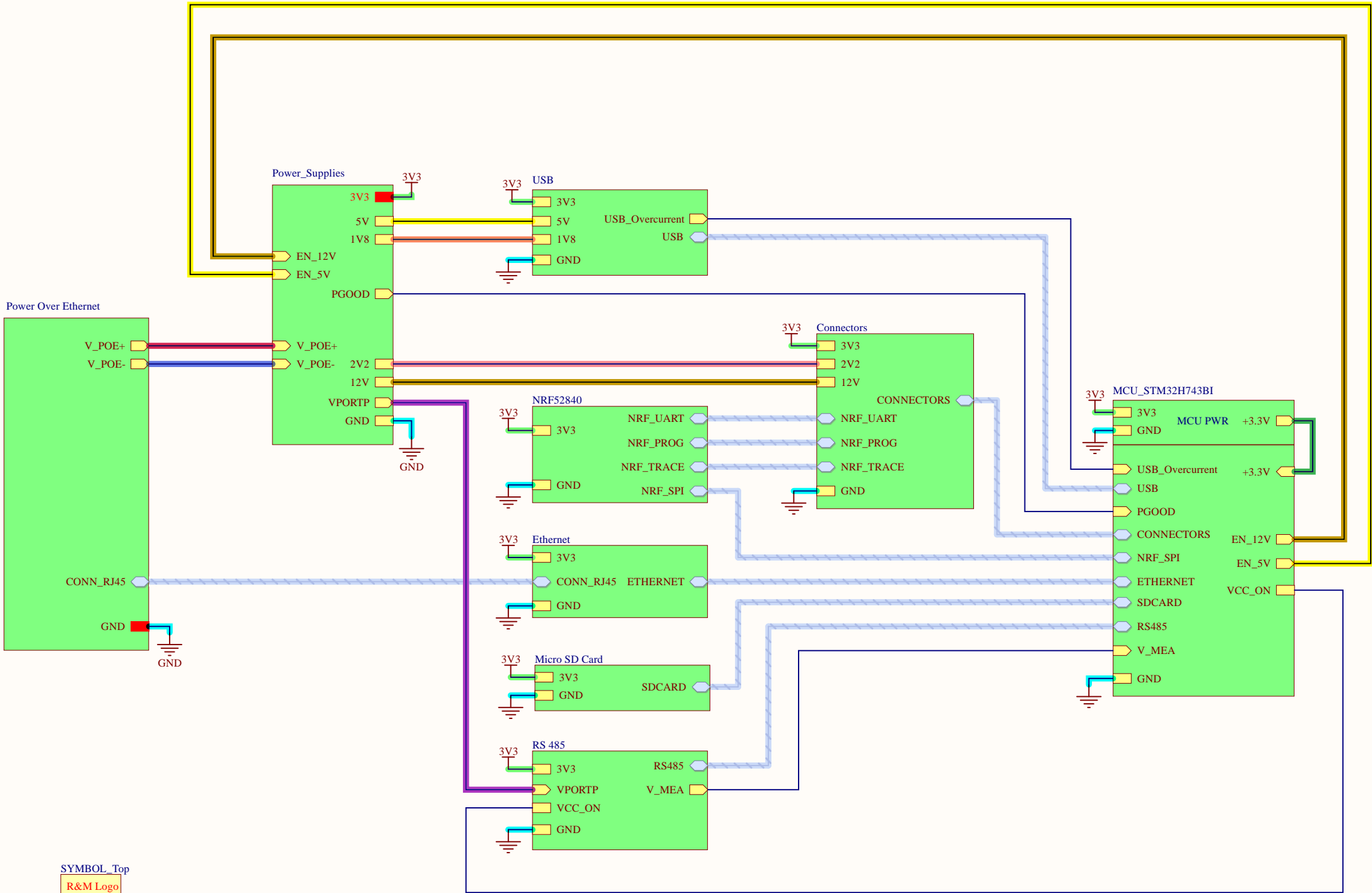


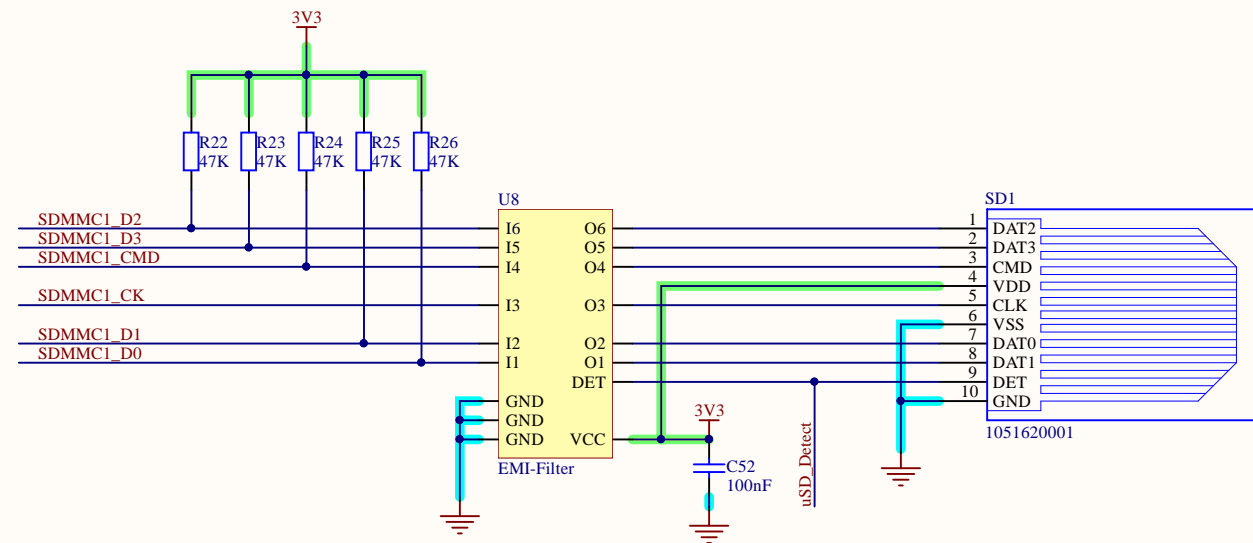
OVERVIEW



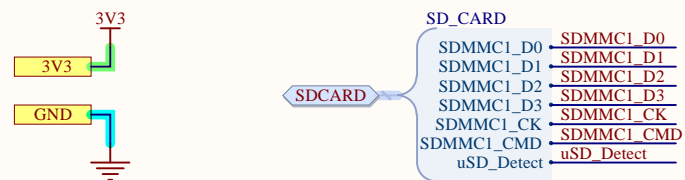
SYMBOL\_Top  
R&M Logo  
Reichle & De-Massari Logo


