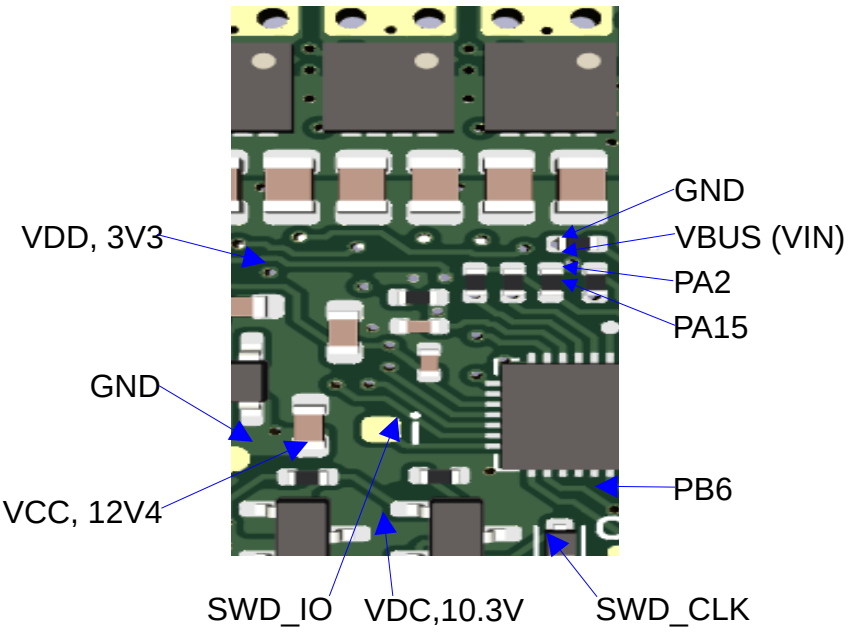
Remora1 Production Test

Revision 0.0
December 2023

Pad identification



Procedure

setup / action	measure	expected result
visual inspection	check for no missing or misplaced parts, no bad joints or solder bridges	all OK
Low Voltage Start & Run		
set power supply to 1.5V, but output off		
connect power supply to + & - terminals		
turn power supply output on	power supply current	43mA to 52mA
	VCC to GND	11.954V to 12.914V
	VDD to GND	3.234V to 3.366V
reduce power supply voltage to 1.25V	power supply current	75mA to 81mA
	VCC to GND	9V to 12.914V
High Voltage Test		
increase power supply voltage to 13.5V	power supply current	4.5mA to 7.5mA
	VDC to GND	8.7V to 12.7V
	VCC to GND	11.954V to 12.914V

Memory Programming		
programme the flash memory		
reduce power supply voltage to zero & turn off		
Operation With Motor Connected		
connect motor, make sure its mechanically secure		
turn power supply on		
slowly increase power supply voltage	check motor rotation	normal rotation
reduce power supply voltage to zero & turn off		
Reverse Polarity Test		
reverse connections to + & - terminals		
turn power supply on, increase power supply voltage to 13.5V	power supply current	<1.7mA
reduce power supply voltage to zero & turn off		
restore normal connections to + & - terminals		
turn power supply on, increase power supply voltage to 13V	check for motor rotation	normal rotation
End of Tests		
reduce power supply voltage to zero & turn off		
end		

Revision History

revision	**date**	**changes**
0.0	29 December 2023	initial draft, based on 2 prototypes with adaptor board
0.1	17 April 2024	changes based on Remora1 measurements. current at 1.5V revised 1.2V test revised to 1.25V, current revised, VCC to GND revised current at 13.5V revised