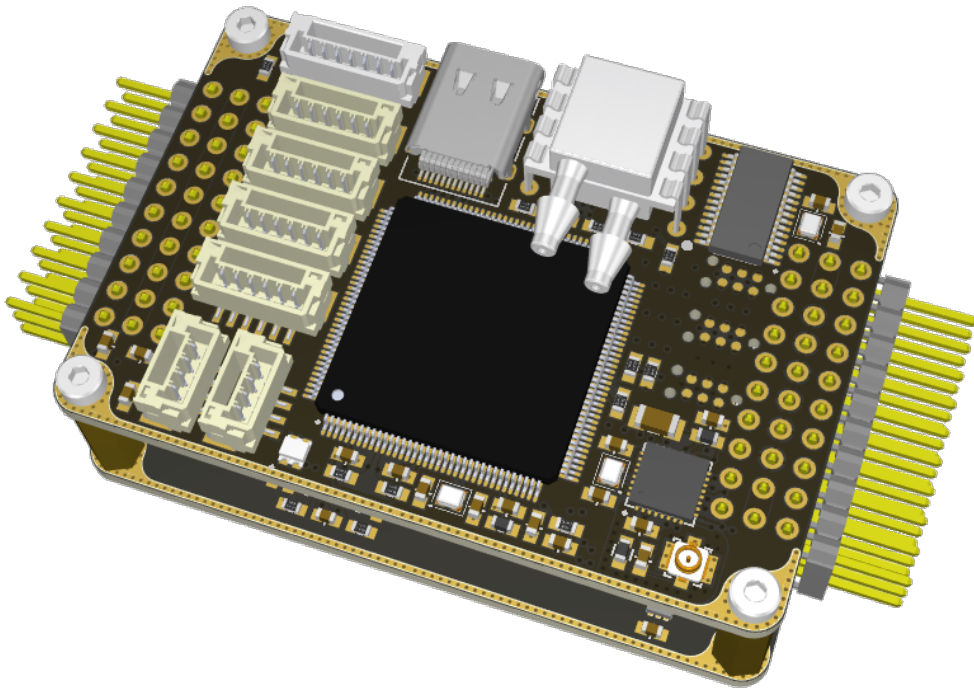


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# ViaDrone FC v1



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# Part I

# Technical Specification

## 1 Processors & Sensors

- FMU Processor: STM32H753  
32 Bit Arm® Cortex®-M7, 480MHz, 2MB flash memory, 1MB RAM
- On-board sensors (specific models are subject to change based on product lifecycle and availability)
  - **IMU1** (isolated) ICM-42688-P
  - **IMU2** (isolated) ICM-42670-P
  - **IMU3** ICM-42688-P
  - **BARO1** (isolated) ICP-20100
  - **BARO2** ICP-20100
  - **PITOT** (optional) 4525DO-DS5AI001DP

## 2 Interfaces

- 10 IO Ports (8 DShot capable)
- 2x CAN Buses for CAN peripheral
- 2x external I2C
- 1x GPS port (with I2C)
- 1x Telemetry port (with flow control)
- 1x external UART with I2C and GPIO input for NFC (can be used as second GPS port)
- 1x external UART with flow control
- 1x external UART with optional RS422
- 3V3 ADC input
- RSSI (PWM or voltage) input
- PPM-SUM signal input
- 1x NZR LED output (for example WS2812b)



