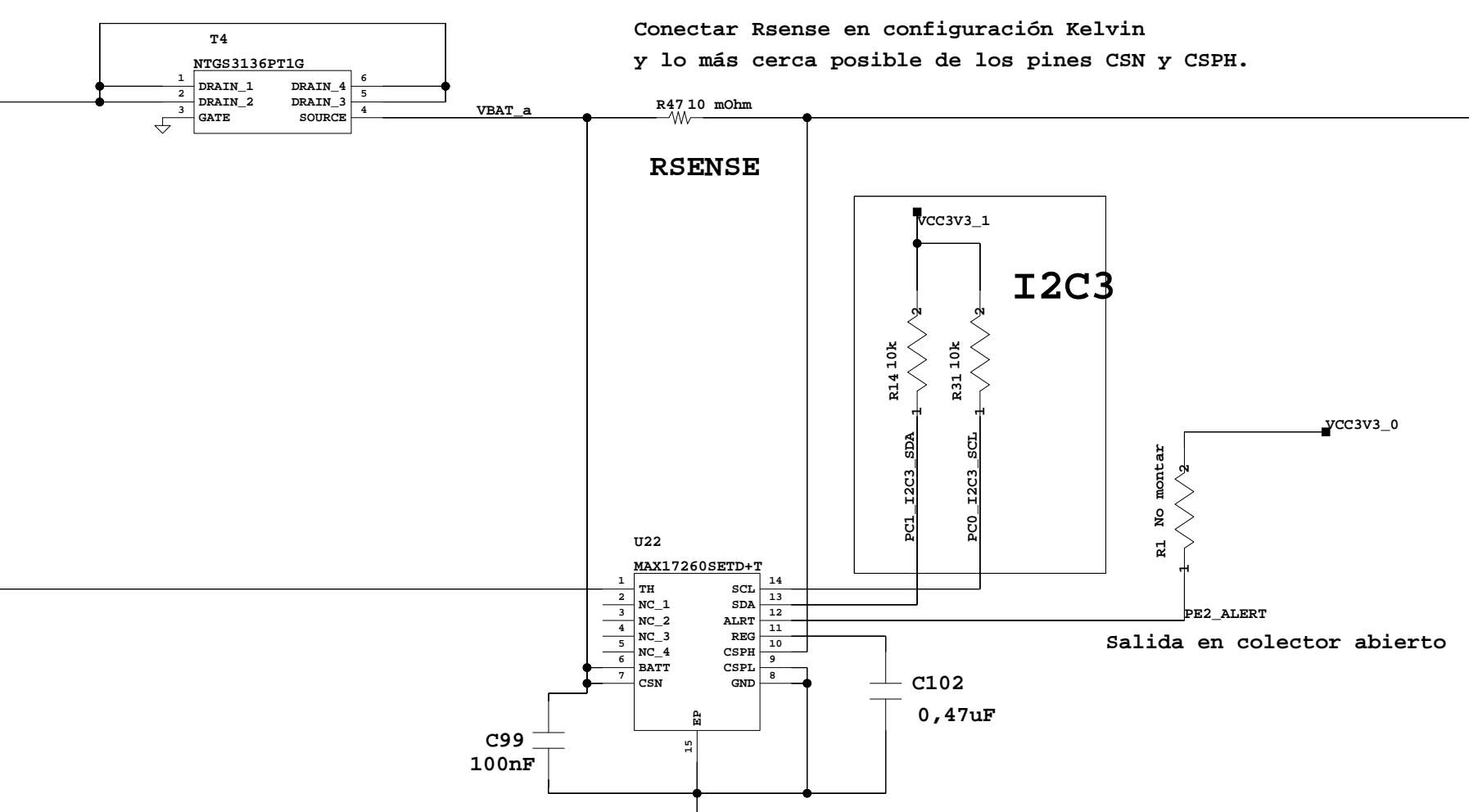
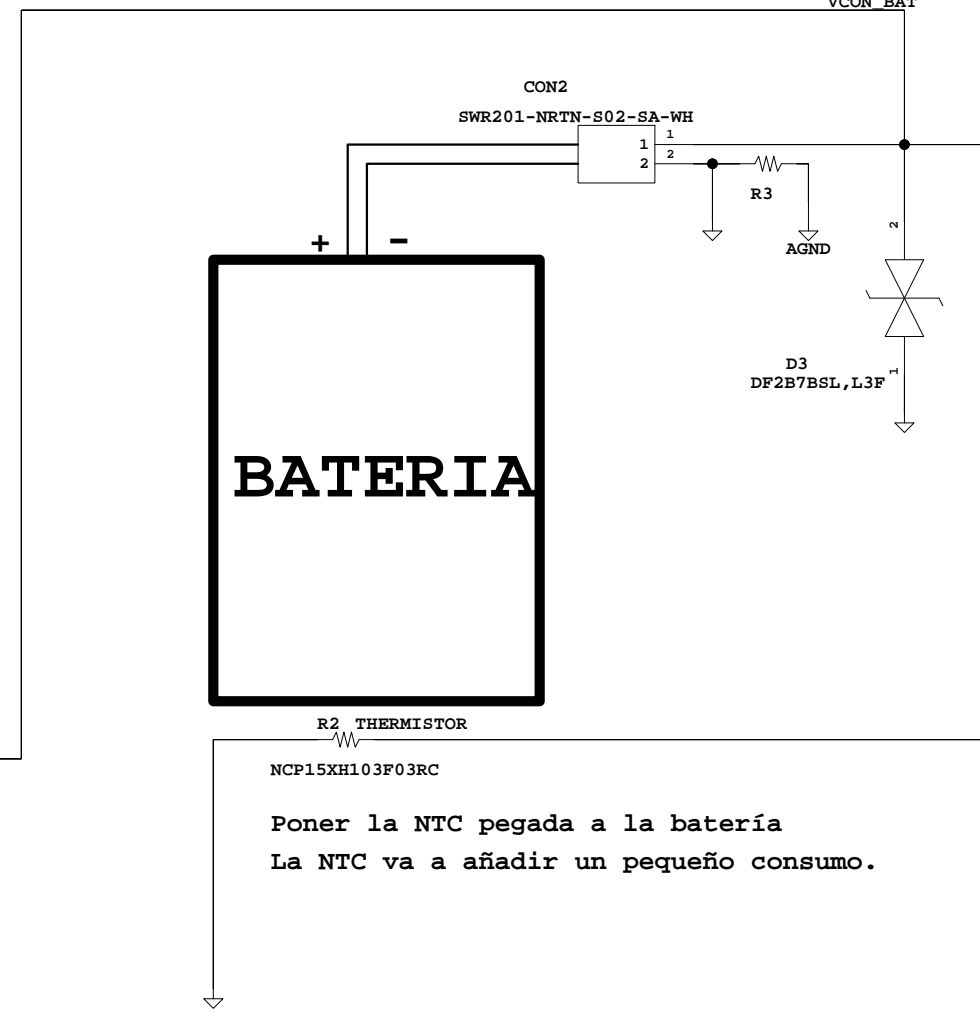
