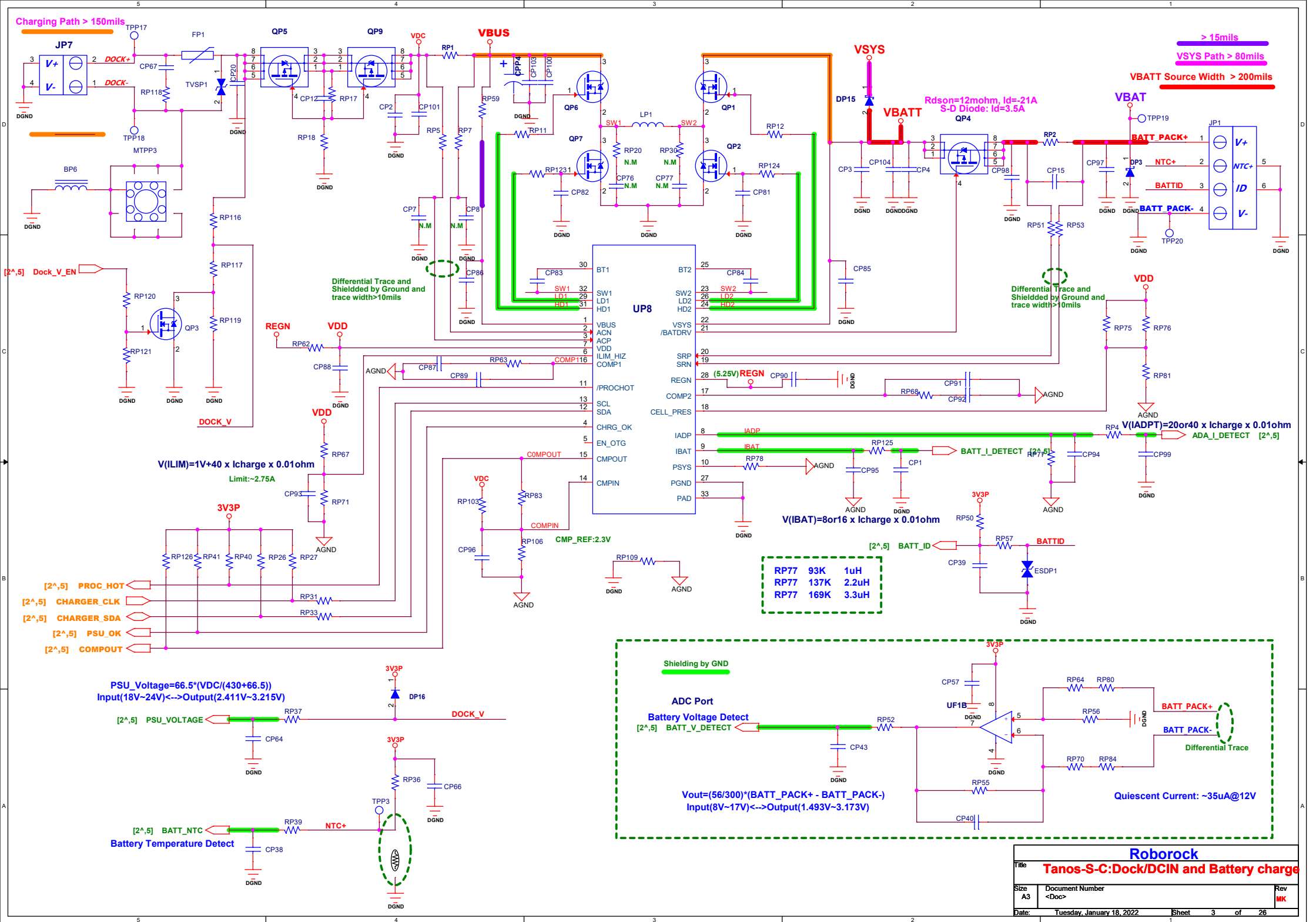
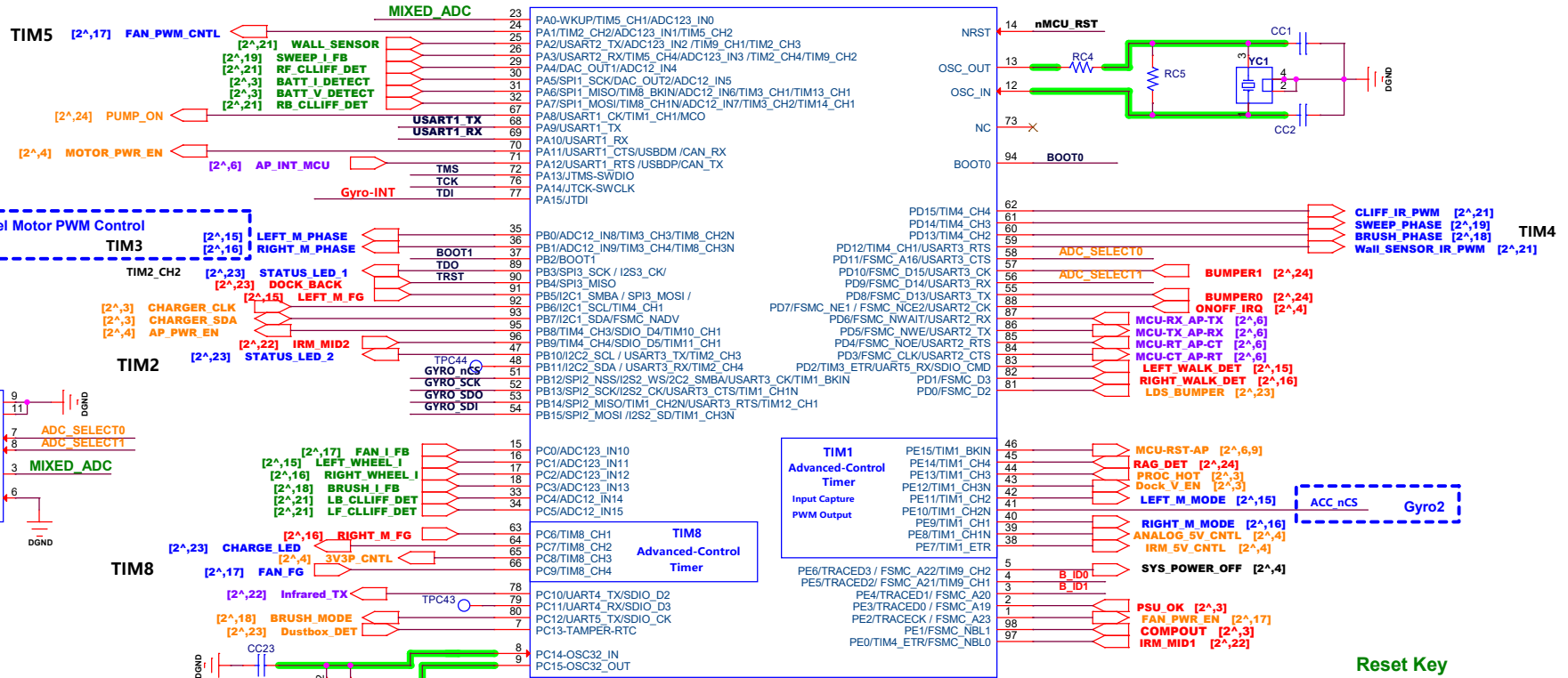




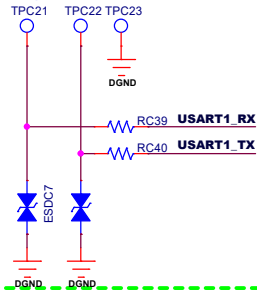
The device exits Standby mode when an external reset (NRST pin), an IWDG reset, a rising edge on the WKUP pin, or an RTC alarm occurs.