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### 3 Additional Features

- OSD
- RemoteID
- 4GB eMMC memory

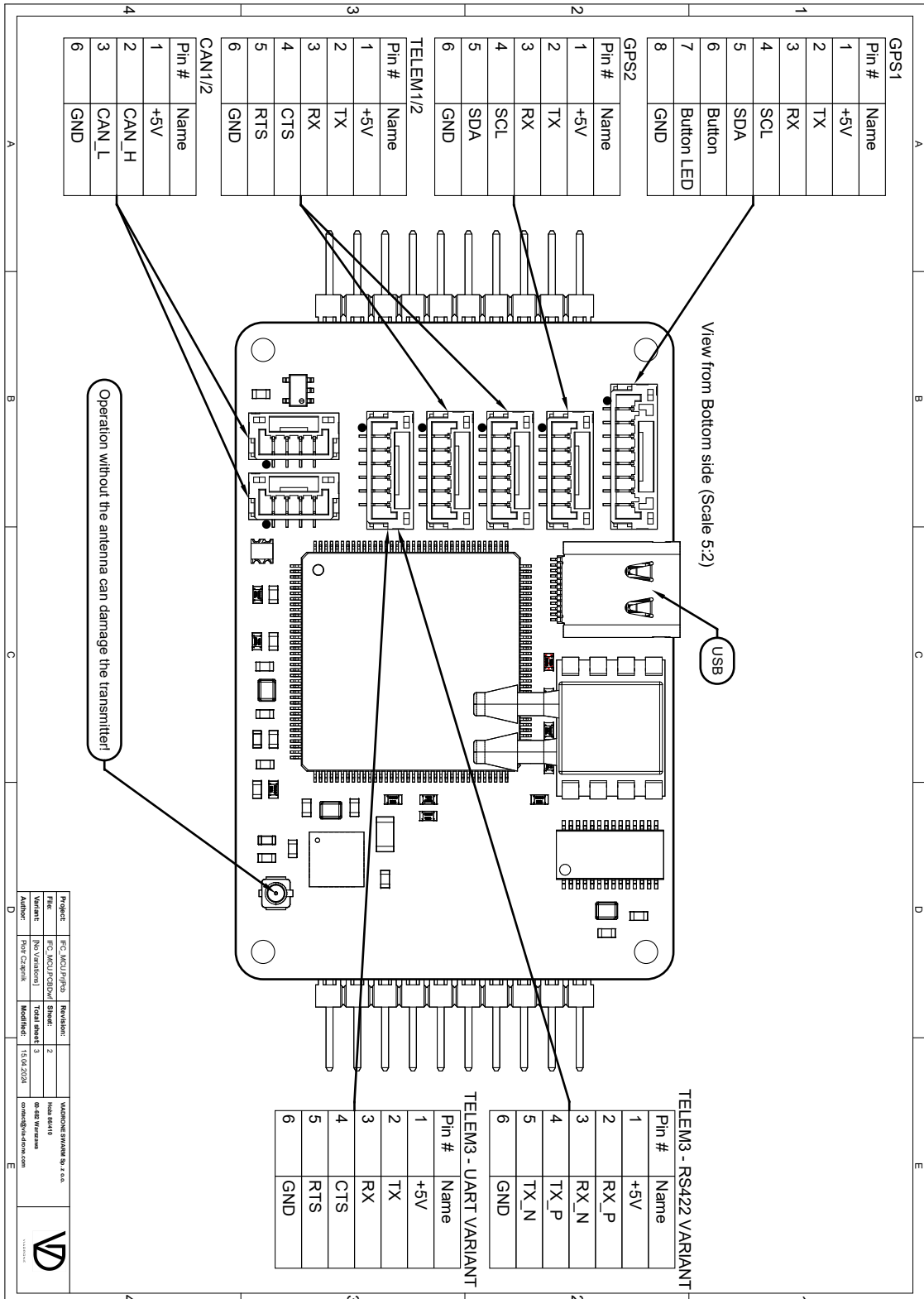
### 4 Electrical data

- 4-12S INPUT
- Digital voltage measurement
- Digital current measurement (Up to 140A)
- Available Power Domains:
  - 5-12V/3A (PEAK 4A) for servos - I2C control
  - 5-12V/2A (PEAK 3A) for camera - I2C control
  - 5V/3A (4A PEAK) for peripheral
  - 3V3/300mA (400mA PEAK) for peripheral
  - 3V3/200mA (300mA PEAK) for sensors

