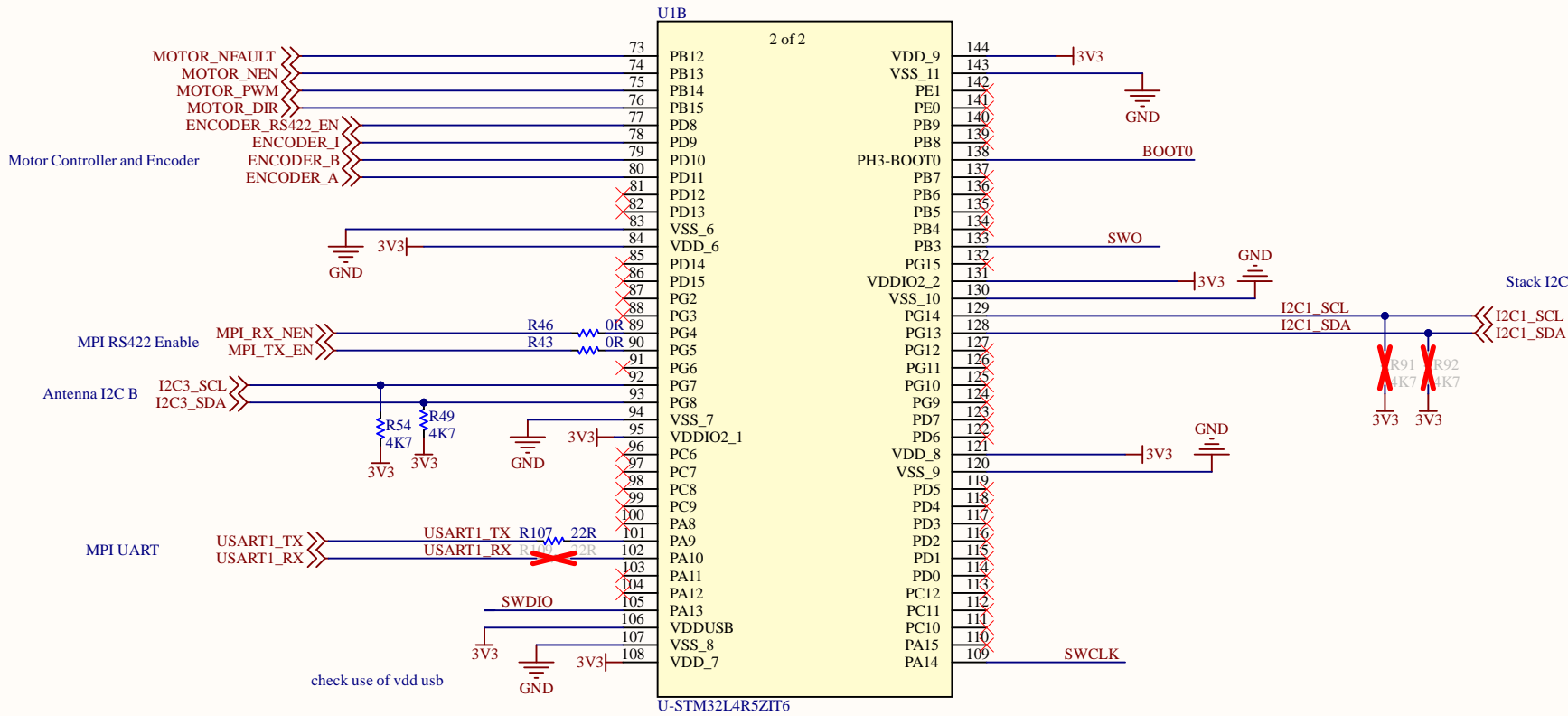
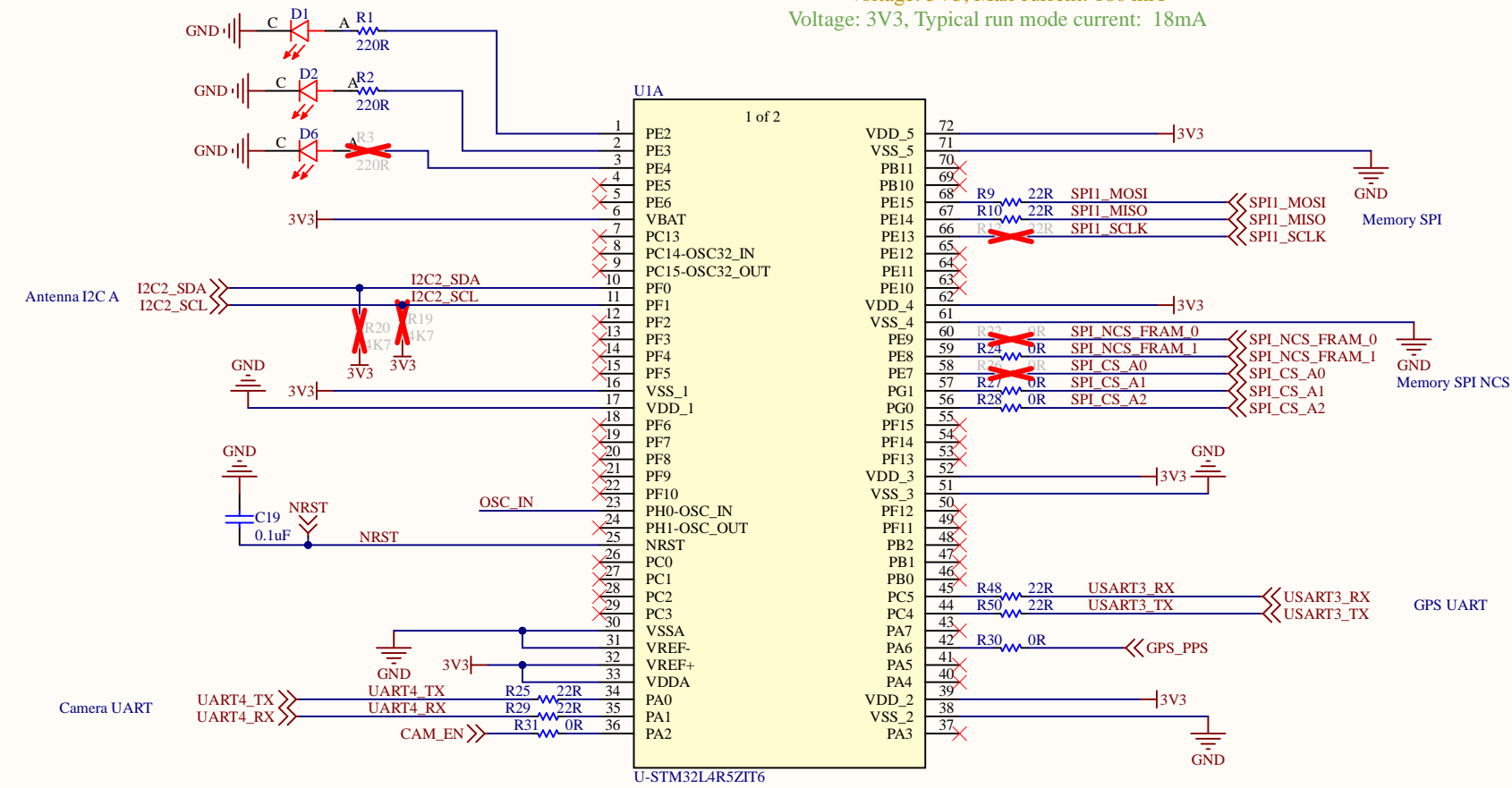
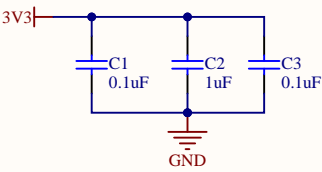


