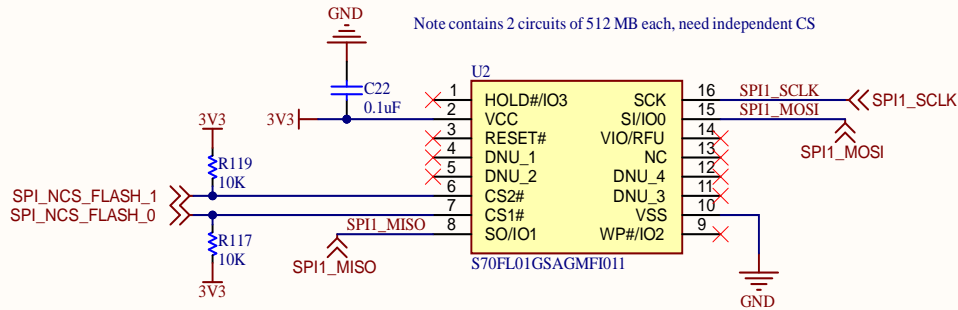
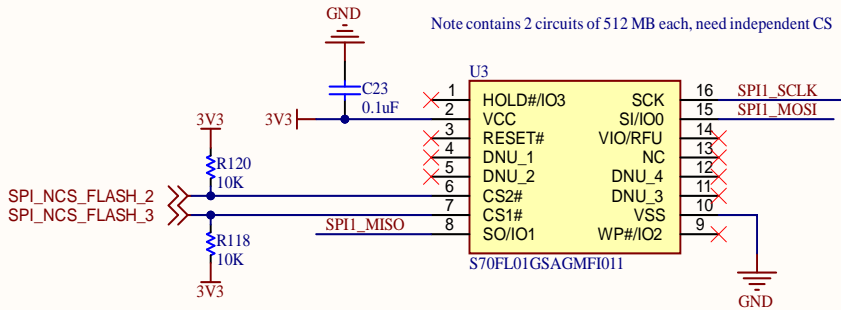


Flash Memory

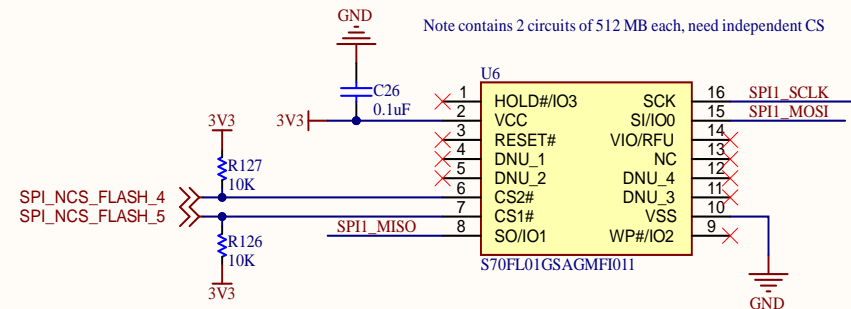
Can use as alternative (stock) S70FL01GSDPMFV010, halves the frequency (133 to 66 MHz)



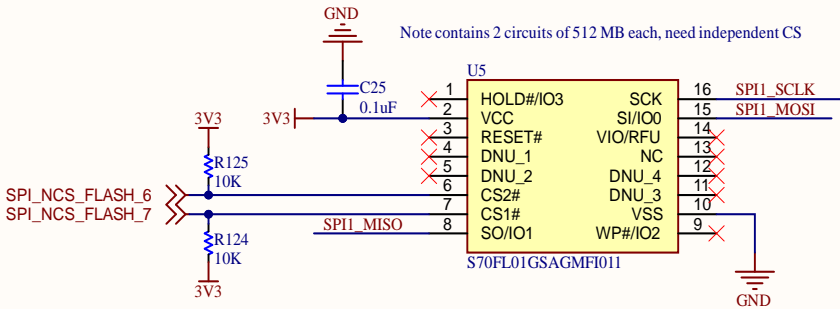
Voltage: 3V3, Max current: 90 mA
Voltage: 3V3, Typical Standby current: 140 uA



