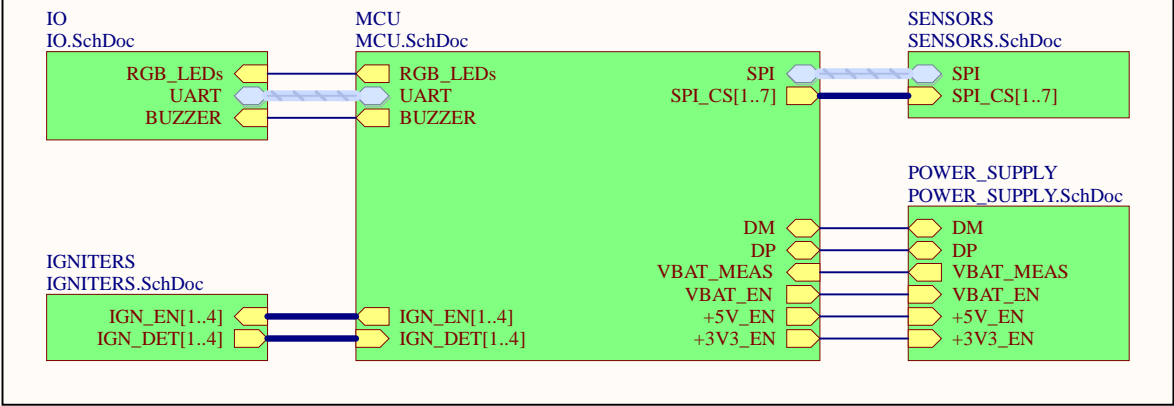


# OBCv1.6FE

## SYSTEM\_OVERVIEW



**Title:** OBCv1.6FE.PrjPcb  
**Author:** Konrad Fura

**Sheet number:** 1  
**Modified:** 05.11.2024

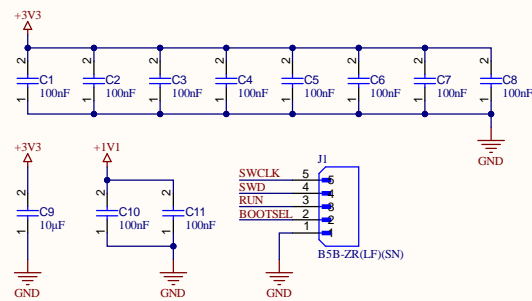
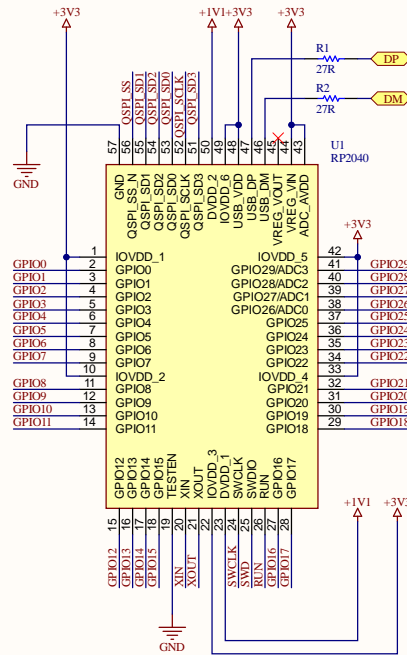
**Description:** SYSTEM\_OVERVIEW.SchDoc