UC1A

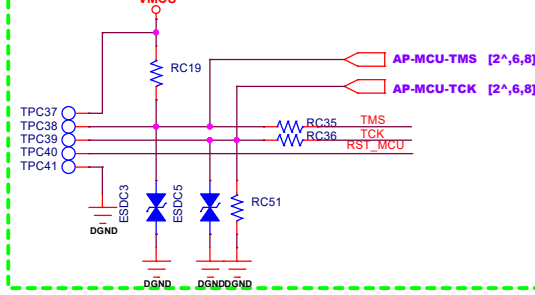


Font Color	Meaning
Blue	PWM Control Signal and high speed capture
Green	Analog: ADC/DAC
Red	Interrupt
Purple	Communication w/ AP
Orange	General GPIO

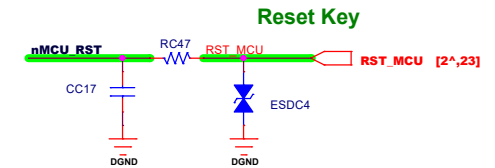
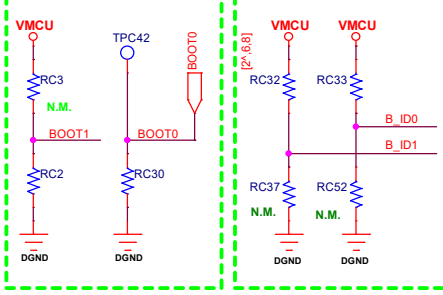
UART: for Debug and Download



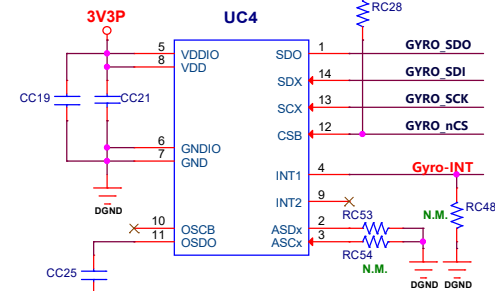
SWD Connector



Board Version

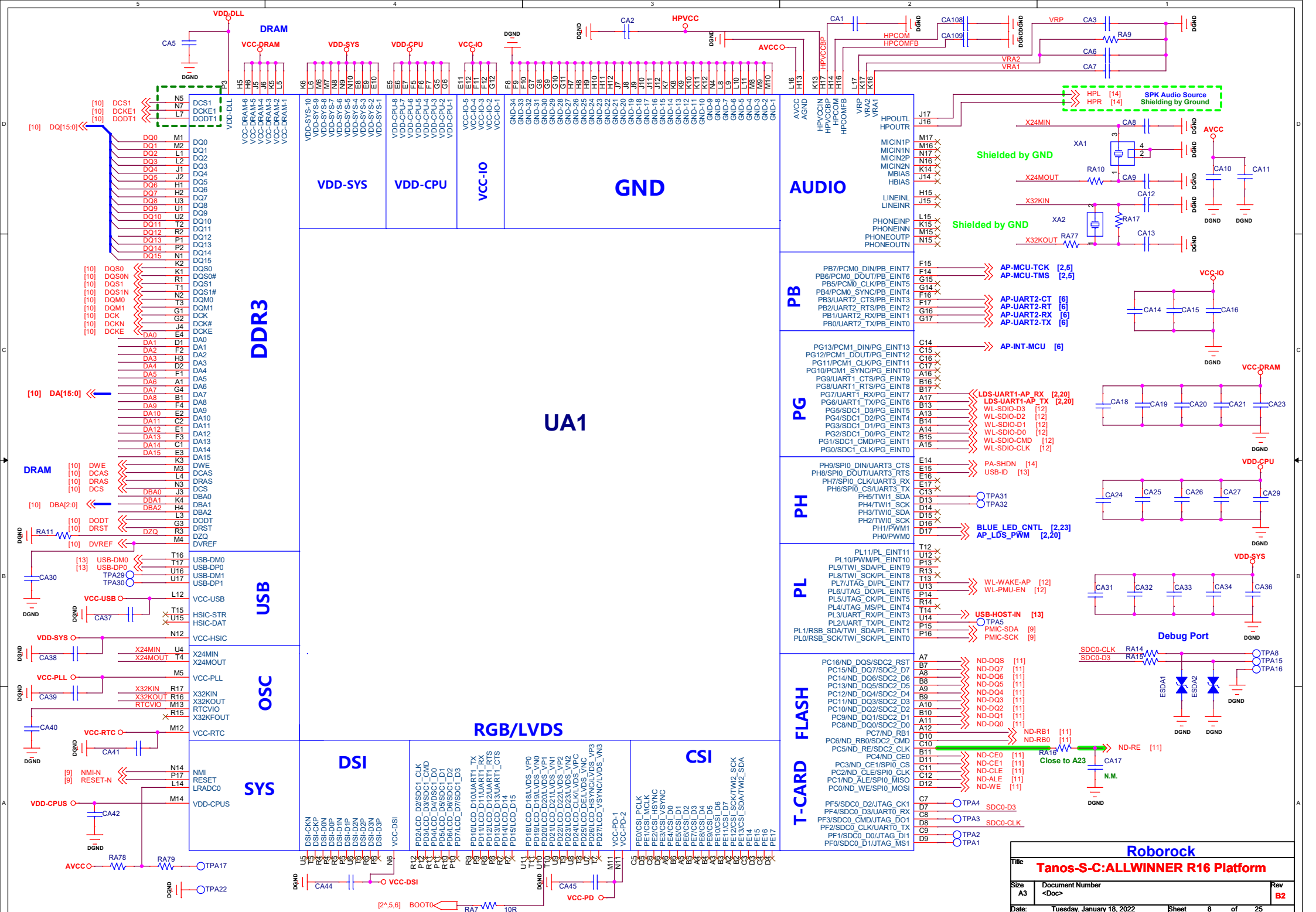


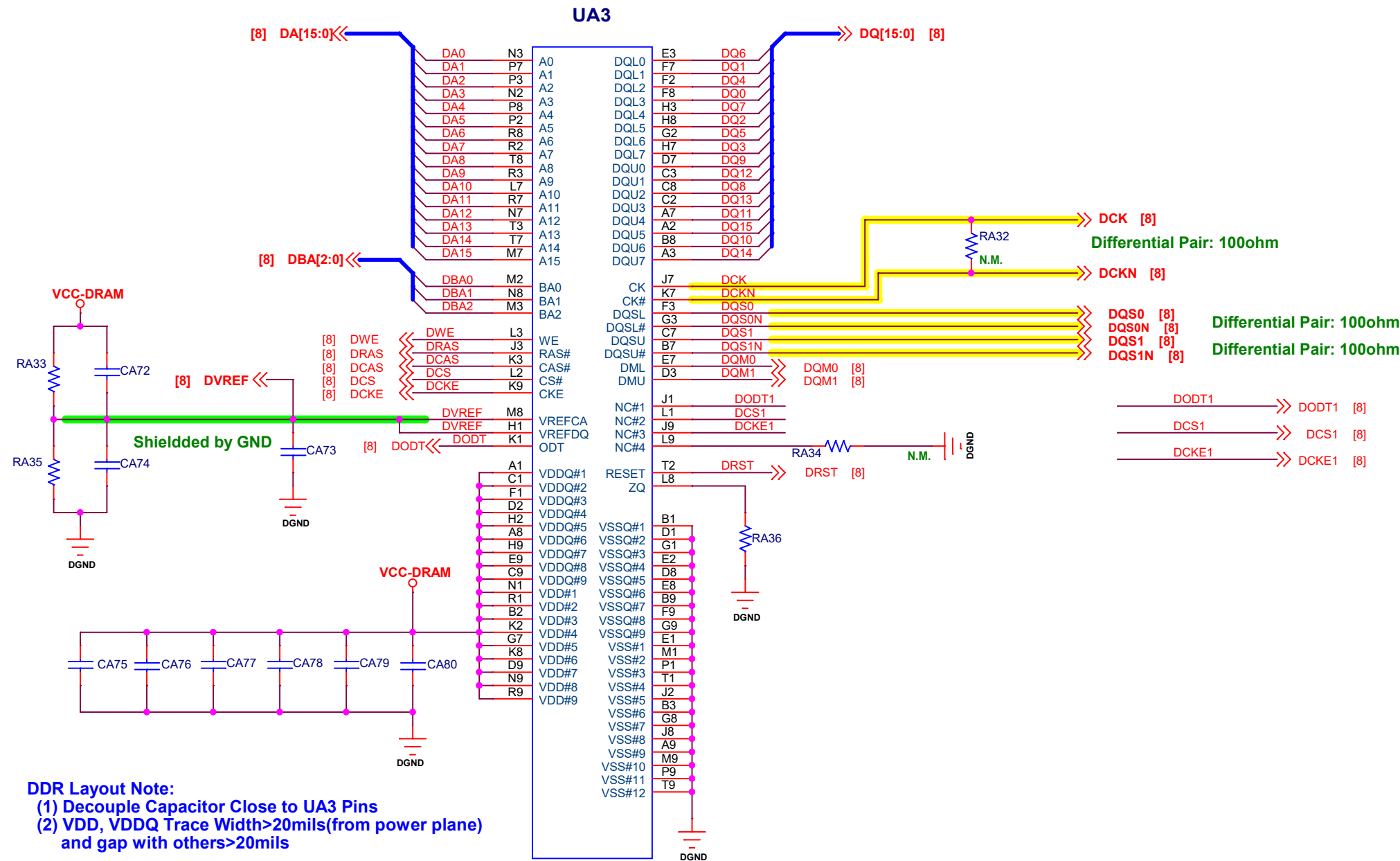
Gyro1



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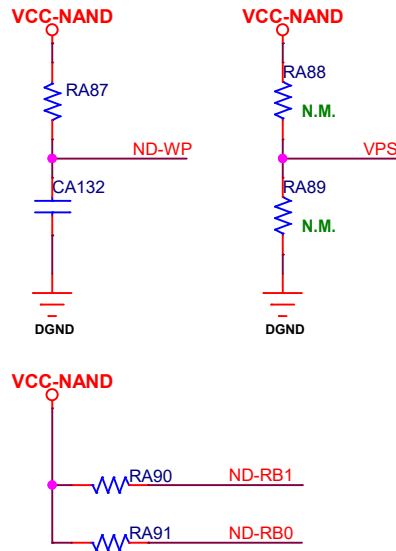
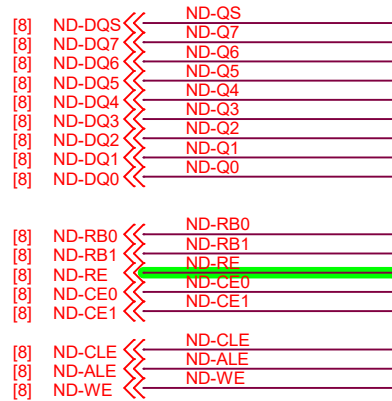