Voltage: 3V3, Max current: 90 mA
Voltage: 3V3, Typical Standby current: 140 uA

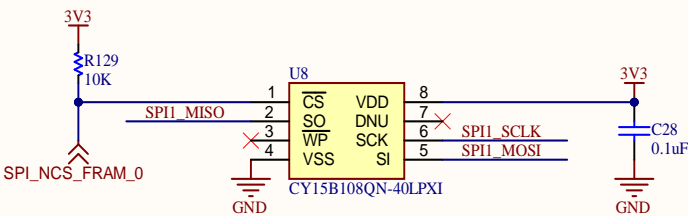


Voltage: 3V3, Max current: 90 mA
Voltage: 3V3, Typical Standby current: 140 uA

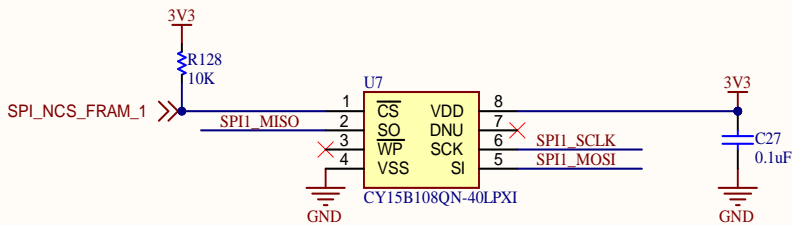


Voltage: 3V3, Max current: 90 mA
Voltage: 3V3, Typical Standby current: 140 uA

FRAM Memory



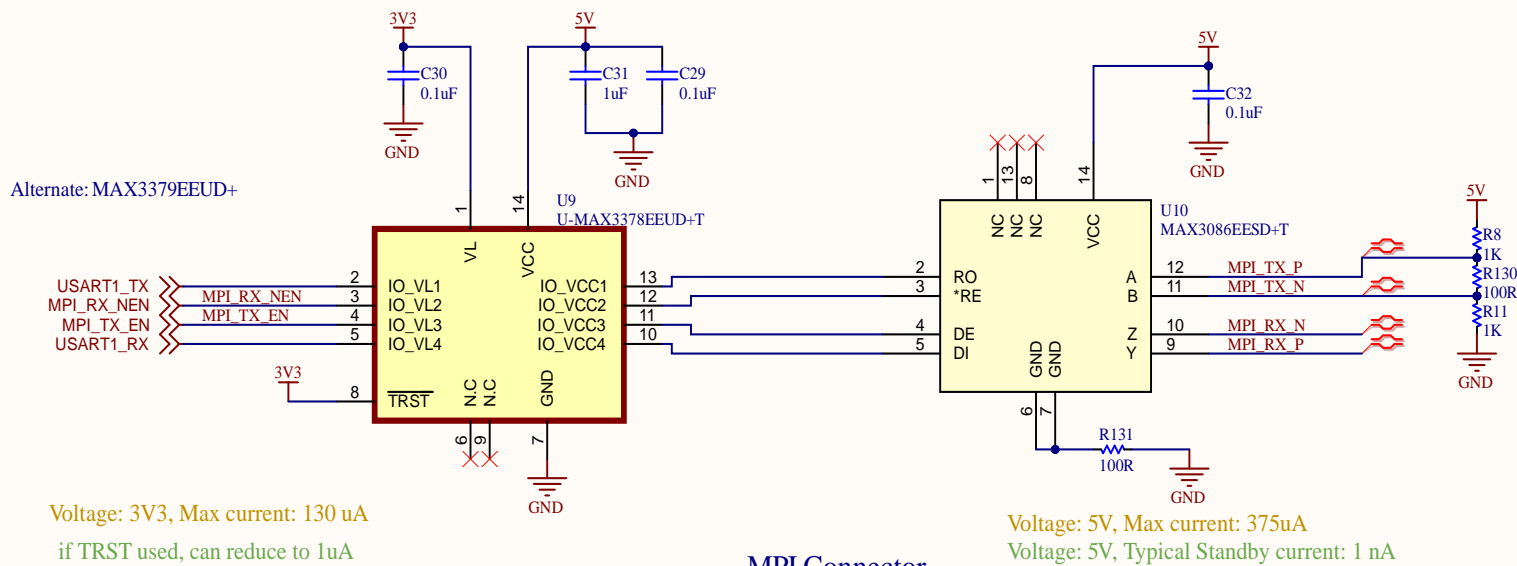
Voltage: 3V3, Typical current: 2.6 mA
Voltage: 3V3, Typical Standby current: 3.5 uA



