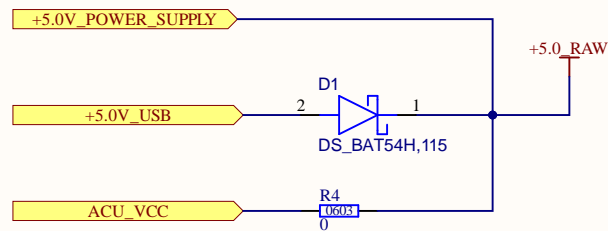
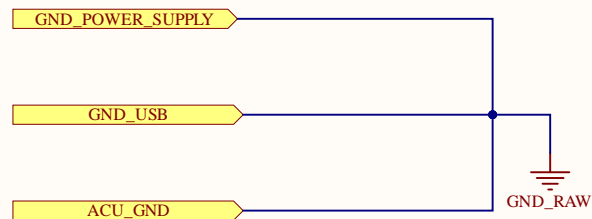
	Name: Main.SchDoc			
	Project: FPS_Master.PrjPcb			
	Author: Wojciech Wołosz	Faculty: WIEIT	Field of study: Elektronika i Telekomunikacja	Date: 2.4.2023

A

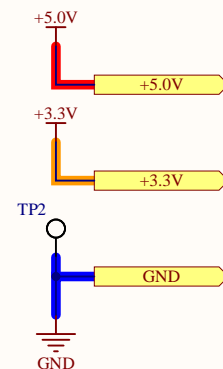
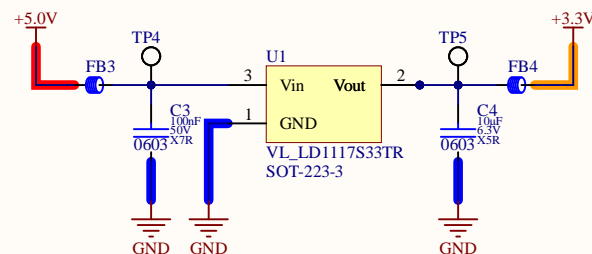
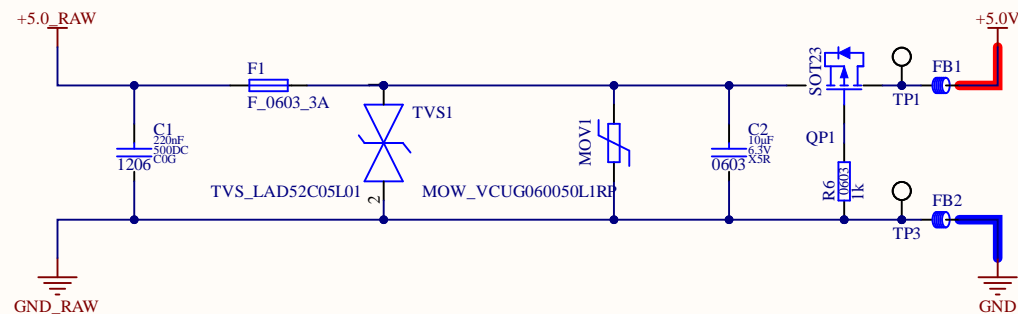


B

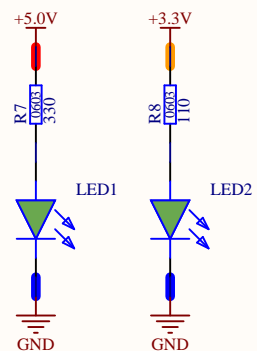


3 sources of power:  
 - primary - through power supply unit - 5VDC/4A  
 - secondary - through microUSB  
 - emergency - by using Li-Ion accumulators and BMS module

Li-ion accumulators are charged by either power supply and USB.



C

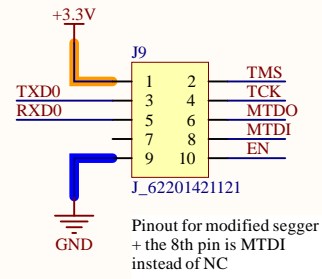
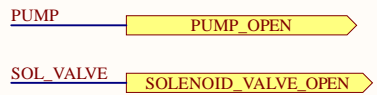
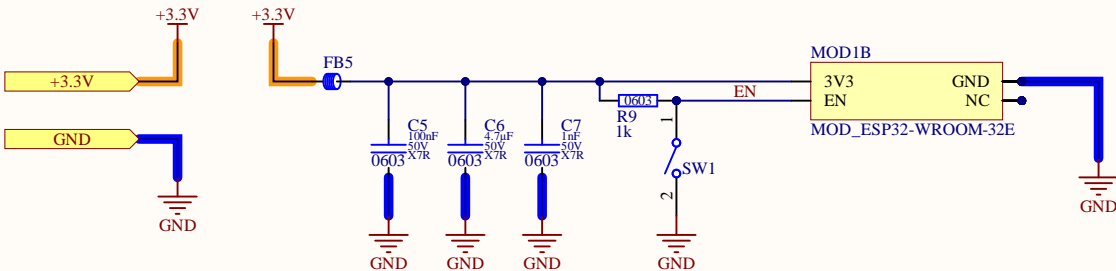


