

Revision History:

Date: Revision: Comments:

Initial Revision
Additional Notes:



Important Notes about this Schematic:

DESIGN NOTE:
Design notes in gray text boxes give information about design requirements and descisions.

LAYOUT NOTE:
Layout notes in red text boxes give infomation regarding layout requirements.

Gun Schematic

Revision History and Table of Contents

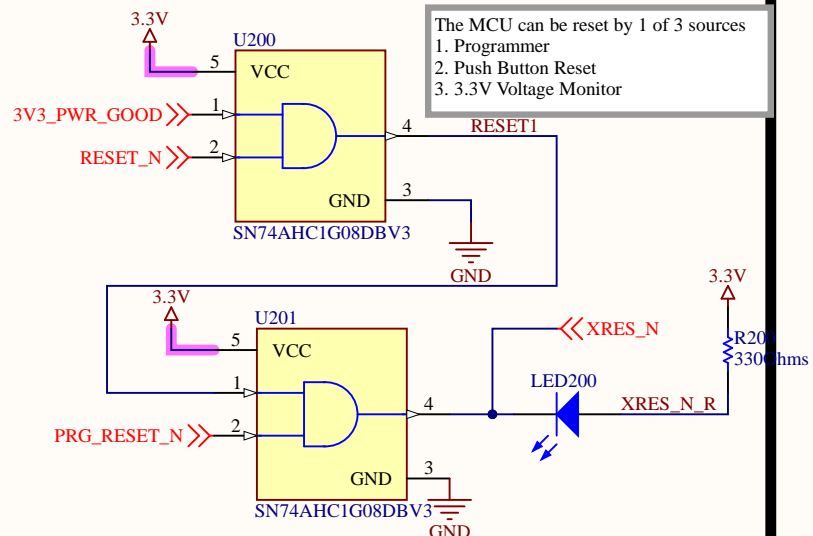
The Gyrosquad:

Anirudh Jayendra
Win San
Brandon Voragongsa
Joseph Zhou

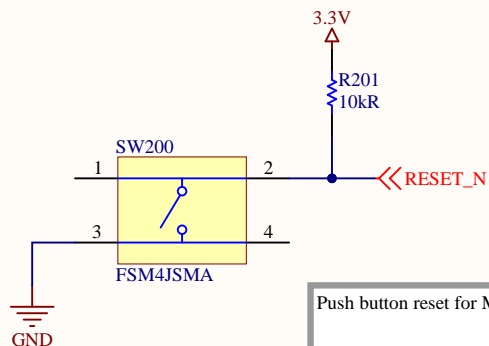


Title		
Size	Number	Revision
A		
Date:	3/09/2023	Sheet of
File:	C:\Users\...\01-Revision_History_and_Content\SchDoc	

