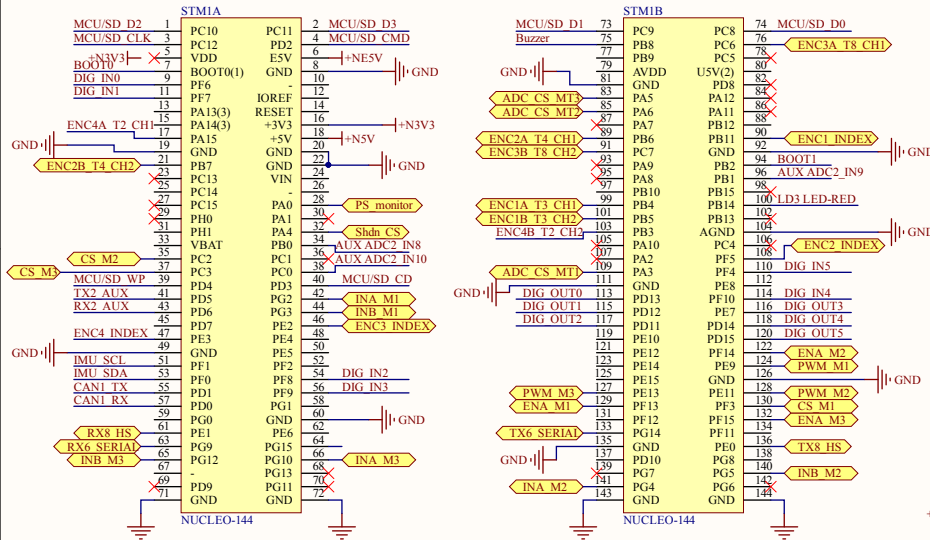
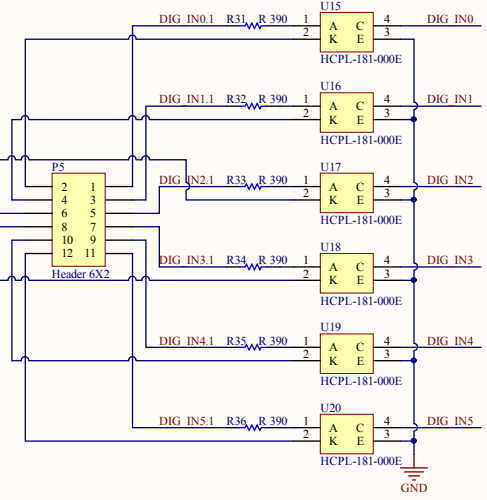


# NUCLEO BOARD

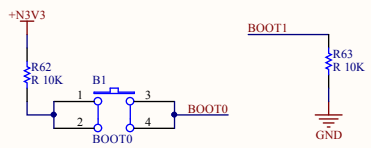
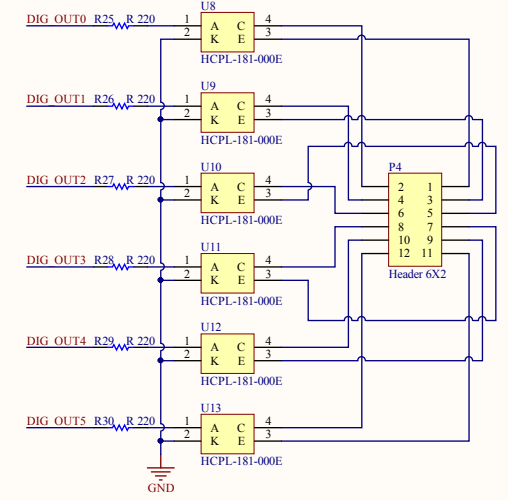