D

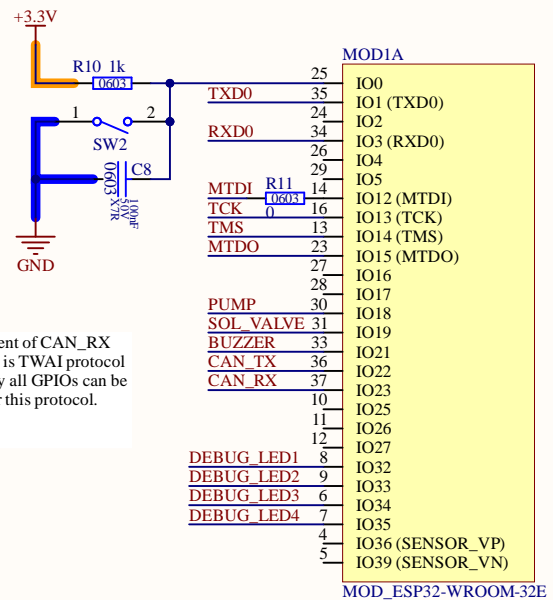
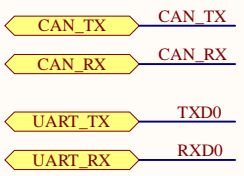


Name: PowerManagement.SchDoc			
Project: FPS_Master.PrjPcb			
Author: Wojciech Wołosz	Faculty: WIEIT	Field of study: Elektronika i Telekomunikacja	Date: 2.4.2023

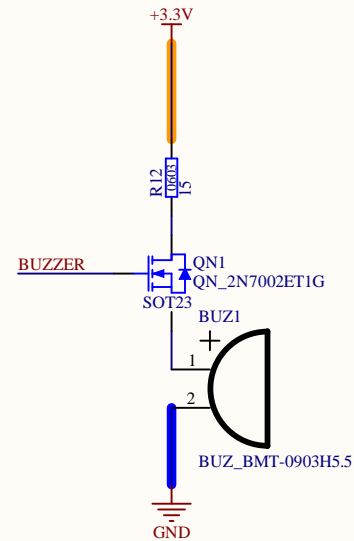
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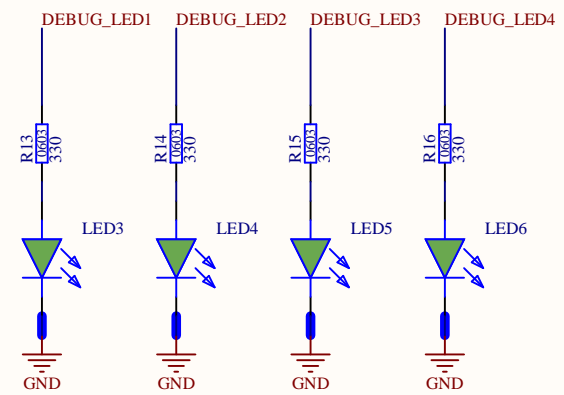
B




ESP's equivalent of CAN\_RX and CAN\_TX is TWAI protocol and apparently all GPIOs can be configured for this protocol.