**Reviewers:** \*

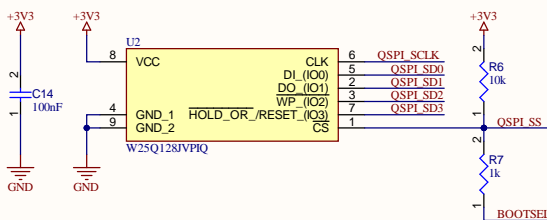


# MICROCONTROLLER\_SECTION

## MAIN\_MCU

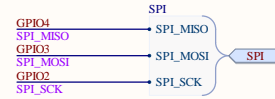


## FLASH\_MEMORY

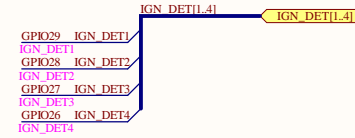


## PINOUT

### SPI



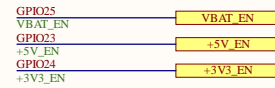
### IGNITERS



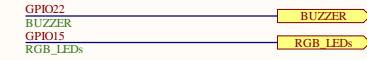
### UART



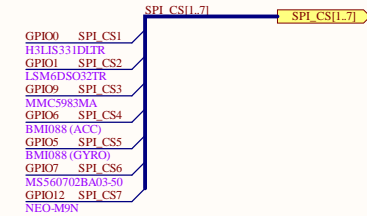
### POWER\_SUPPLY



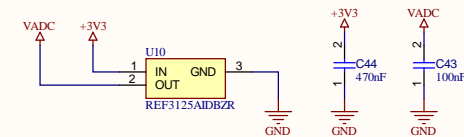
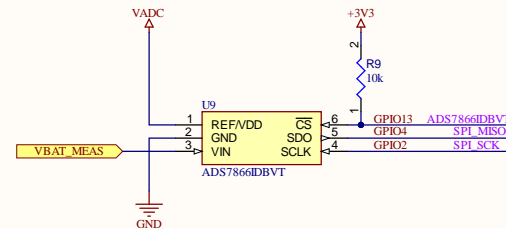
### IO