STM32

Voltage: 3V3, Max current: 160 mA
Voltage: 3V3, Typical run mode current: 18mA

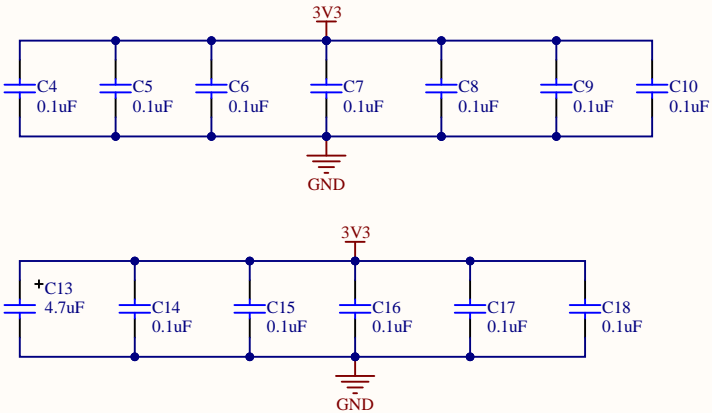


VDDA Capacitors

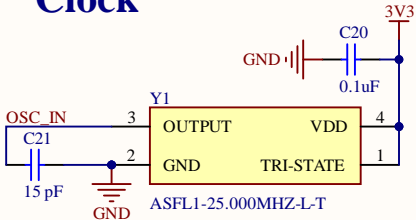


Decoupling Capacitors

Place as close to pins as possible

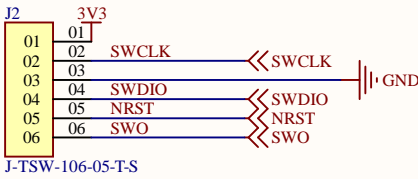


Clock

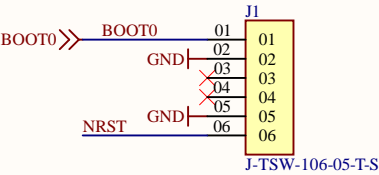


Voltage: 3V3, Max current: 15 mA

SWD Interface



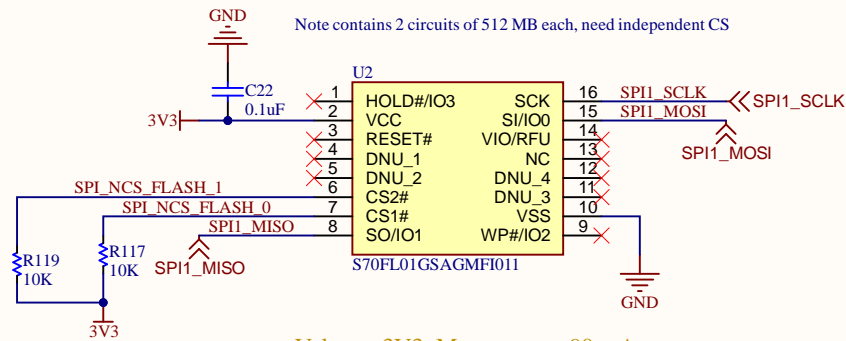
NRST + BOOT



Title			
STM32			
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A3			
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File:	C:\Users\...\STM32.SchDoc		Drawn By:

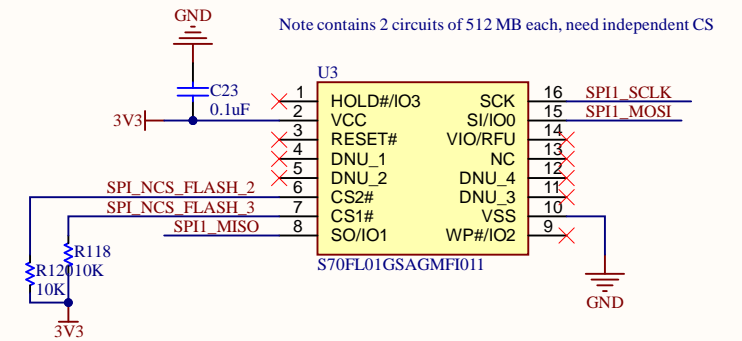
Flash Memory

Can use as alternative (stock) S70FL01GSDPMFV010, halves the frequency (133 to 66 MHz)