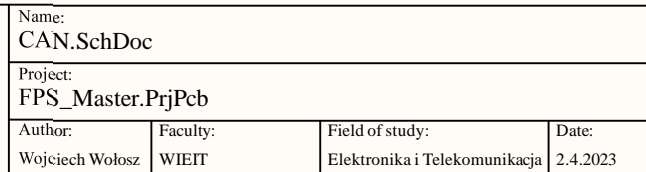
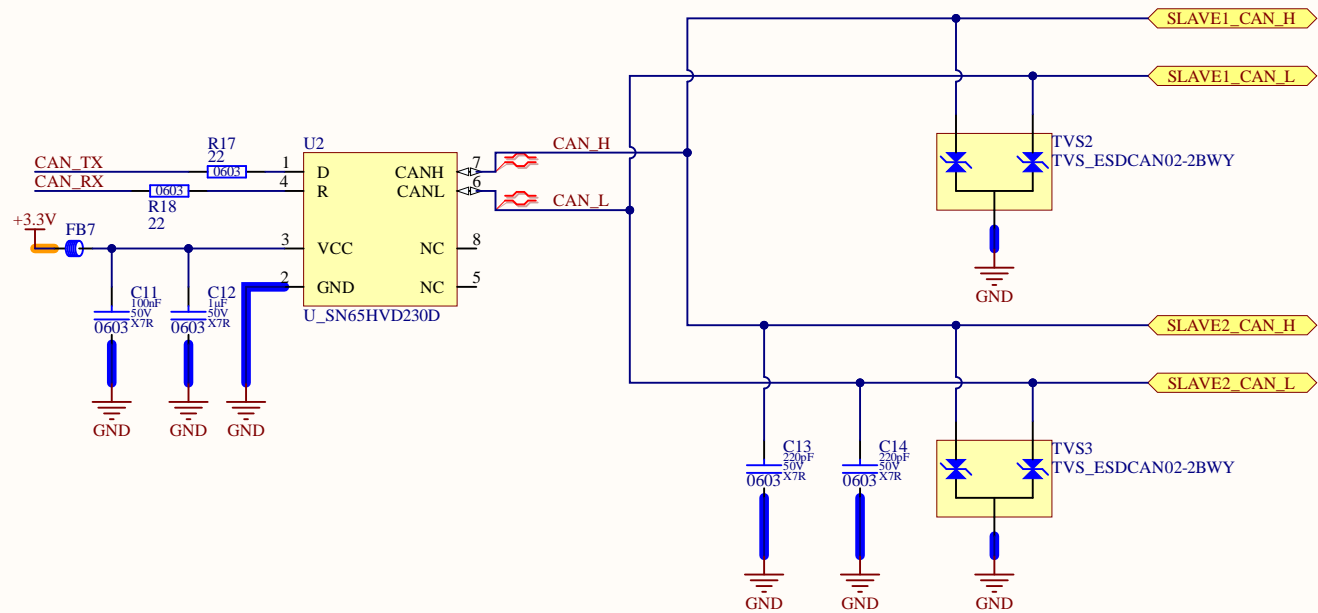


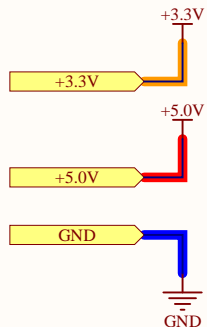
C



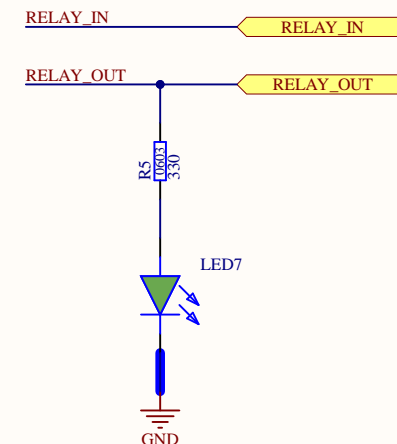
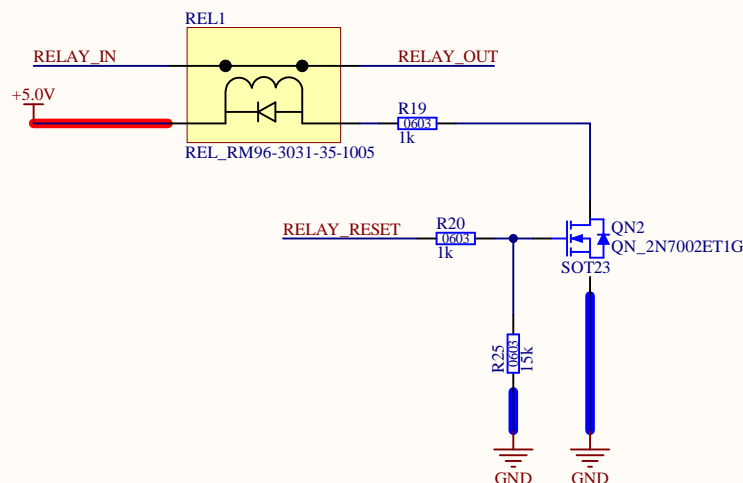
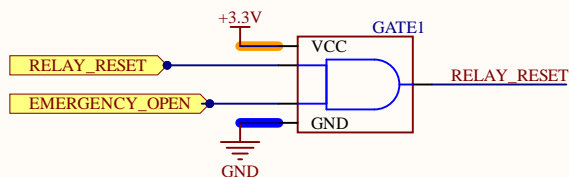
D

	Name: MCU.SchDoc			
	Project: FPS_Master.PrjPcb			
	Author: Wojciech Wołosz	Faculty: WIEIT	Field of study: Elektronika i Telekomunikacja	Date: 2.4.2023