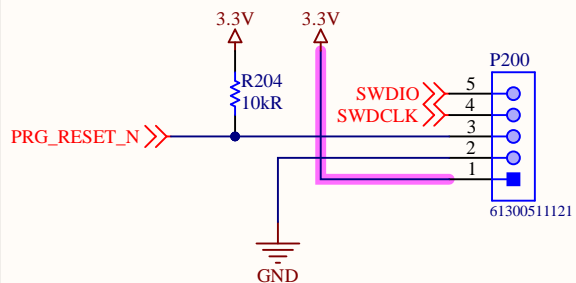
A



B



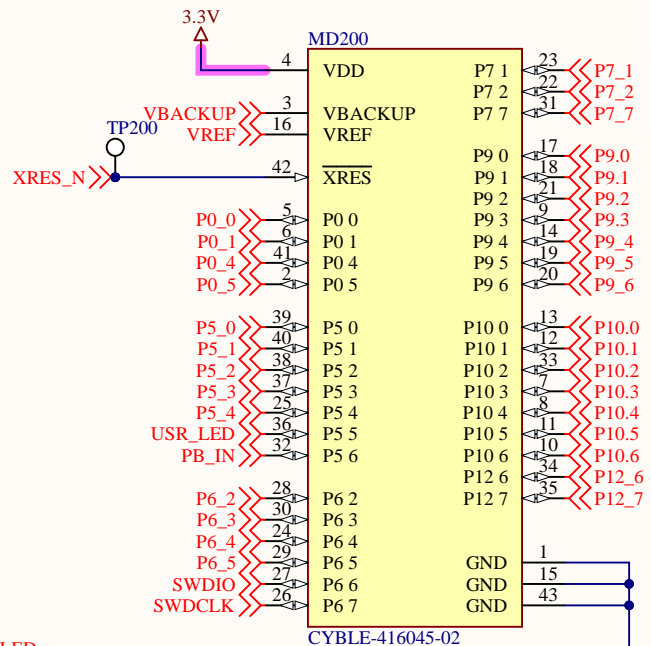
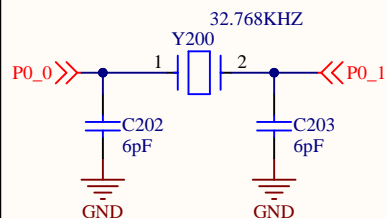
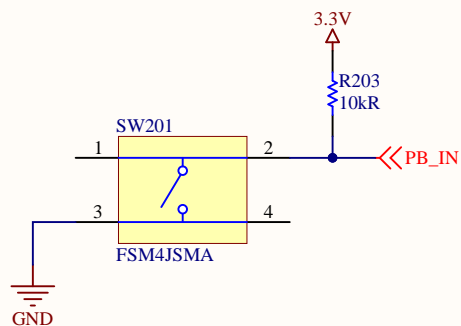
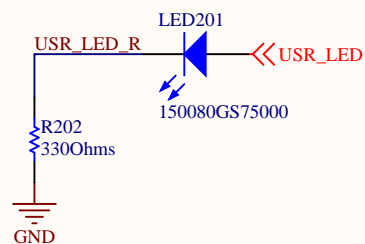
C



D



Header for the MiniProg4 Programmer.
The programmer can be used to supply
3.3V to the MCU.