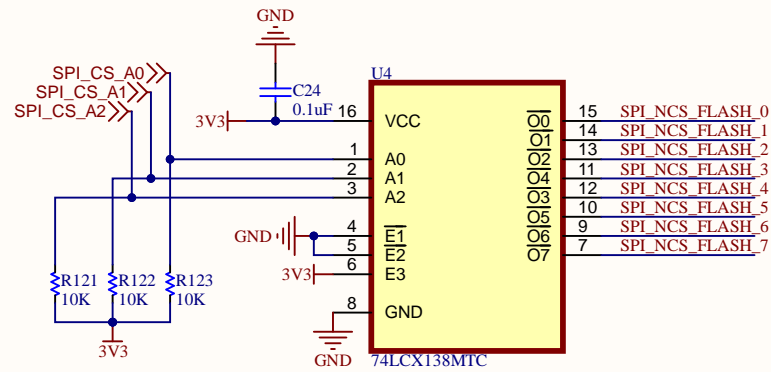
Voltage: 3V3, Max current: 90 mA

Voltage: 3V3, Typical Standby current: 140 uA

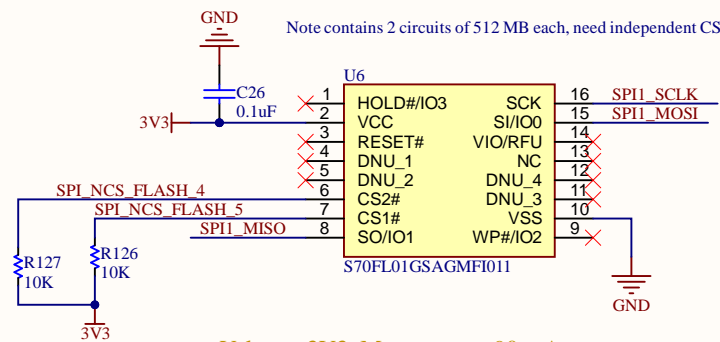


Voltage: 3V3, Max current: 90 mA

Voltage: 3V3, Typical Standby current: 140 uA

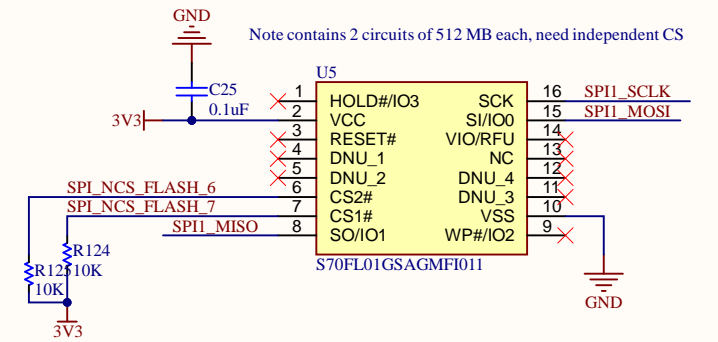


Voltage: 3V3, Max current: ~1mA



Voltage: 3V3, Max current: 90 mA

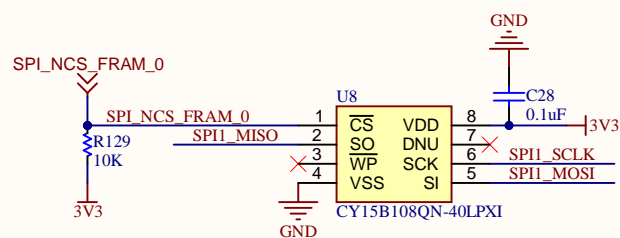
Voltage: 3V3, Typical Standby current: 140 uA