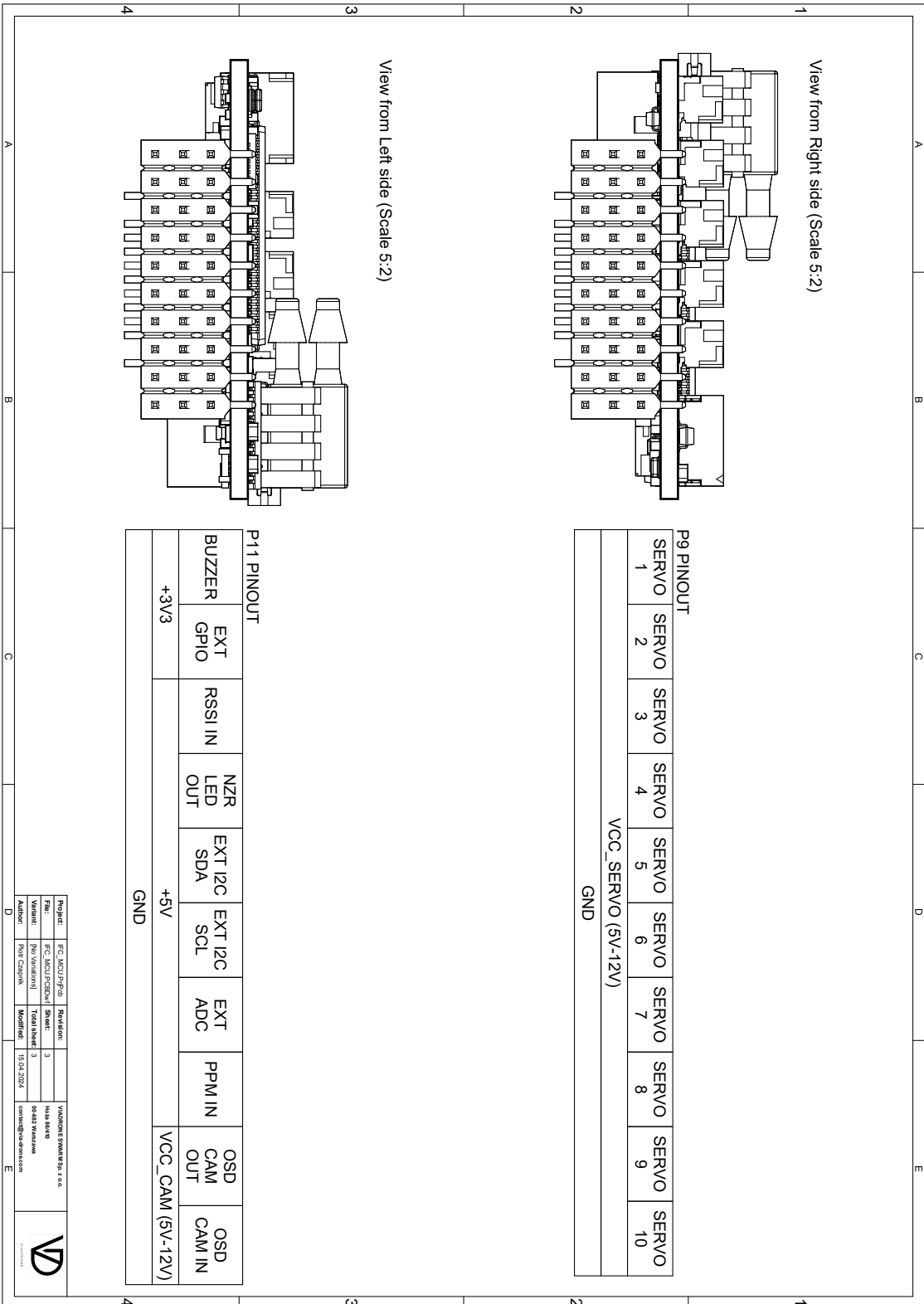




## 5.2 Top connectors pinout



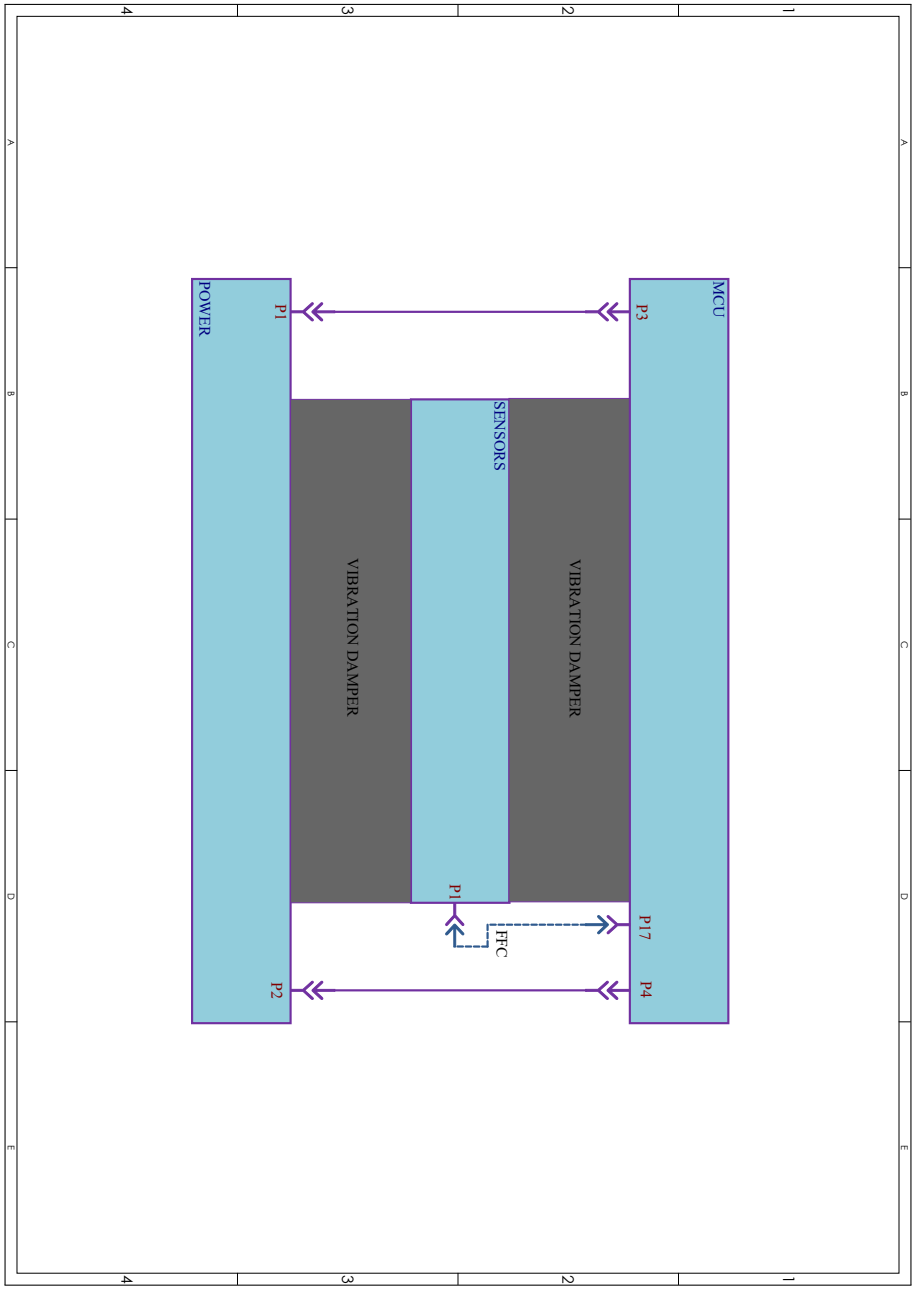
