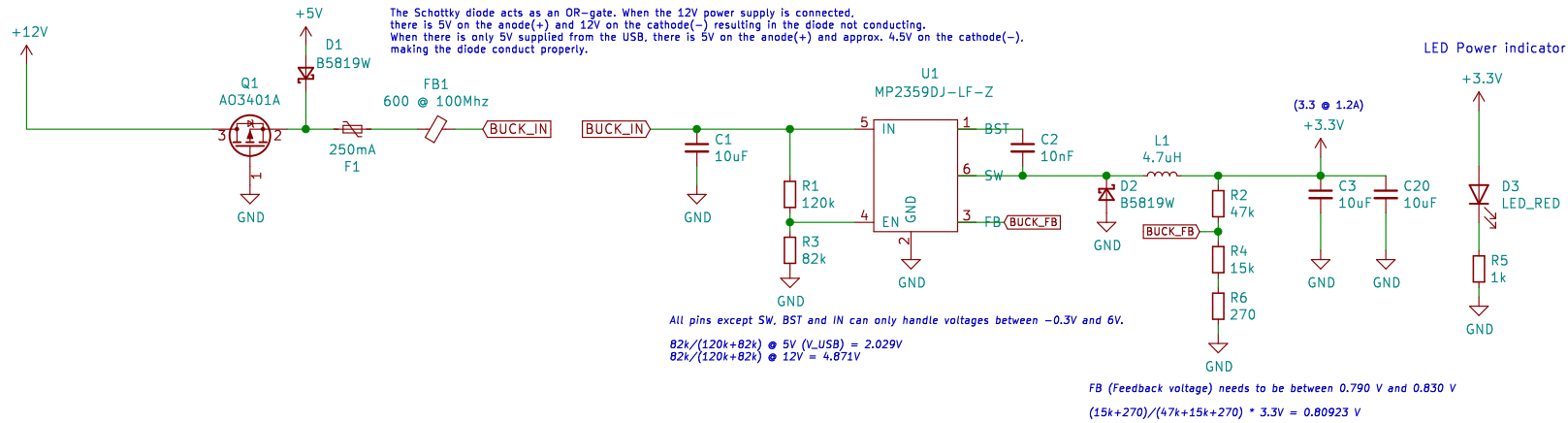
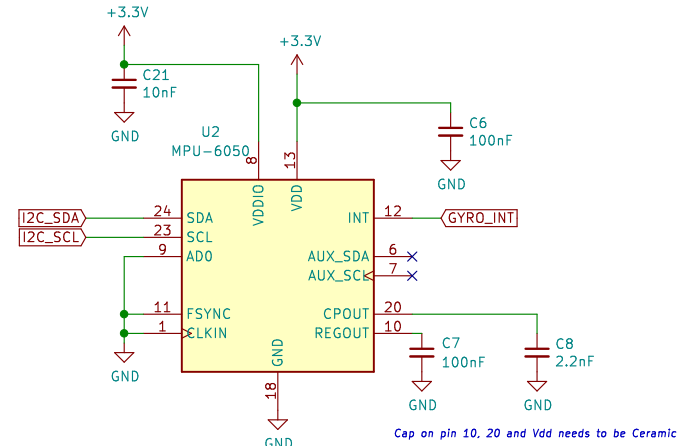