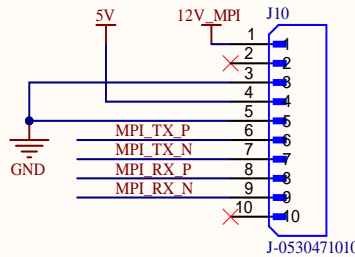
Voltage: 3V3, Typical current: 2.6 mA
Voltage: 3V3, Typical Standby current: 3.5 uA

Title		
Memory		
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File:	C:\Users\...\Memory.SchDoc	Drawn By: James Chen

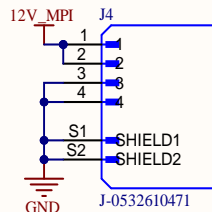
MPI RS422 Transceiver + Connector



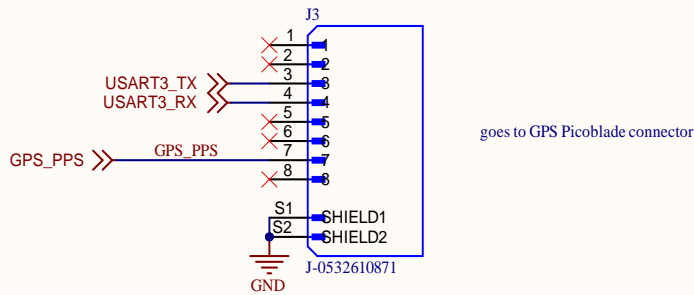
MPI Connector



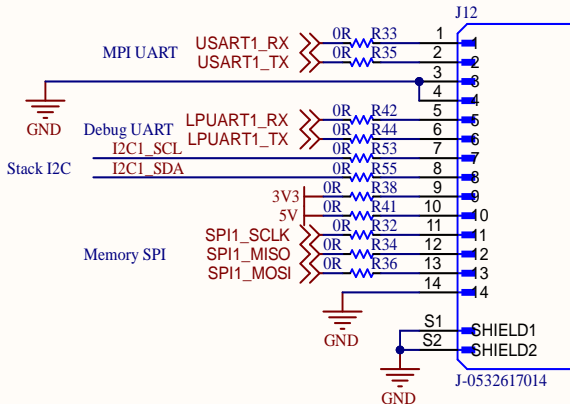
Power Connector



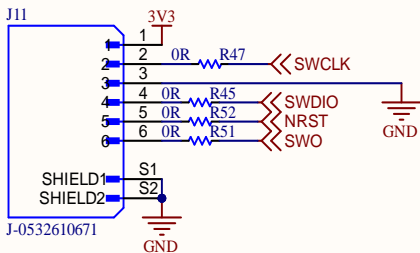
GPS connector