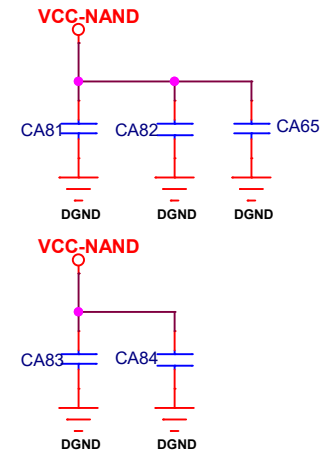
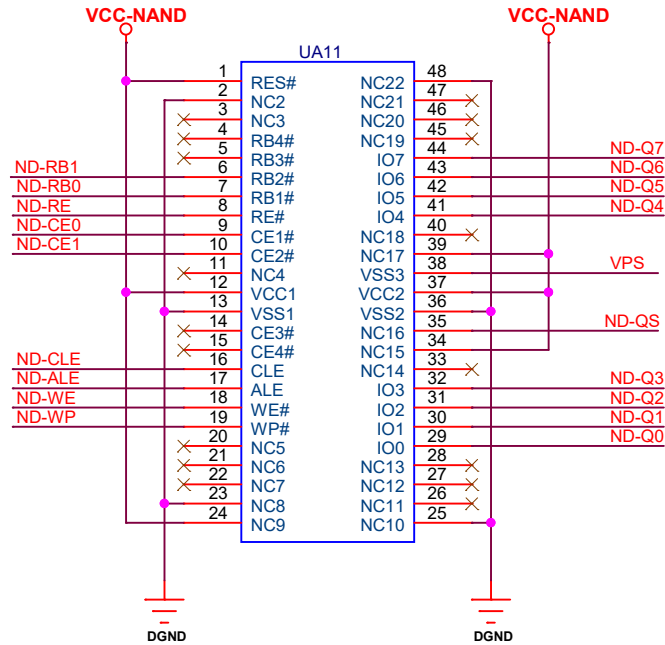
DDR Layout Note:

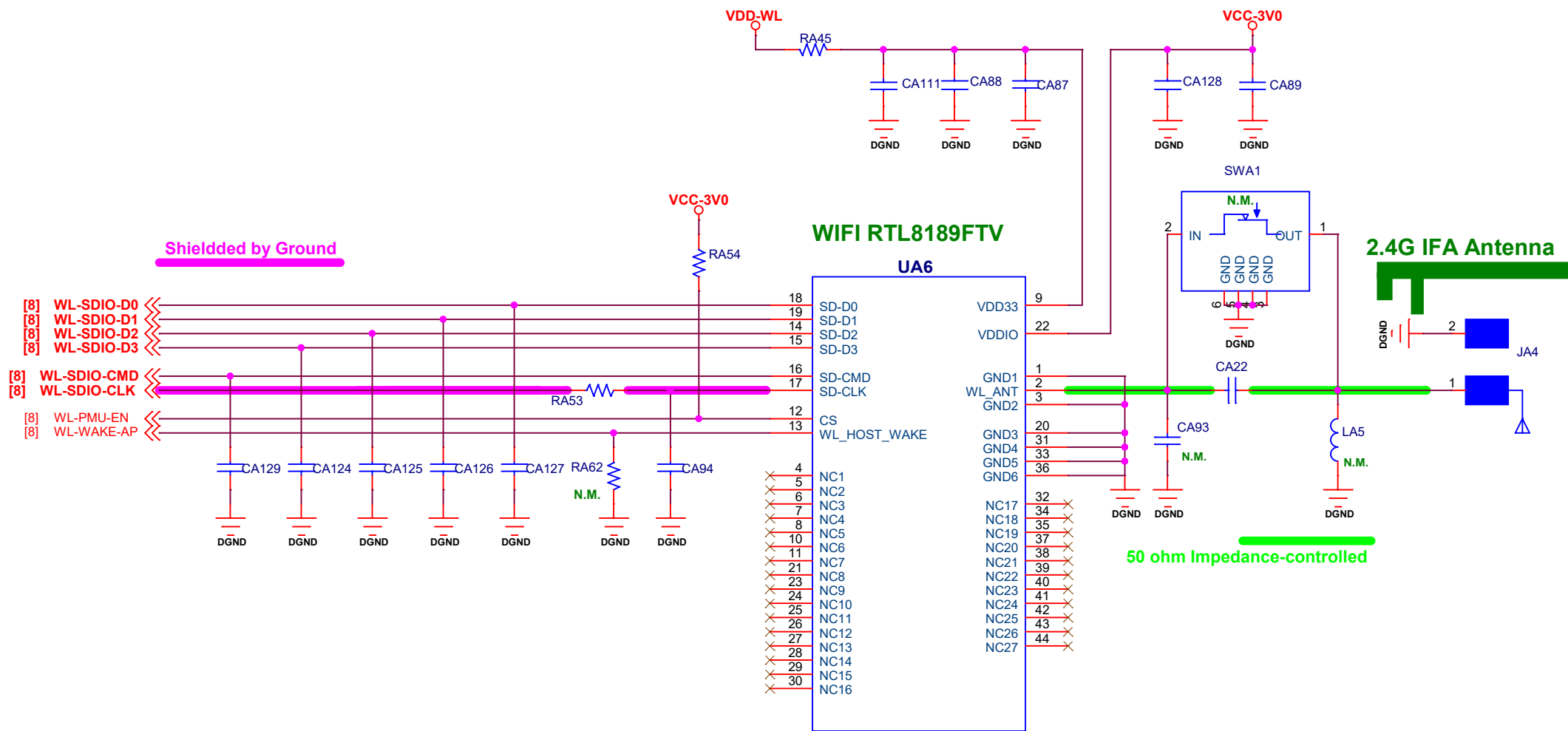
- (1) Decouple Capacitor Close to UA3 Pins
- (2) VDD, VDDQ Trace Width>20mils(from power plane) and gap with others>20mils
- (3) Trace Impedance:
 - (a) Single-ended signal trace are to be 50 ohm+-10%.
 - (b) Differential signal trace are to be 100 ohm +- 10%.
- (4) Differential clocks CK, CK#
 - (a) Differential line length match: within +- 25 mils;
 - (b) Trace length with DQS and DQS#: within +- 10 mils