SYMBOL\_But  
R&M Logo  
Reichle & De-Massari Logo

MICRO SD CARD

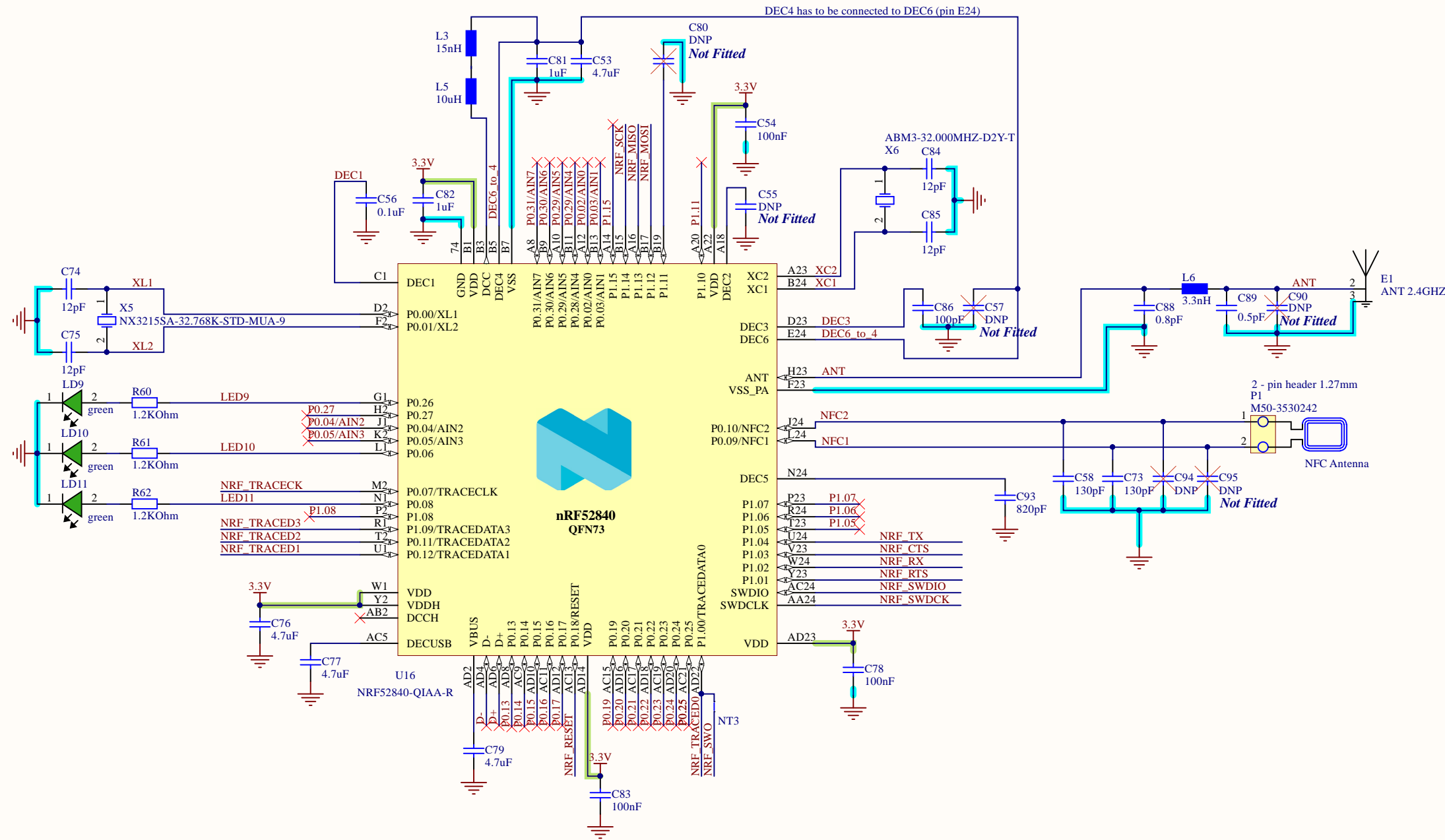


## SIGNALS



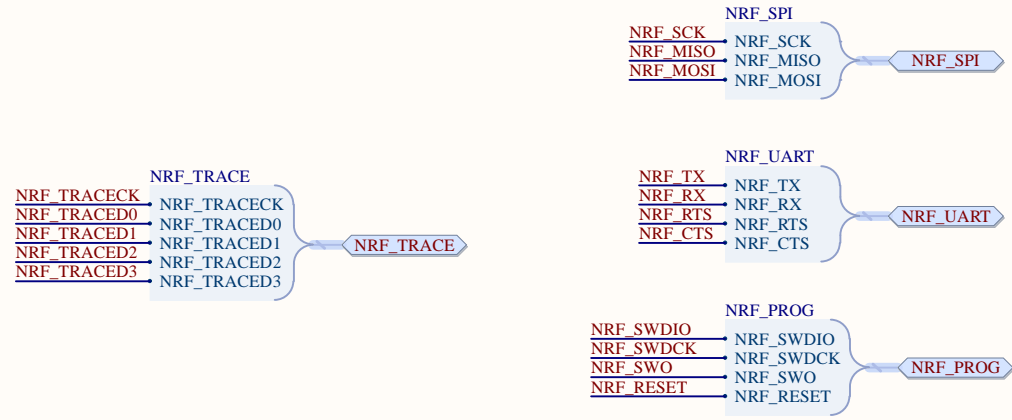
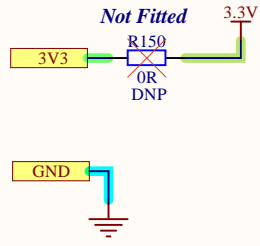
Title <b><i>Micro SD Card</i></b>			Reichle & De-Massari Binzstrasse 32 8620 Wetzikon Switzerland 
Size: <b>A3</b>	Number: <b>2</b>	Revision: <b>V0.1</b>	
Date: <b>1/29/2020</b>	Time: <b>7:51:48 AM</b>	Sheet <b>2</b> of <b>11</b>	
File: <b>C:\Users\Public\Documents\Altium\Projects\IT_Asset_Tracking_Rack_Controller-H743_HW\Micro_SD_Card\SchDoc</b>			