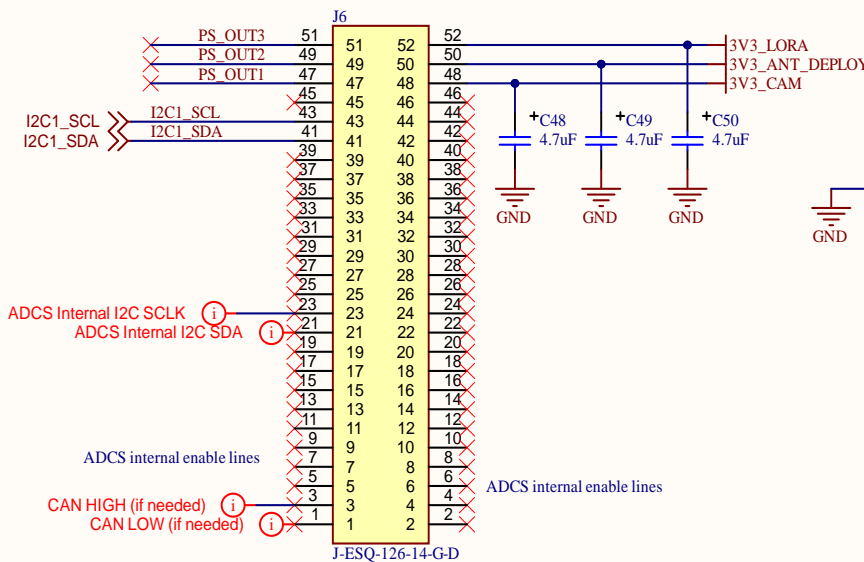
Umbilical connector



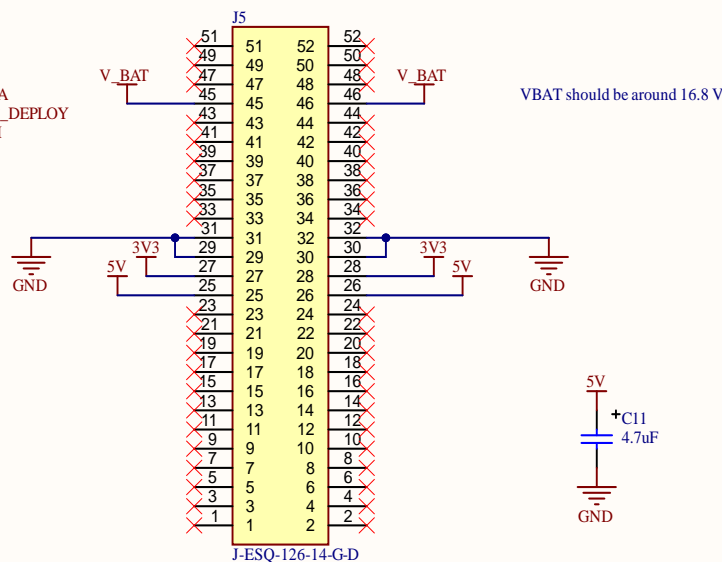
Programming Connector



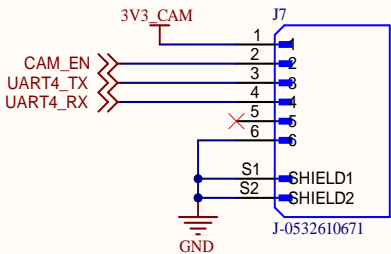
H1 PC104 Connector



H2 PC104 Connector

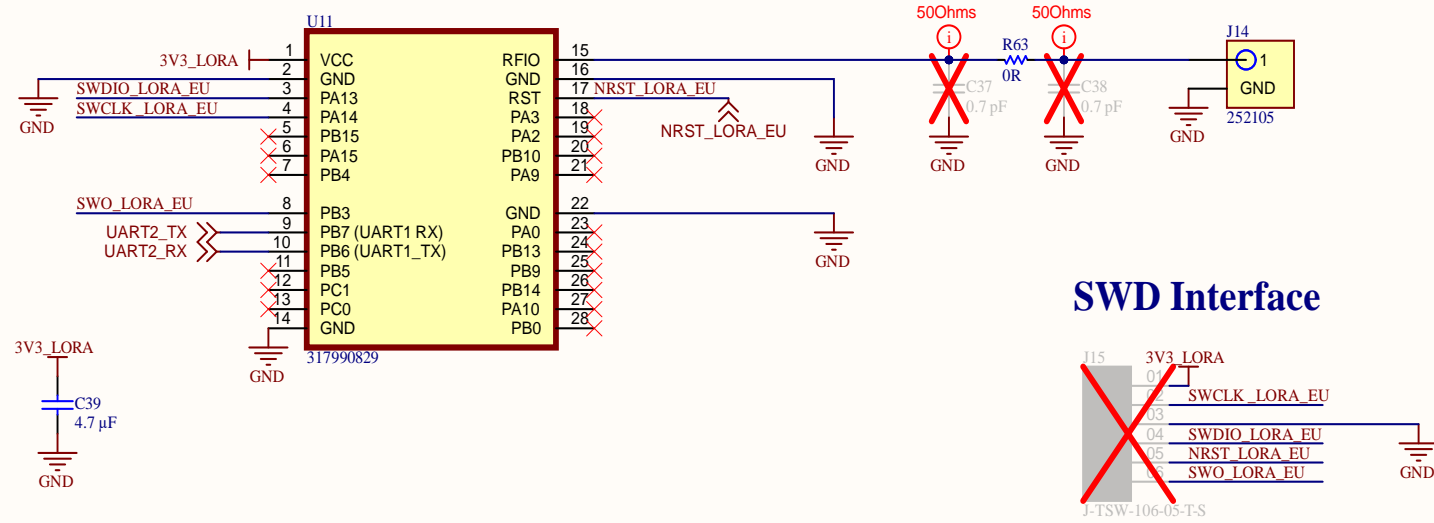


Camera Connector

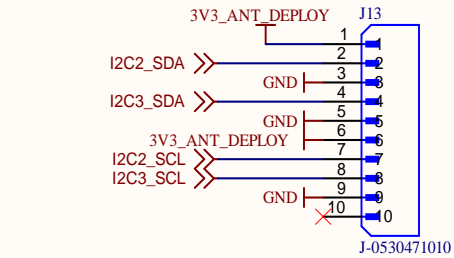


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External Connectors		
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File:	C:\Users\...\External Connectors.SchDoc	Drawn By: James Chen

