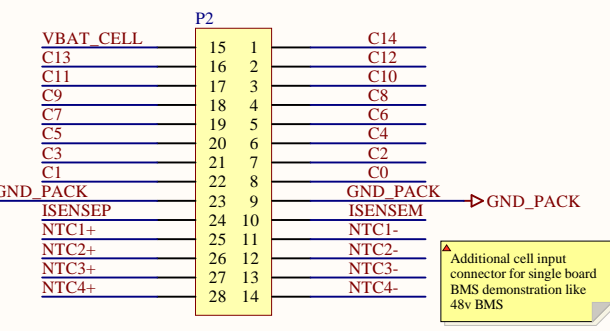
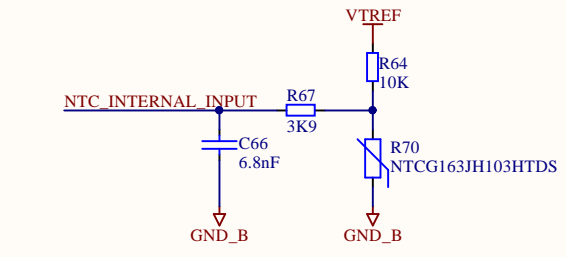
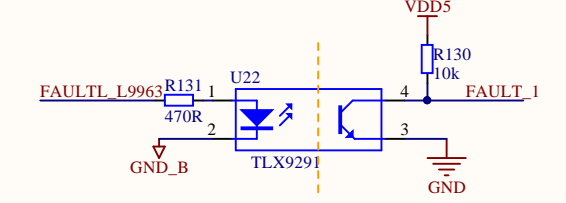
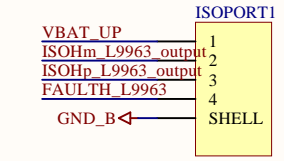


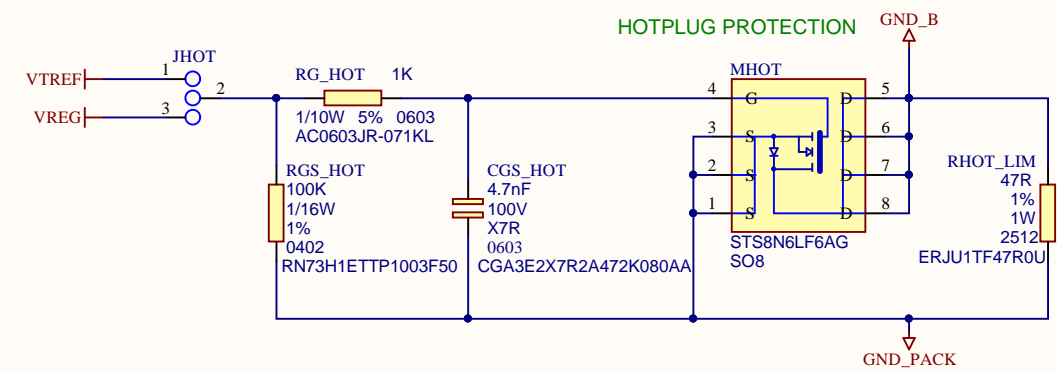
L9963/L9963T transceiver assembly note:



Additional cell input connector for single board BMS demonstration like 48v BMS

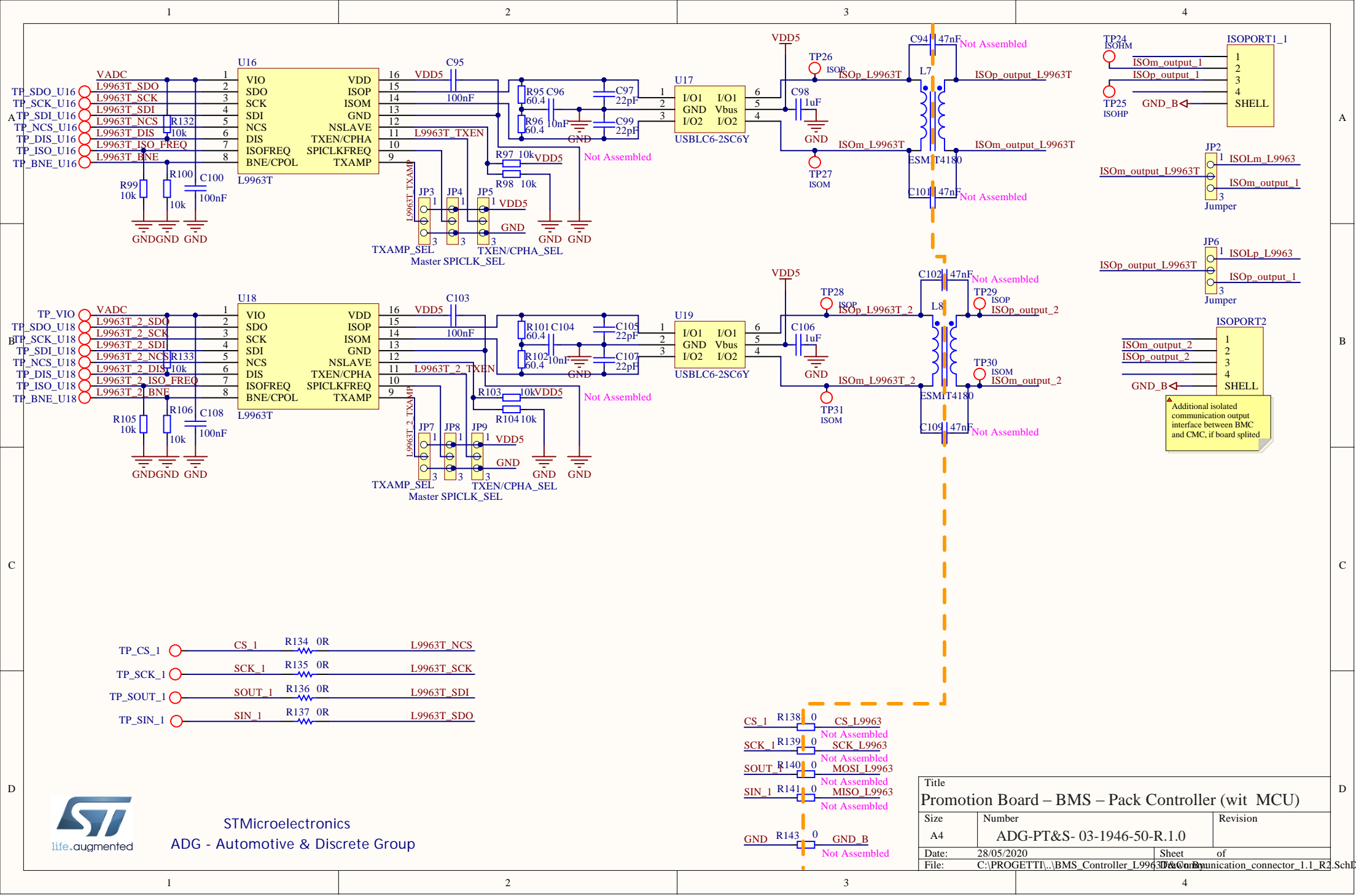


HOTPLUG PROTECTION



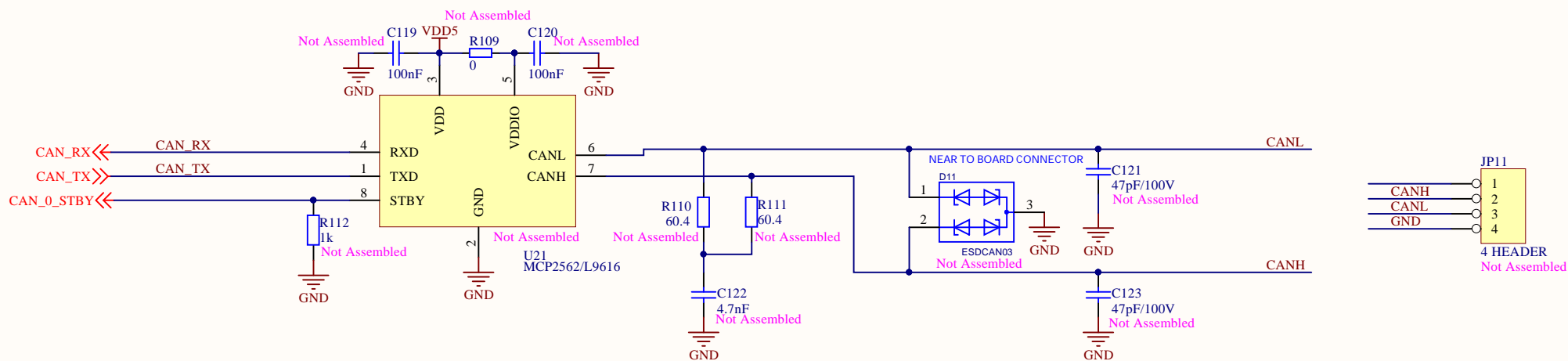