RF-MODUL  
With Bluetooth and NFC



SIGNALS

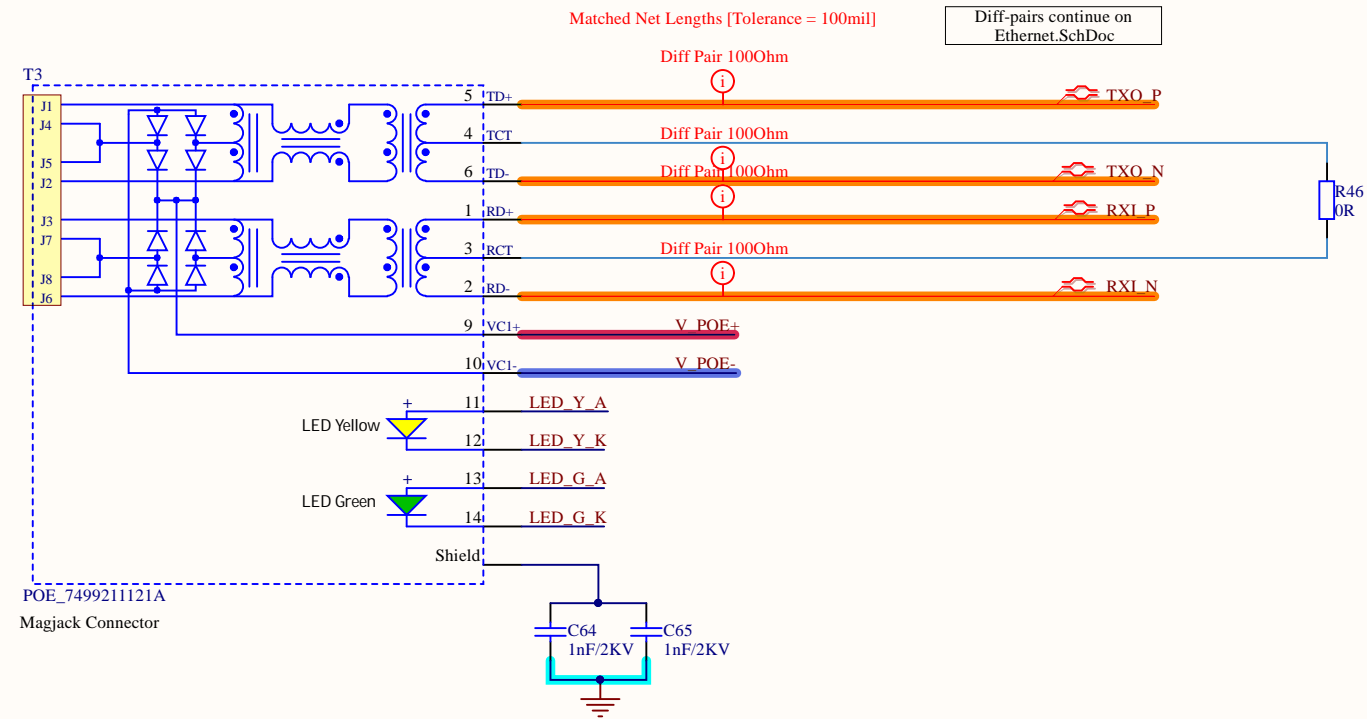
Fit resistors to put MCU into operation



## POWER OVER ETHERNET

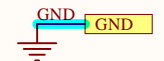
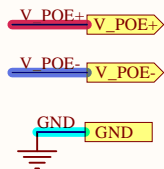
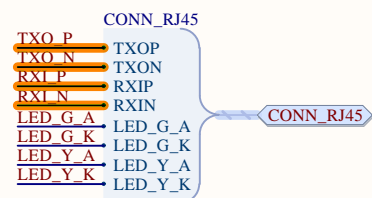
Input voltage range: 44 - 57V


In average:  $\sim 48V$



Diff-pairs continue on  
Ethernet.SchDoc

## SIGNALS

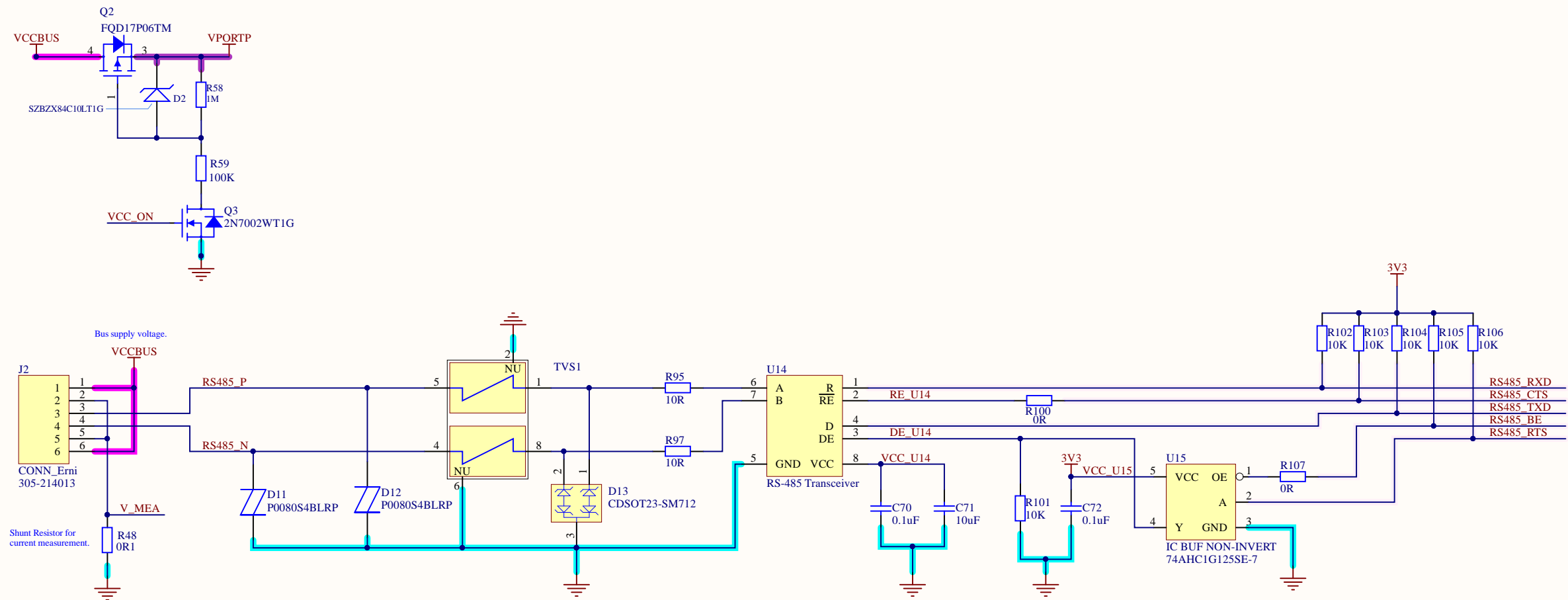


Title <b><i>Power over Ethernet</i></b>			Reichle & De-Massari Binzstrasse 32 8620 Wetzikon Switzerland *	
Size: <b>A3</b>	Number: <b>4</b>	Revision: <b>V0.1</b>		
Date: <b>1/29/2020</b>	Time: <b>7:51:49 AM</b>	Sheet <b>4</b> of <b>11</b>		
File: <b>C:\Users\Public\Documents\Altium\Projects\IT_Asset_Tracking_Rack_Controller-H743_HW\Power_Over_Ethernet.SchDoc</b>				

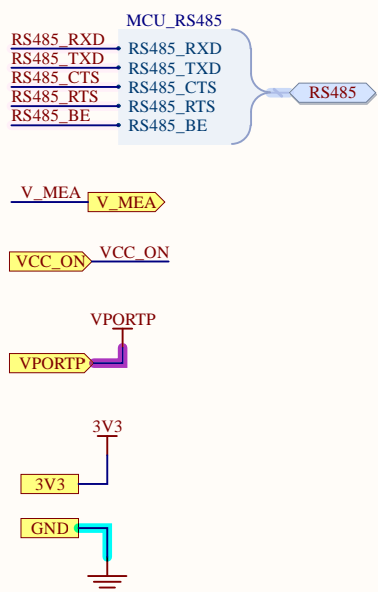
Reichle & De-Massari  
Binzstrasse 32  
8620 Wetzikon  
Switzerland