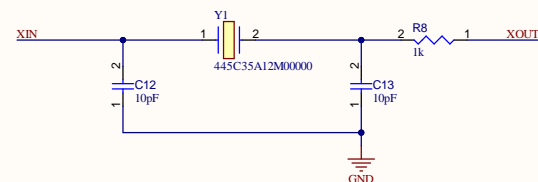
### SENSORS



## ANALOG-TO-DIGITAL\_CONVERTER



## CRYSTAL\_OSCILLATOR



Title: OBCv1.6FE.PjPdb  
Author: Konrad Fura

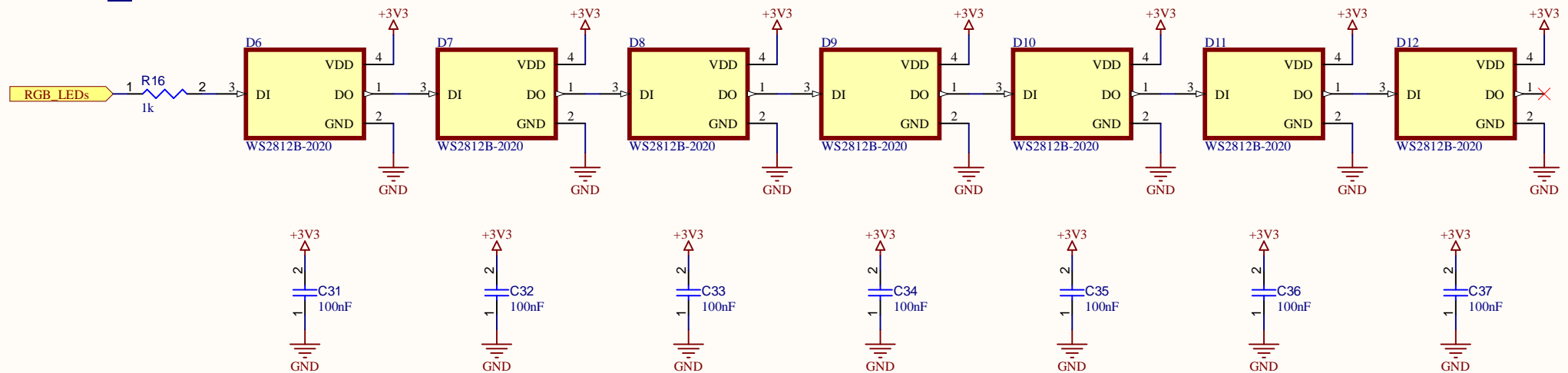
Sheet number: 2  
Modified: 05.11.2024

Description: MCU.SchDoc

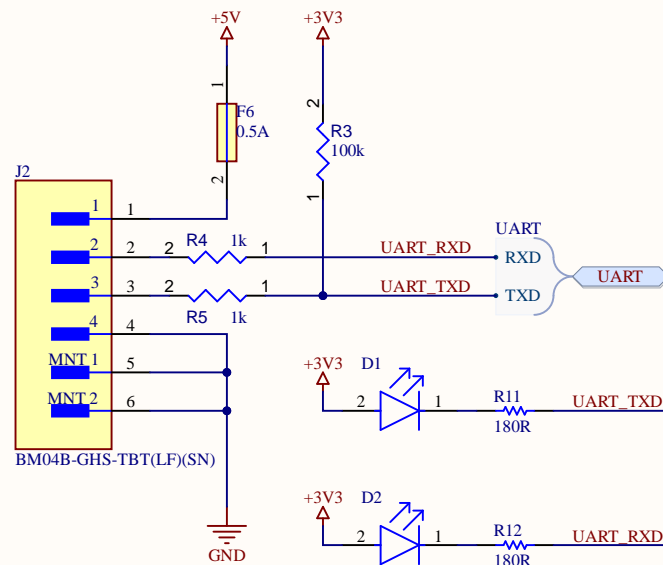
Reviewers: \*



## RGB\_LEDs

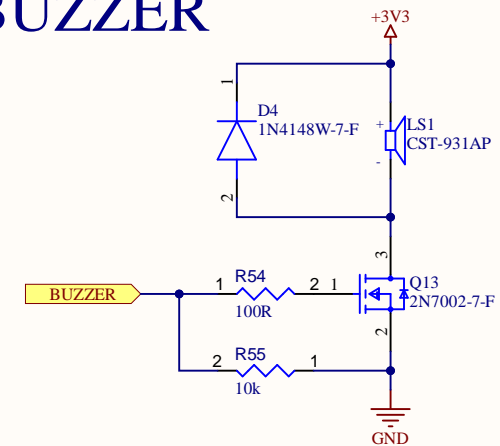


## EXTERNAL\_DATA\_CONNECTORS



THE LED ON THE RX PIN SHOULD HAVE A FORWARD VOLTAGE AS CLOSE AS POSSIBLE TO 3.3V!!!