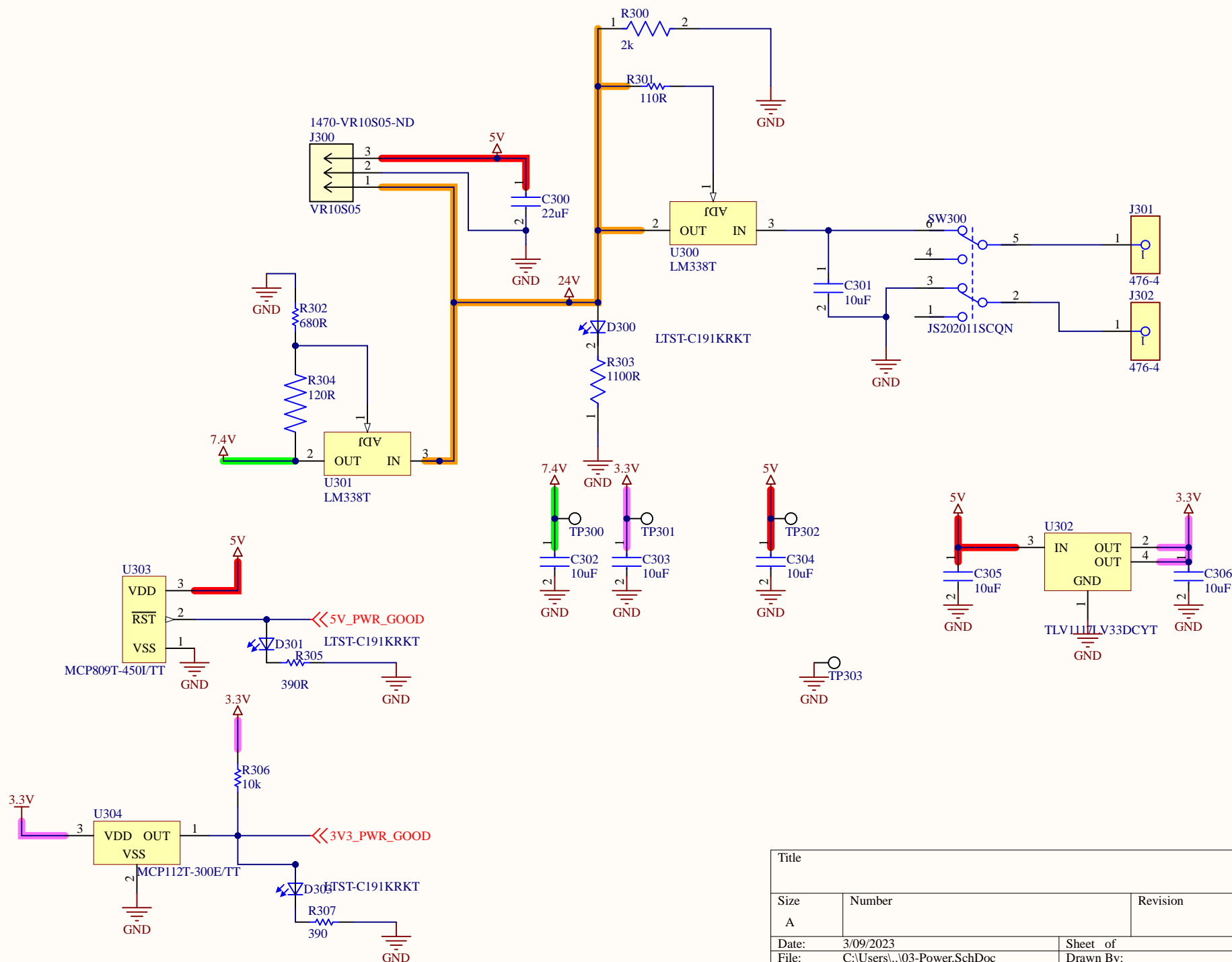
A

B

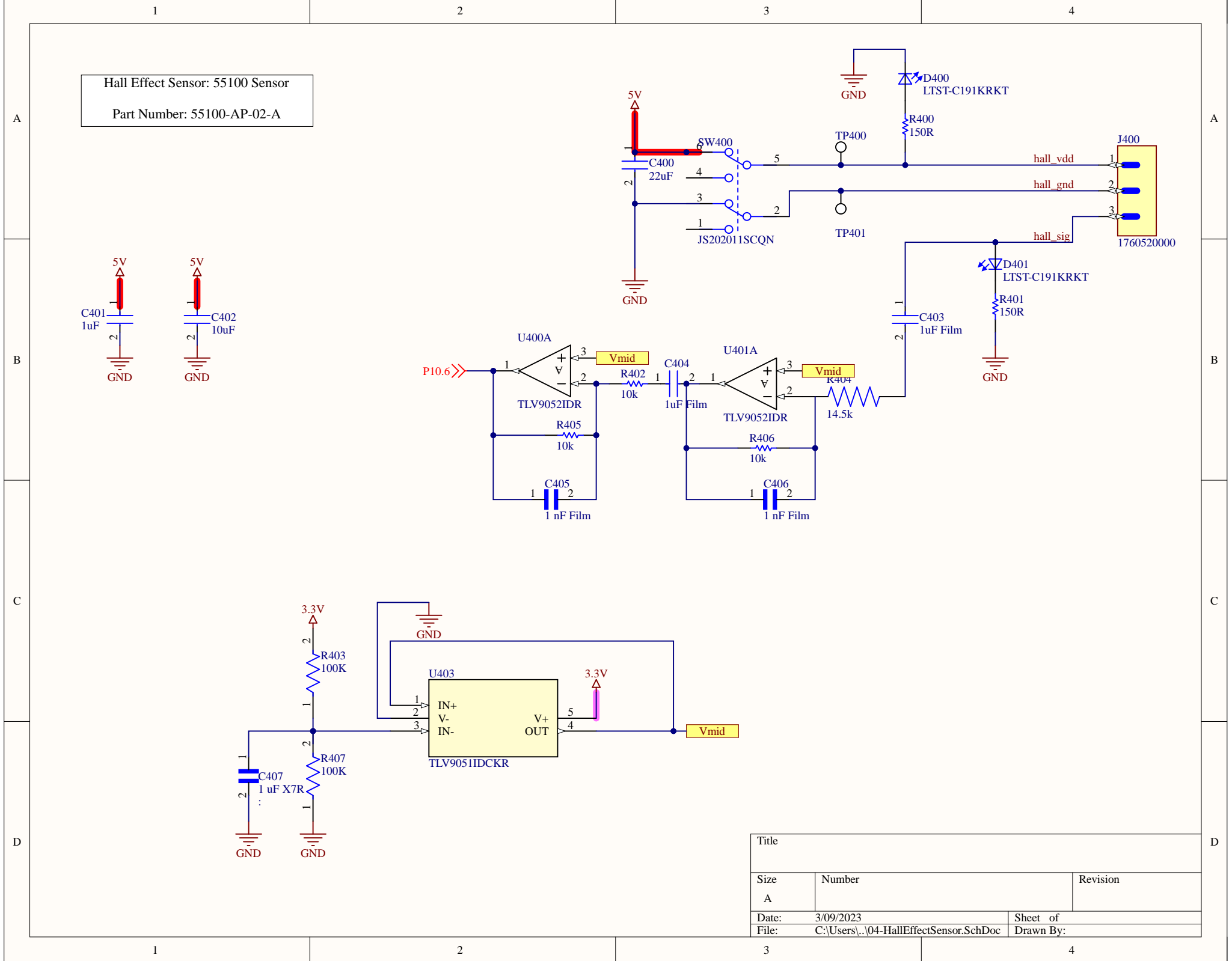
C

D

Title		
Size	Number	Revision
A		
Date:	3/09/2023	Sheet of
File:	C:\Users\...\02-MCU.SchDoc	Drawn By:

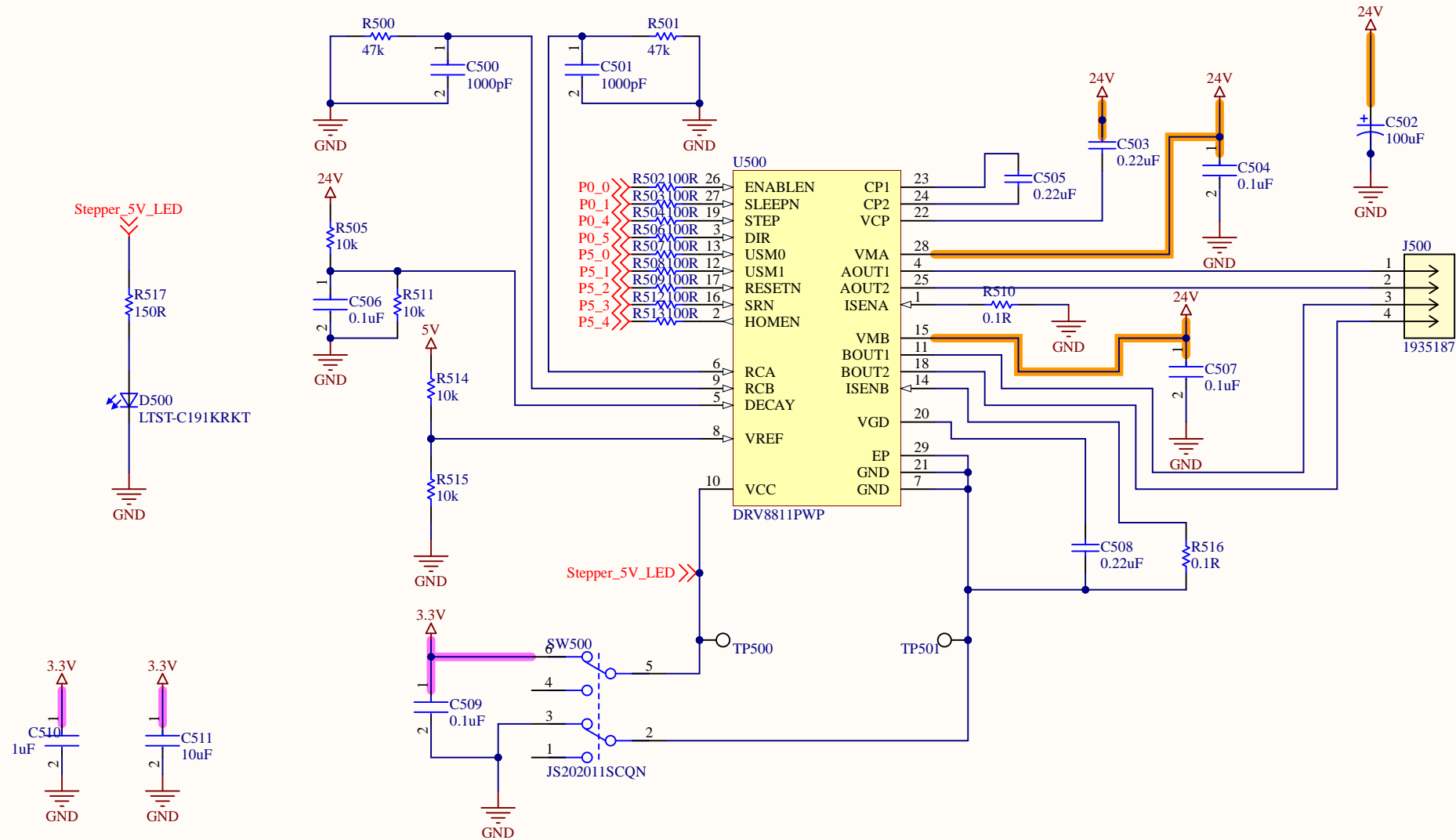


Title		
Size	Number	Revision
A		
Date:	3/09/2023	Sheet of
File:	C:\Users\...\03-Power.SchDoc	Drawn By:



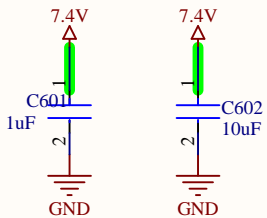
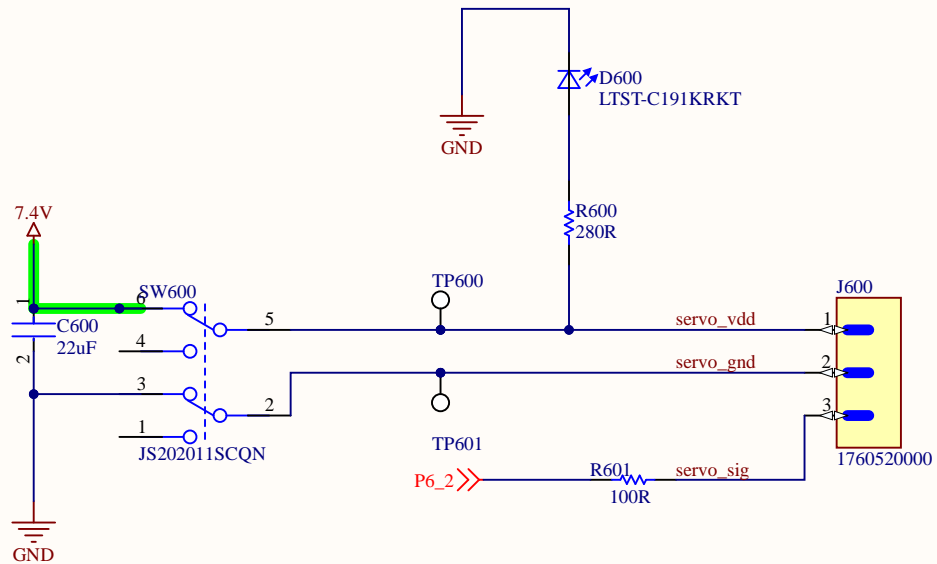
Title		
Size	Number	Revision
A		
Date:	3/09/2023	Sheet of
File:	C:\Users\...\04-HallEffectSensor.SchDoc	Drawn By:

Stepper Motor Driver: DRV8811 Stepper Motor
Controller IC

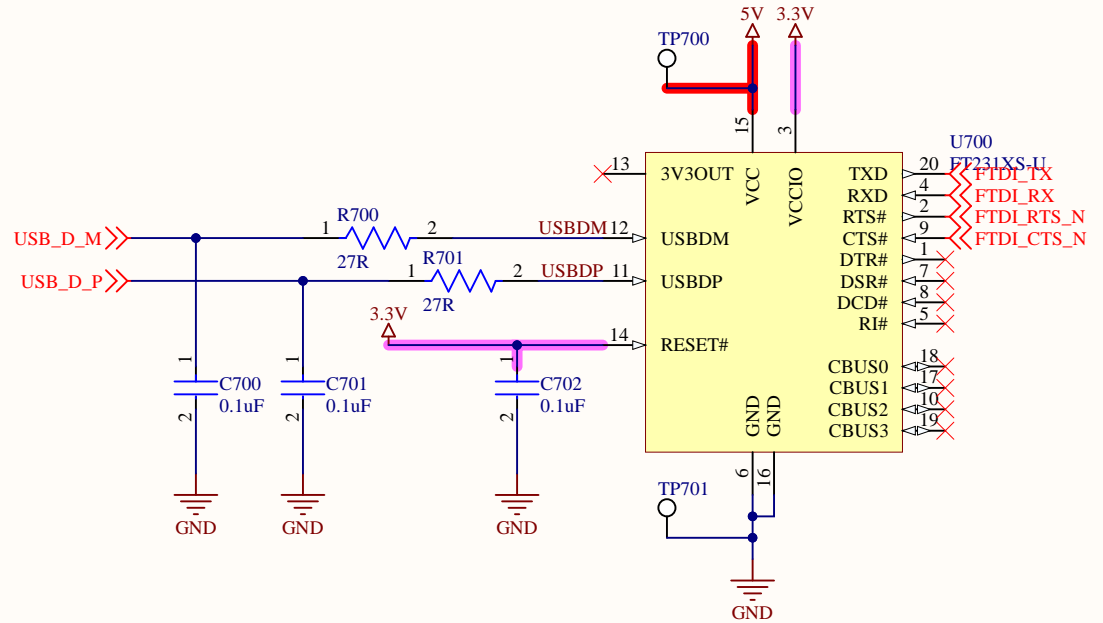
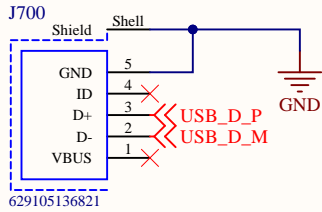


Title		
Size	Number	Revision
A		
Date:	3/09/2023	Sheet of
File:	C:\Users\...\05-StepperMotor.SchDoc	Drawn By:

Servo Motor: BETU 35kg Waterproof Servo
ASIN: B09M4668PM
Model Number: BETU-35KG-Tie



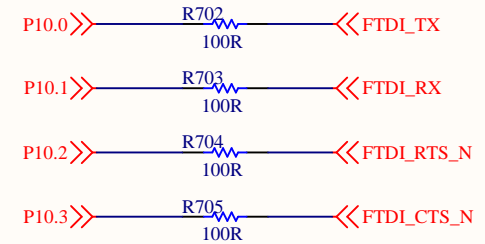
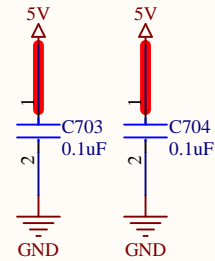
Title		
Size	Number	Revision
A		
Date:	3/09/2023	Sheet of
File:	C:\Users\...\06-ServoMotor.SchDoc	Drawn By:



UART Bridge: FT231XS-U

NOTE: We are not taking in power from VBUS because it is being supplied by the POWER module