### 5.3 Rear connectors pinout



# 6 Mechanical data

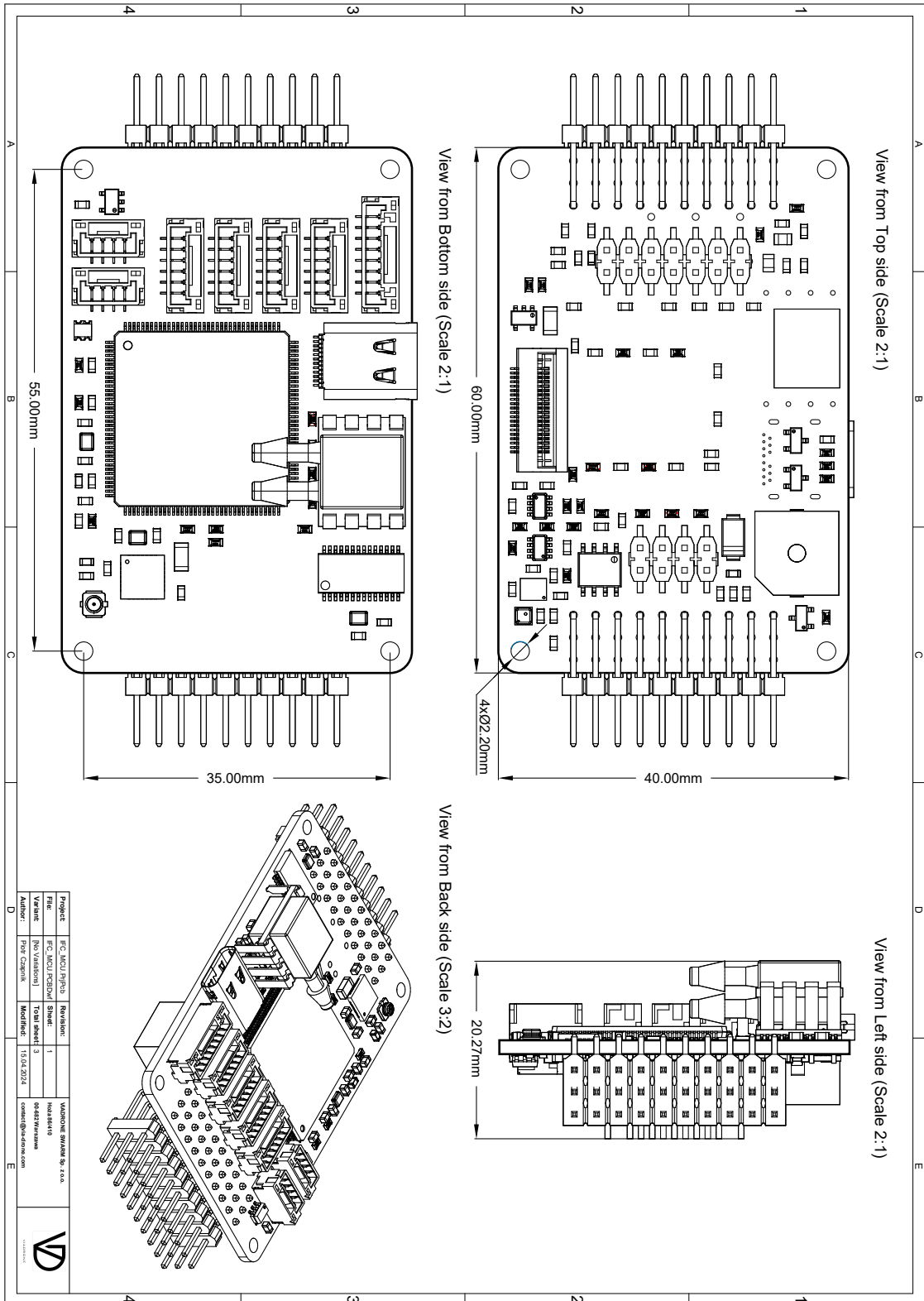