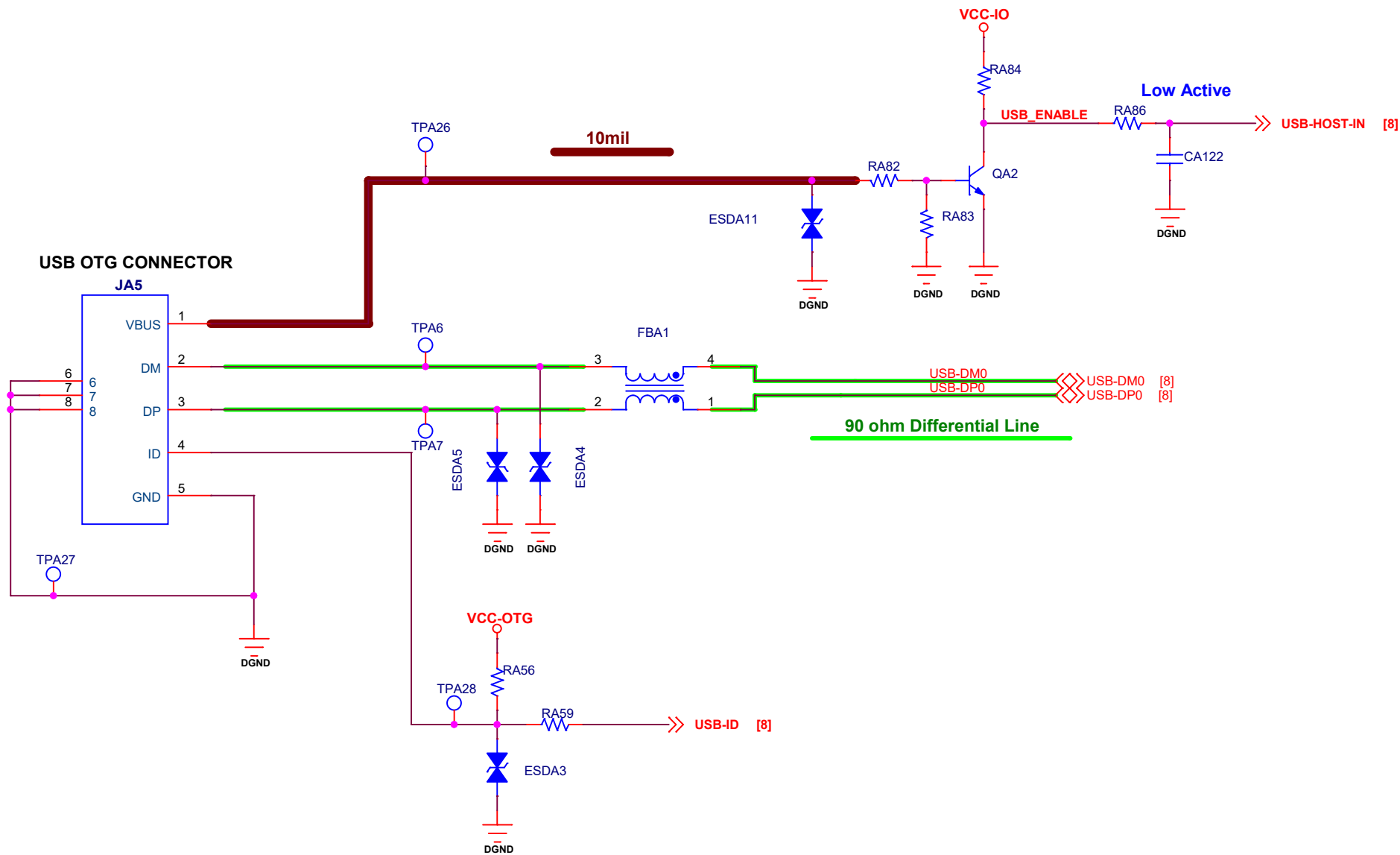
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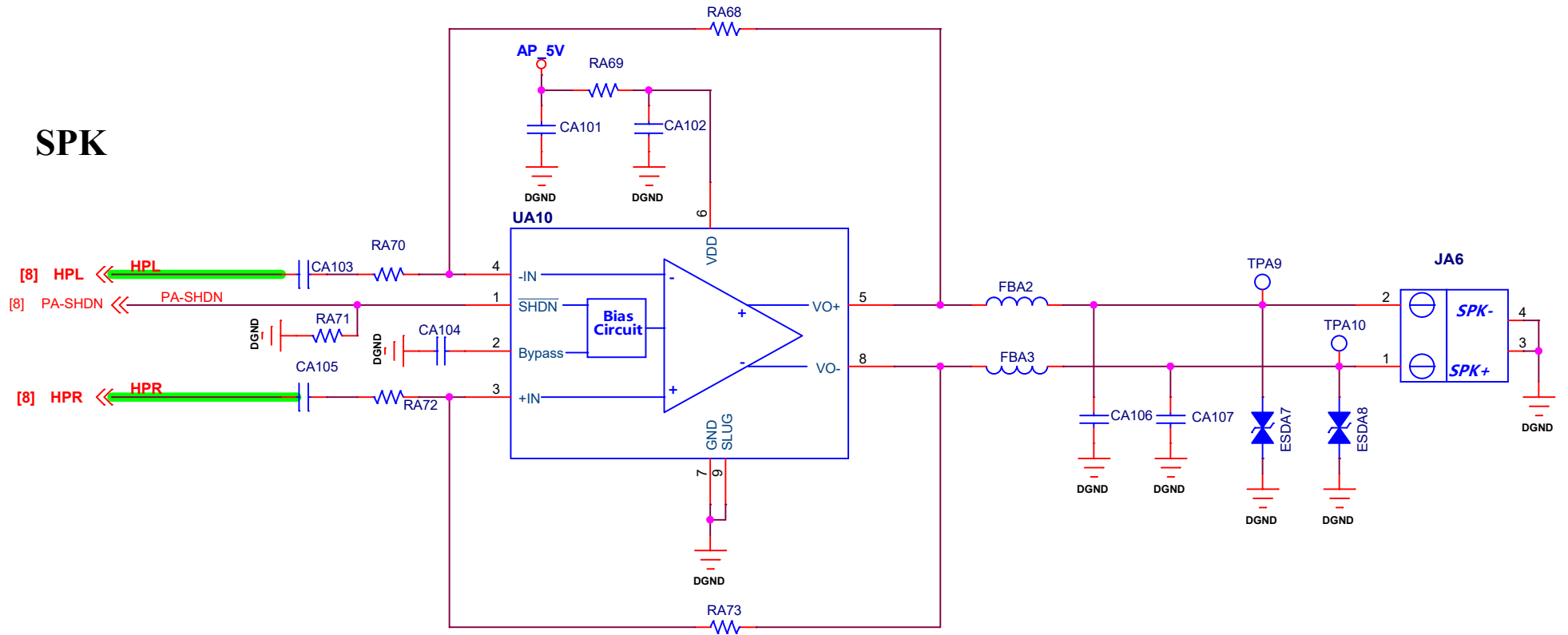
Nand Flash