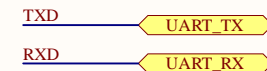
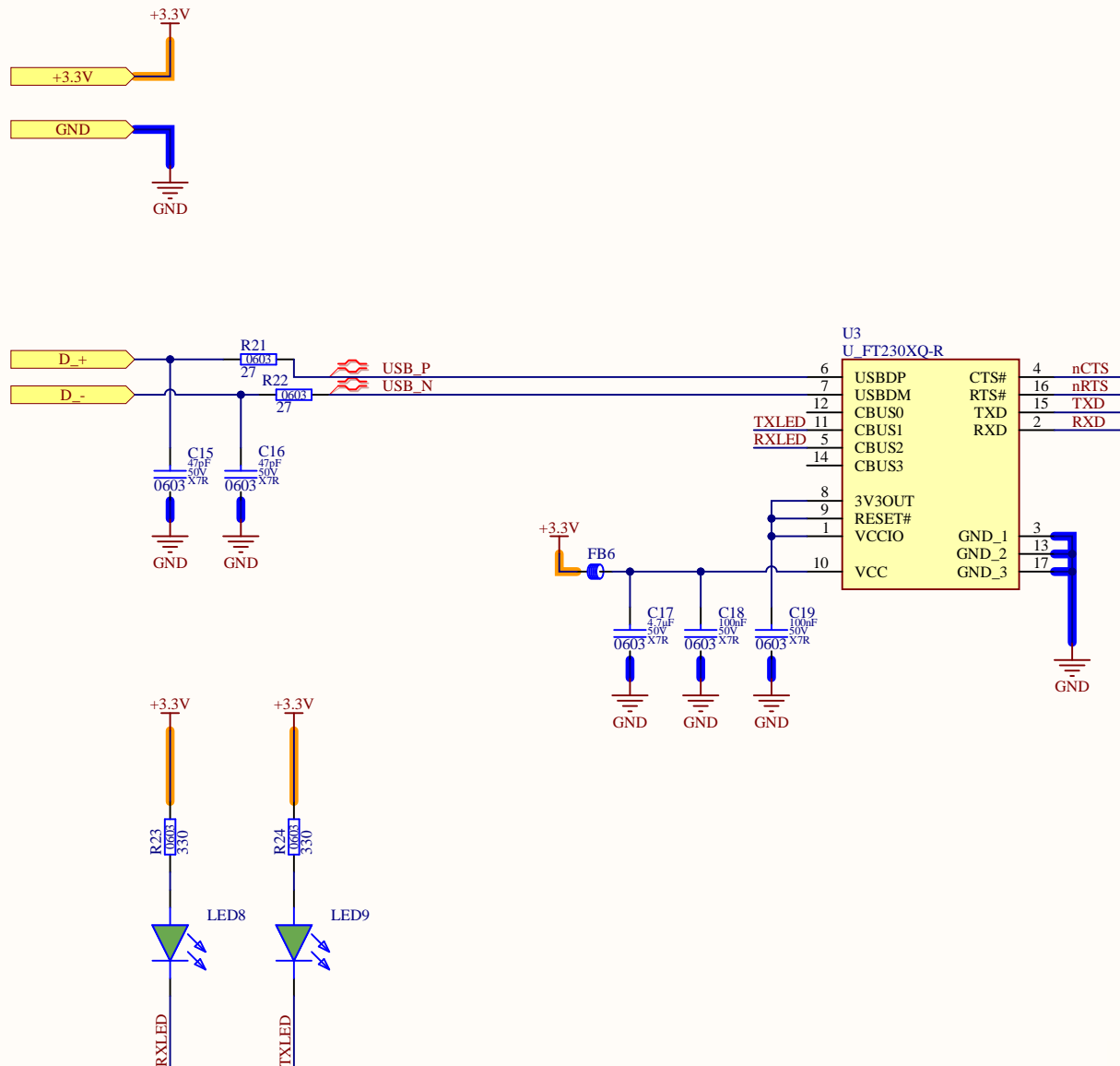


Datasheet does not provide value of current needed for changing state. Coil itself has 500Ω, which gives 100mA through coil.  
Serial resistor is used to experimentaly determine if current flowing through coil can be limited.




Main idea is that controlled devices have their own power supply and board only controls when it should be connected.

	Name: Relay.SchDoc		
	Project: FPS_Master.PrjPcb		
	Author: Wojciech Wołosz	Faculty: WIEIT	Field of study: Elektronika i Telekomunikacja
	Date: 2.4.2023		



Emergency header for external FTDI  
in case that internal one fails.

	Name: USB-UART_Converter.SchDoc			
	Project: FPS_Master.PrjPcb			
	Author: Wojciech Wołosz	Faculty: WIEIT	Field of study: Elektronika i Telekomunikacja	Date: 2.4.2023