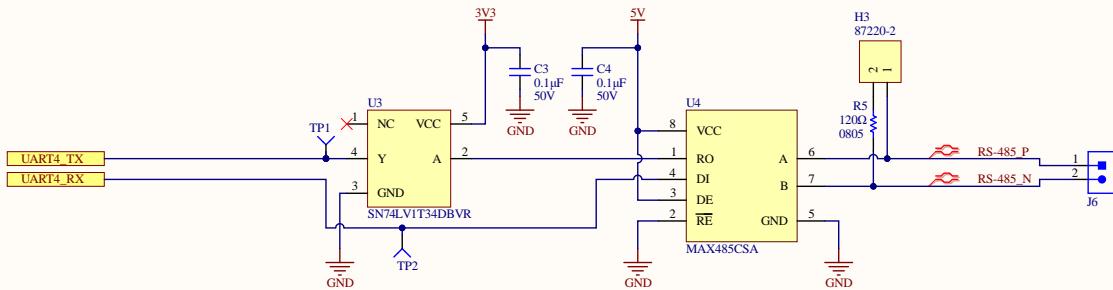


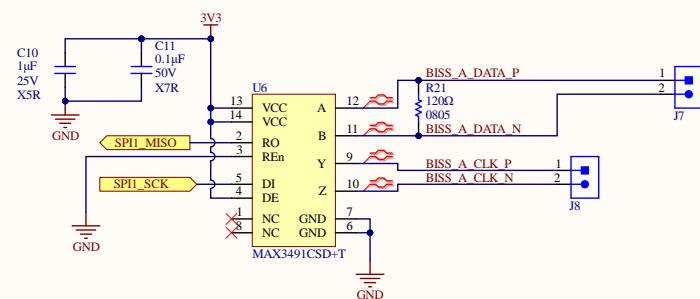
Title: CANTransceivers	
Project:	Nucleo Shield.PnjPcb
Rev:	1.0
Checker:	Wolfgang Windholtz
Engineer:	Sahil Kale
Date:	12/27/2020
Sheet:	1 of 7

A

RS-485 Transceiver



B



C

Title: RS-485 Transceiver	
Project:	Nucleo Shield.PnjPcb
Rev:	1.0
Checker:	Wolfgang Windholtz
Engineer:	Sahil Kale
Date:	12/27/2020
Sheet:	2 of 7



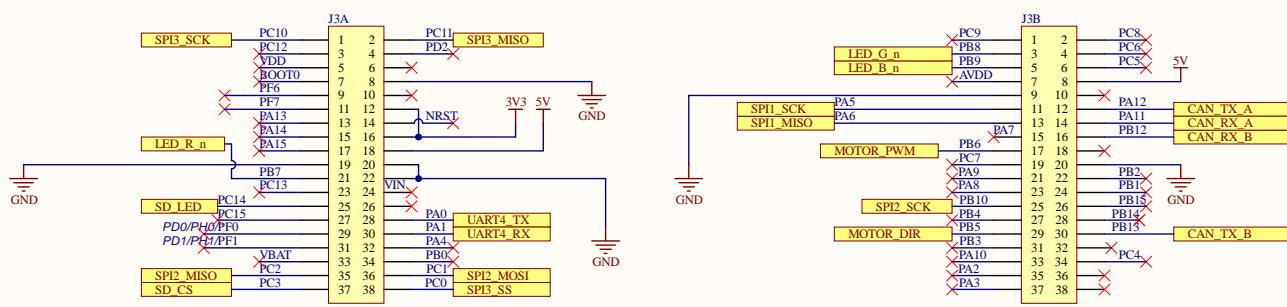
1 2 3 4 5 6

A A

B B

C C

D D



Title: Nucleo Headers	
Project: Nucleo Shield.PnjPcb	
Rev: 1.0	Checker: Wolfgang Windholtz
	Engineer: Sahil Kale
Date: 12/27/2020	Sheet: 3 of 7



1 2 3 4 5 6

A

A

B

B

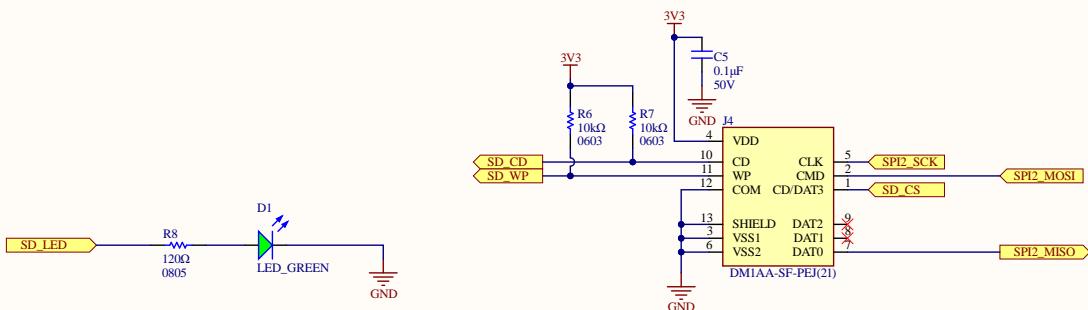
C

C

D

D

SD Card Connector



Title: SD Card Interface	
Project: Nucleo Shield.PnjPcb	
Rev: 1.0	Checker: Wolfgang Windholtz
Engineer: Cindy Li	
Date: 12/27/2020	Sheet: 4 of 7



