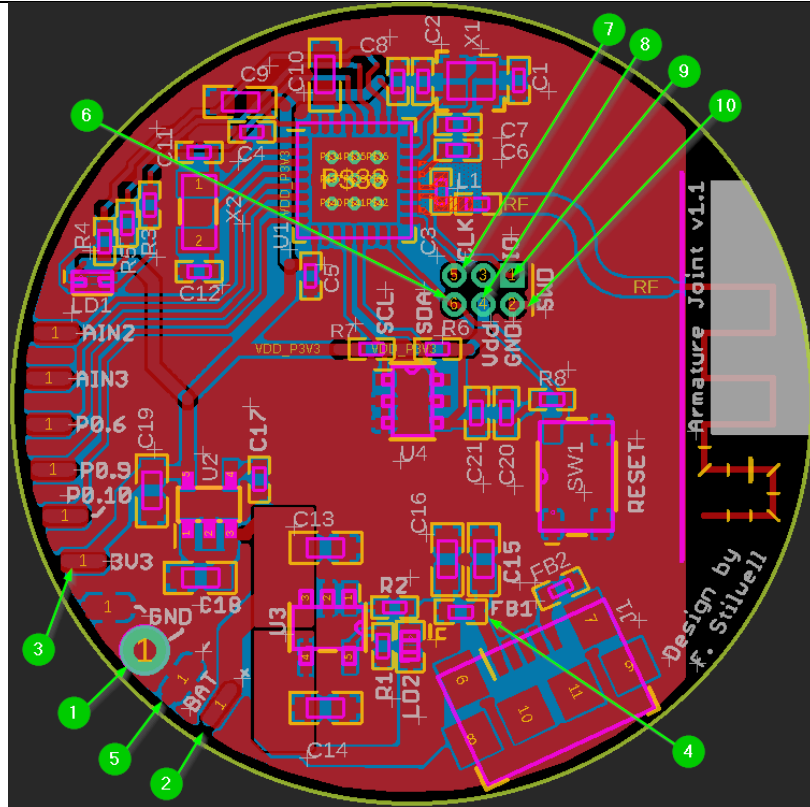


11.11.20

- RGB LED orientation is wrong
- Button is not functioning due to schematic error, should be removed