## Power Supply & Filtering



## Gyroscope MPU6050

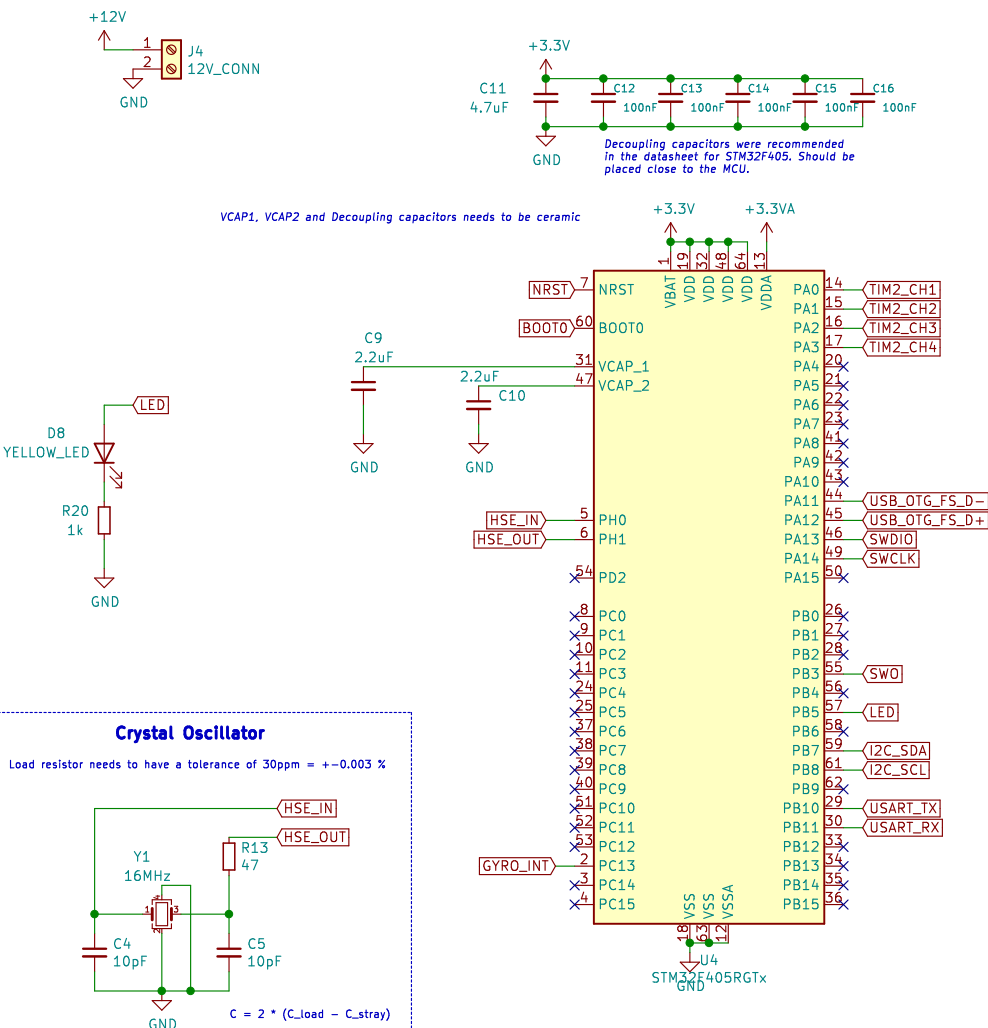


INT (interrupt) pin which is an interrupt digital output pin and used to give indication to the MCU that data is available to read from the MPU6050.

FSYNC is used to sync the MPU6050 with a videocamera etc. If unused, connect to ground according to datasheet.

CLKIN is optional external reference clock input. If unused, connect to ground according to datasheet.

## MCU STM32F405

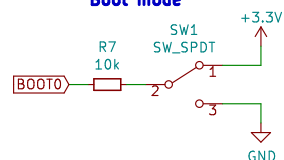


### Analog power supply filtering

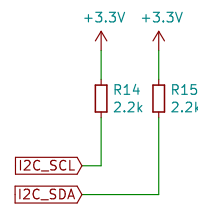
The inductor together with the capacitors in parallel form a low pass filter with  $F_c =$

Decoupling capacitors were recommended in the datasheet for STM32F405.

### Boot mode

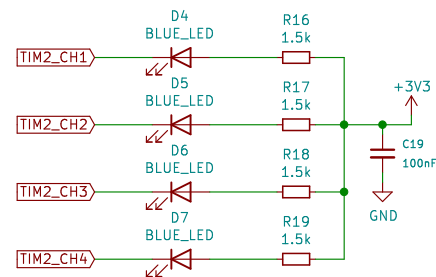


### I2C Pull-up resistors

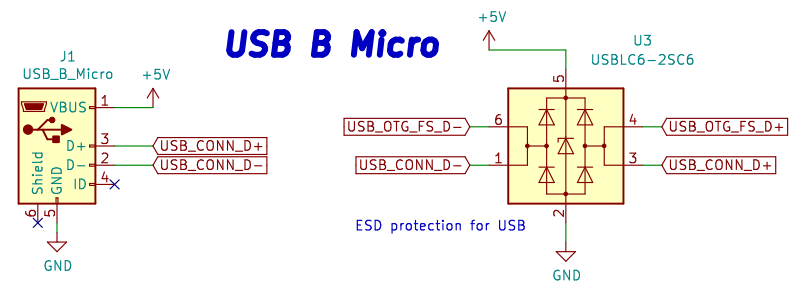


Pull-up resistors are needed for I2C to ensure the logical state. Should be in range 2k to 10k

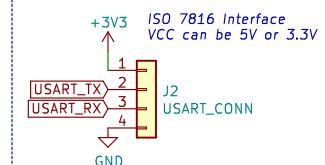
## PWM LED



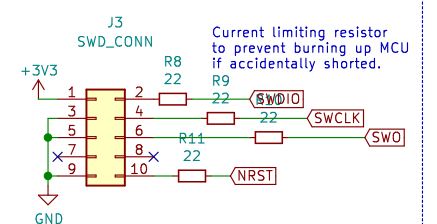
## USB B Micro



## USART



## Serial Wire Debug



Sheet: /

File: STM32F405RG + Gyro + I2C.sch

**Title: STM32F405RG-GYRO-I2C-UART-USB**

Size: A3

Date:

KiCad E.D.A. kicad (5.1.10)-1

Rev:

Id: 1/1