- Dimensions: 40x60x30mm
- Weight: 75g

## 6.1 System mechanical structure





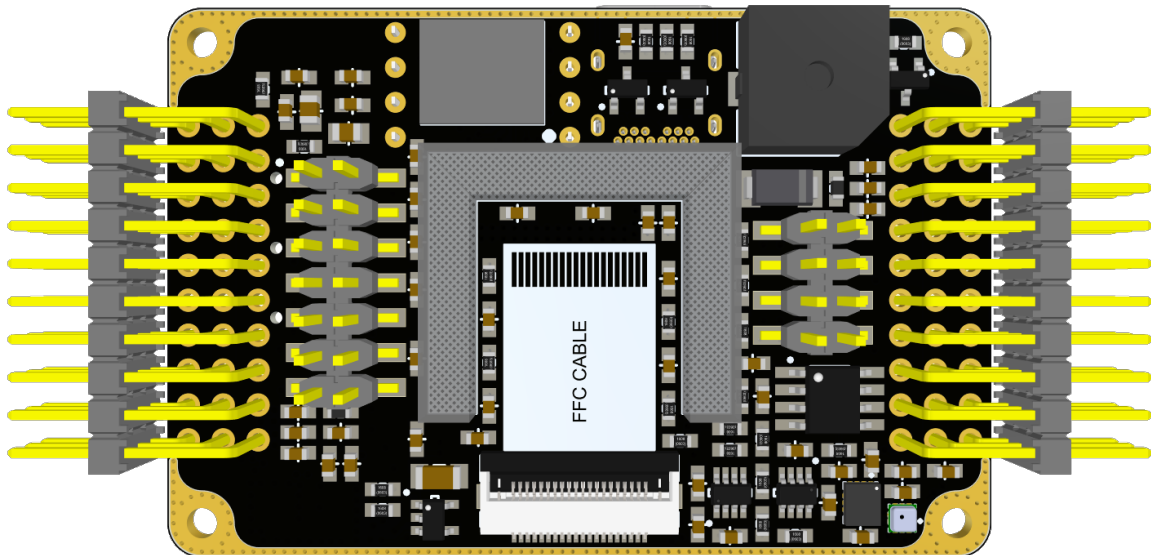
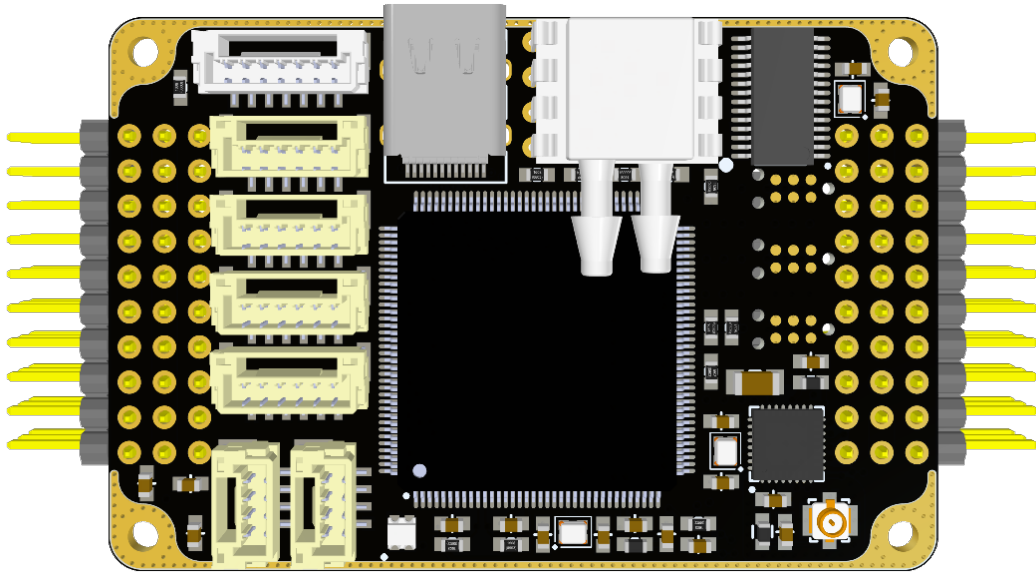
## 6.2 MCU BOARD - mechanical drawing