Voltage: 3V3, Max current: 90 mA

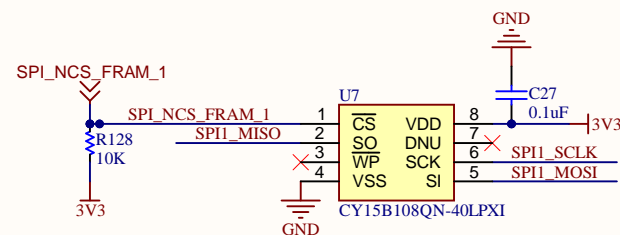
Voltage: 3V3, Typical Standby current: 140 uA

FRAM Memory



Voltage: 3V3, Typical current: 2.6 mA

Voltage: 3V3, Typical Standby current: 3.5 uA

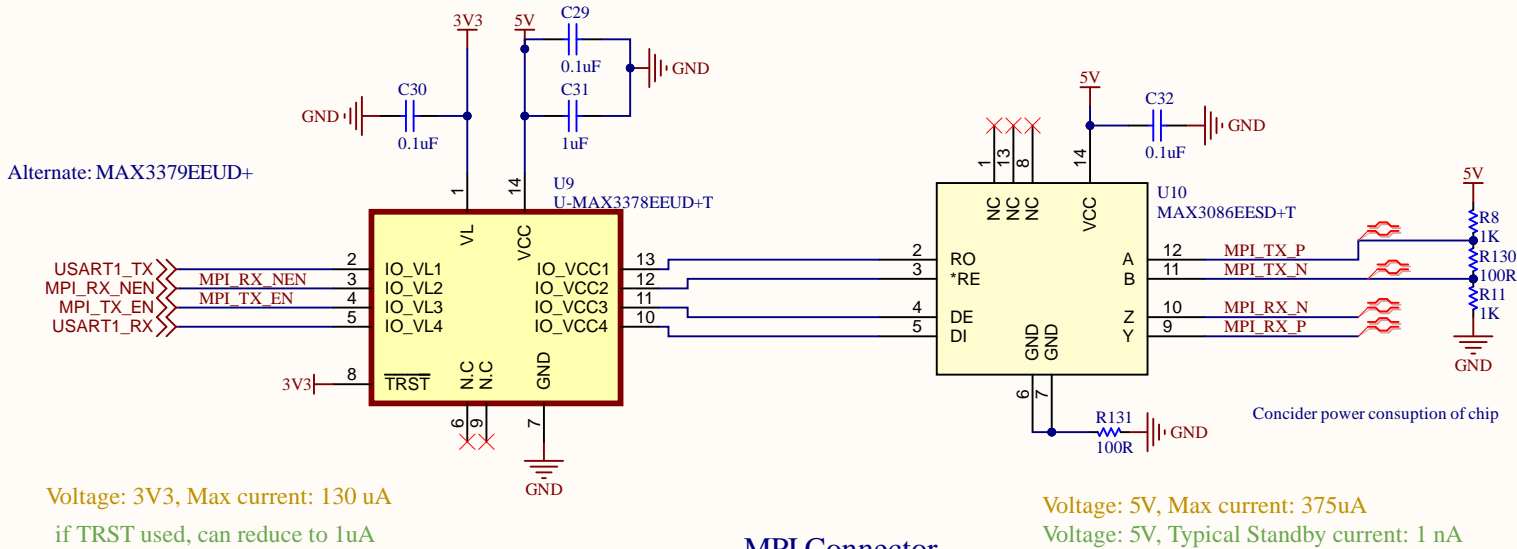


Voltage: 3V3, Typical current: 2.6 mA

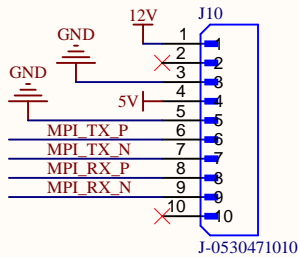
Voltage: 3V3, Typical Standby current: 3.5 uA

Title			Memory		
Size		Number		Revision	
A3					
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File:			C:\Users\...\Memory.SchDoc		Drawn By: James Chen