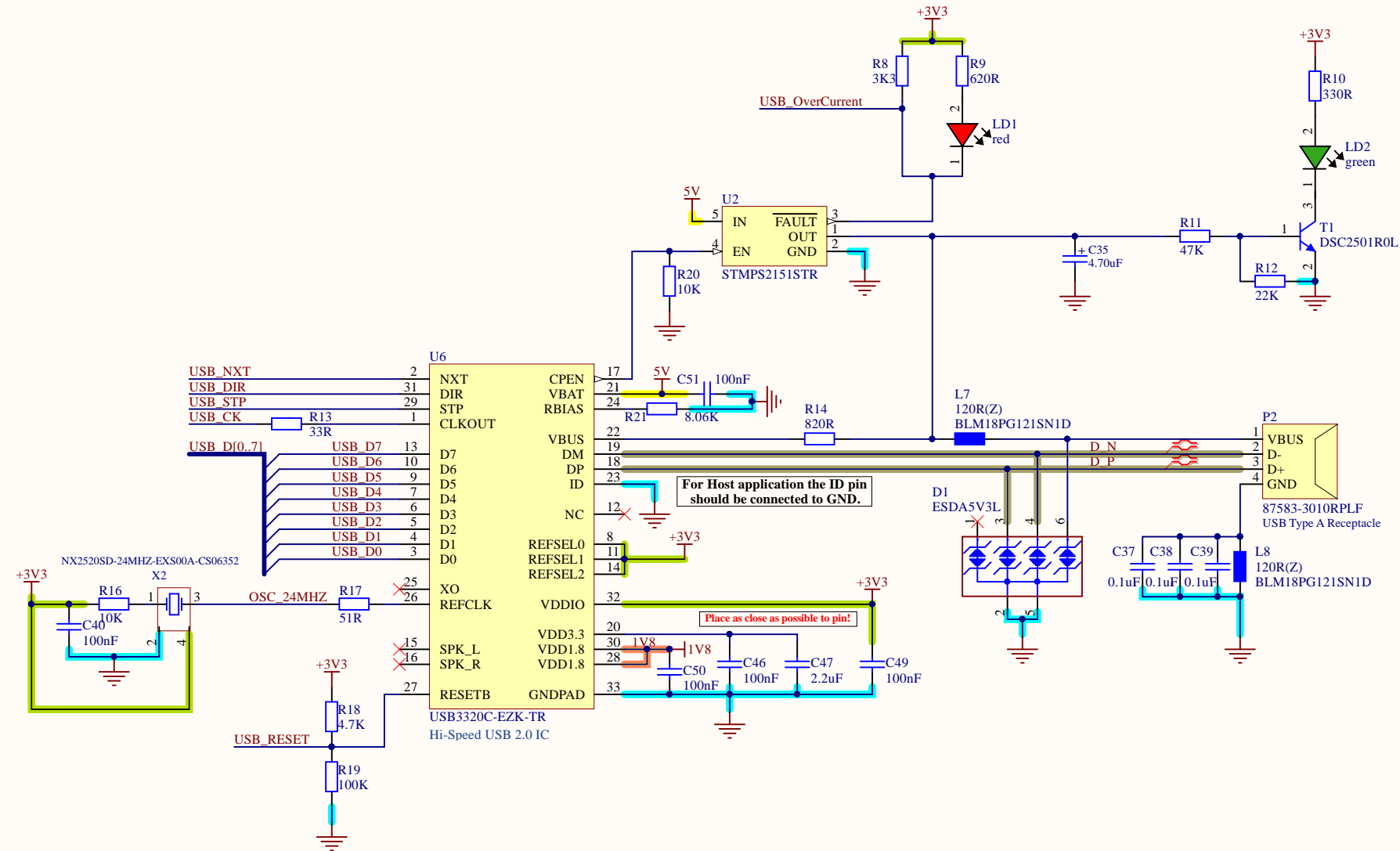
RS-485



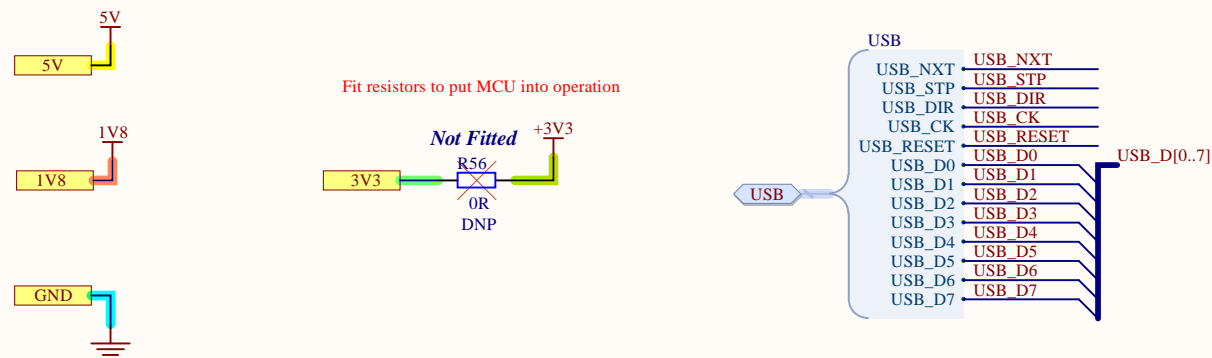
SIGNALS



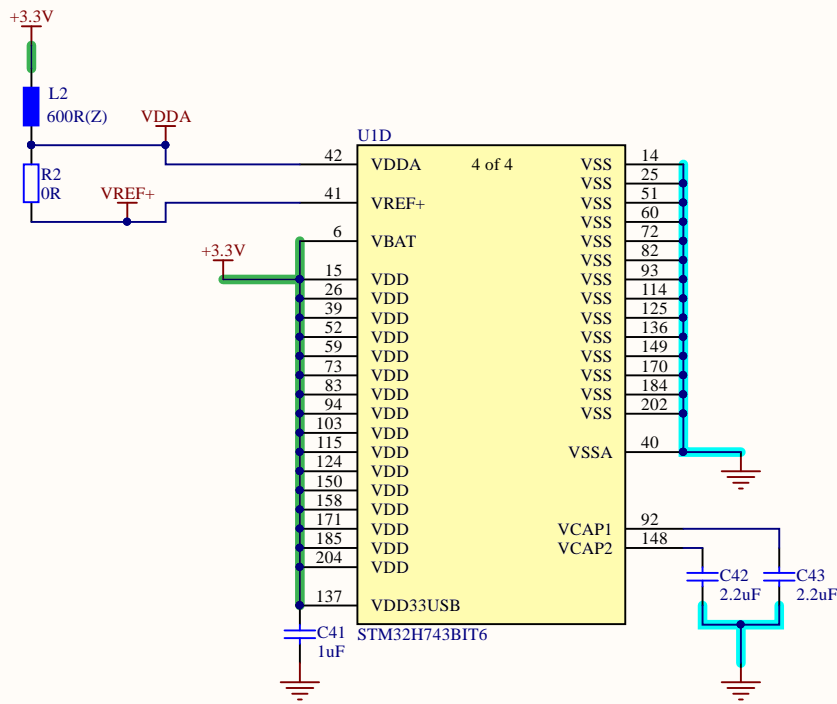
## HI - SPEED USB TRANSCEIVER



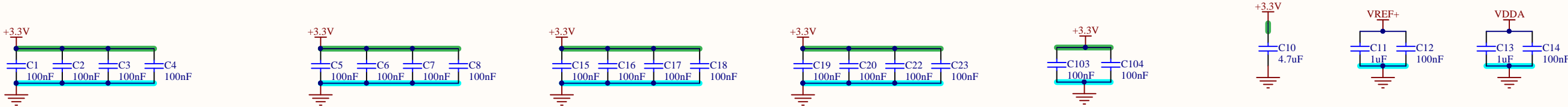
## SIGNALS



MCU PWR SUPPLIES

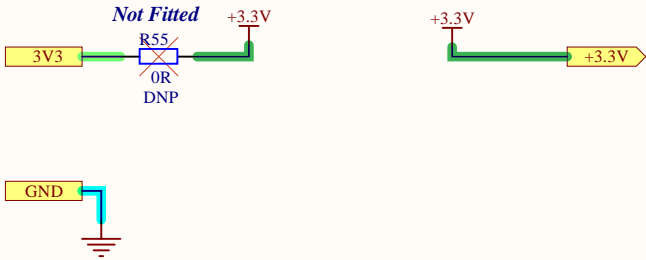