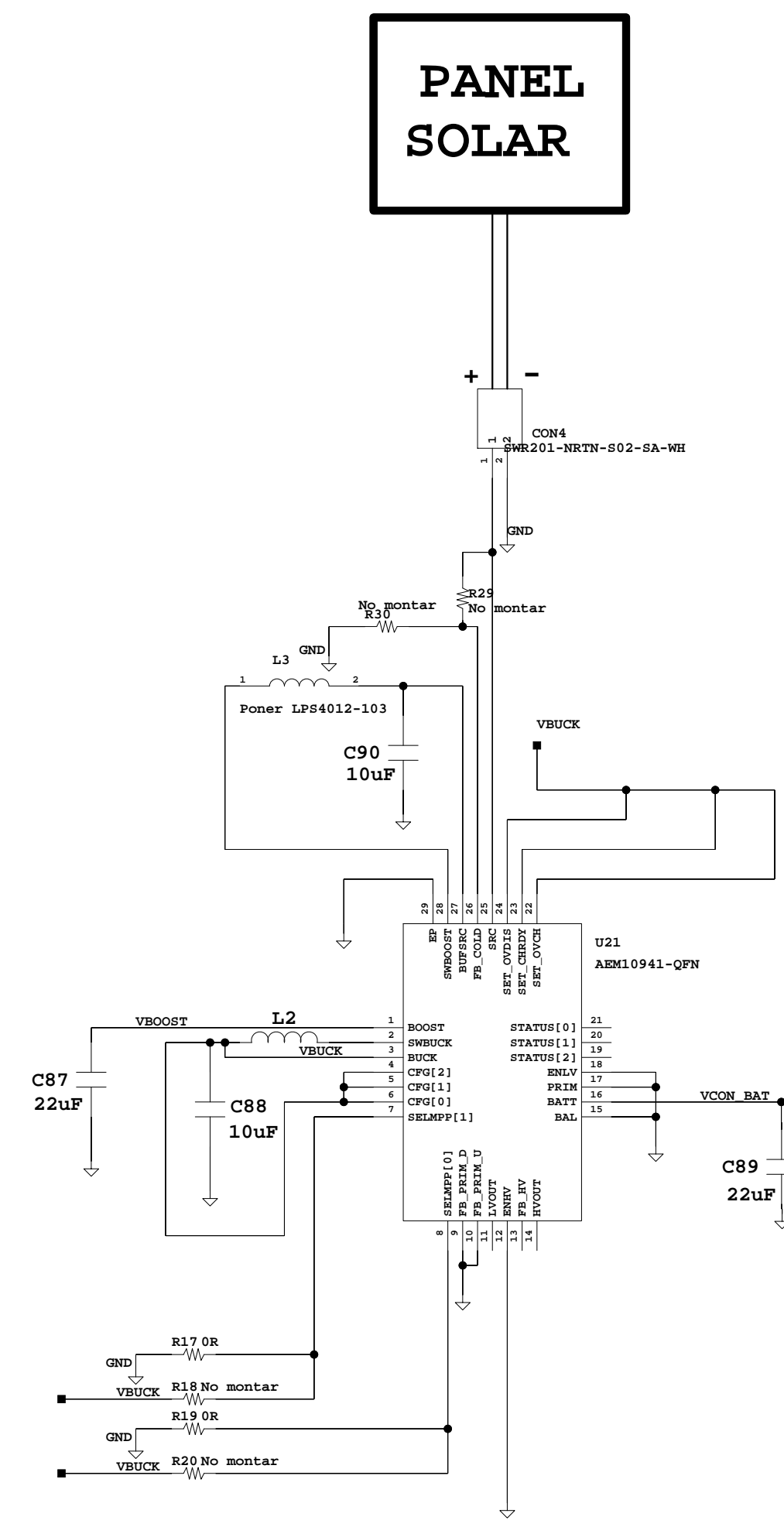
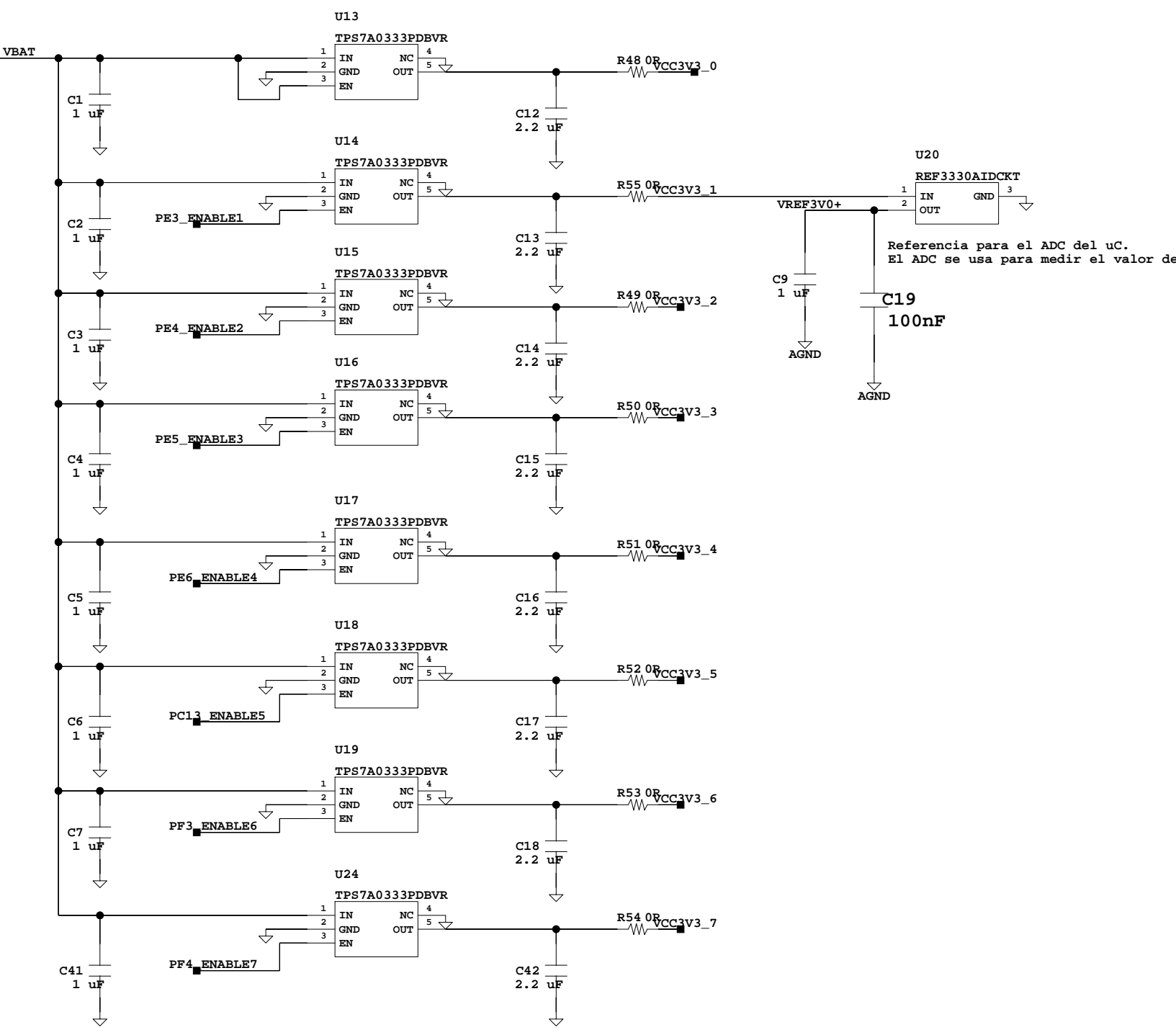