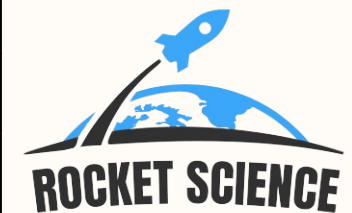
## BUZZER



Title: OBCv1.6FE.PrjPcb  
Author: Konrad Fura

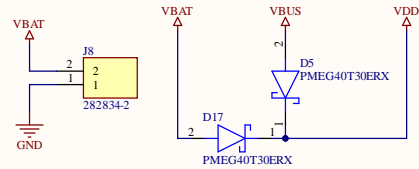
Sheet number: 3  
Modified: 05.11.2024

Description: IO.SchDoc  
Reviewers: \*



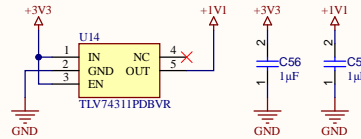
# POWER\_SUPPLY

## POWER\_SUPPLY



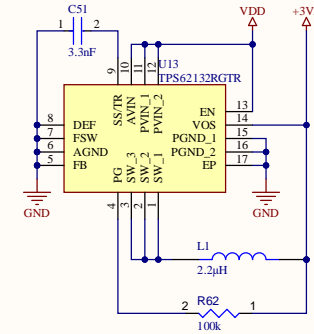
## MCU\_CORE\_POWER

MAX 300mA OUTPUT CURRENT

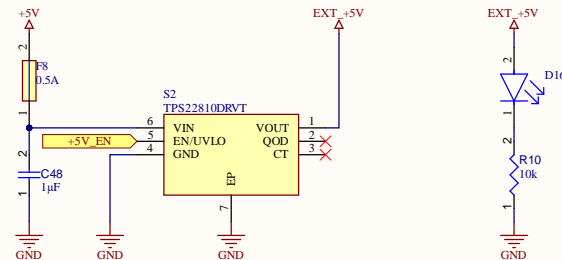
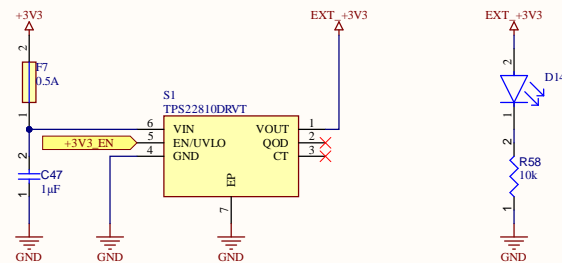
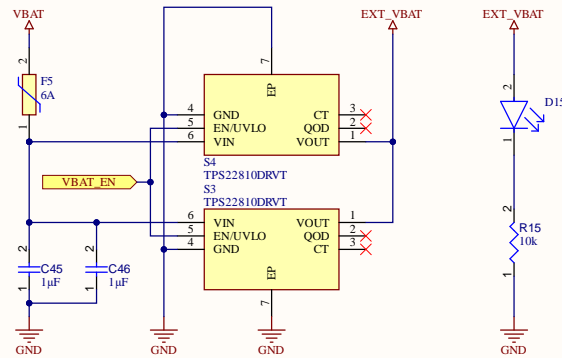


## 3.3V BUCK CONVERTER

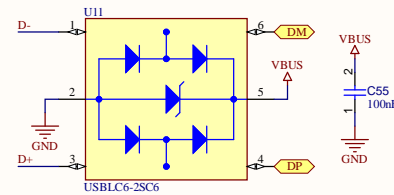
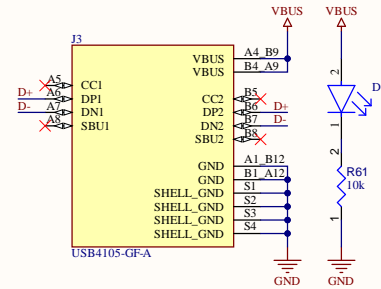
MAX 3A OUTPUT CURRENT