LoRa WAN US915 + Antenna



Antenna Connector (9 pin)

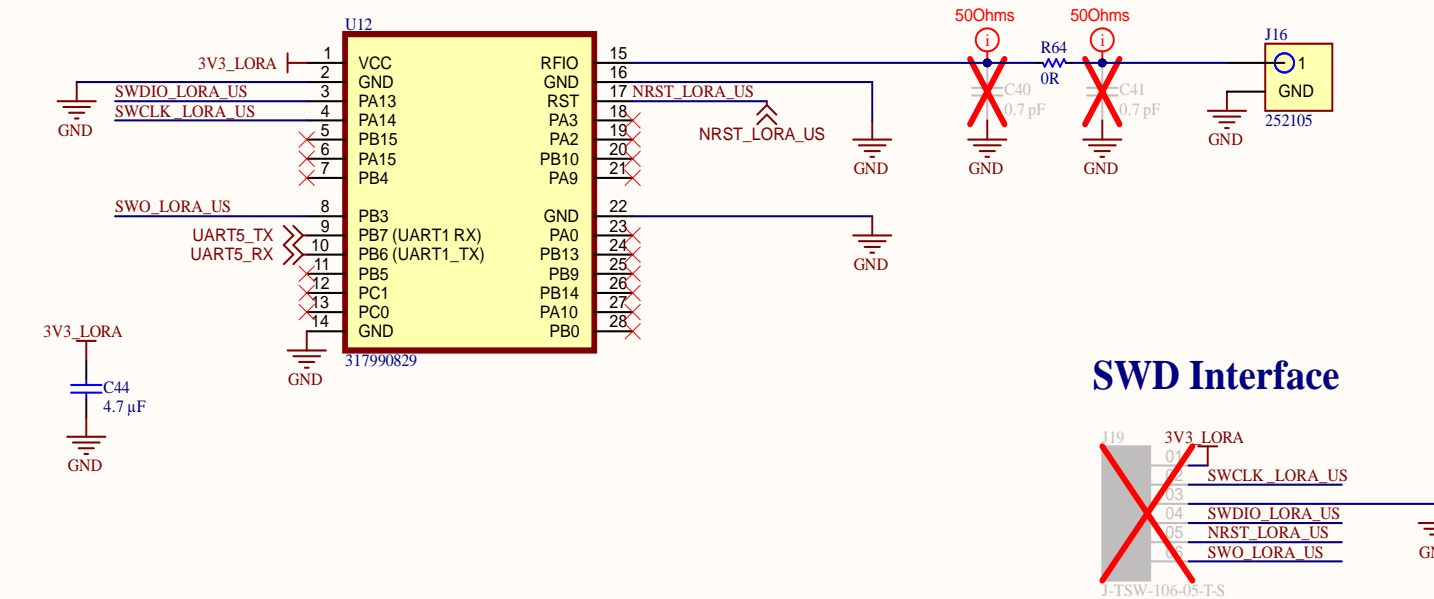


Two I2C? Duplicate and connect it?

