NATIVE ROV PCB DESIGN, PRODUCTION AND CONTROL

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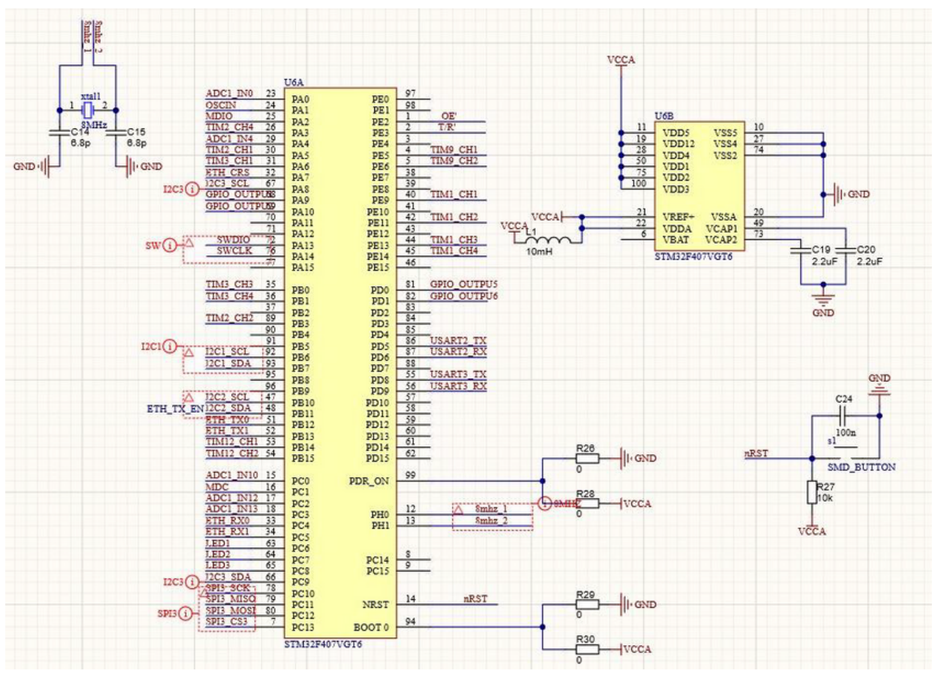
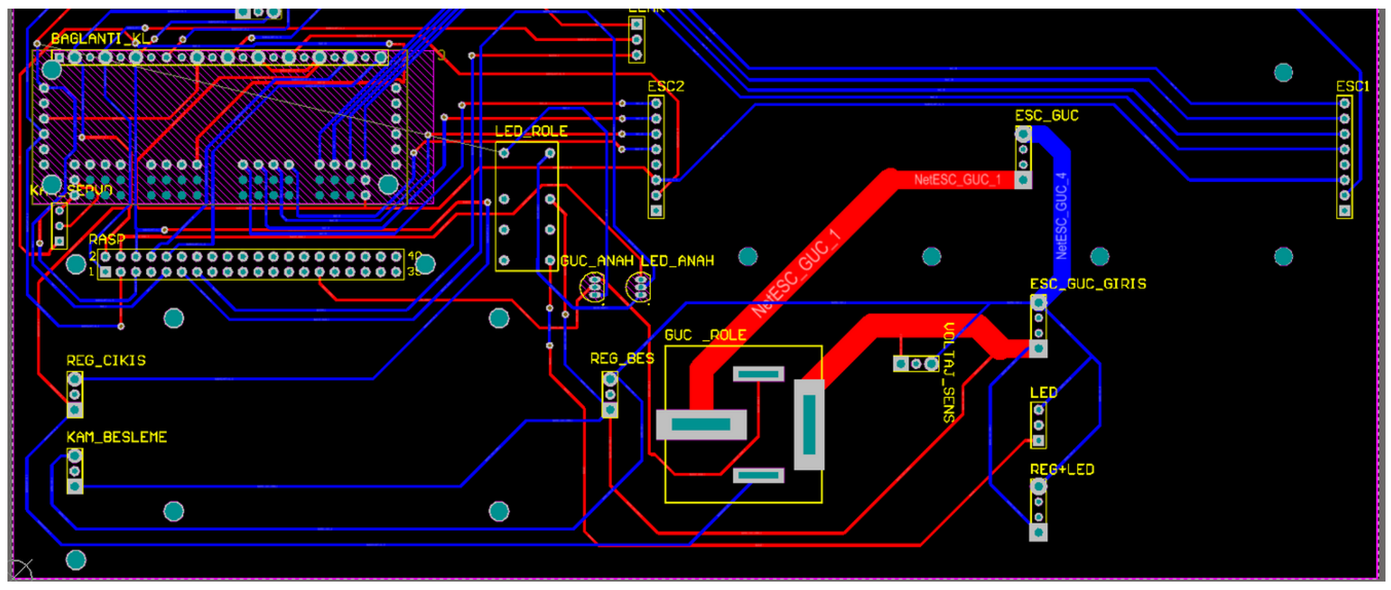
Abstract