MCU DECAPS  
Ceramic capacitor (Low ESR, ESR<1 Ω)

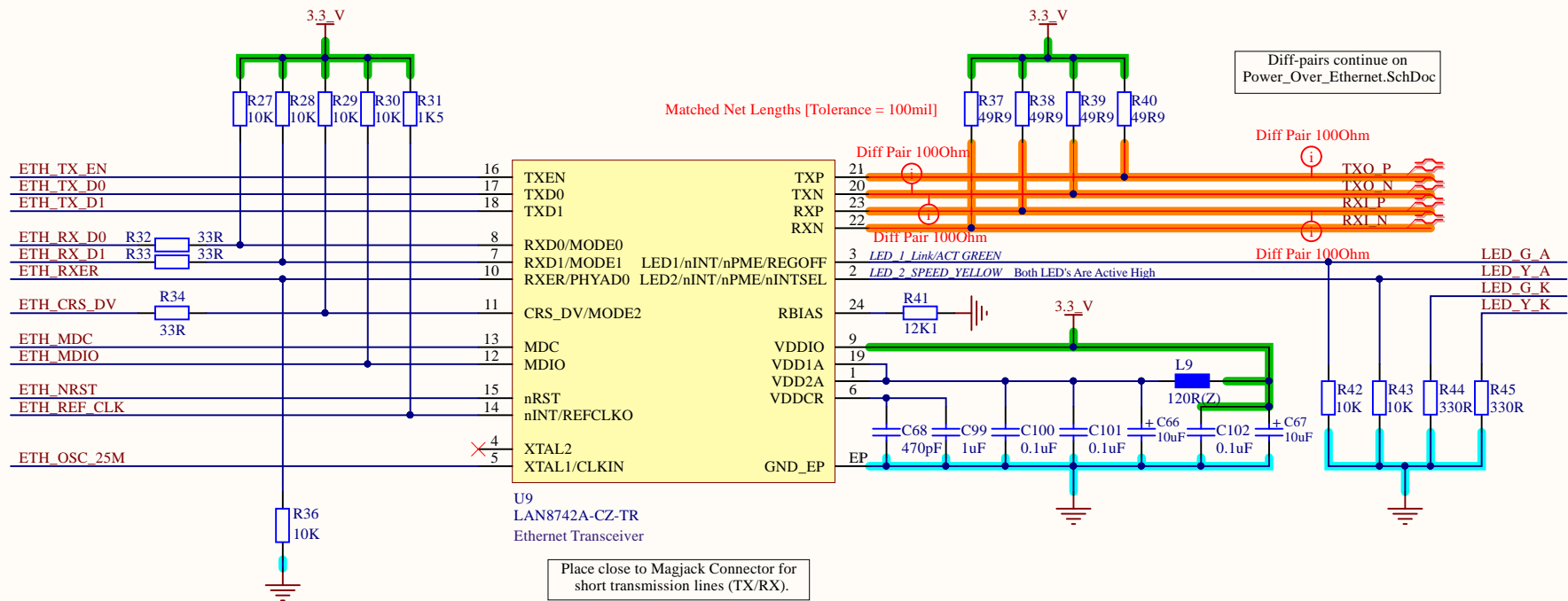


SIGNALS

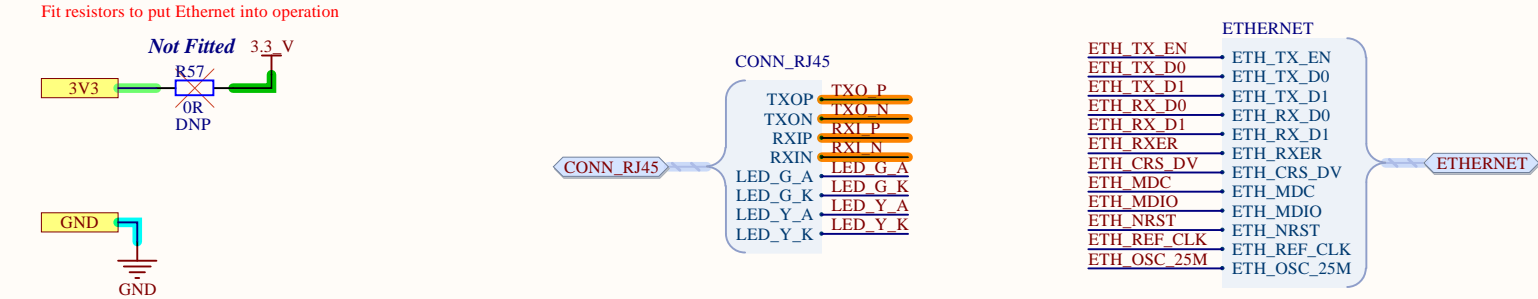
Fit resistors to put MCU into operation



ETHERNET

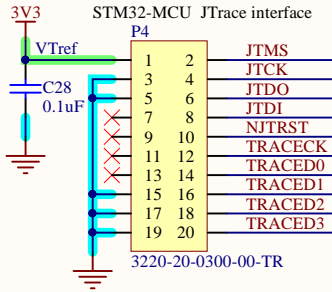
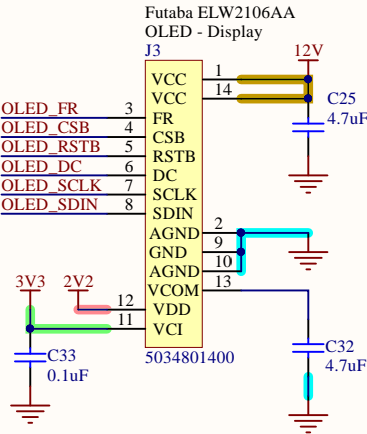