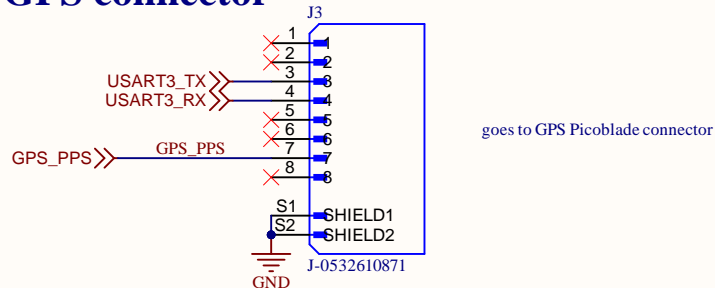
MPI RS422 Transceiver + Connector



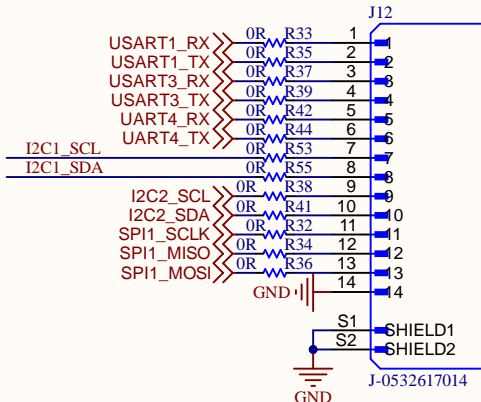
MPI Connector



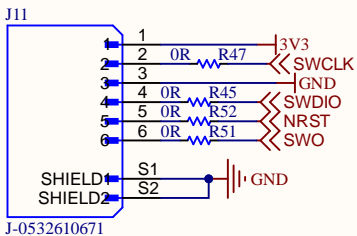
GPS connector



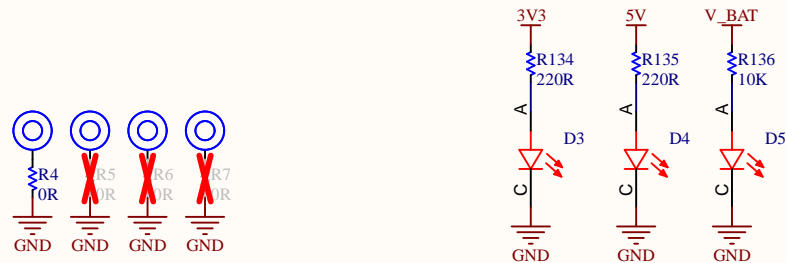
Umbilical connector



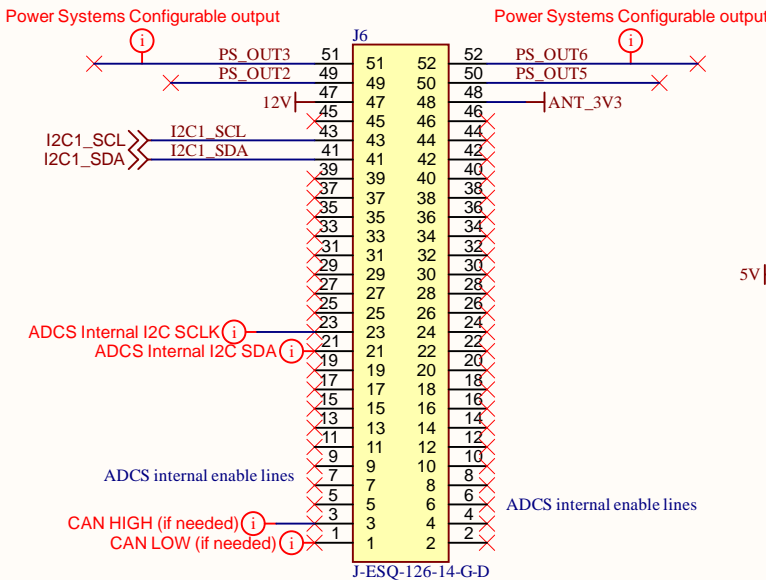
Programming Connector



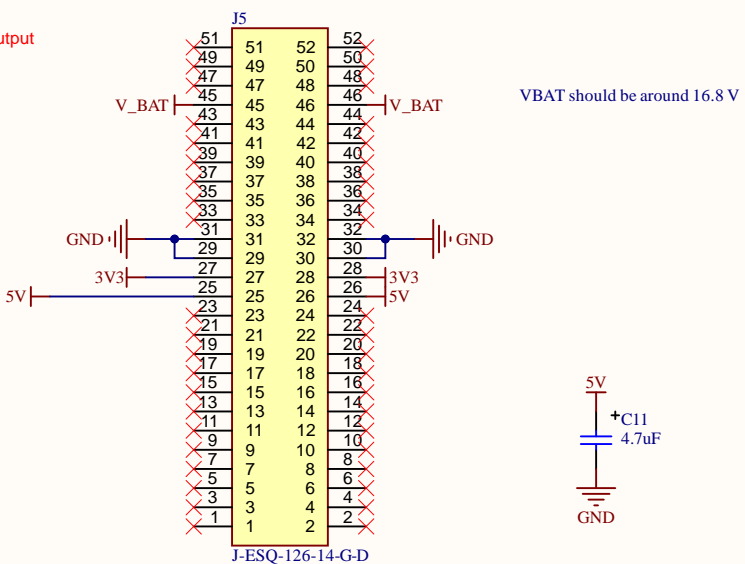
Voltage indicator LED's



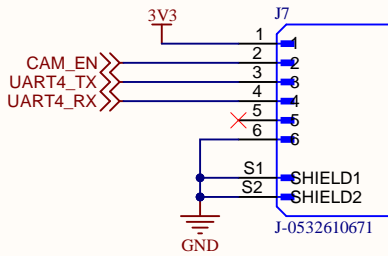
H1 PC104 Connector



H2 PC104 Connector



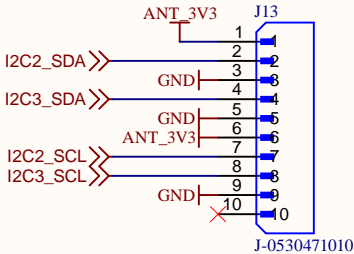