The IOs of STM32 microcontroller are 3.3 V compatible

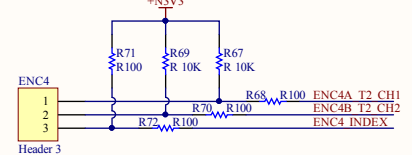
# DIGITAL INPUTS



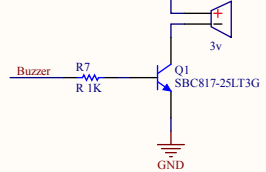
# DIGITAL OUTPUTS



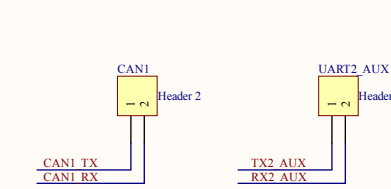
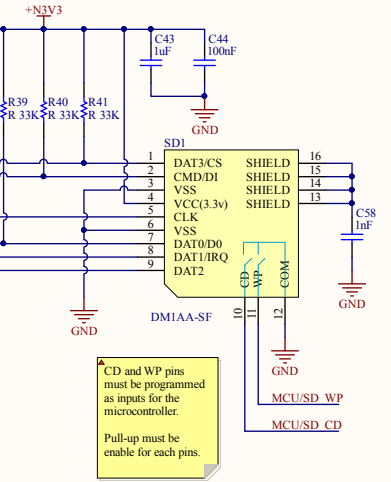
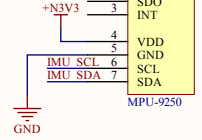
# EXTRA ENCODER 4



# BUZZER



# IMU



Title: NUCLEO_CORE / SD CARD			
Draw by: MIE. Juan Manuel Jacinto Villegas			
Size: A3	Revision: 2	Co. PERCRO Lab.	
Date: 15-Nov-17	Project: PCB STM32F7 v4.0 PrjPcb		
File: PCB v4.0 CORE SchDoc	Sheet: 1	of 4	



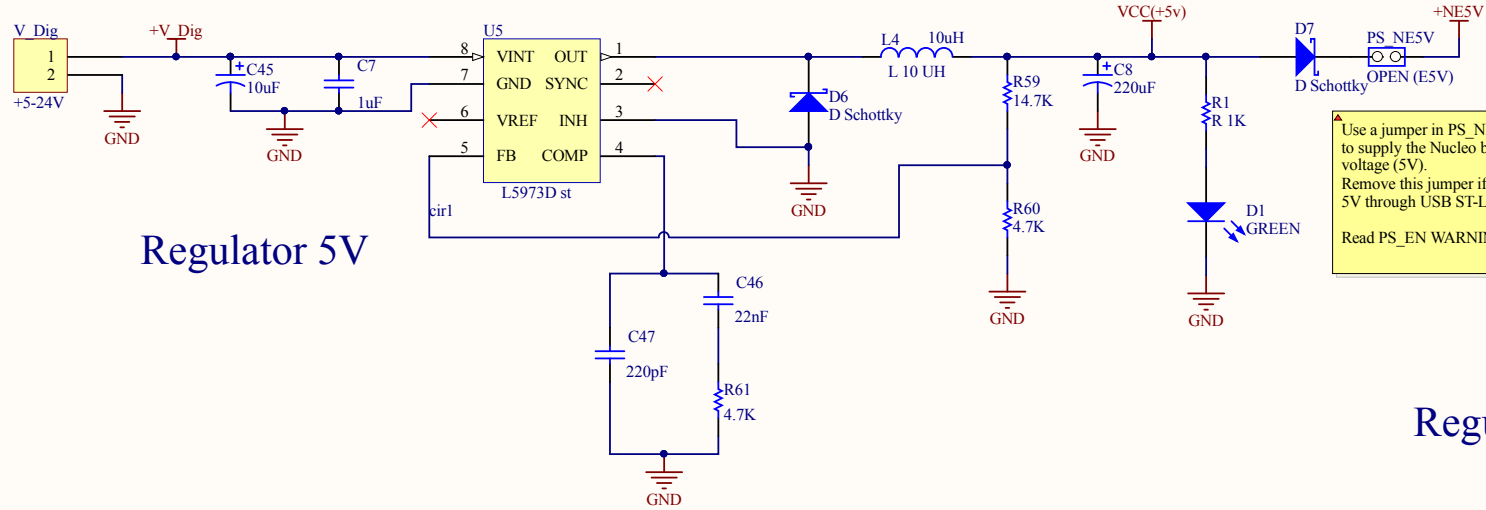
1

2

3

4

Regulator 5V



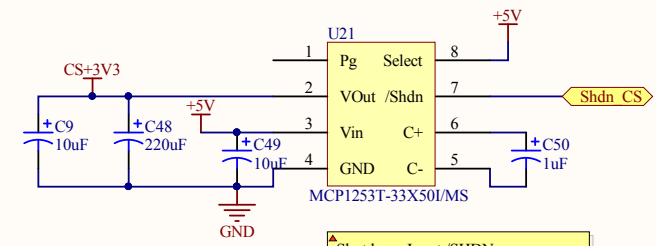
Use a jumper in PS\_NE5V only if you want to supply the Nucleo board with external voltage (5V). Remove this jumper if you are supplying 5V through USB ST-LINK. Read PS\_EN WARNING!