SIGNALS

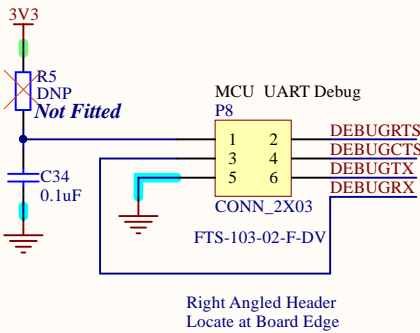
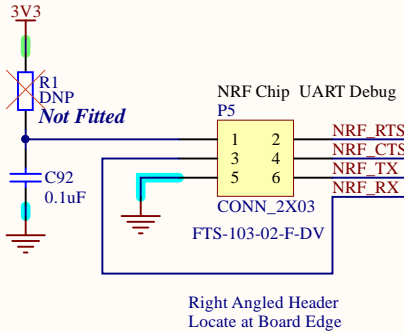
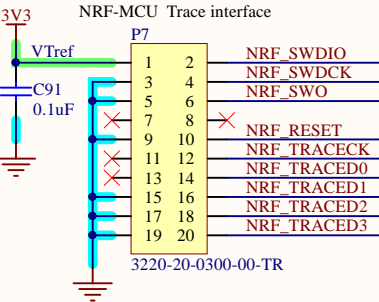
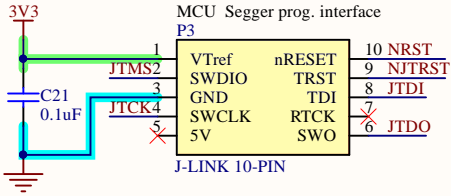
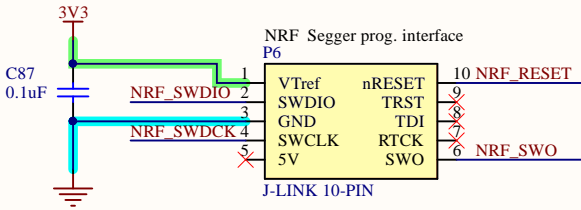




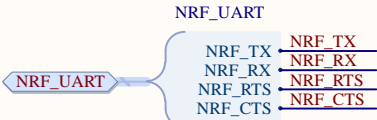
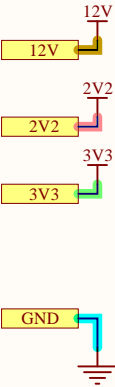
CONNECTORS



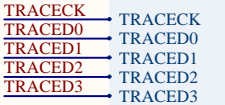
VTref is needed by the programming Tool. It indicates the programming voltage.



SIGNALS

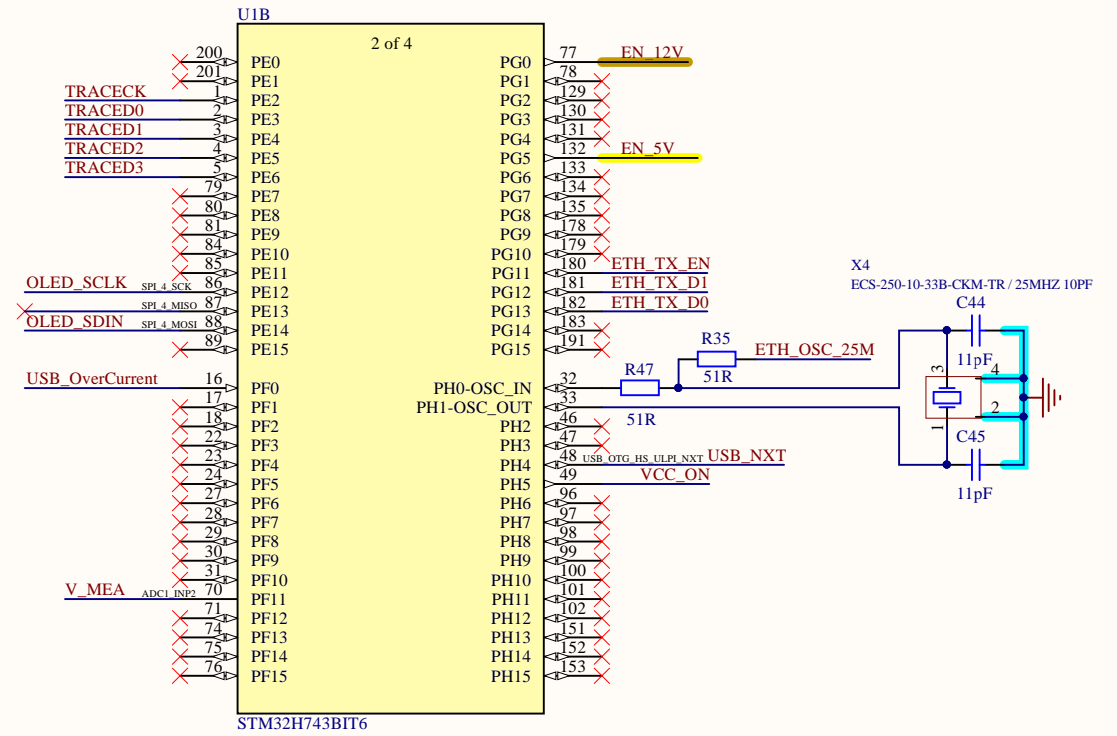
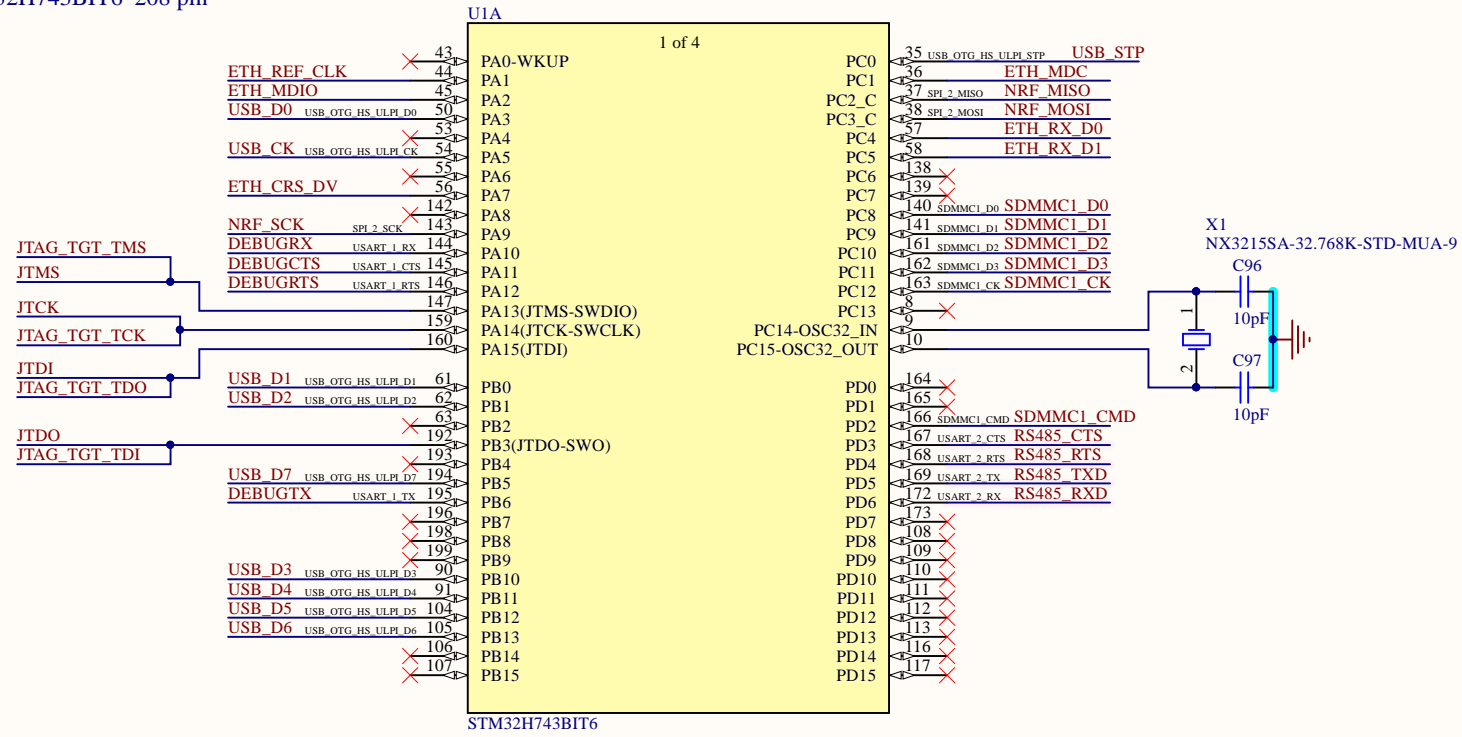