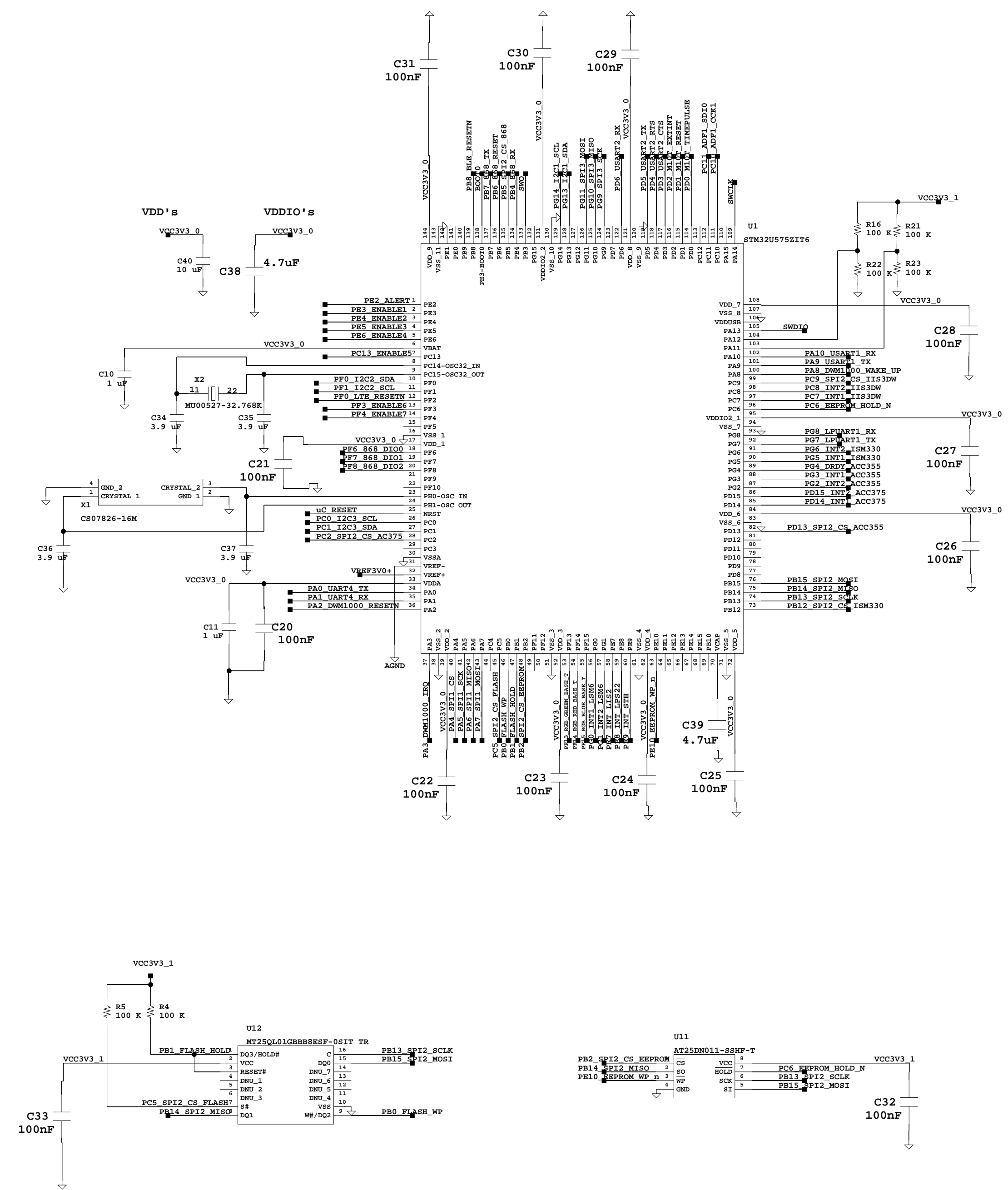
VCC	MODULO	Max	VOLTAJE
0	uC	100 mA	3,3 V
1	1Mb mem	18 mA	3,3 V
	1 Gb mem	55 mA	3,3 V
	RGB	30 mA	3,3 V
2	IMU	<1 mA	3,3 V
	Acelerometros	<1 mA	3,3 V
	ADC temp	<1 mA	3,3 V
	Magnetometro	<1 mA	3,3 V
	Presion	<1 mA	3,3 V
	Humedad	<1 mA	3,3 V
	Microfono	<1 mA	3,3 V
3	Infrarojos	<1 mA	3,3 V
	LTE-M	<100 mA	3,3 V
4	LoRA	125 mA	3,3 V
5	UWB	160 mA	3,3 V
6	BLE	88 mA	3,3 V
7	GNSS	<13 mA	3,3 V