**IMPORTANT WARNING!**

If you want to supply the Nucleo board with external voltage (5V) using PS\_NE5V. Use a jumper in PS\_EN (2-3 pins).

Then PS\_EN (1-2 pins) must not be connected if you are using PS\_NE5V, you can DAMAGED THE BOARD

Regulator 3V3\_CS

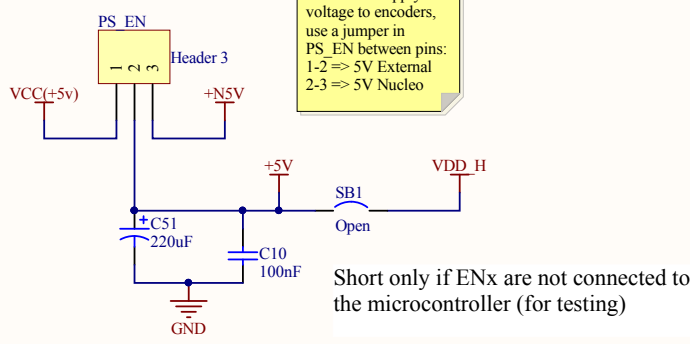


**Shutdown Input /SHDN:**

\*A logic-low signal applied to /SHDN disables the device.

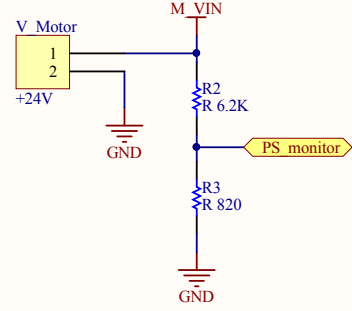
\*A logic-high signal applied to this pin allows normal operation.

POWER ENCODERS



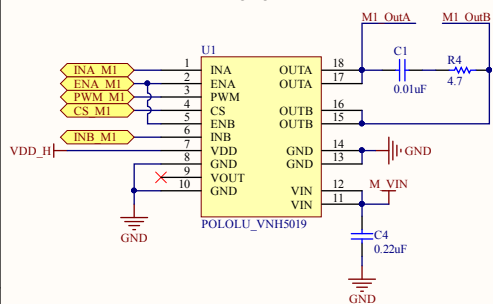
In order to supply the voltage to encoders, use a jumper in PS\_EN between pins: 1-2 => 5V External 2-3 => 5V Nucleo

Motor Power Supply 6 - 24v

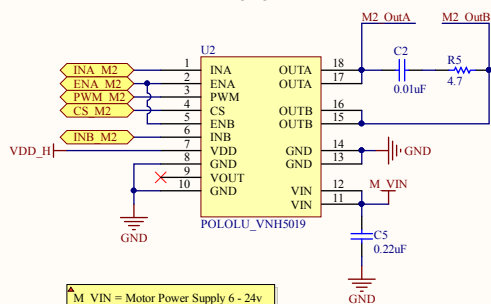


Title: POWER SUPPLYS			Cannot open file C:\Users\Ing.juanmanuel\Pictures\percro\
Draw by: MIE. Juan Manuel Jacinto Villegas			
Size: A4	Revision: 2	Co. PERCRO Lab.	
Date: 15-Nov-17	Project: PCB STM32F7 v4.0.PrjPcb		
File: PCB v4.0 POWER SUPPLY.SchDoc		Sheet 2 of 4	