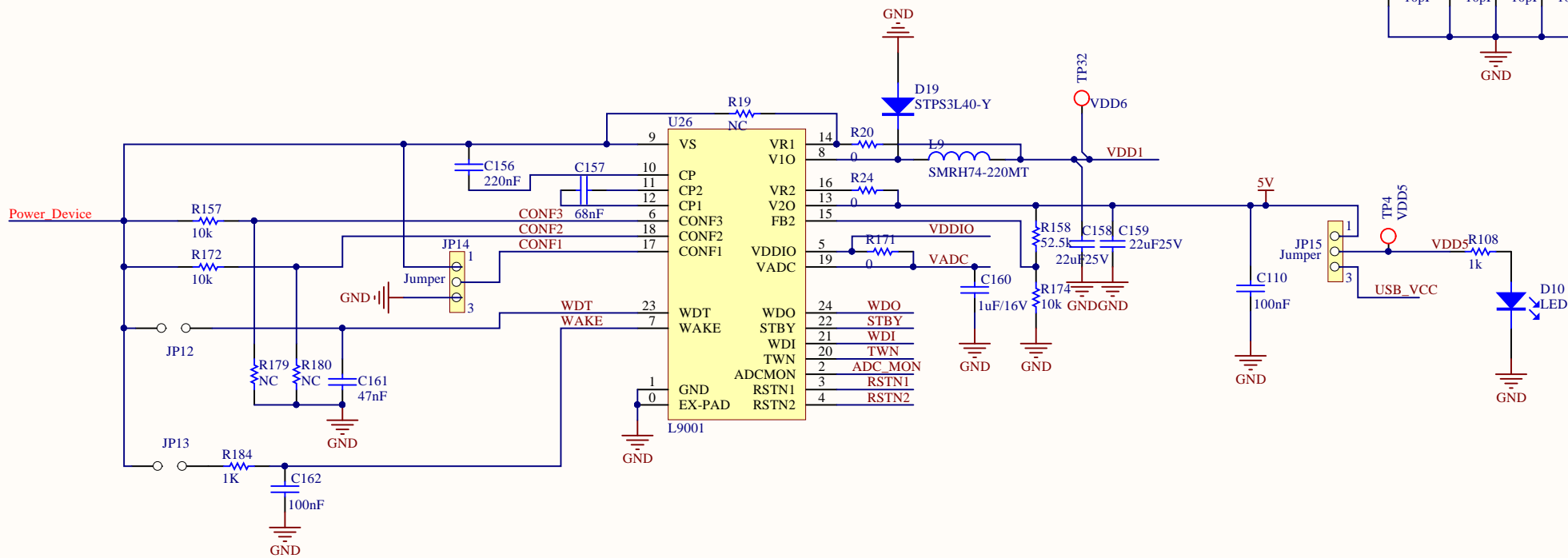
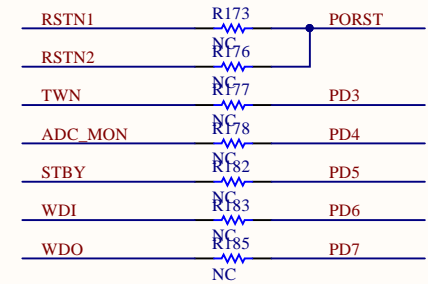
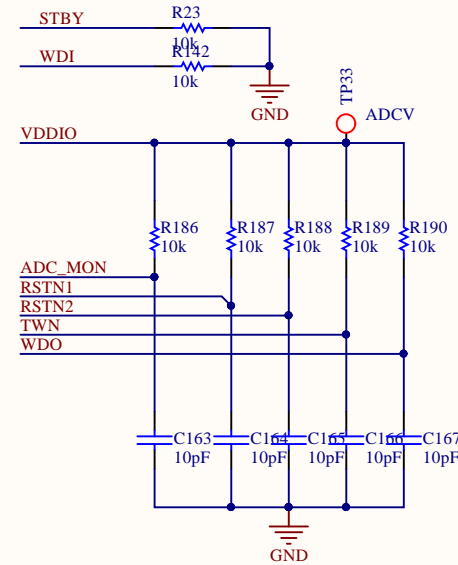
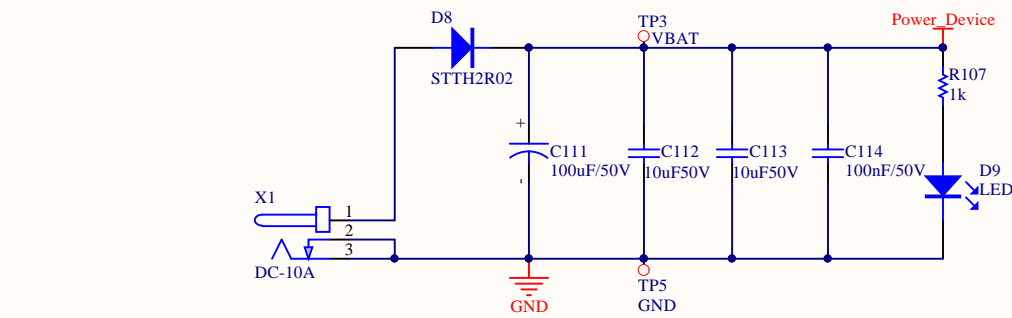
STMicroelectronics  
ADG - Automotive & Discrete Group