REGISTER TYPE	LSB SIZE	MINIMUM VALUE	MAXIMUM VALUE
Capacity	5.0µVh/ RSENSE	0.0µVh	327.675mVh/ RSENSE
Percentage	1/256%	0.00%	256.00%
Voltage	1.25mV/16	0.0V	5.11992V
Current	1.5625µV/ RSENSE	-51.2mV/ RSENSE	51.1984mV/ RSENSE
Temperature	1/256°C	-128.0°C	+127.996°C

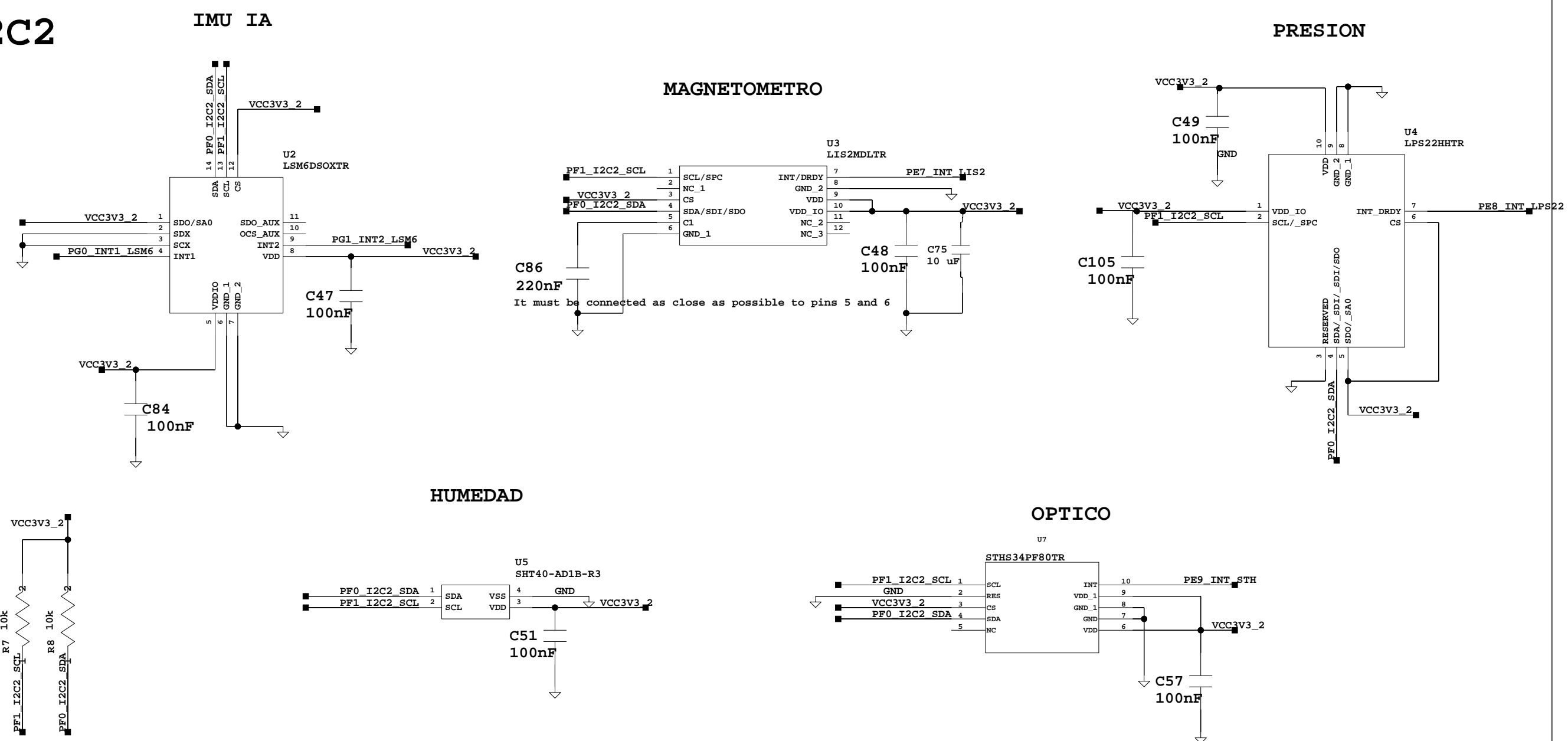


Title		Rev.
D-FR8RAILOG		v0
Circuit	ALIMENTACIONES	
Author	Javi Cejudo/Markos Losada	
Date	12/01/2024	
Sheet#	out of	1



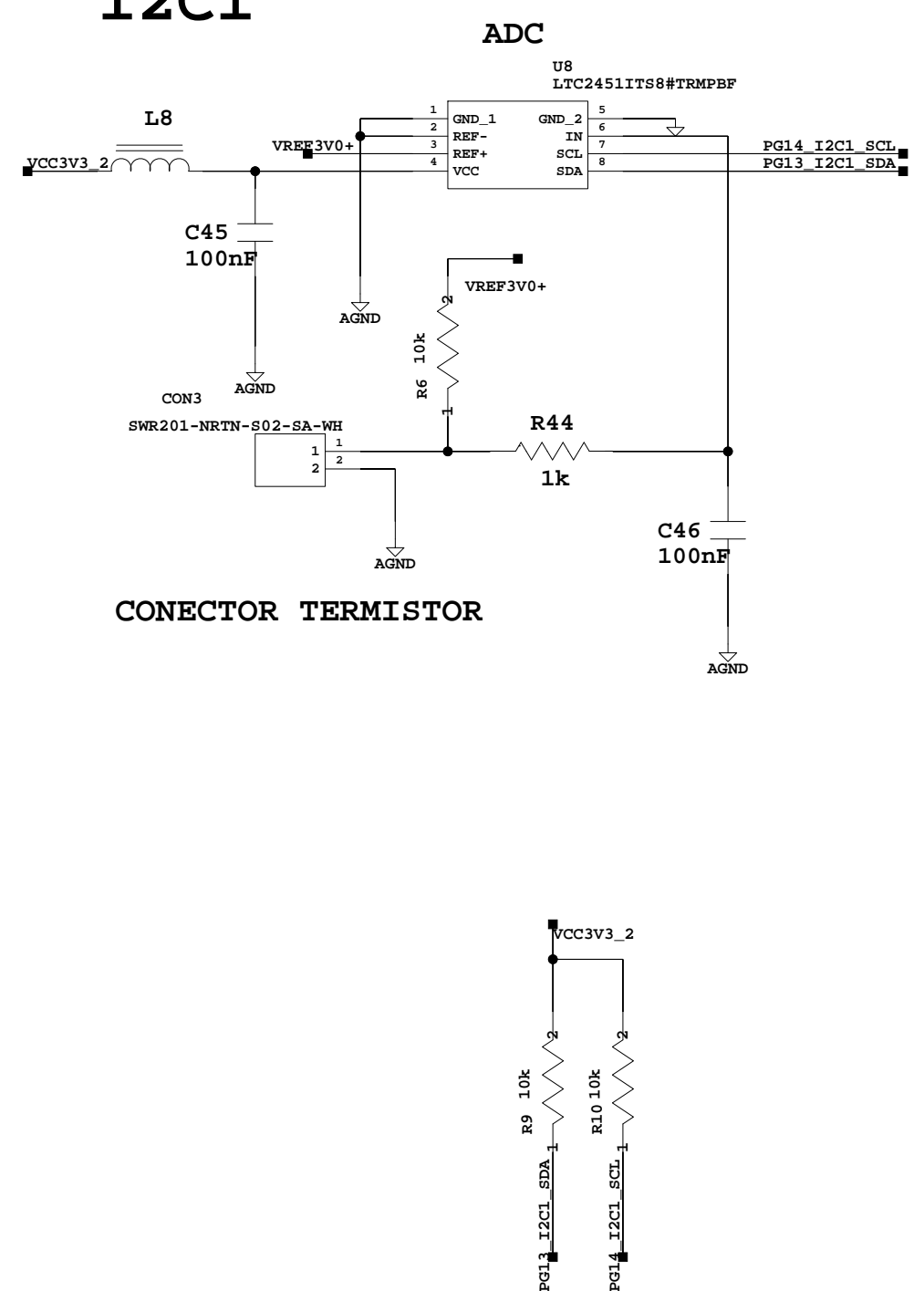
Title		Rev.
D-FR8RAILOG		v0
Circuit	CONTROL	
Author	Javi Cejudo/Markos Losada	
Date	12/01/2024	
Sheet#	out of	1