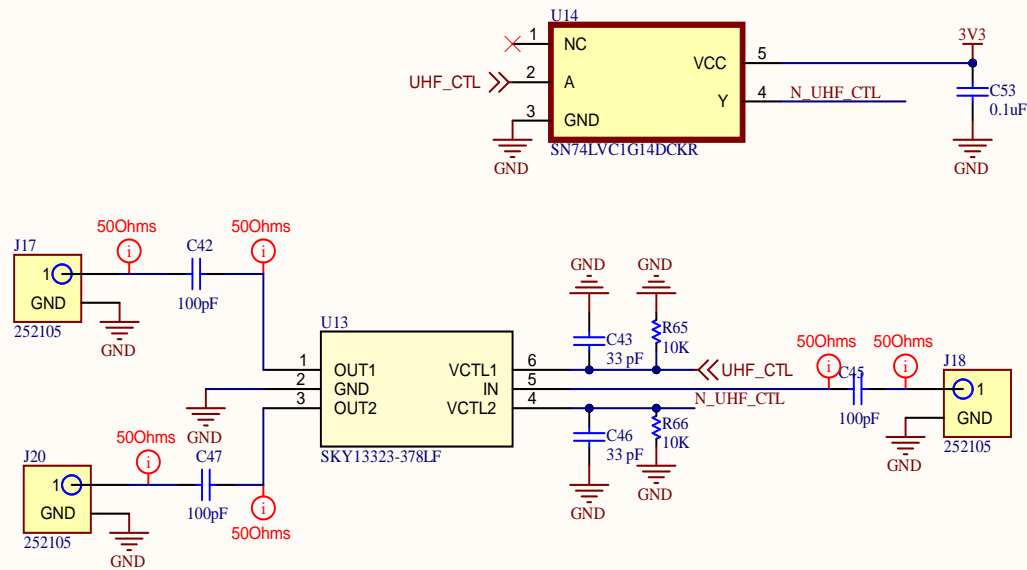
Voltage: 3V3, Typical Standby current: 13 mA

2W system, 3V3, ~600mA Activated in deployment

LoRa WAN EU868 + Antenna



UHF Dipole Switch

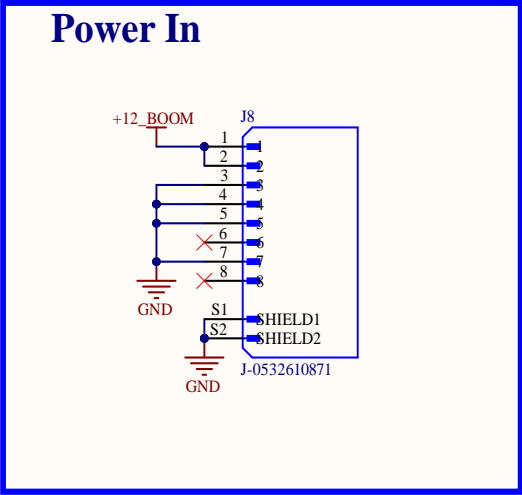


Antenna Deployment

Title	Size	Number	Revision
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File:	C:\Users\...\Antenna and LoRa.SchDoc	Drawn By:	James Chen

Power In

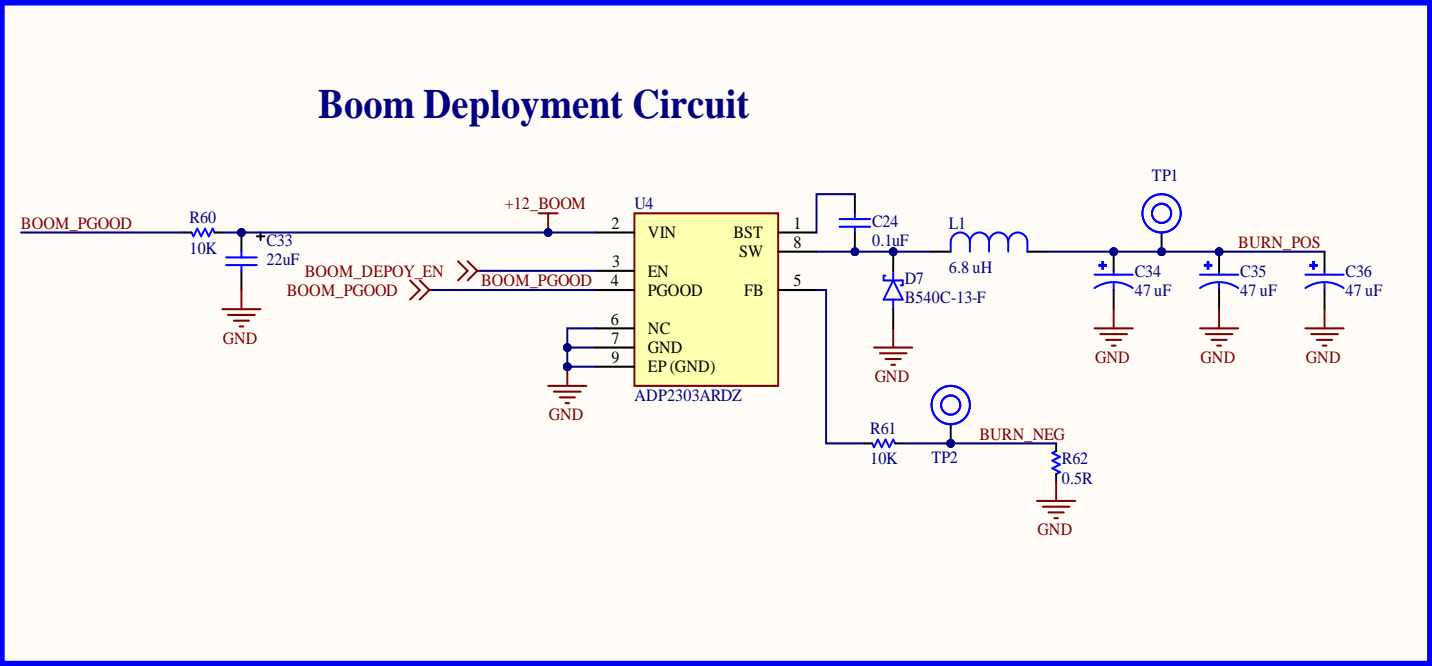
The diagram illustrates the power input wiring for a device. It features a connector labeled J8 with 8 pins. Pins 1 through 5 are connected to a +12_BOOM power source. Pins 6 and 7 are connected to a common ground (GND). Pins 8, SHIELD1, and SHIELD2 are also connected to GND. A blue box highlights pins 1 through 5 and 8, while a red box highlights pins 6 and 7. The connector is identified as J-0532610871.