A

A

B

B

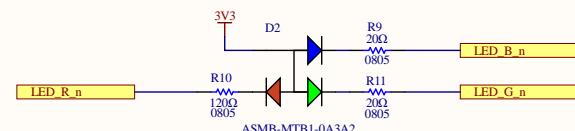
C

C

D

D

Status LED



LED Current Calculations
 Red: $(3.3-2.1)/(120)=10mA$
 Green & Blue: $(3.3-3.1)/(20)=10mA$

Title: RGB LED	
Project: Nucleo Shield.PnjPcb	
Rev: 1.0	Checker: Wolfgang Windholtz
	Engineer: Sahil Kale
Date: 12/27/2020	Sheet: 5 of 7



A

A

B

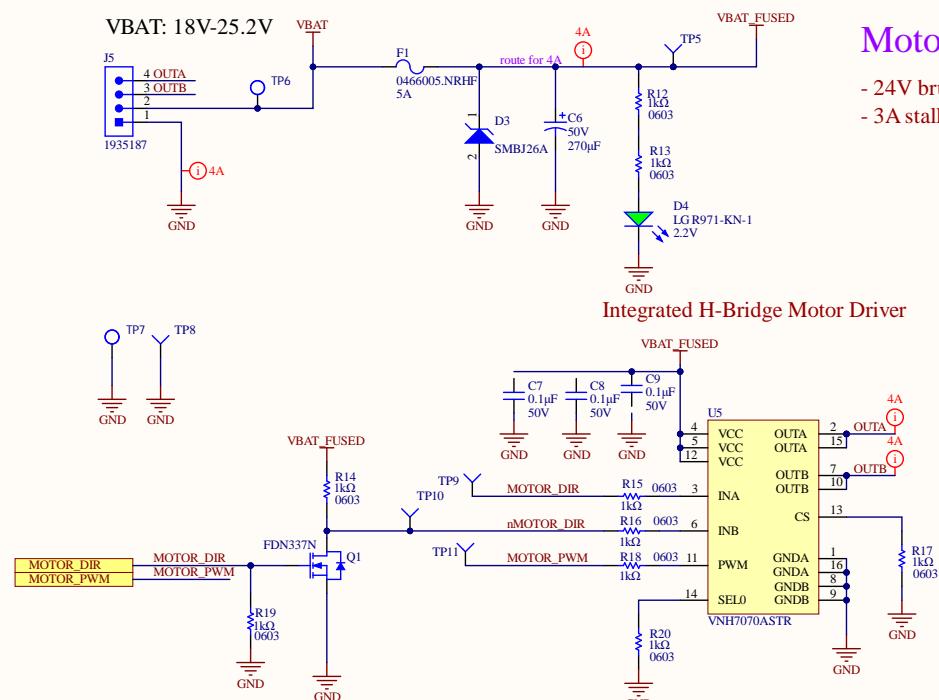
B

C

C

D

D



Motor Controller Specs

- 24V brushed motors
- 3A stall current

Integrated H-Bridge Motor Driver

Title: Brushed Motor Controller	
Project: Nucleo Shield.PnjPcb	
Rev: 1.0	Checker: Wolfgang Windholtz
Engineer: Kyle Hong	Date: 12/27/2020 Sheet: 6 of 7

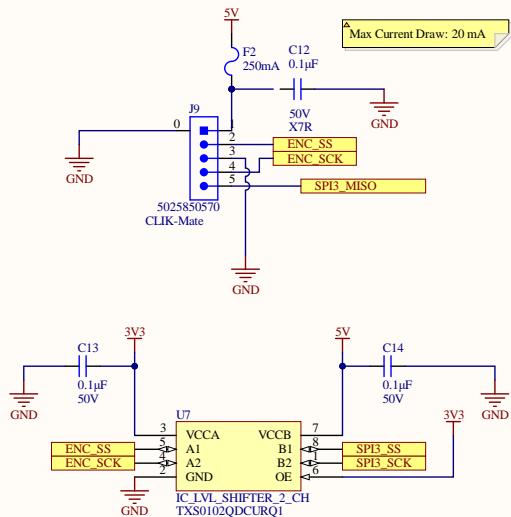
A

A

B

B

Broadcom AEAT-6012 Encoder



C

C

D

D

Title: Broadcom Encoder	
Project: Nucleo Shield.PnjPcb	
Rev: 1.0	Reviewer: Wolfgang Windholtz
	Engineer: Sahil Kale
Date: 12/27/2020	Sheet: 7 of 7

