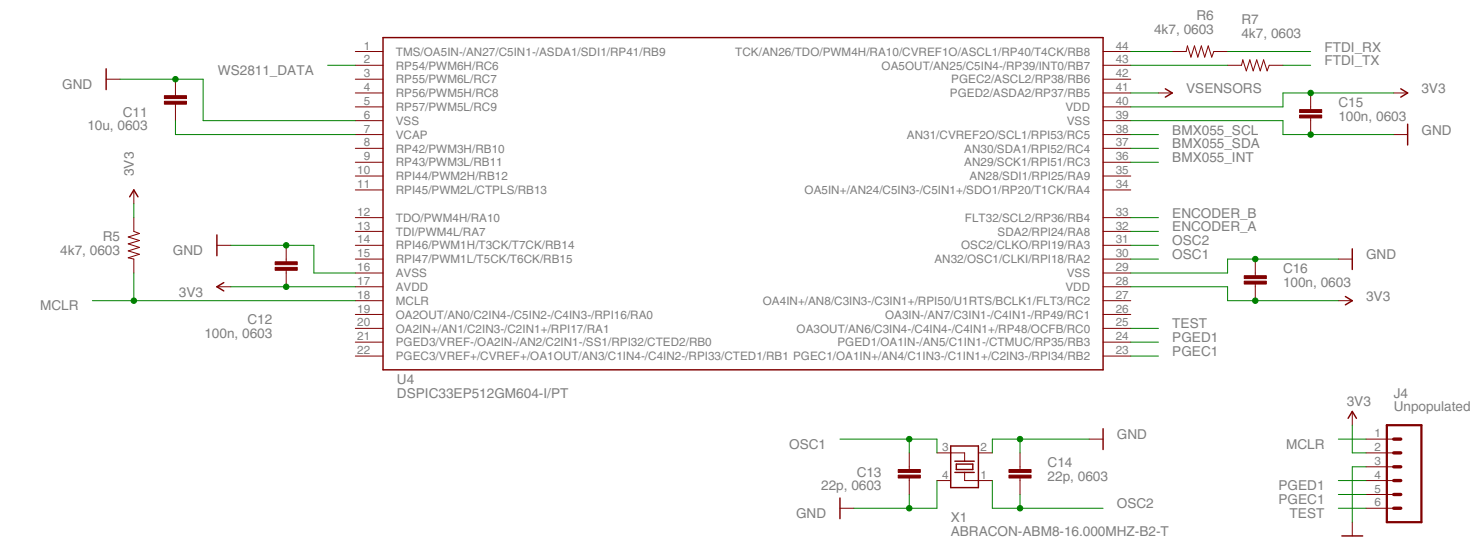
RGB LEDs



IMU header



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 RA4 (ENCODER_B) are 5V tolerant pins

Seb Madgwick

x-io Technologies

Rev. 3



Human Harp Player

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