Boom Deployment Circuit

The schematic diagram illustrates the Boom Deployment Circuit, centered around the ADP2303ARDZ DC-DC converter (U4). The circuit is configured as a boost converter to step up the +12_BOOM supply.

- Input Stage:** The +12_BOOM supply is connected to the VIN pin of U4 through a 10K resistor (R60). A 22uF capacitor (C33) is connected in parallel to ground for input filtering.
- Control and Feedback:** The EN (enable) pin is connected to the BOOM_DEPOY_EN signal, and the PGOOD (power good) pin is connected to the BOOM_PGOOD signal. The FB (feedback) pin is connected to a voltage divider network consisting of a 10K resistor (R61) and a 0.5R resistor (R62) connected to ground.
- Output Stage:** The SW (switch) pin is connected to the output of the converter. This output is filtered by a 0.1uF capacitor (C24) and a 6.8uH inductor (L1). The output is then connected to a 47uF capacitor (C34) to ground and a B540C-13-F diode (D7) to ground.
- Test Points and Additional Components:** The output is connected to test point TP1. A 47uF capacitor (C35) is connected to ground. The output is also connected to test point TP2 and a 47uF capacitor (C36) to ground. The output is connected to a test point (TP1) and a 47uF capacitor (C36).

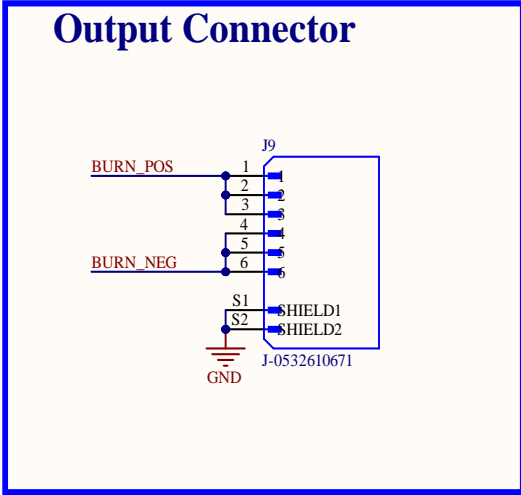


Output Connector

The diagram illustrates the pin configuration for the Output Connector J9. The connector has 8 pins. The connections are as follows:

- Pin 1: BURN_POS
- Pin 2: (unlabeled)
- Pin 3: (unlabeled)
- Pin 4: (unlabeled)
- Pin 5: (unlabeled)
- Pin 6: BURN_NEG
- Pin 7: SHIELD1
- Pin 8: SHIELD2

The SHIELD1 and SHIELD2 pins are connected to a common ground (GND) symbol. The connector is labeled J-0532610671.



Title			Motor Control		
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