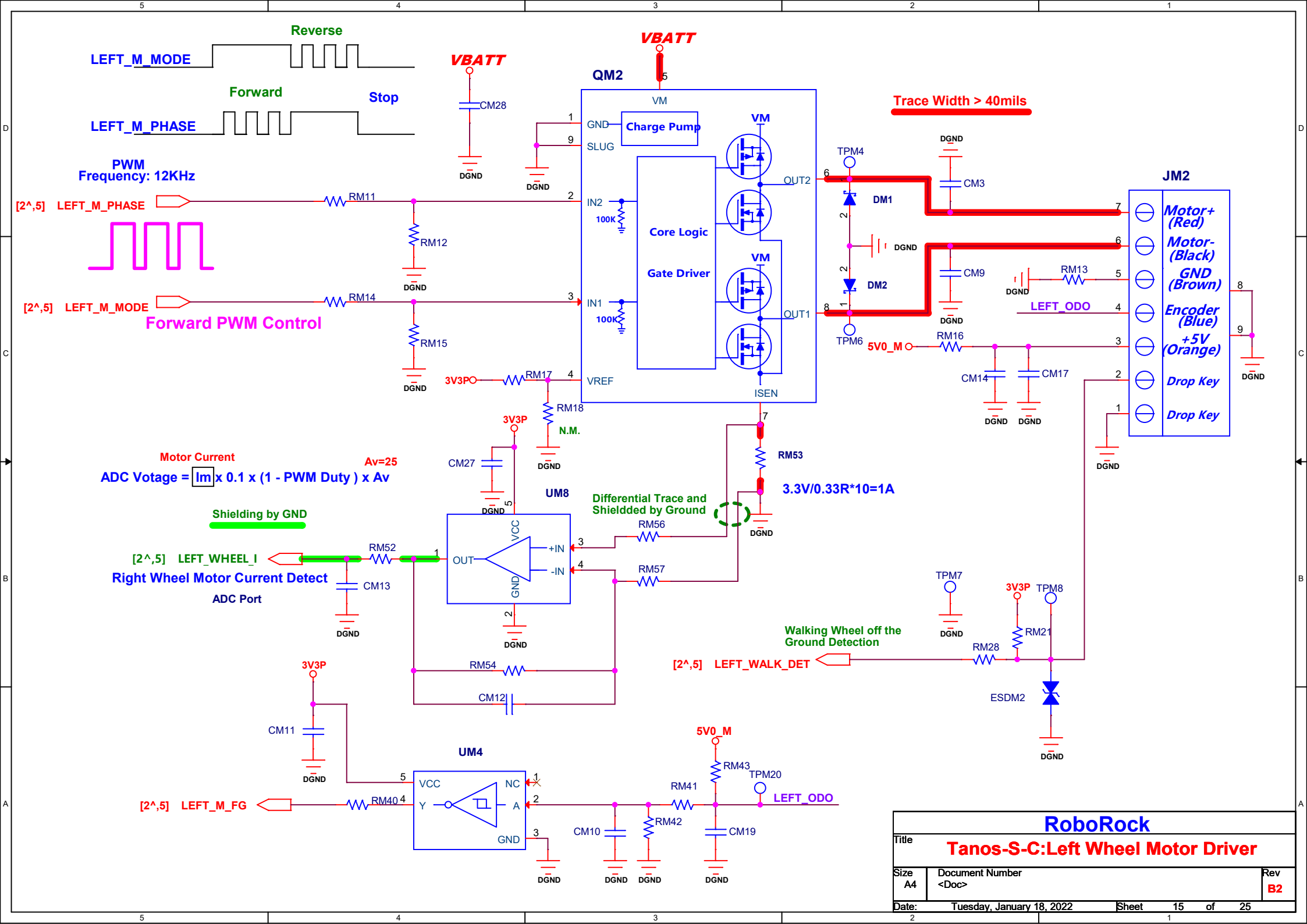


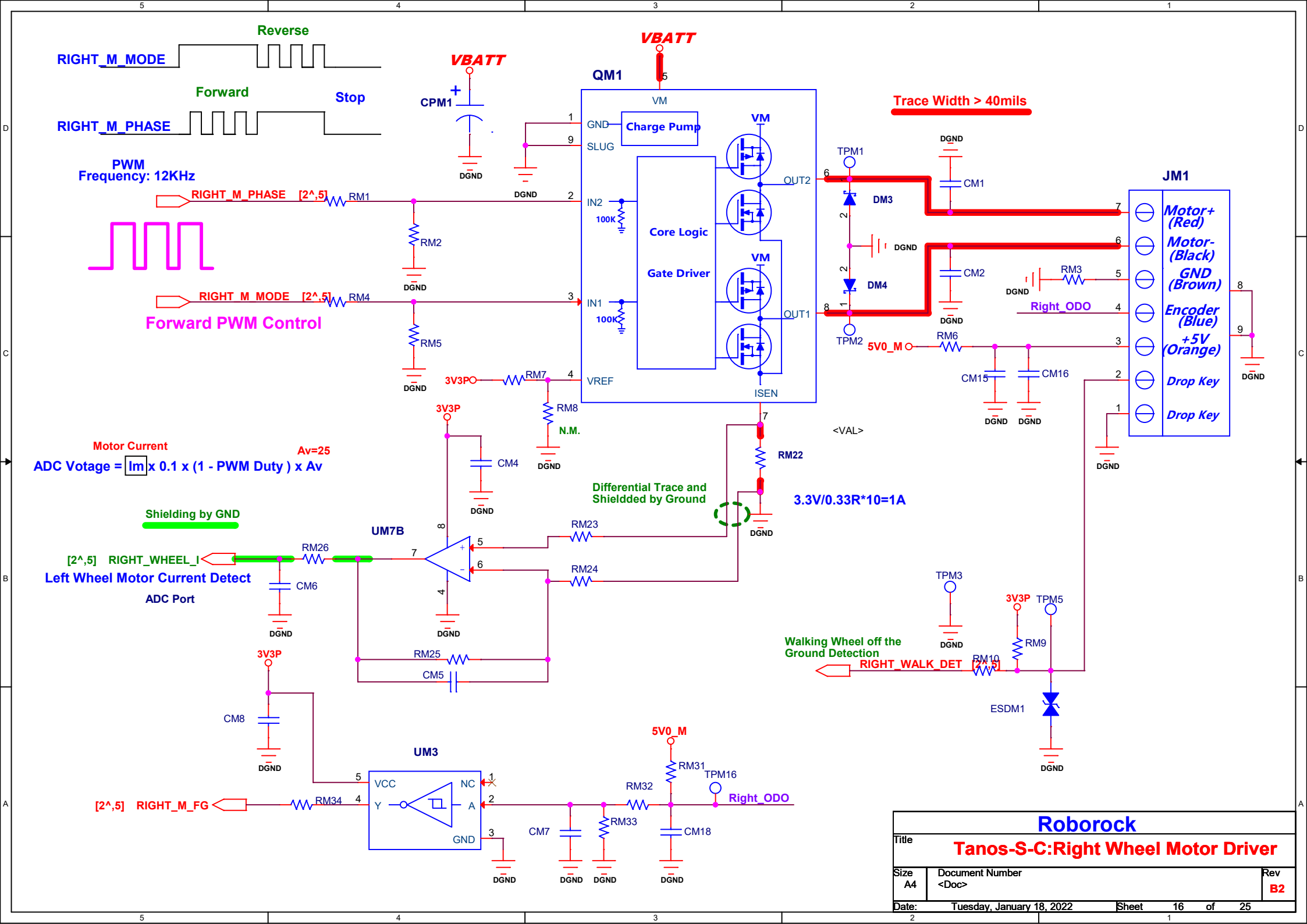


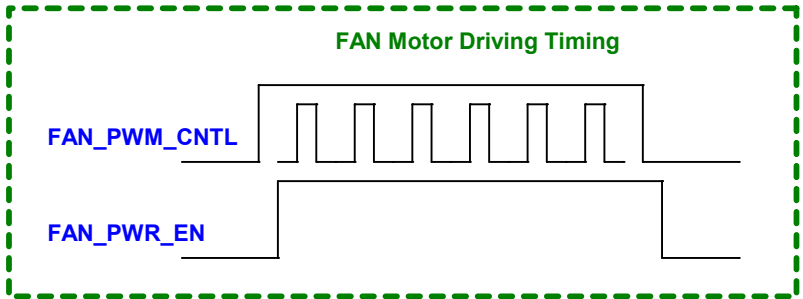
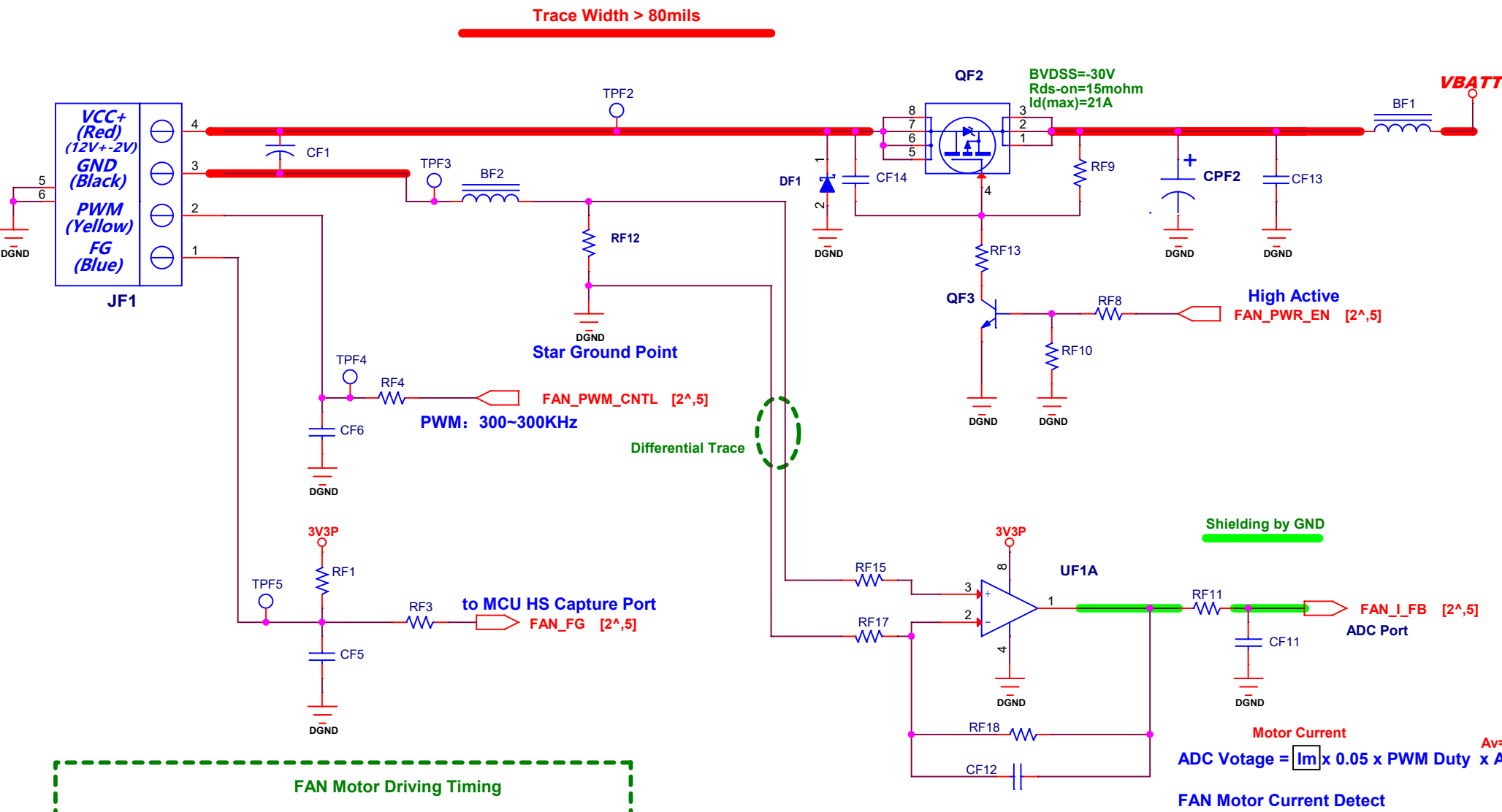