MOTOR 1

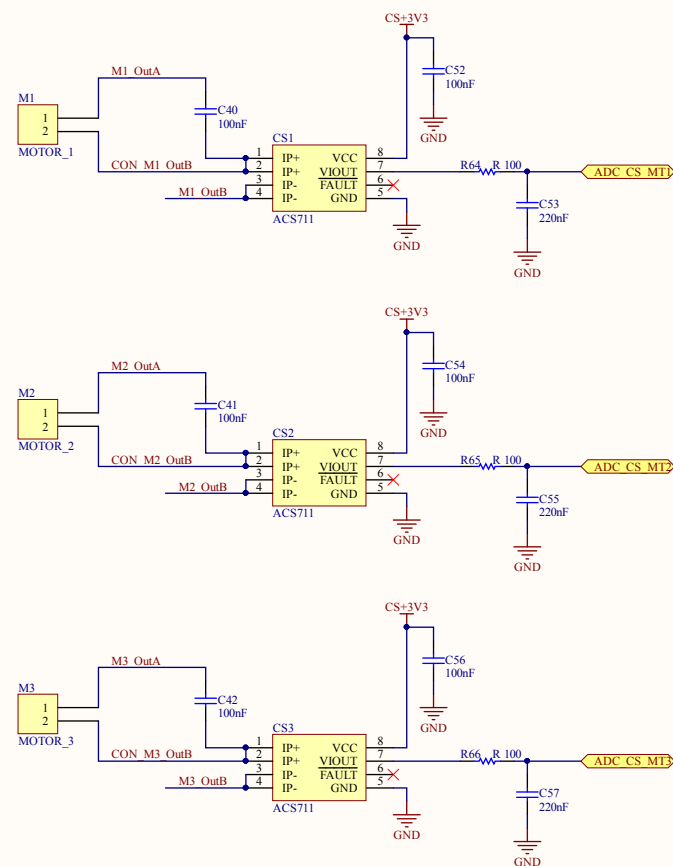
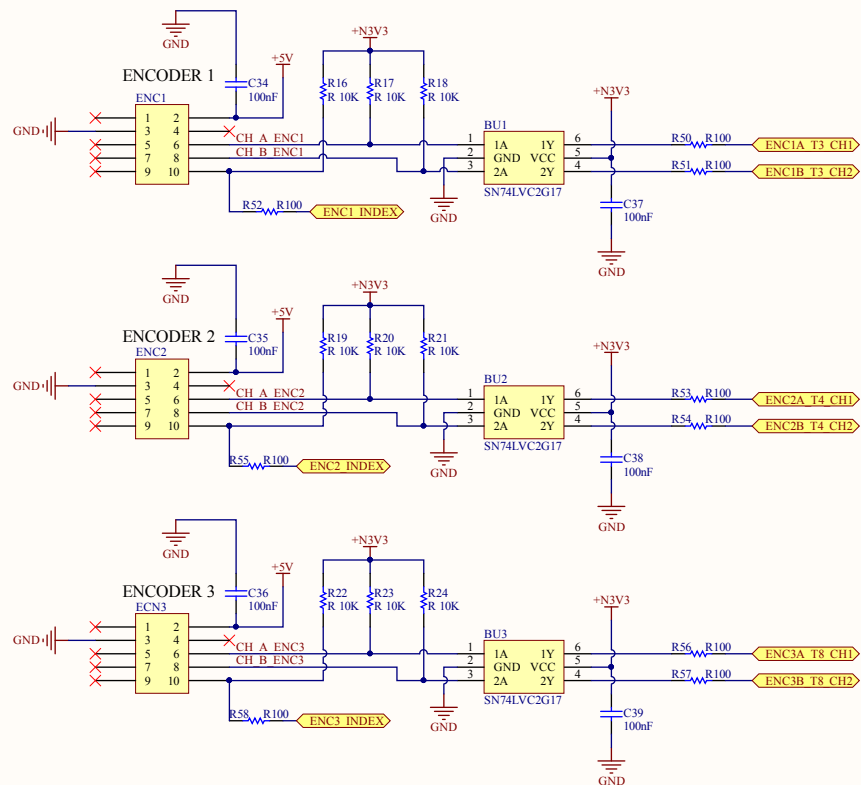
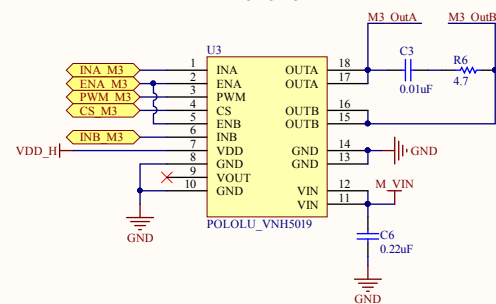