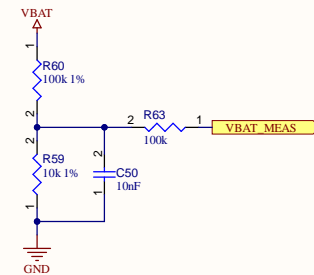
## EXTERNAL\_VOLTAGE



## USB\_C

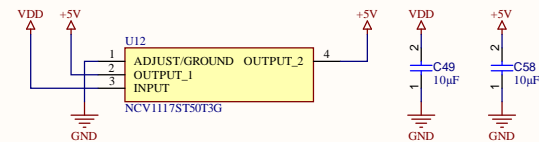


## VBAT\_MEASURE



## 5V\_LDO

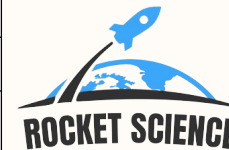
MAX 1A OUTPUT CURRENT



Title: OBCv1.6FE.PrjPcb  
Author: Konrad Fura

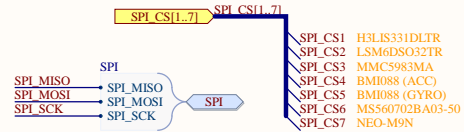
Sheet number: 4  
Modified: 05.11.2024

Description: POWER\_SUPPLY.SchDoc  
Reviewers: \*

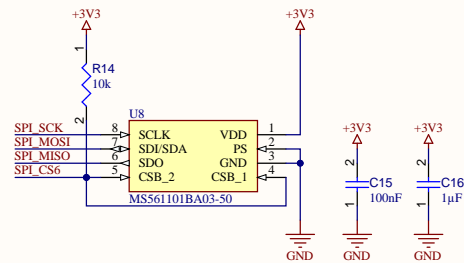


# SENSORS

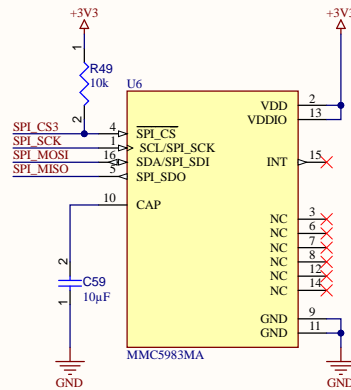