Title		
Promotion Board – BMS – Pack Controller (wit MCU)		
Size	Number	Revision
A3	ADG-PT&S- 03-1946-50-R.1.0	
Date:	28/05/2020	Sheet of
File:	C:\PROGETTI\BMS_Controller_L9963\DR3_SchDoc	



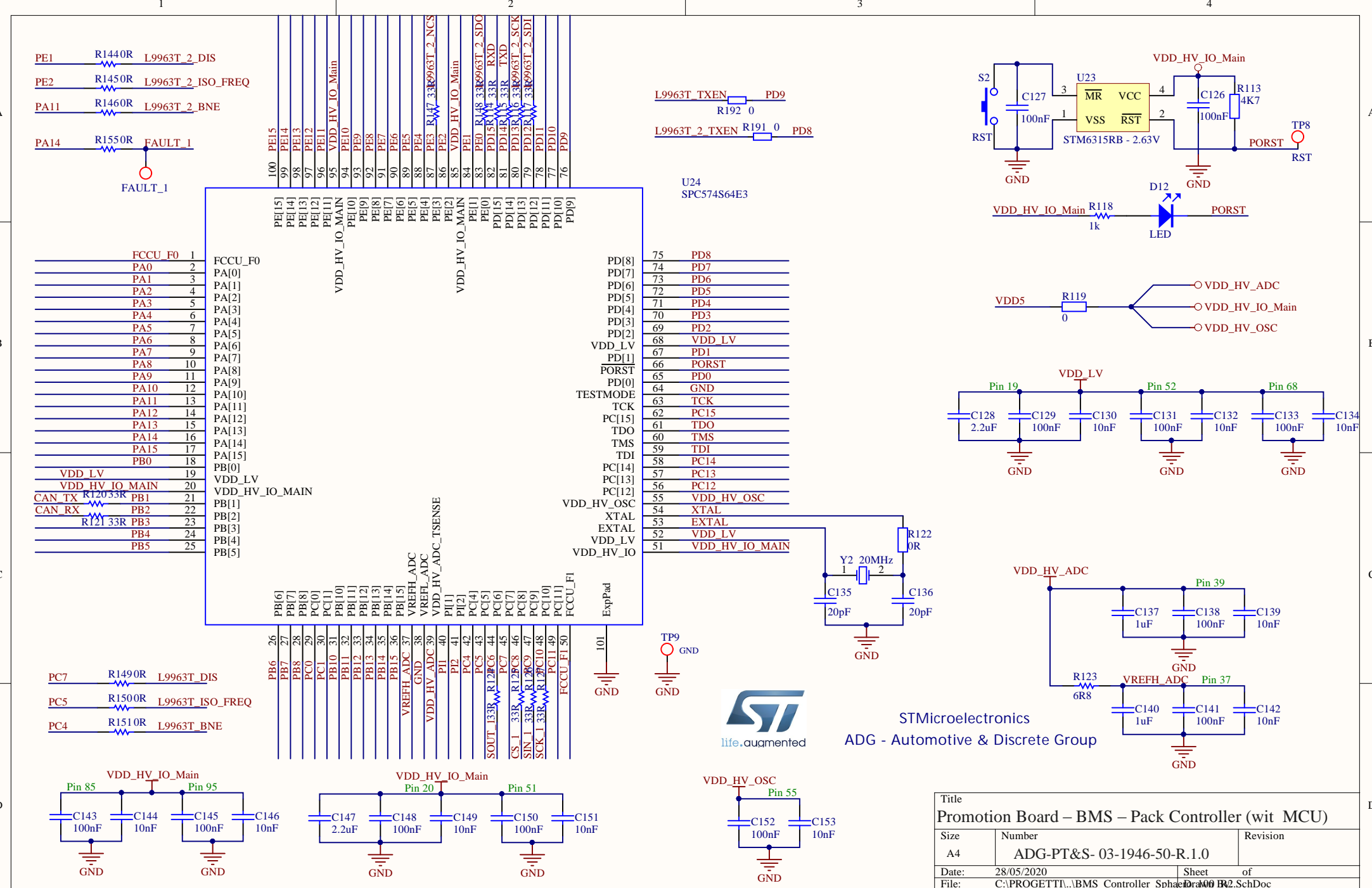
STMicroelectronics  
ADG - Automotive & Discrete Group