Camera Connector



Title			External Connectors		
Size	Number			Revision	
A3					
Date:	5-19-2022			Sheet of	
File:	C:\Users\...\External Connectors.SchDoc			Drawn By: James Chen	

1	2	3	4	5	6	7	8
A							A
B							B
C							C
D							D

Connector (9 pin)



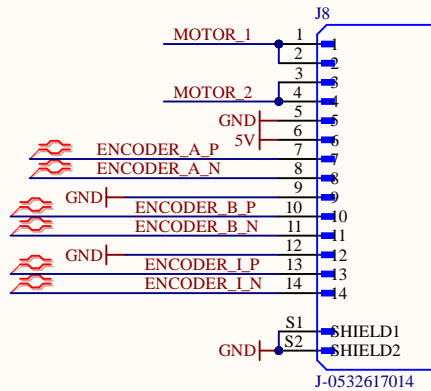
Two I2C? Duplicate and connect it?

Determine real pinout!

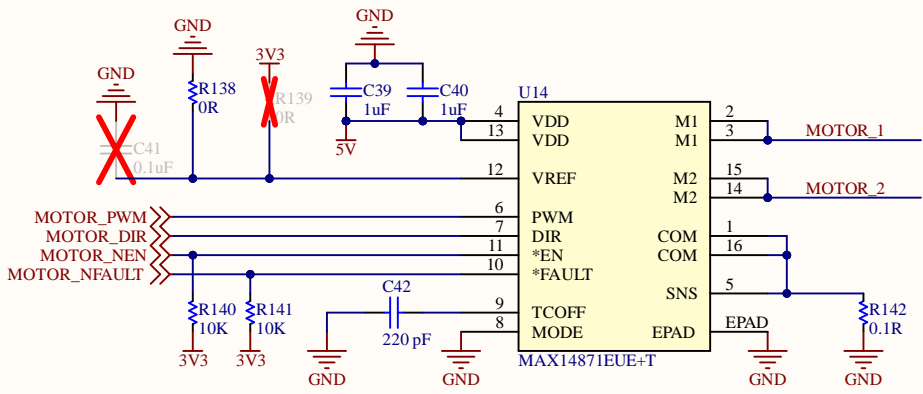
Voltage: 3V3, Typical Standby current: 13 mA
2W system, 3V3, ~600mA Activated in deployment