## PINOUT



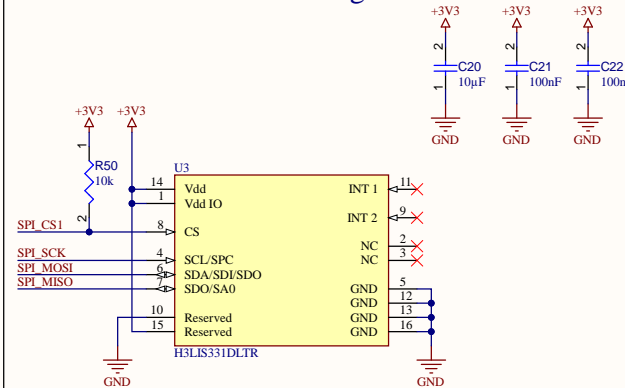
## BAROMETER



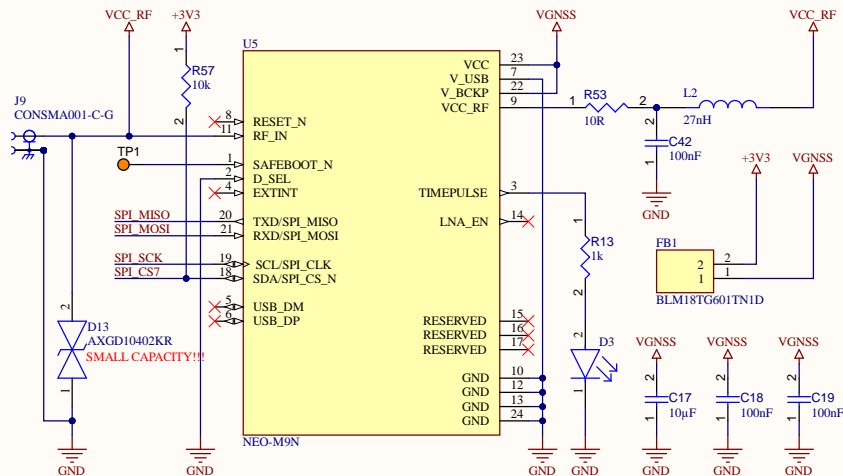
## MAGNETOMETER



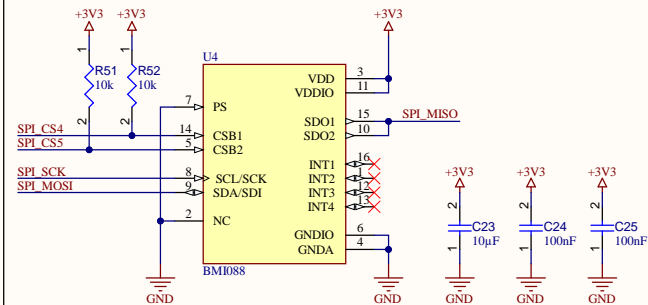
## ACCELEROMETER 100g



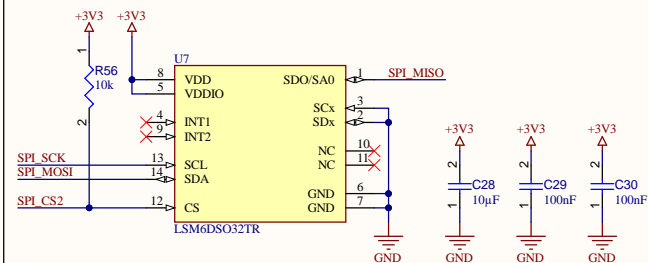
## GPS



## IMU 6DOF 24g



## IMU 6DOF 32g



Title: OBCv1.6FE.PrjPcb  
 Author: Konrad Fura

Sheet number: 5  
 Modified: 05.11.2024

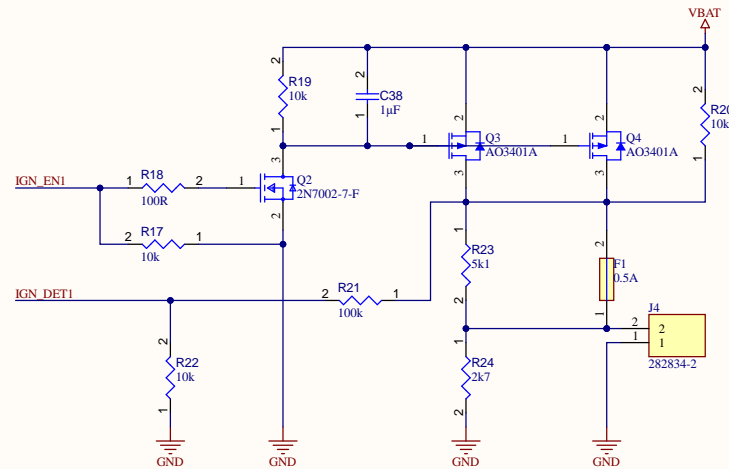
Description: SENSORS.SchDoc

Reviewers: \*

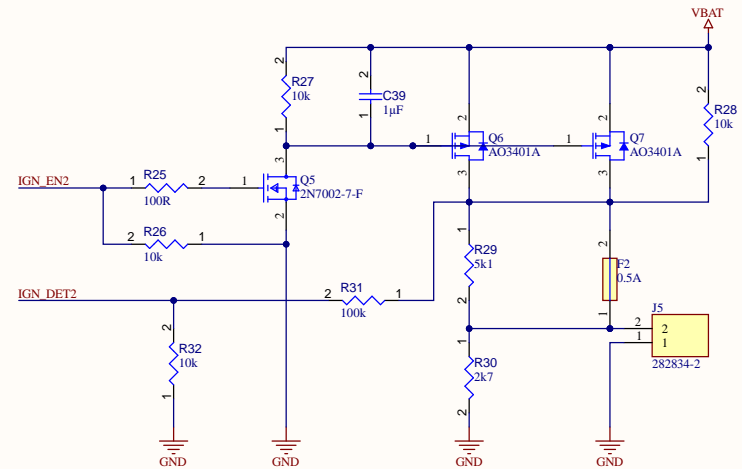