I2C2

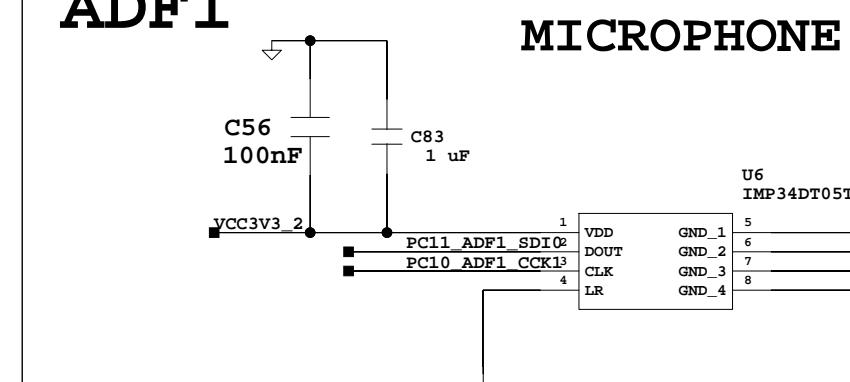


Para usar con la librería X-CUBE-MEMS1

I2C1

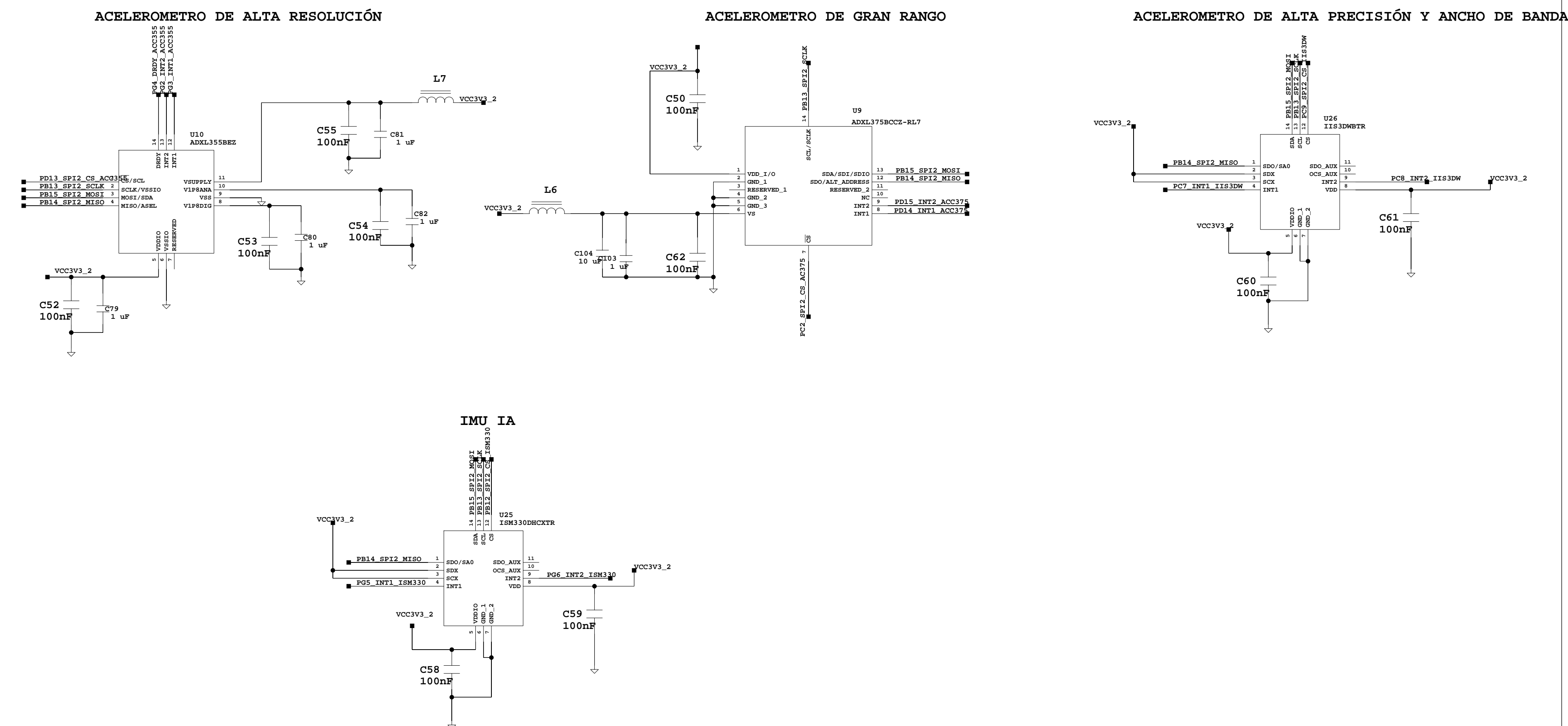


ADF1

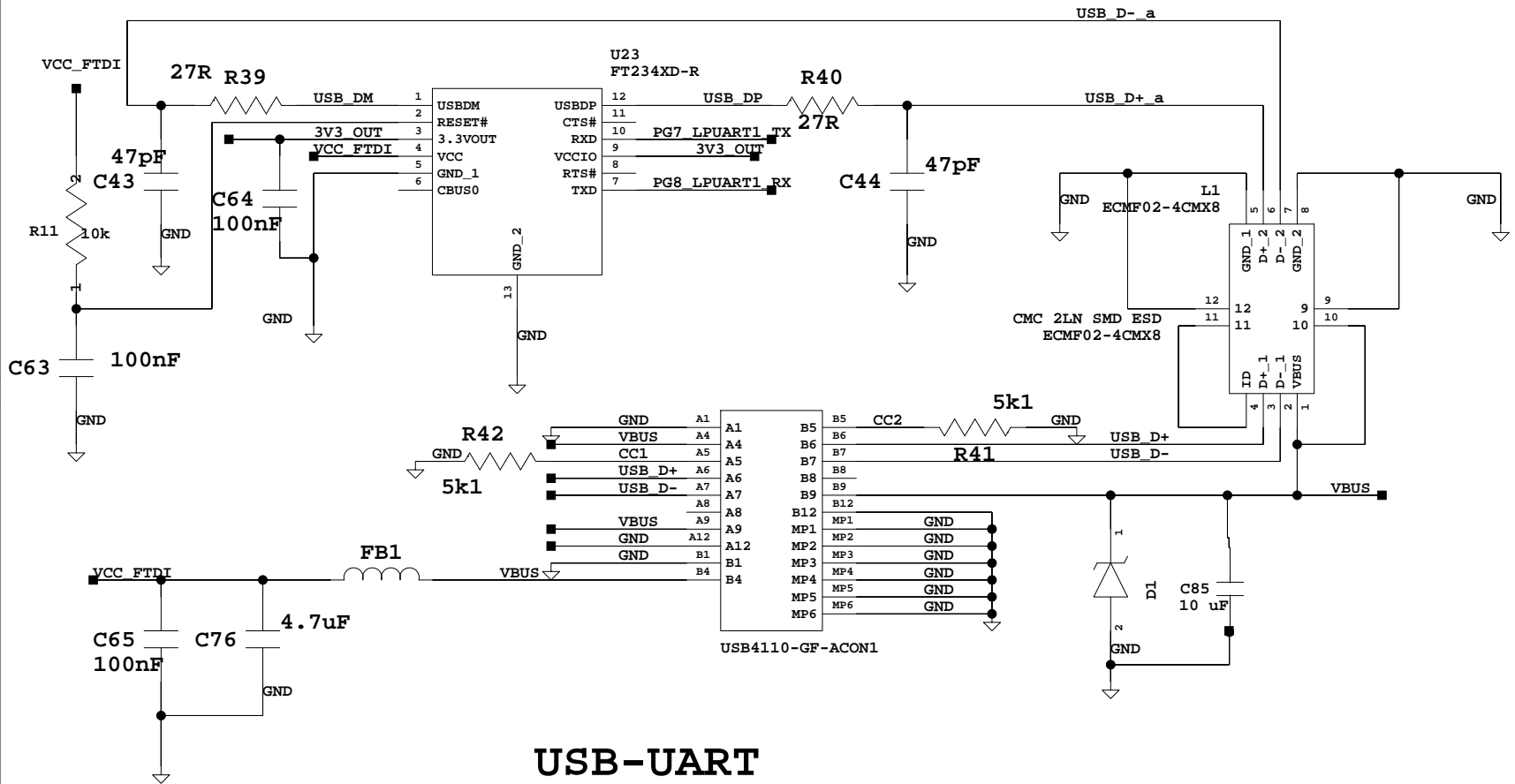


Para usar con la librería X-CUBE-MEMS1