CONNECTORS

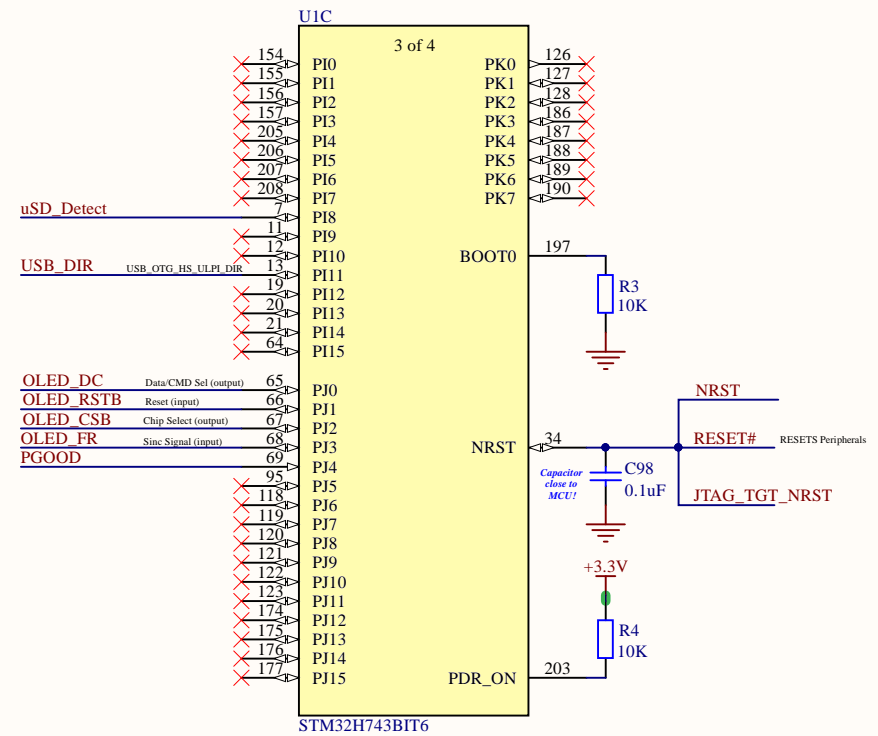
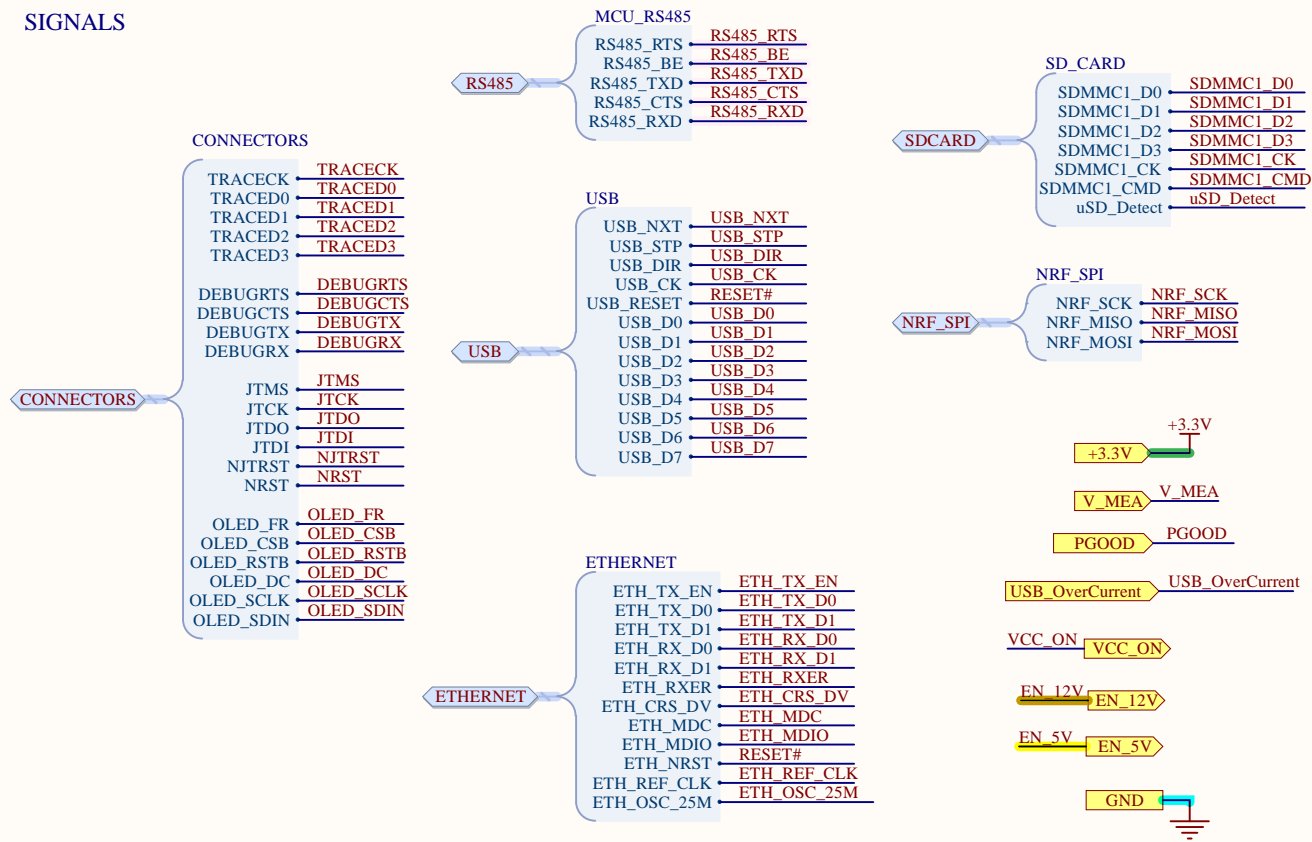