PCB Name	Armature Joint V1.1
Serial Number	4
Tester	Flynn Stilwell

Test Point Diagram



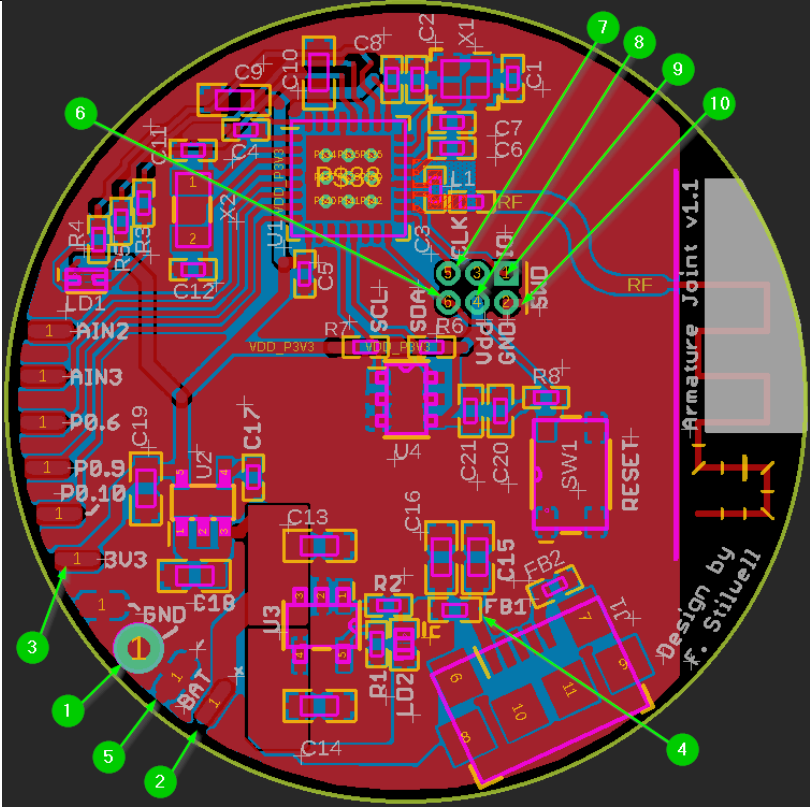
Top View

Test Points	Test Parameters / Conditions	Criterion, Units	Value	Comments
Multimeter Probes	No power connected	Resistance, Ω	0.3	
1-2			OL	
1-3			9.82k	Value from pullup resistor R8, related to GND'd switch
1-4			OL	
1-10			0.1	
1-6			0.1	Check button, all pins connected to GND. Button pin 4 connected to GND
1-7			47.2k	
1-8			OL	
1-9			6.52M	
1-2	USB Power Only	Voltage, V	3.987	
1-3			3.343	
1-4			5.074	
USB Tester		Current, A		
1-2	Battery Power Only	Voltage, V		
1-3				
USB Tester		Power, W		

	Battery + USB, Charging battery	Current, A		
		Voltage, V		
Notes: 11.11.20 <ul style="list-style-type: none"> - RGB LED orientation is wrong - Button is not functioning due to schematic error, should be removed 				

PCB Name	Armature Joint V1.1
Serial Number	5
Tester	Flynn Stilwell

Test Point Diagram



Top View

Test Points	Test Parameters / Conditions	Criterion, Units	Value	Comments
Multimeter Probes	No power connected	Resistance, Ω		
1-2			OL	
1-3			9.84k	Value from pullup resistor R8, related to GND'd switch
1-4			OL	
1-10			0.2	
1-6			0.2	Check button, all pins connected to GND. Button pin 4 connected to GND
1-7			47.48k	
1-8			9.84k	
1-9			152.0k	
1-2	USB Power Only	Voltage, V		
1-3				
1-4				
1-2	Battery Power Only	Voltage, V		
1-3				
1-4				

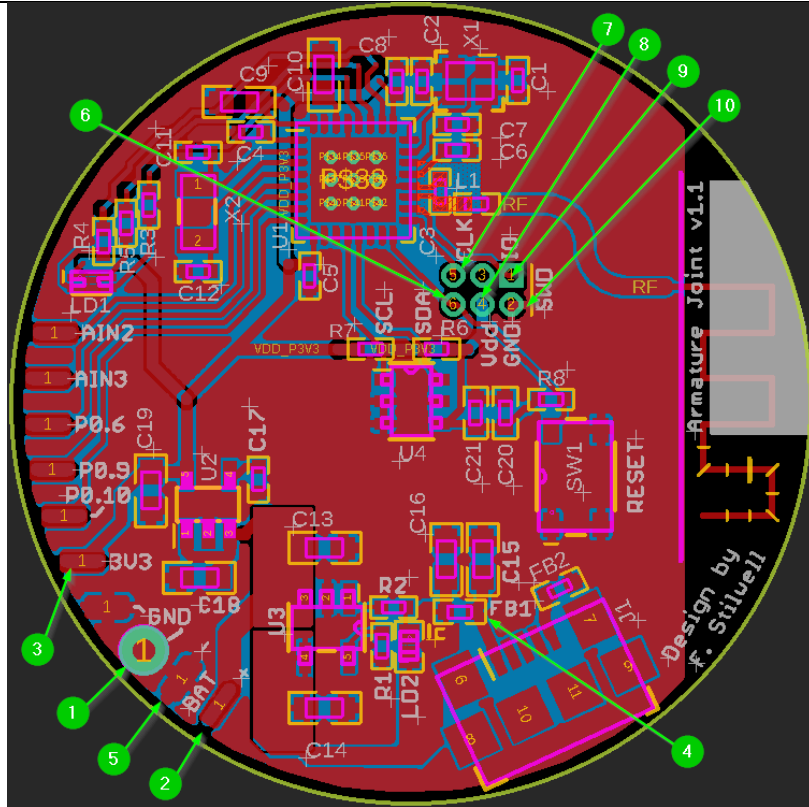
Notes:

11.11.20

- LD2, charger indicator orientation is wrong
- BLE Blinky program upload: Indicates advertisement but cannot be found with nRF Connect Android
- C1 possibly disconnected
- Button is not functioning due to schematic error, should be removed

PCB Name	Armature Joint V1.1
Serial Number	6
Tester	Flynn Stilwell

Test Point Diagram



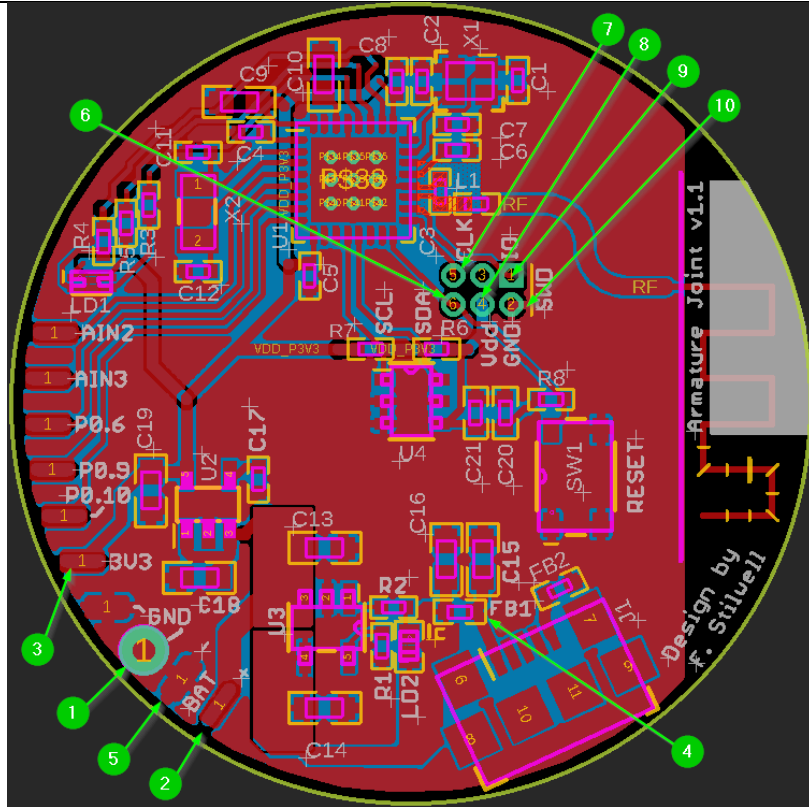
Top View

Test Points	Test Parameters / Conditions	Criterion, Units	Value	Comments
Multimeter Probes	No power connected	Resistance, Ω	0.2	
1-2			OL	
1-3			9.80k	Value from pullup resistor R8, related to GND'd switch
1-4			OL	
1-10			0.1	
1-6			0.2	Check button, all pins connected to GND. Button pin 4 connected to GND
1-7			47.92k	
1-8			9.80k	
1-9			156.0k	Lower than S/N 3 and 4
1-2	USB Power Only	Voltage, V	4.060	
1-3			3.328	
1-4			5.072	
USB Tester		Current, A	0.000	No current draw, no shorts
1-2	Battery Power Only	Voltage, V		
1-3				
1-4				

Notes: <ul style="list-style-type: none">- Removed Button- R4 and R5 needed more solder on their uC pin pads				