In this project , we will explain how to make design , produce and control a system control pcb design for a rov (remotely operated underwater vehicle)system.

Circuit Schematics

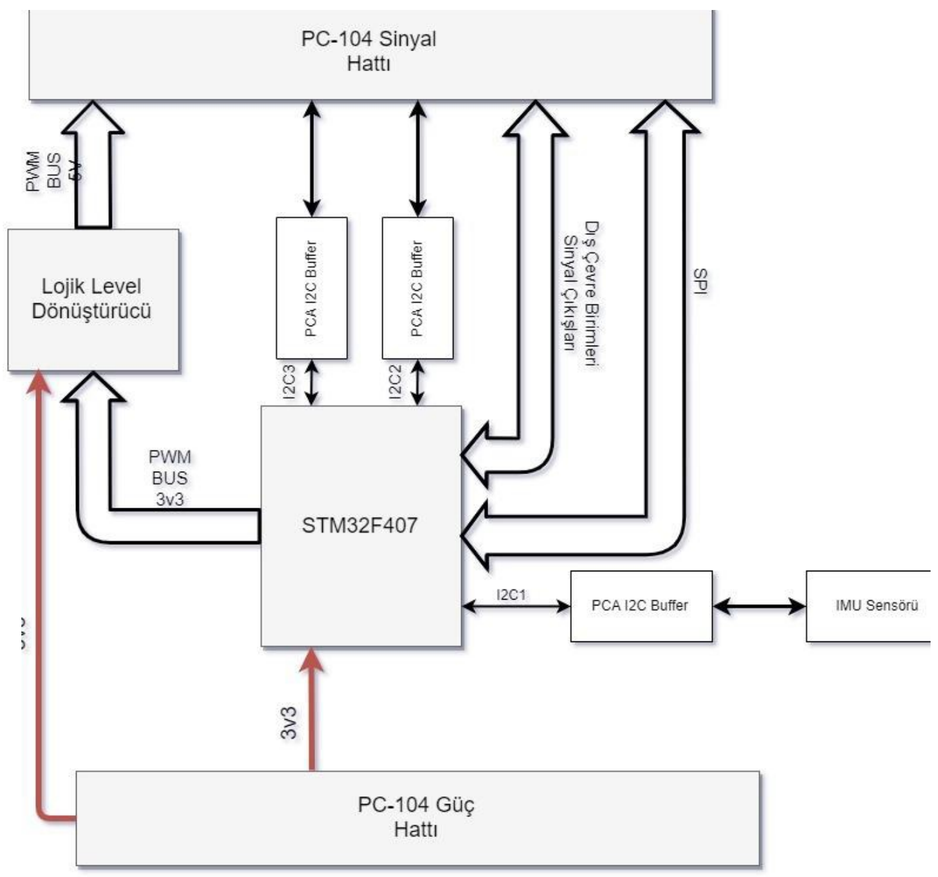


Main Components: STM32F407 microcontroller , blank pcb board , resistors , capacitor ,inductor



Design

The vehicle's control algorithm will be run on the motherboard. STM32F407 processor with ARM M4 architecture is used. It has the capability of giving 16 PWM, 3 I2C, 1 SPI outputs. . The block diagram of the designed motherboard structure is given in the nearby figure.



Conclusion

Our purpose make to more specific control card for rov systems we design a customize pcb card for achieve that purpose.

References

Teknofest 2021 Unmanned Underwater Systems Competition specification
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