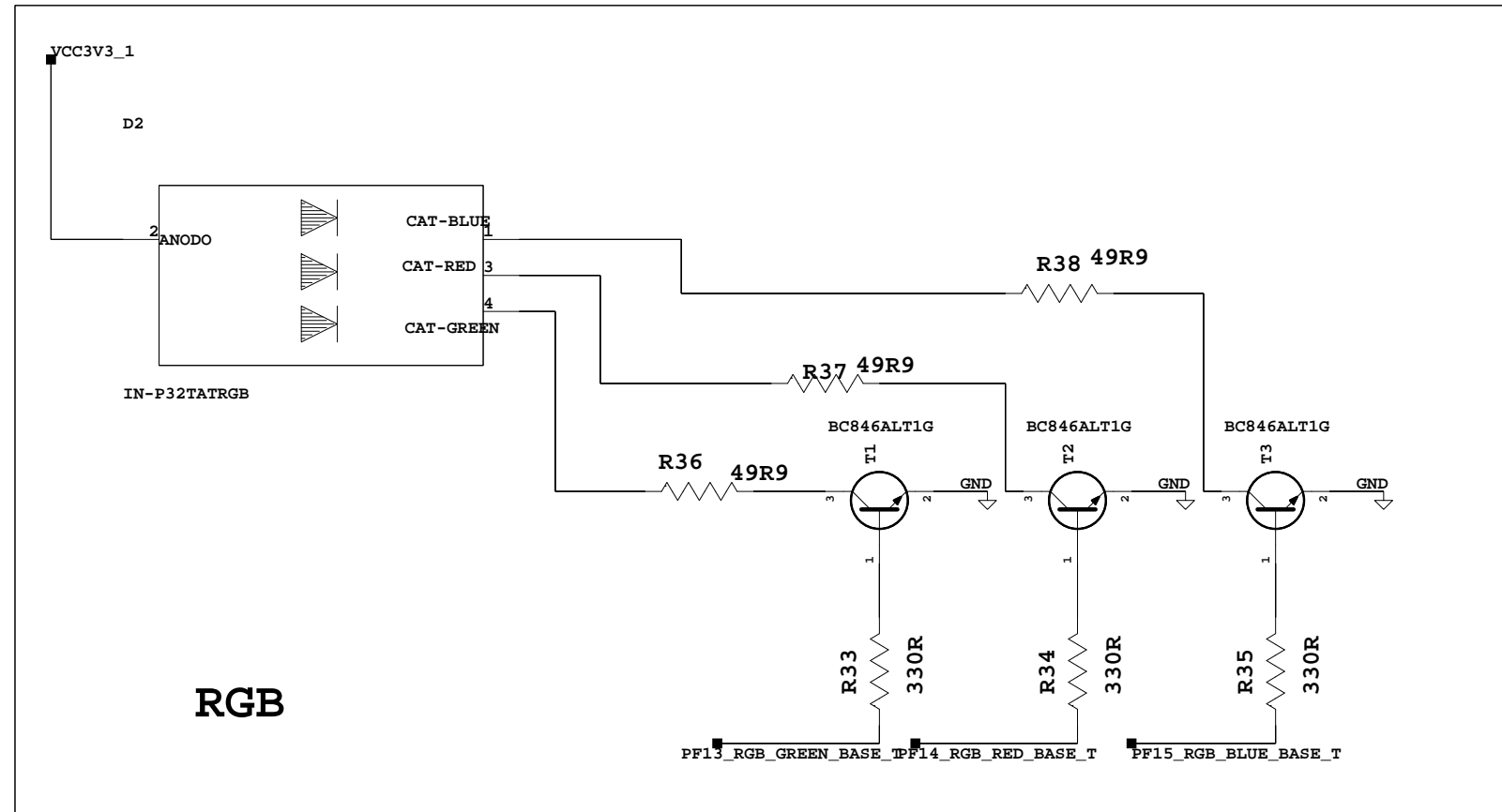
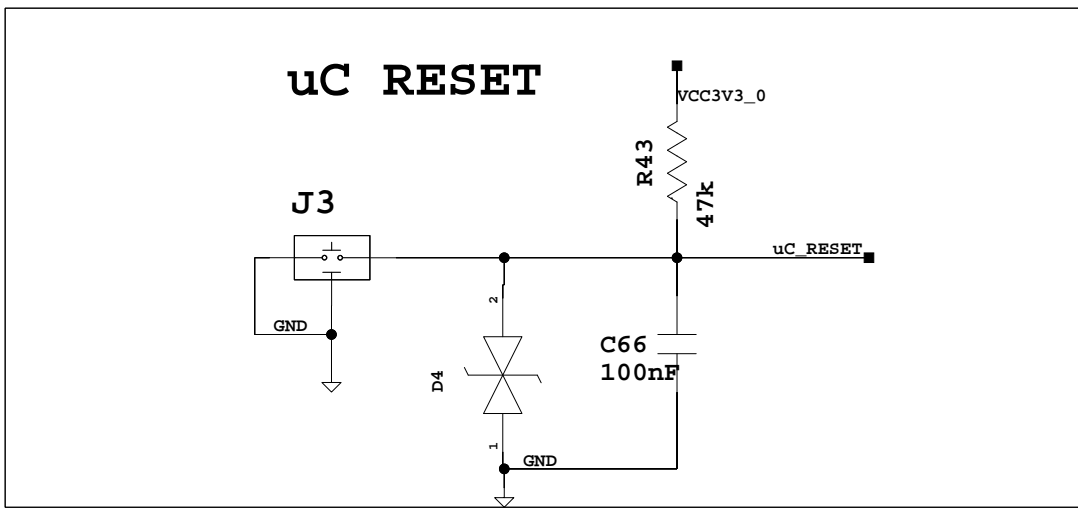
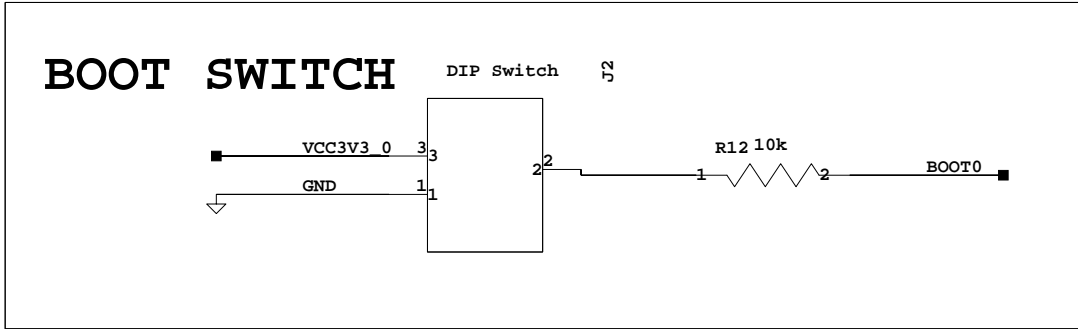
SPI2



Title		Rev.
D-FR8RAILOG		v0
Circuit	SENSORES	
Author	Javi Cejudo/Markos Losada	
Date	12/01/2024	
Sheet#	out of 1	