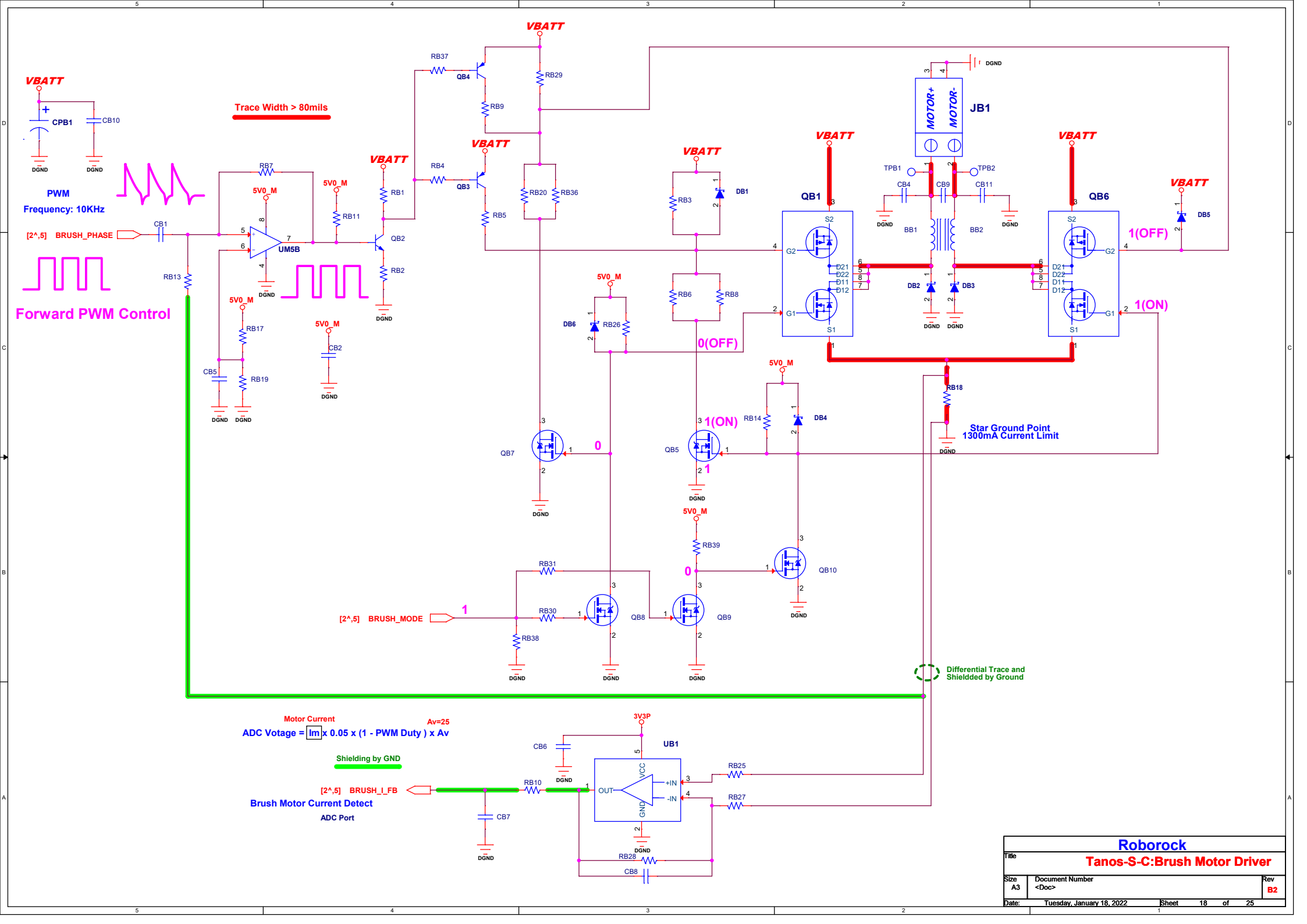
SPK









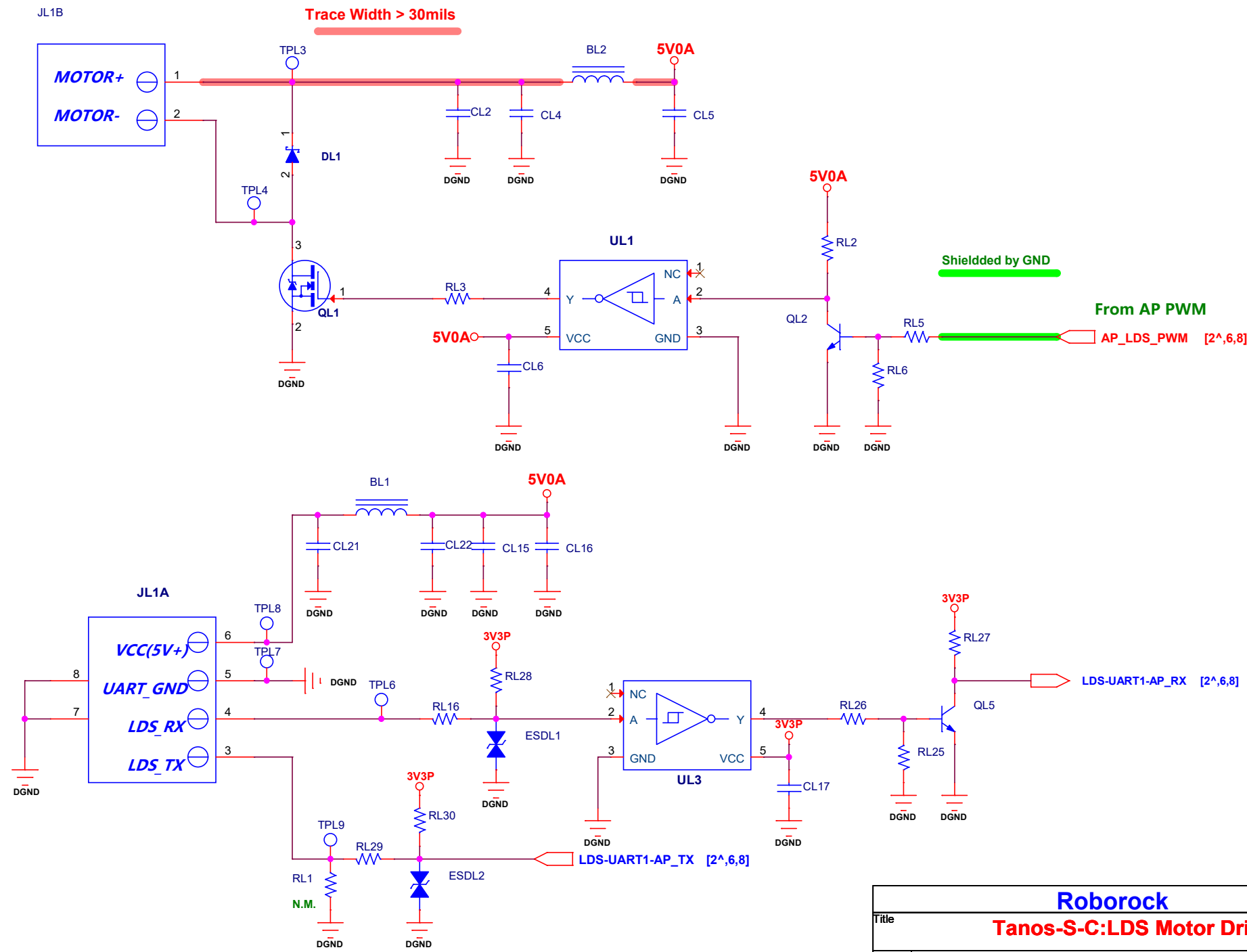


Motor Current
$$\text{ADC Voltage} = I_m \times 0.05 \times (1 - \text{PWM Duty}) \times A_v$$