CONNECTORS

ARM M7 MCU 480 MHz  
STM32H743BIT6 208 pin



## SIGNALS

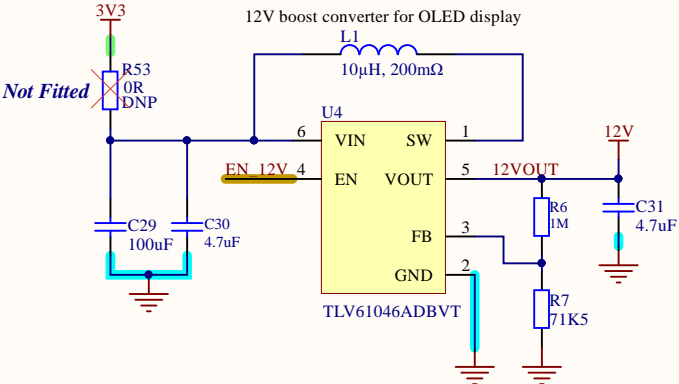
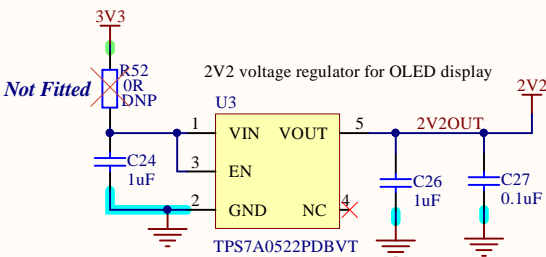
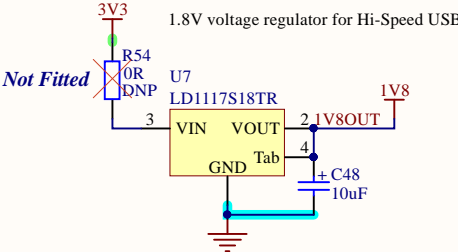
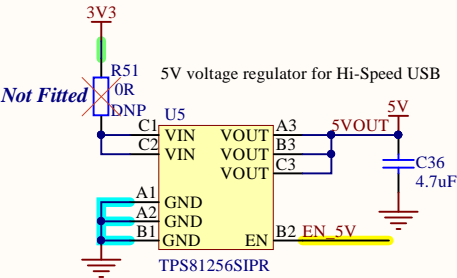


Title <b>MCU_STM32H743BI</b>			Reichle & De-Massari Binzstrasse 32 8620 Wetzikon Switzerland 
Size: <b>A3</b>	Number: <b>10</b>	Revision: <b>V0.1</b>	
Date: <b>1/29/2020</b>	Time: <b>7:51:50 AM</b>	Sheet 10 of 11	
File: <b>C:\Users\Public\Documents\Altium\Projects\IT_Asset_Tracking_Rack_Controller-H743_HW\MCU_STM32H743BI.SchDoc</b>			

POWER SUPPLIES

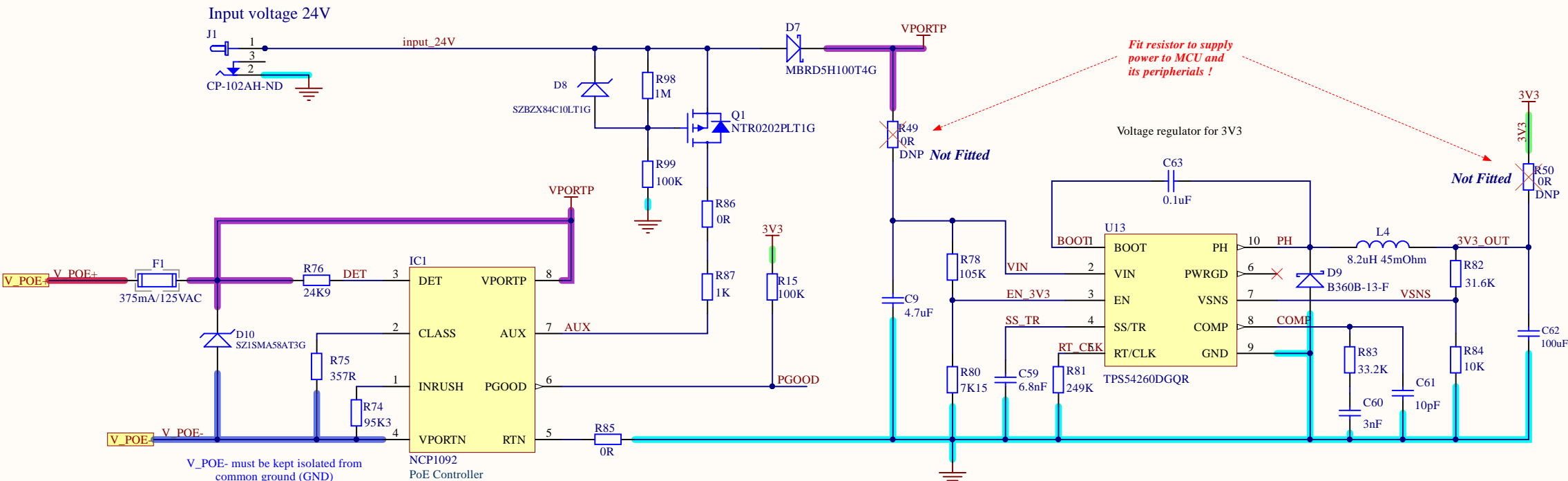
Power supplies for USB and OLED display

In order to use peripherals you need to fit resistors R51 to R54.



Place R51, R54 resp. R52 and R53 close to each other to indicate that both R's are needed to set the USB resp. OLED operational.

POE POWER CONVERSION



SIGNALS