USB-UART



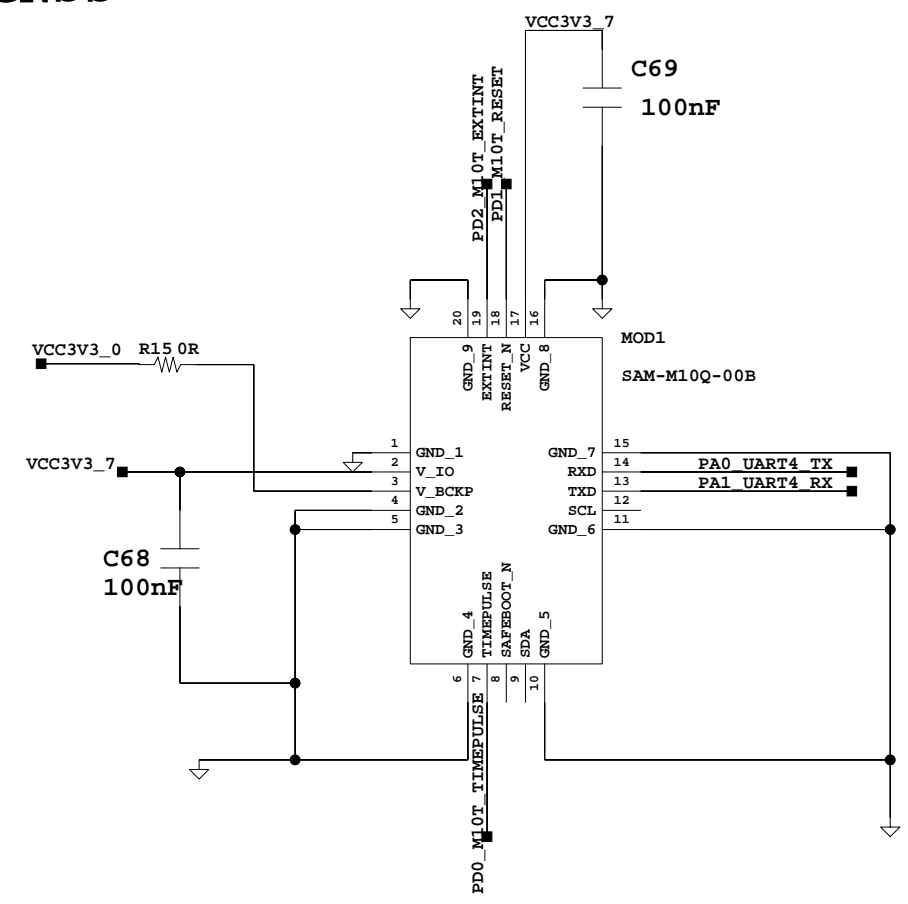
RGB

Title		D-FR8RAILOG		Rev.		v0	
Circuit		HMI					
Author		Javi Cejudo/Markos Losada					
Date		12/01/2024					
Sheet#		out 4of				4	

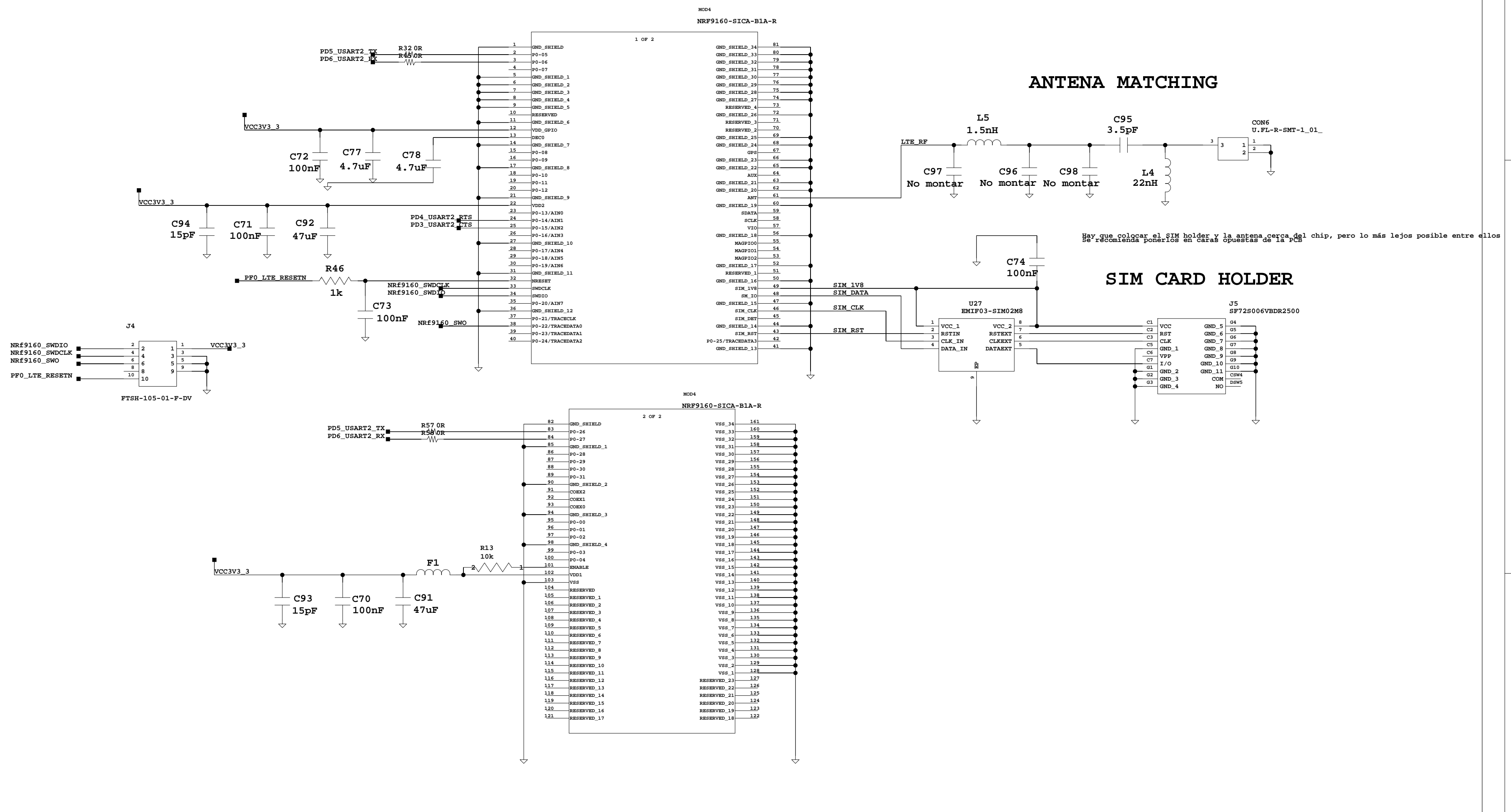
SAM-M100 GNSS patch antenna module is intended to be placed in the middle of a 50 x 50 mm GND plane. A larger or a smaller GND plane can also be used. Note that when using a smaller GND plane than 40 x 40 mm, the performance may be degraded significantly. It is recommended not to place anything closer than 10 mm to each edge of SAM-M100.

It is however recommended to place any tall components (> 3 mm) at least 50 mm away from the antenna. An enclosure or a plastic cover should have a minimum distance of 50 mm to the antenna.