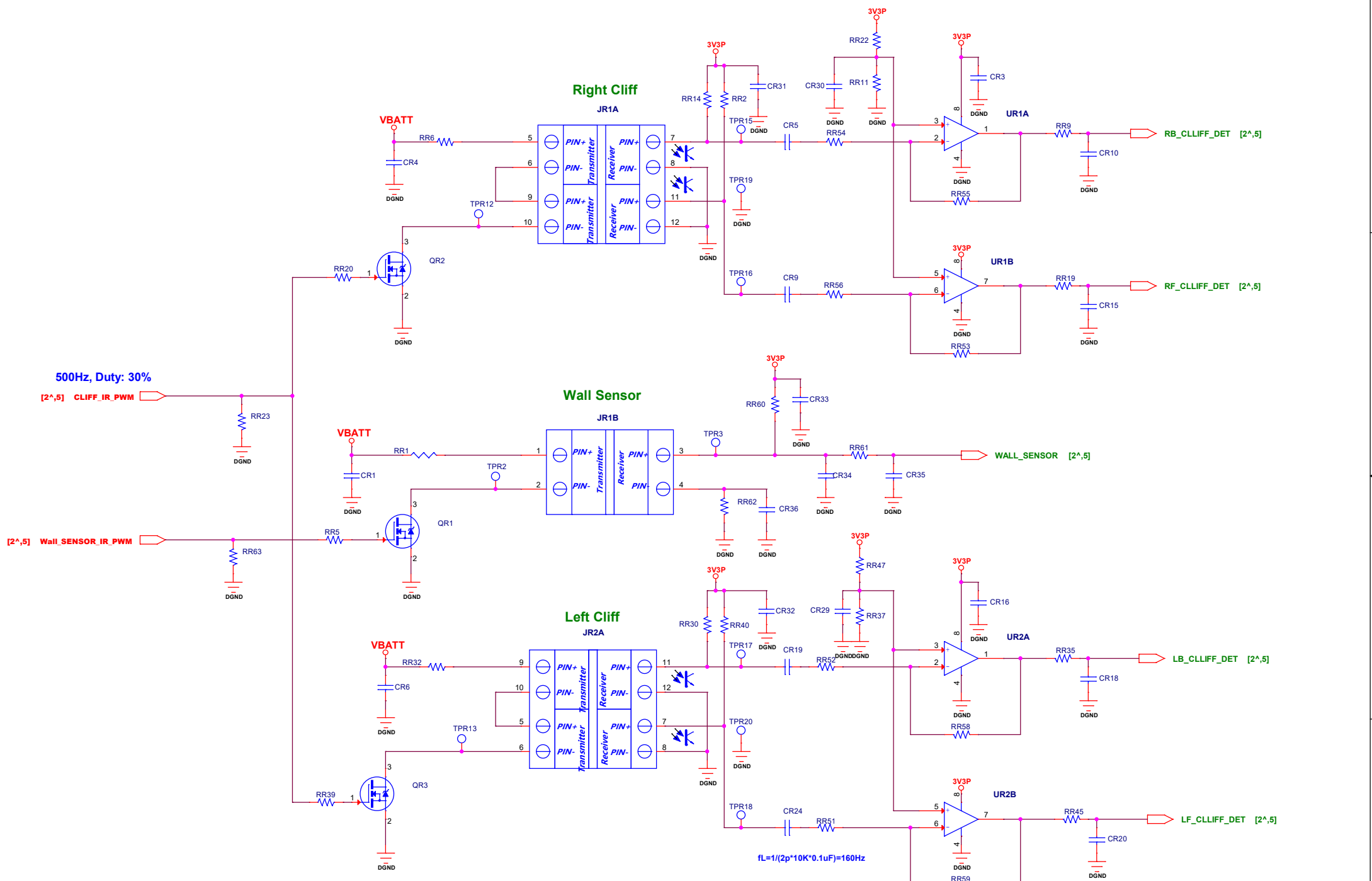
Av=25

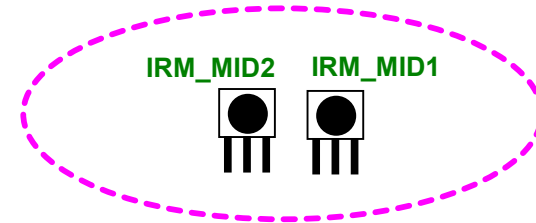
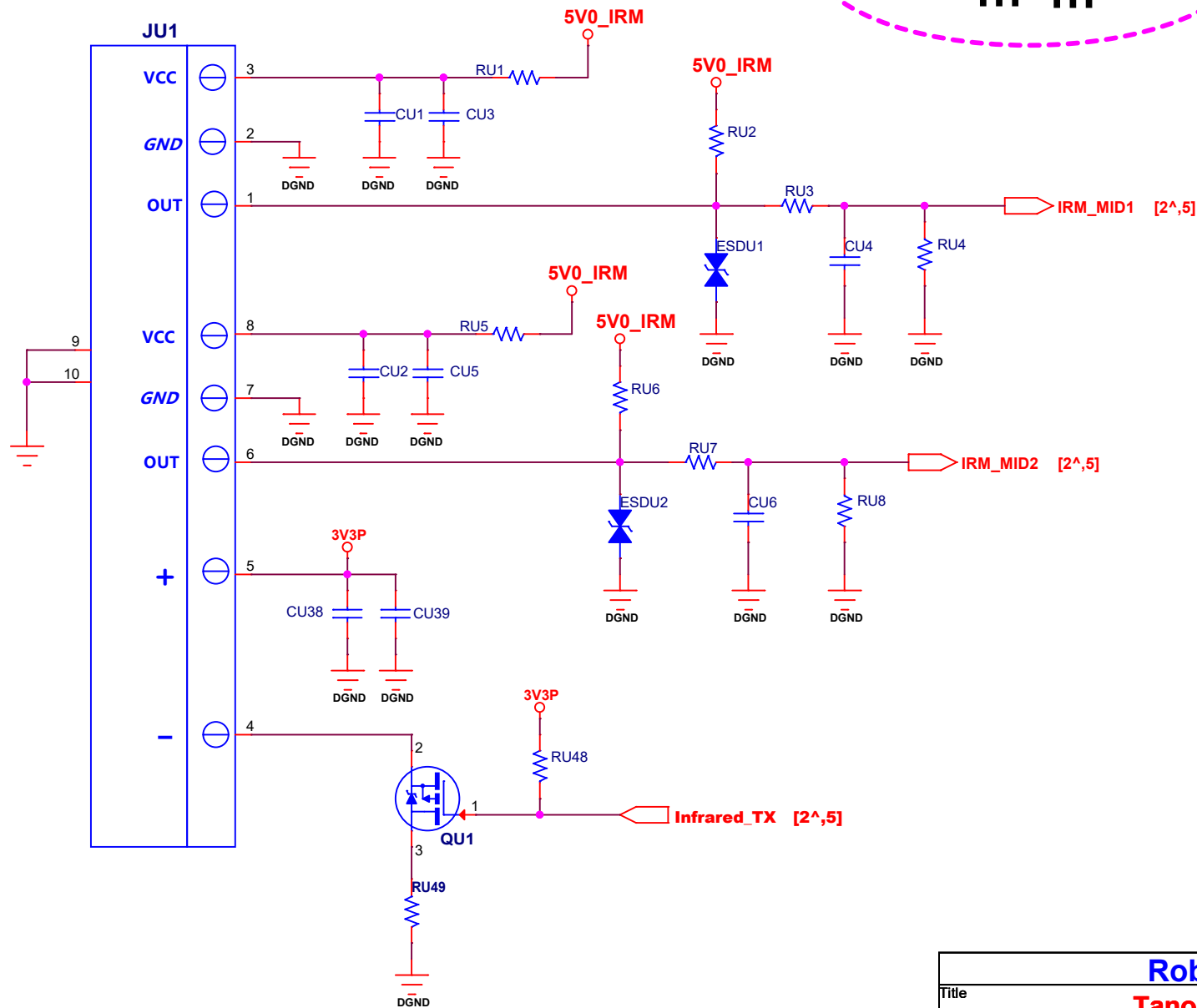
Shielding by GND