MOTOR 2



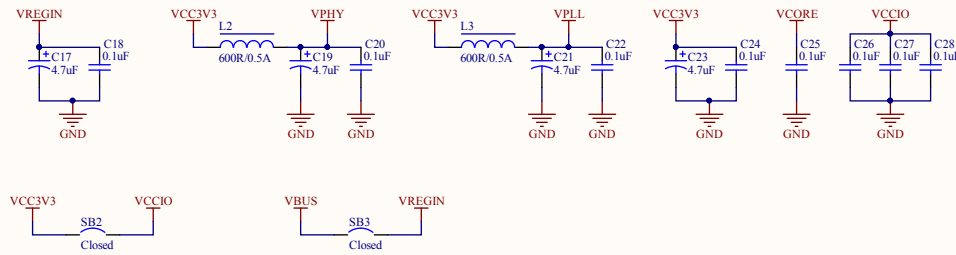
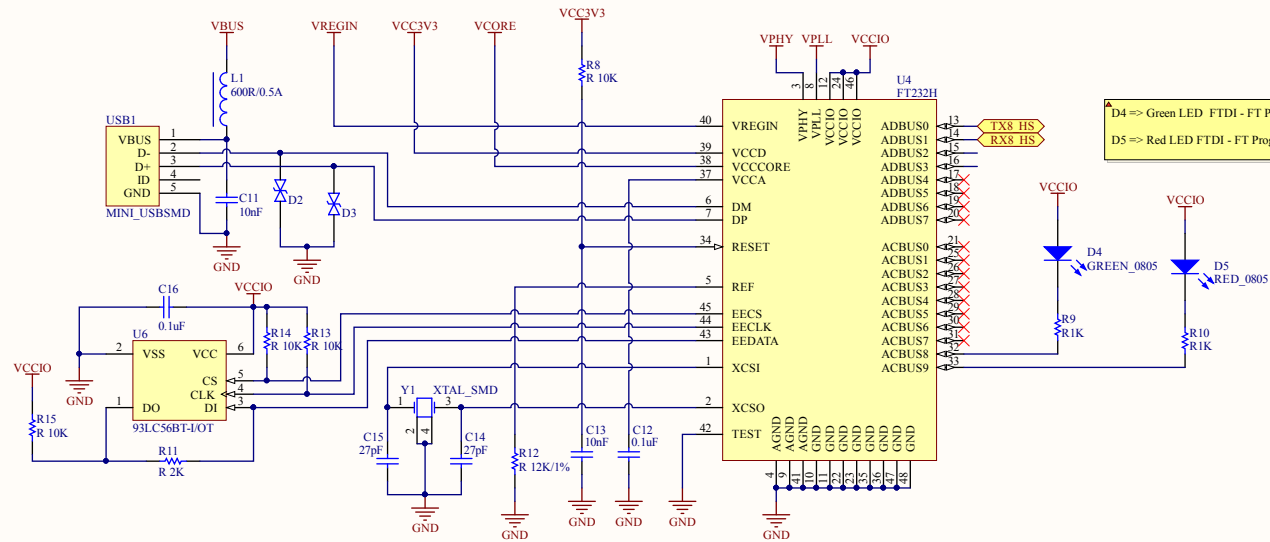
M\_VIN = Motor Power Supply 6 - 24v

MOTOR 3

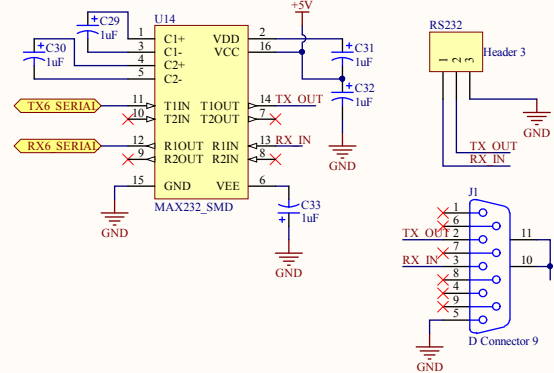


Title: MOTORS / ENCODERS			Cannot open file C:\Users\Ing.j uanmanuel\Pi ctures\percro\
Draw by: MIE. Juan Manuel Jacinto Villegas			
Size: A3	Revision: 2	Co. PERCRO Lab.	
Date: 15-Nov-17	Project: PCB STM32F7 v4.0 PrjPcb		
File: PCB_v4.0 MOTOR_ENCODER_SchDoc			Sheet 3 of 4

# HIGH-SPEED USB COMMUNICATION



## SERIAL COMMUNICATION



Title: COMMUNICATION HS-USB/SERIAL			Cannot open file C:\Users\Ing.juanmanuel\Pictures\percro\
Draw by: MIE. Juan Manuel Jacinto Villegas			
Size: A3	Revision: 2	Co. PERCRO Lab.	
Date: 15-Nov-17	Project: PCB STM32F7 v4.0 PnPb		
File: PCB_v4.0_COMMUNICATION_SchDoc			Sheet 4 of 4

00.051