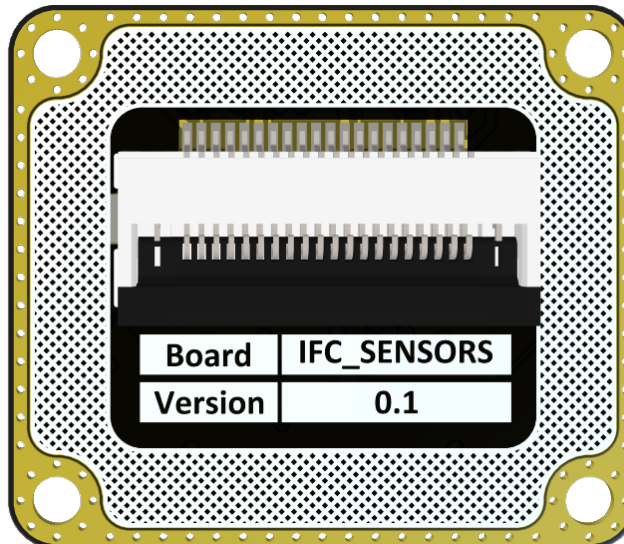
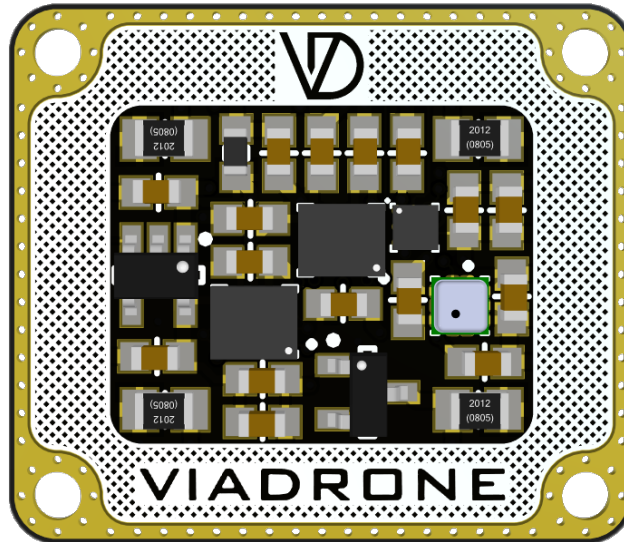
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## 7 Pictures

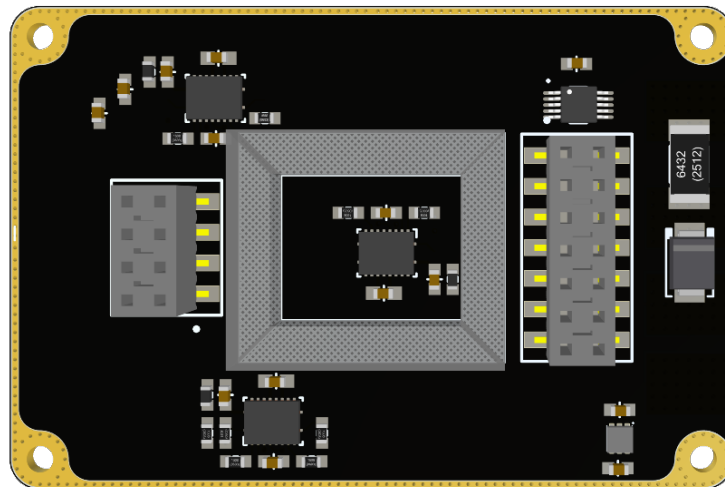
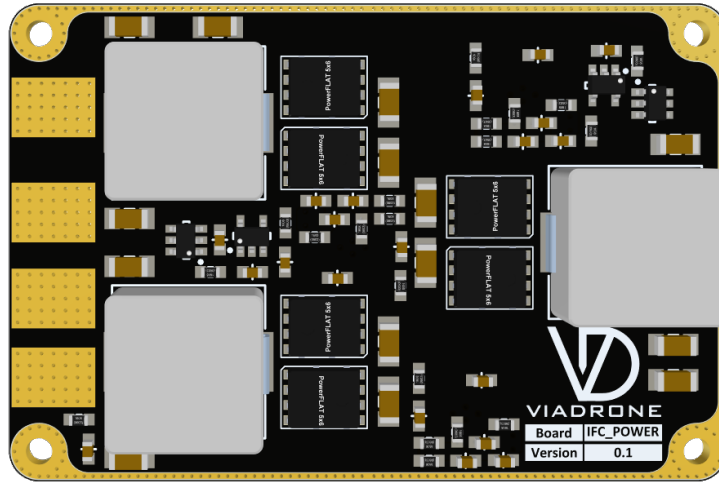
### 7.1 MCU BOARD



## 7.2 SENSORS BOARD



## 7.3 POWER BOARD



END OF SECTION