PCB Name	Armature Joint V1.1
Serial Number	1
Tester	Flynn Stilwell

Test Point Diagram



Top View

Test Points	Test Parameters / Conditions	Criterion, Units	Value	Comments
Multimeter Probes	No power connected	Resistance, Ω		
1-2			OL	
1-3			9.82k	Value from pullup resistor R8, related to GND'd switch
1-4			OL	
1-10			0.2	
1-6			0.2	Check button, all pins connected to GND. Button pin 4 connected to GND
1-7			45.53k	
1-8			9.82k	
1-9			148.7k	
1-2	USB Power Only	Voltage, V	4.062	
1-3			3.327	
1-4			5.048	
1-2	Battery Power Only	Voltage, V	3.860	
1-3			3.328	
1-4			0.515	

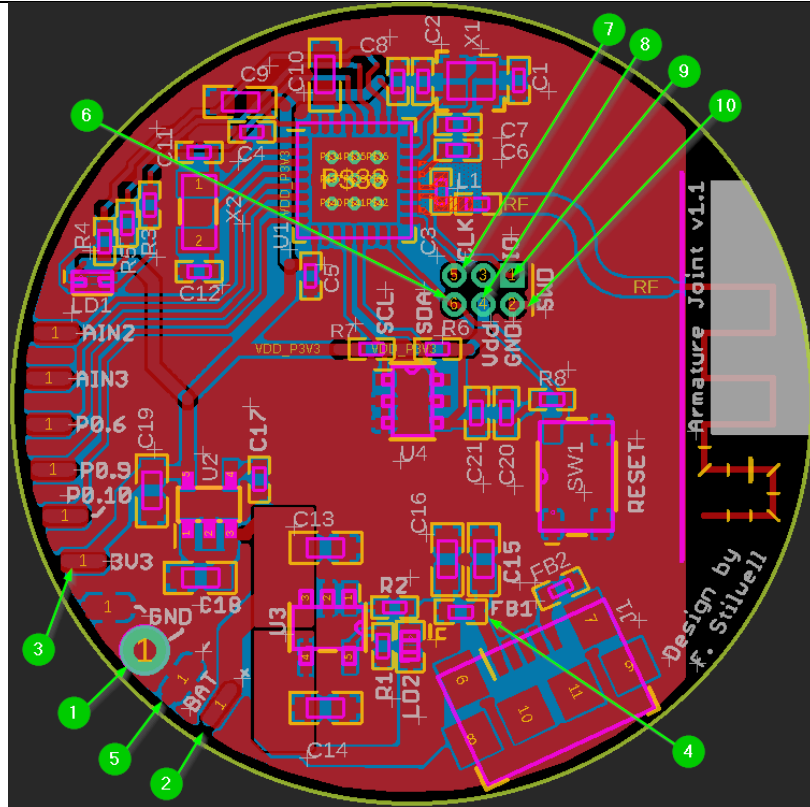
Notes:

11.11.20

- RGB LED orientation is wrong
- Button is not functioning due to schematic error, should be removed

PCB Name	Armature Joint V1.1
Serial Number	2
Tester	Flynn Stilwell

Test Point Diagram



Top View

Test Points	Test Parameters / Conditions	Criterion, Units	Value	Comments
Multimeter Probes	No power connected	Resistance, Ω		
1-2			OL	
1-3			9.80k	Value from pullup resistor R8, related to GND'd switch
1-4			OL	
1-10			0.2	
1-6			0.2	Check button, all pins connected to GND. Button pin 4 connected to GND
1-7			47.64k	
1-8			9.80k	
1-9			0.955M	Lower than S/N 3 and 4, higher than 6
1-2	USB Power Only	Voltage, V	-0.155	Issue with charger IC. Pin 1, Stat = ~0V Pin 2, GND = 0.0V Pin 3, VBAT = -120mV Pin 4, VDD = 5.109V Pin 5, Prog = ~0V

1-3			0.0	
1-4			5.109	
1-2	Battery Power Only	Voltage, V		
1-3				
1-4				
Notes: 11.11.20 <ul style="list-style-type: none"> - LD2, charger indicator orientation is wrong - Charger IC is not working - Button is not functioning due to schematic error, should be removed 				