Title		
Promotion Board – BMS – Pack Controller (wit MCU)		
Size	Number	Revision
A4	ADG-PT&S- 03-1946-50-R.1.0	
Date:	28/05/2020	Sheet of
File:	C:\PROGETTI\...BMS_Controller_L9963D&C\Communication_connector_1.1_R3.Sch	



STMicroelectronics  
ADG - Automotive & Discrete Group

Title		
Promotion Board – BMS – Pack Controller (wit MCU)		
Size	Number	Revision
A3	ADG-PT&S- 03-1946-50-R.1.0	
Date:	28/05/2020	Sheet of
File:	C:\PROGETTI\BMS_Controller_PSU	Doc. No. Rev. Sch. Doc.



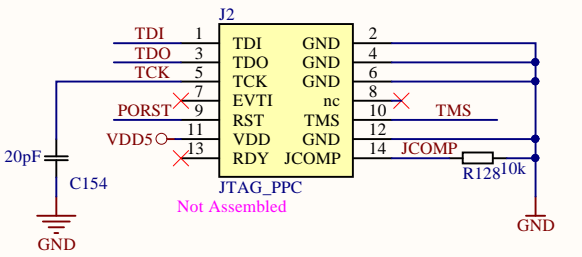
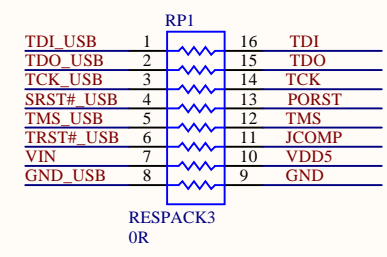
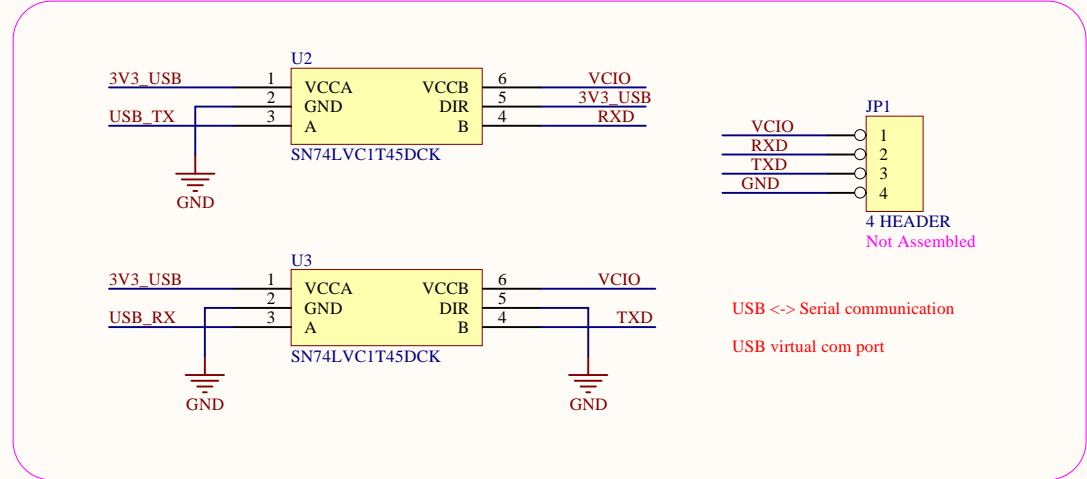
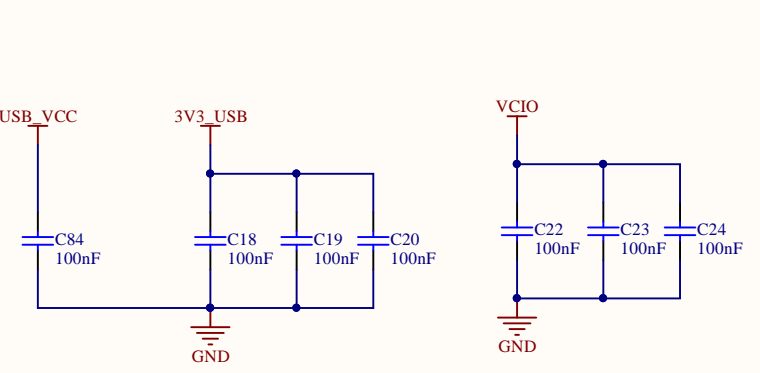
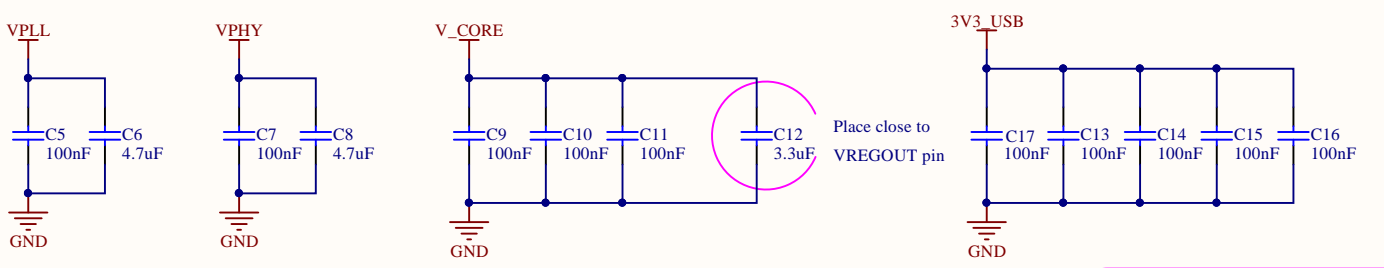
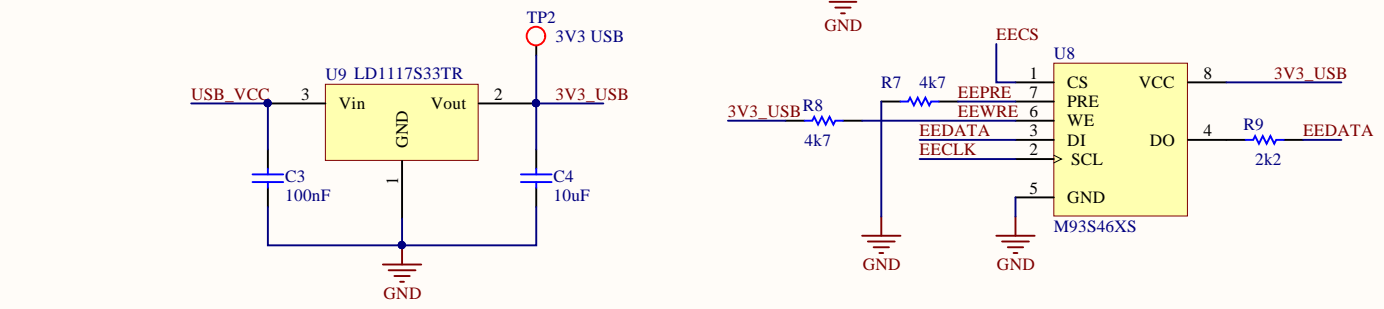