# IGNITERS

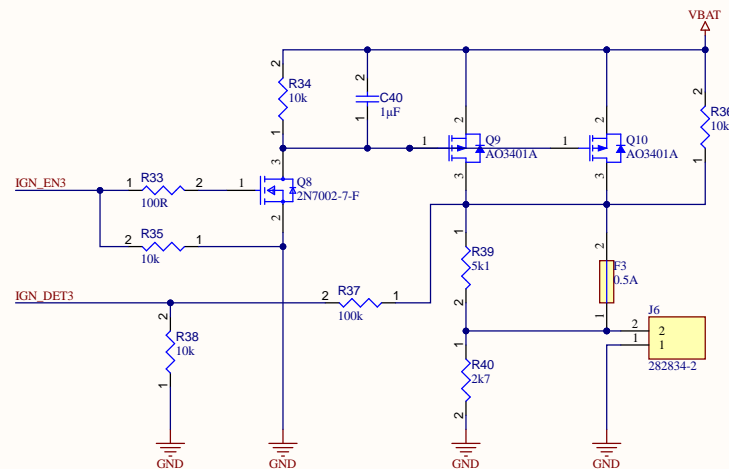
## IGNITION\_CIRCUT\_1



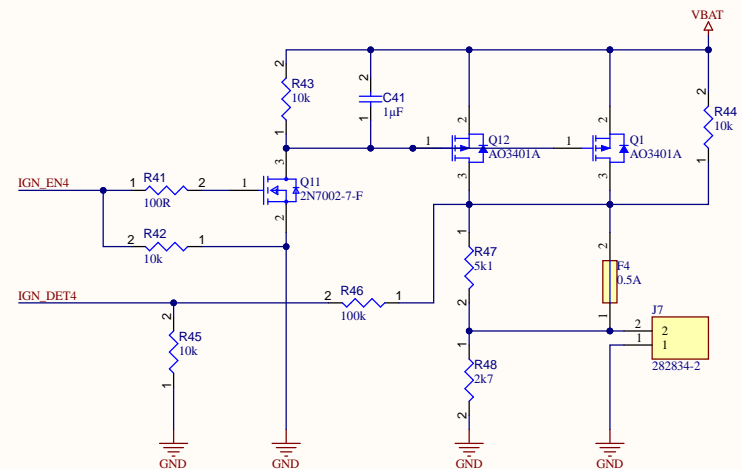
## IGNITION\_CIRCUT\_2



## IGNITION\_CIRCUT\_3

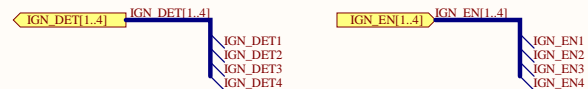


## IGNITION\_CIRCUT\_4



## SIGNALS

IGNITERS DETECTION & ENABLE SIGNALS

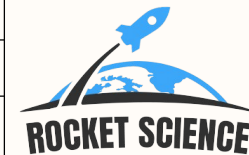


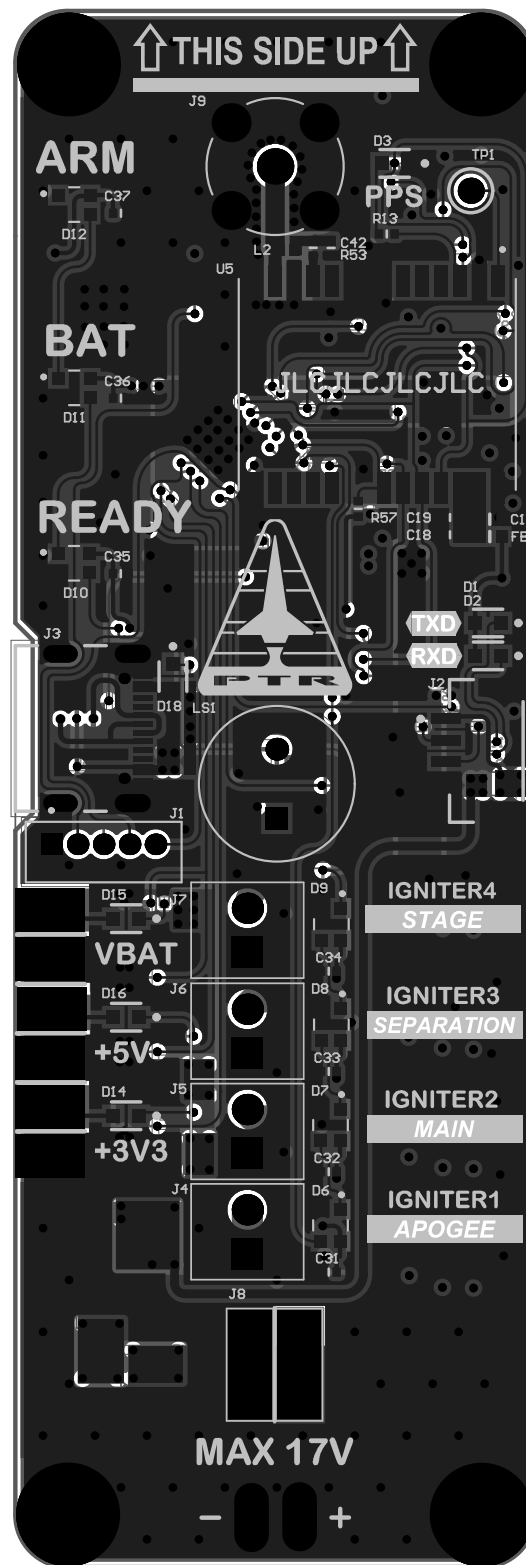
Title: OBCv1.6FE.PjtPeb  
Author: Konrad Fura

Sheetnumber: 6  
Modified: 05.11.2024

Description: IGNITERS.SchDoc

Reviewers: \*





[illegible]