POWER module supplies 5 and 3.3V



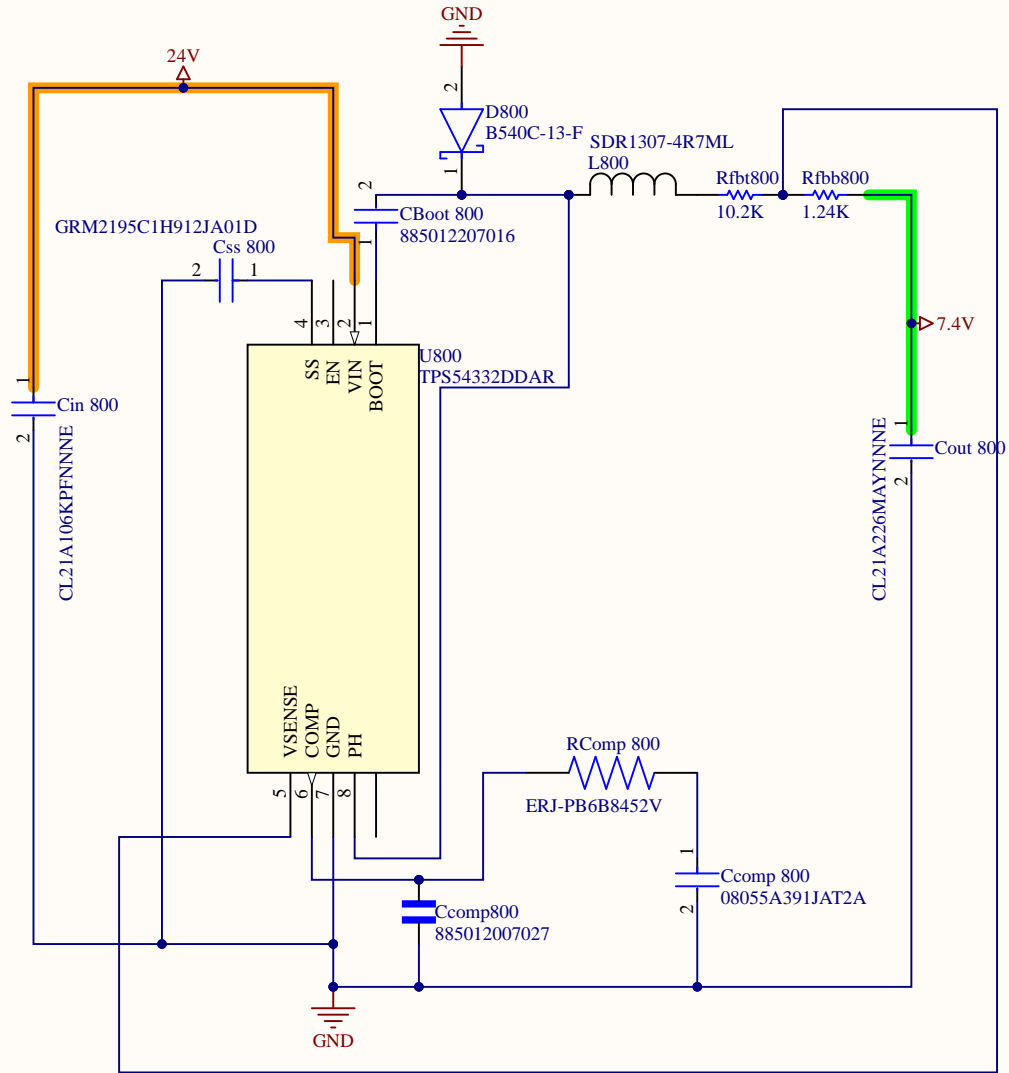
Title		
Size	Number	Revision
A		
Date:	3/09/2023	Sheet of
File:	C:\Users\...\07-UARTBridge.SchDoc	Drawn By:

24V to 7.4V Switching Regulator

Part Number: TPS54332DDAR

24V to 7.4V Switching Regulator

Part Number: TPS54332DDAR



Title		
Size A	Number	Revision
Date:	3/09/2023	Sheet of
File:	C:\Users\...\08-SwitchingRegulator.SchDoc Drawn By:	