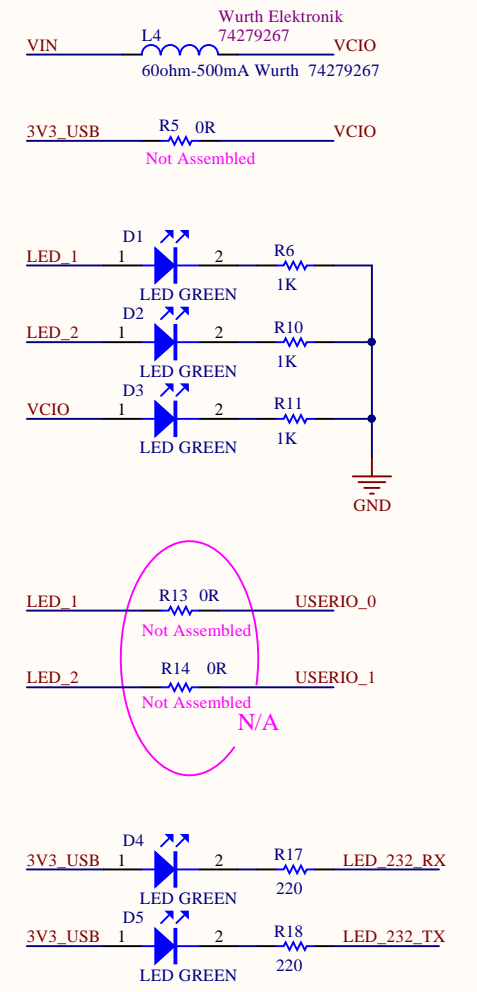
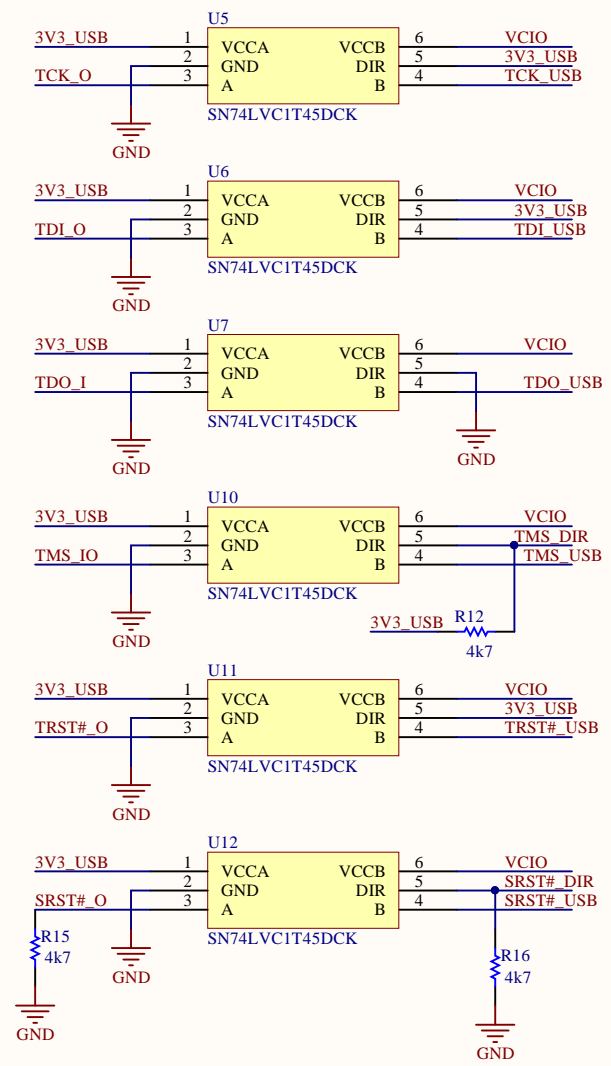
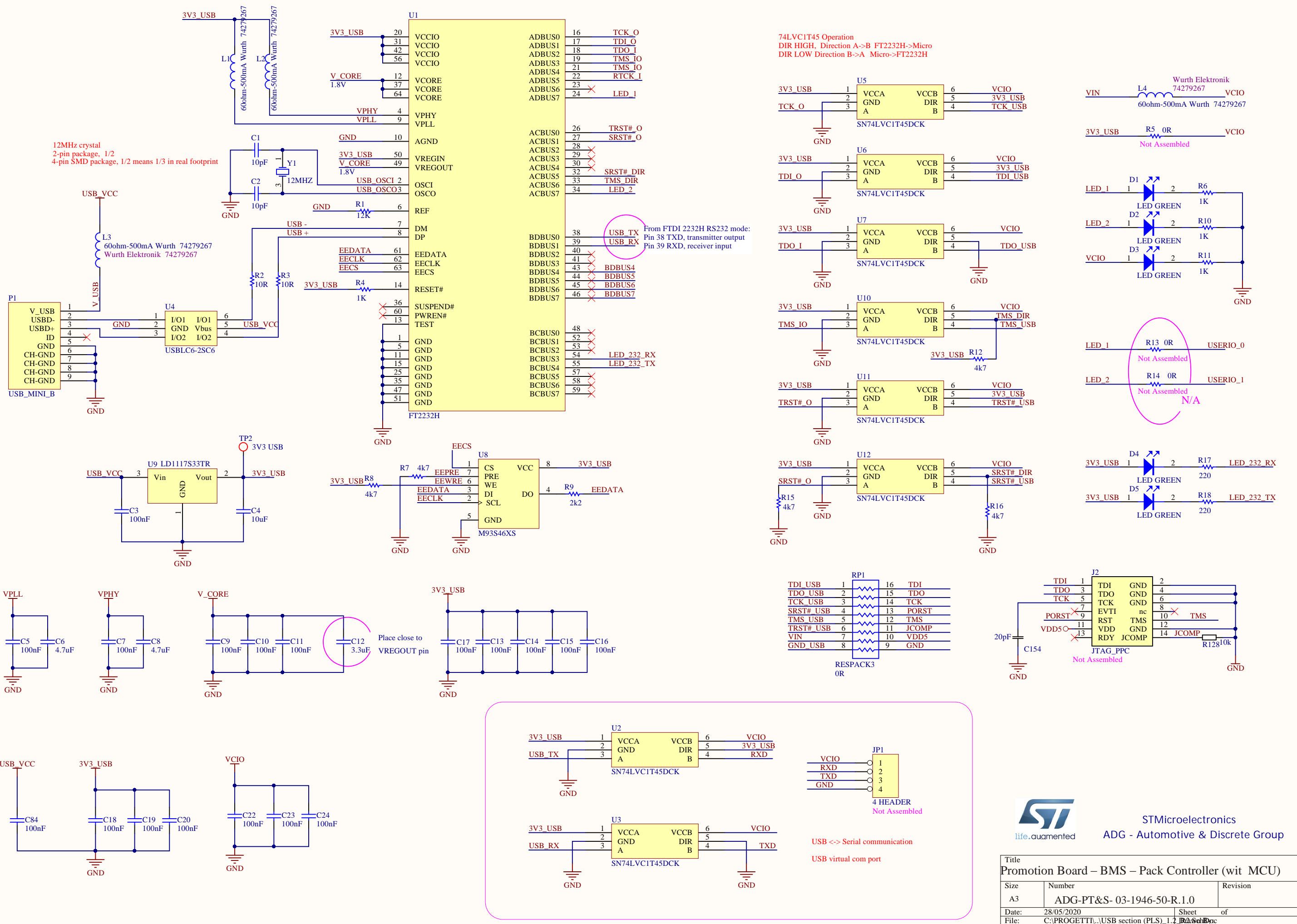
Title		
Promotion Board – BMS – Pack Controller (wit MCU)		
Size	Number	Revision
A4	ADG-PT&S- 03-1946-50-R.1.0	
Date:	28/05/2020	Sheet of
File:	C:\PROGETTI\...BMS_Controller_Sphaera\001\B2.SchDoc	



STMicroelectronics  
ADG - Automotive & Discrete Group

12MHz crystal  
2-pin package, 1/2  
4-pin SMD package, 1/2 means 1/3 in real footprint

74LVC1T45 Operation  
DIR HIGH, Direction A->B FT2232H->Micro  
DIR LOW Direction B->A Micro->FT2232H



Title Promotion Board – BMS – Pack Controller (wit MCU)		
Size A3	Number ADG-PT&S- 03-1946-50-R.1.0	Revision
Date: 28/05/2020	Sheet of	
File: C:\PROGETTI\USB section (PLS) 1.2\BzSchDoc		