Title Antenna Deployment		
Size A3	Number	Revision
Date: 5-19-2022	Sheet of	
File: C:\Users\...\Antenna Deployment.SchDoc	Drawn By: James Chen	
1	2	3

Motor Connector



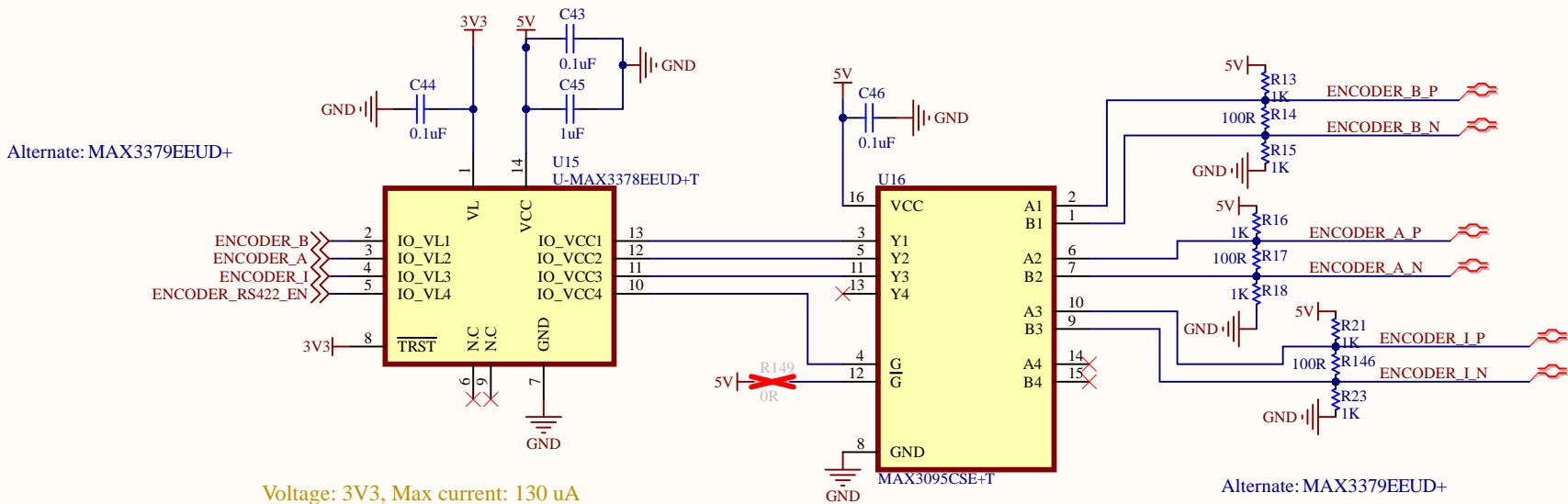
Motor Controller



Voltage: 5V, Max current: 3A

Voltage: 5V, Typical Standby current: 10 uA

Motor Encoder



Voltage: 3V3, Max current: 130 uA
if TRST used, can reduce to 1uA

Voltage: 5V, Max current: 2.4mA
Voltage: 5V, Typical Shutdown current: 1 nA

Title Motor Control			
Size A3	Number		Revision
Date:	5-19-2022		Sheet of
File:	C:\Users\...\Motor Control.SchDoc		Drawn By: James Chen