Brush Motor Current Detect
ADC Port

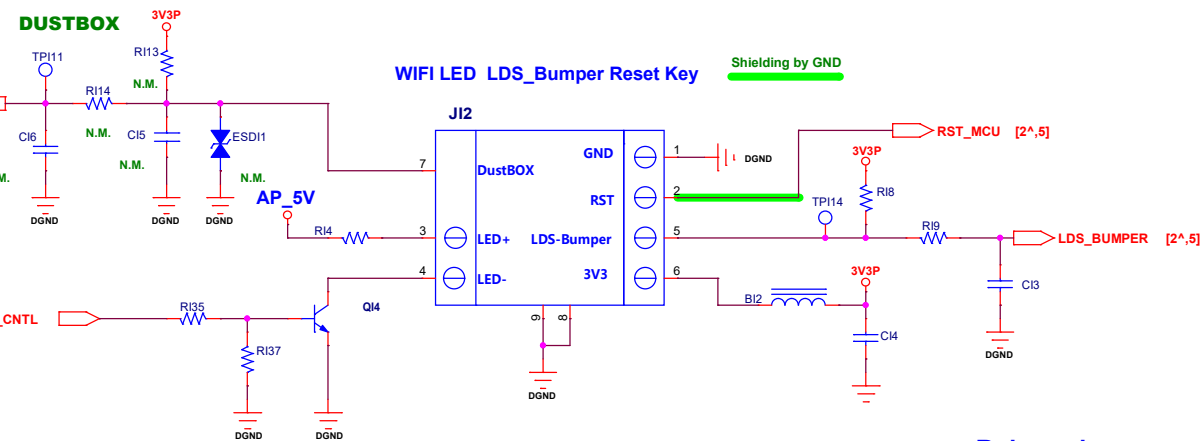
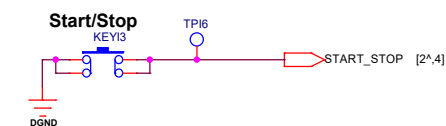
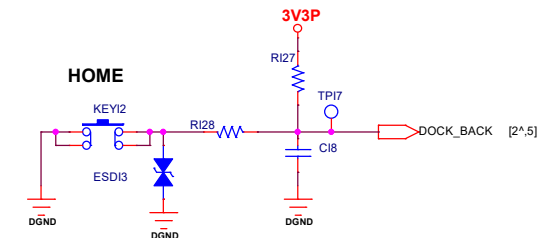
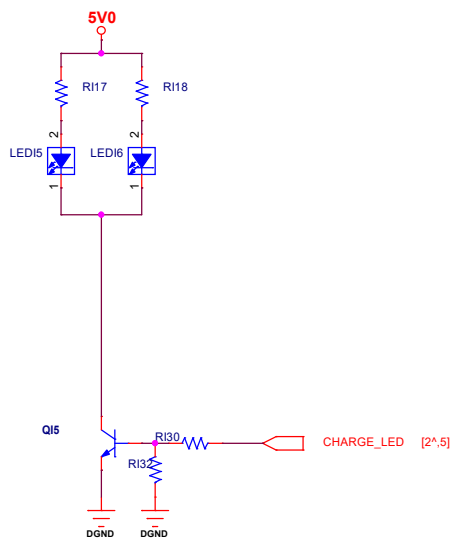
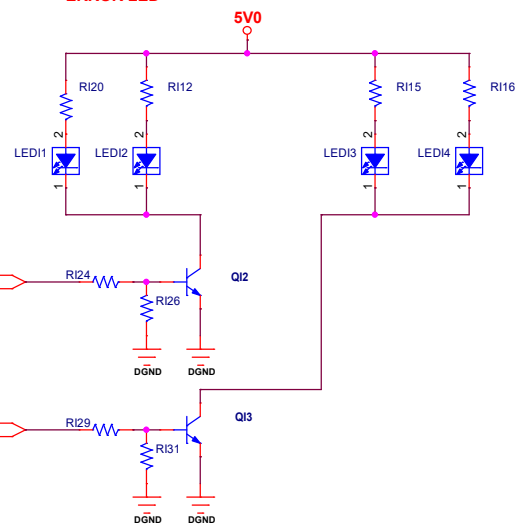


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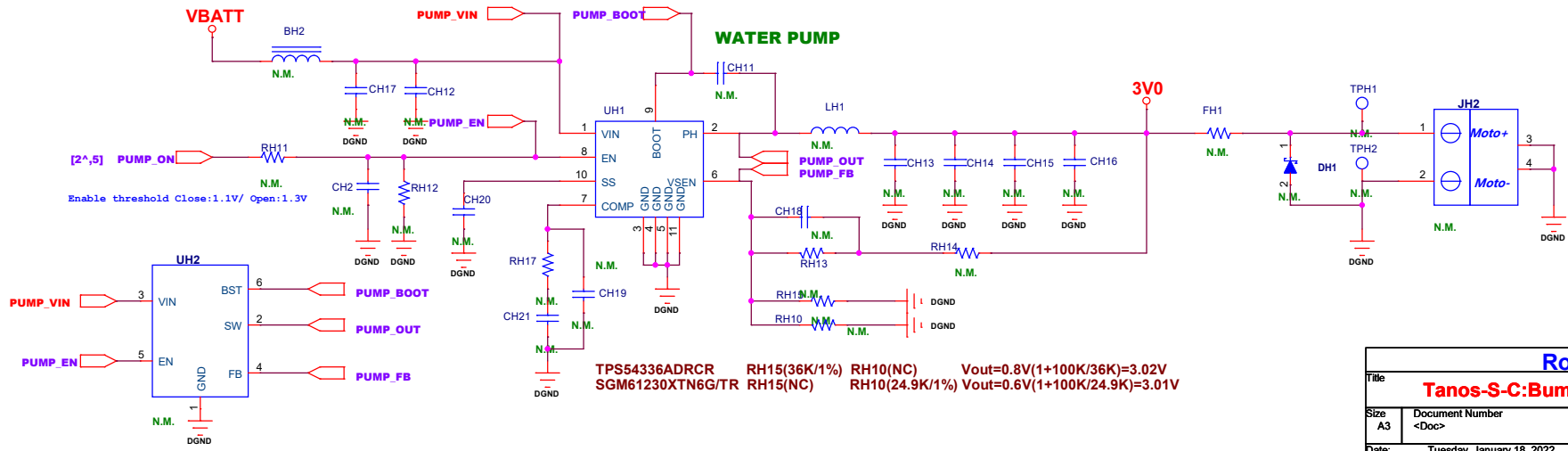
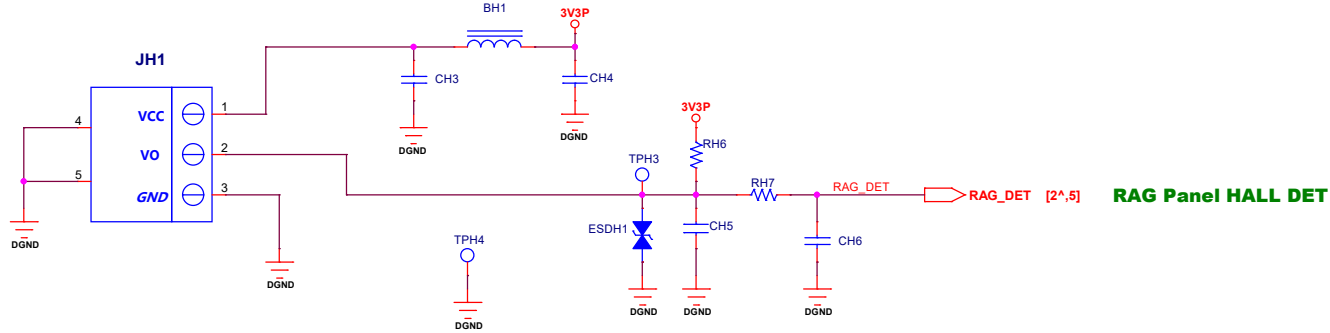
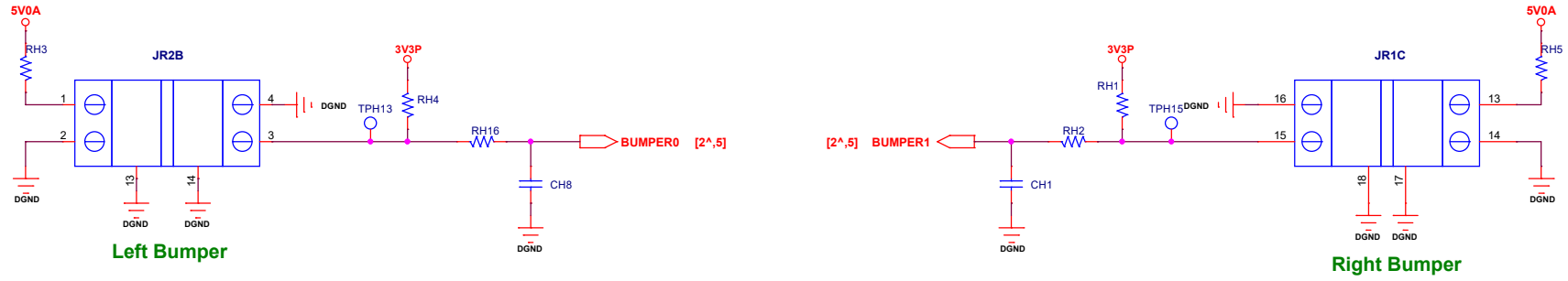




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Bumper Detection x2



VDDIO  R105  NC/10K/5%/0201 GPIO12

GPI000/GPI001 for UART_Debug_Log✔