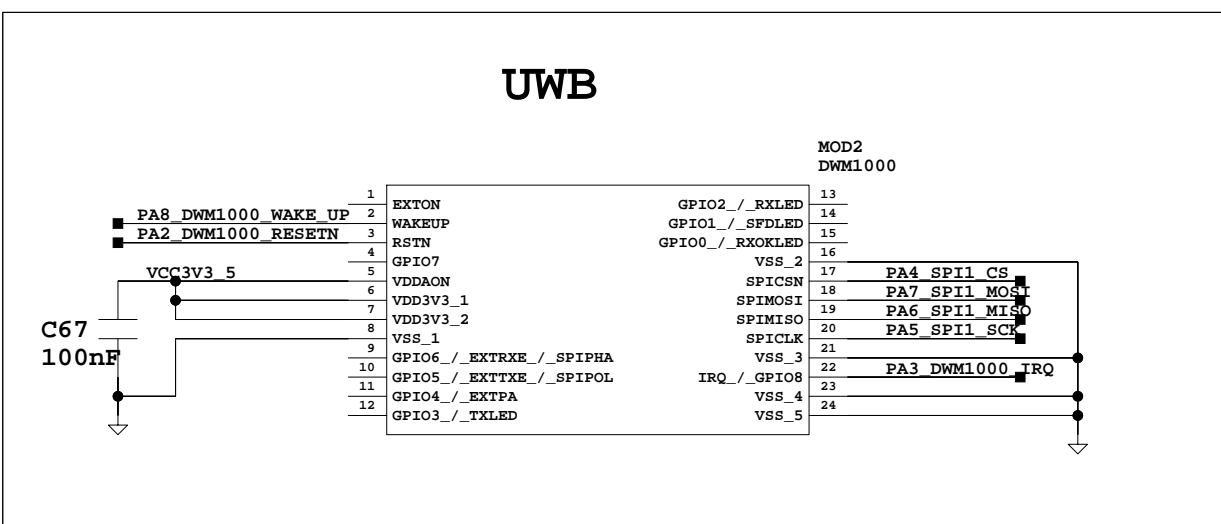
GNSS



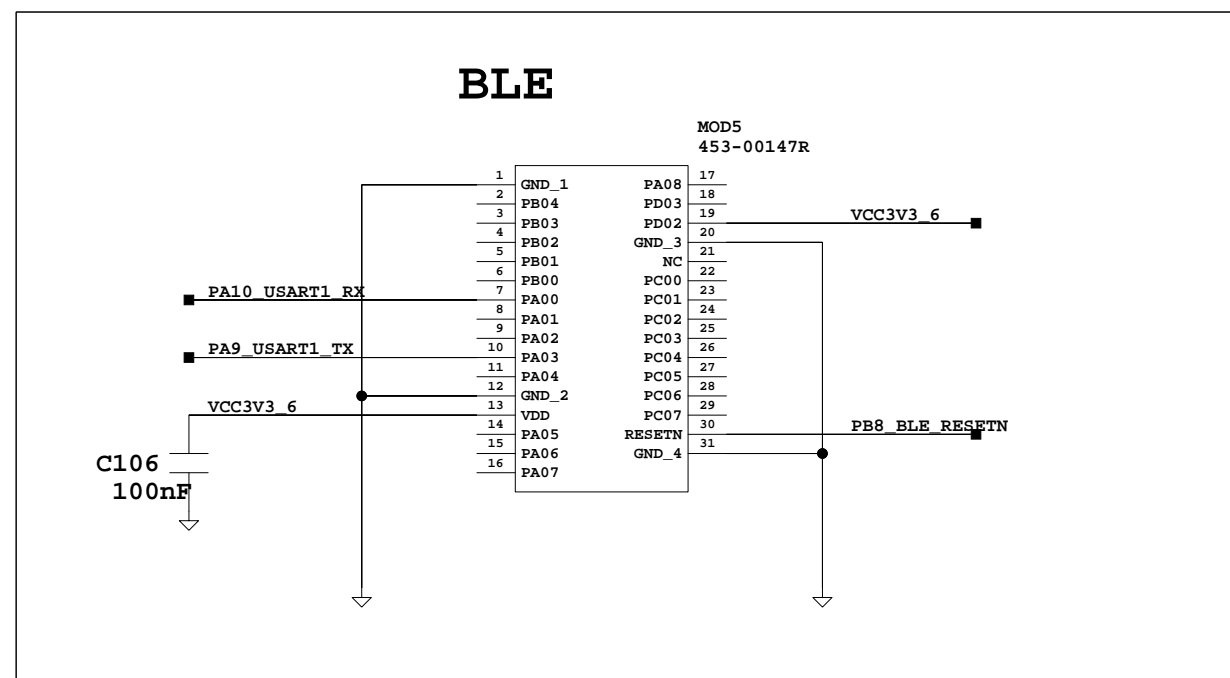
LTE/NB-IOT



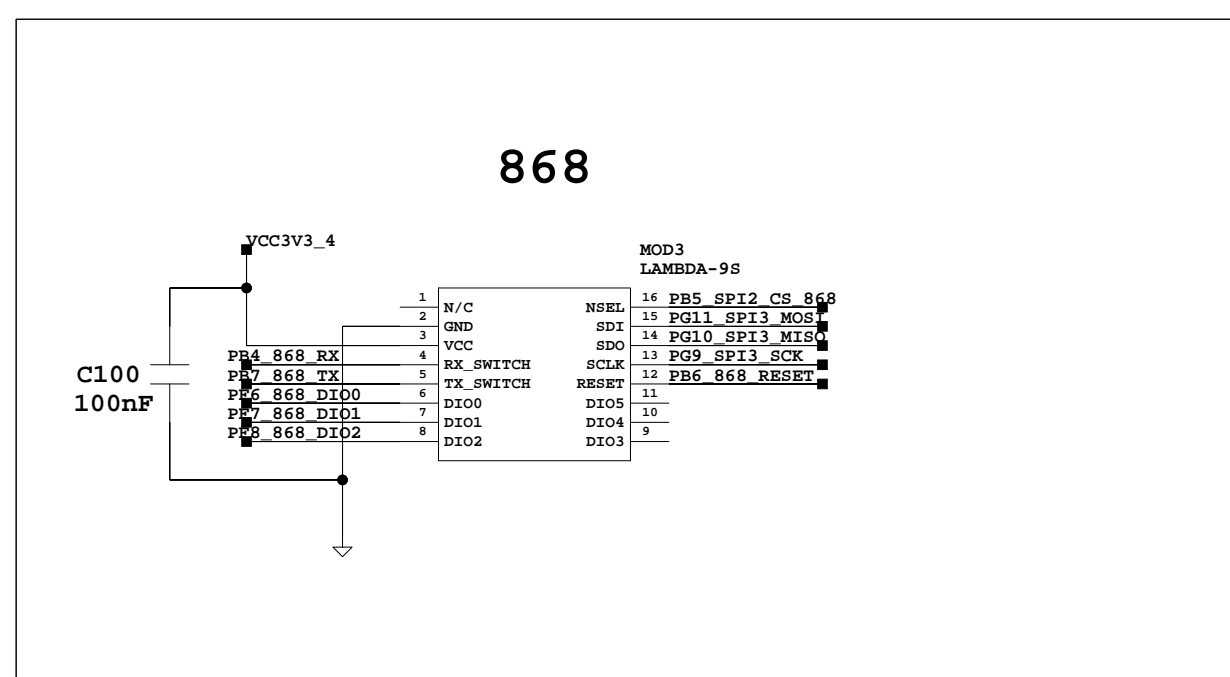
UWB



BLE



868



Title		D-FR8RAILOG		Rev.	v0
Circuit	COMUNICACIONES				
Author	Javi Cejudo/Markos Losada				
Date	12/01/2024				
Sheet#	out of	1			