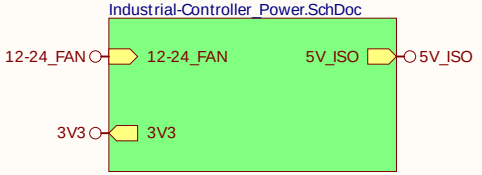
REVISION	DESCRIPTION	DATE	ECO	ENGINEER
0.1.0	Prototype	10/17/2022	0000	Podlesnyi V.S.

POWER

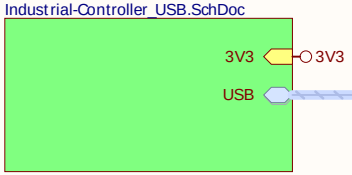
Power
Industrial-Controller_Power.SchDoc



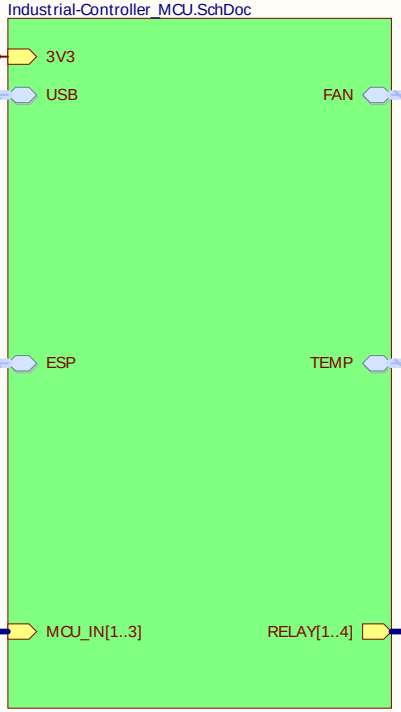
MCU

USB

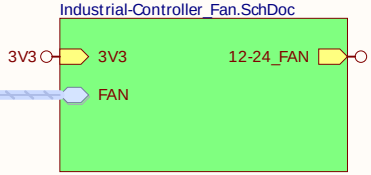
USB
Industrial-Controller_USB.SchDoc



MCU
Industrial-Controller_MCU.SchDoc



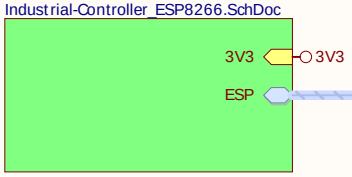
Fan
Industrial-Controller_Fan.SchDoc



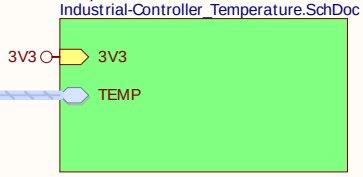
FAN

ESP

ESP8266
Industrial-Controller_ESP8266.SchDoc



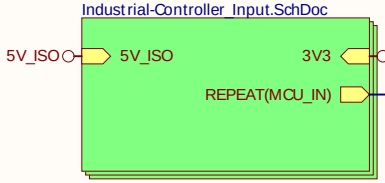
Temp sensor
Industrial-Controller_Temperature.SchDoc



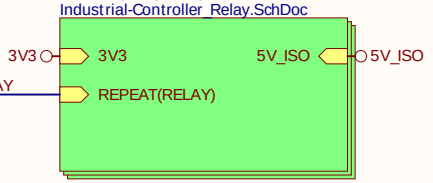
TEMP

INPUTS

REPEAT(Isolated inputs,1,3)
Industrial-Controller_Input.SchDoc



REPEAT(Relays,1,4)
Industrial-Controller_Relay.SchDoc



RELAYS

Title: Overview			MRobot, LCC nab. reki Karpovki, d. 5/3E Saint-Petersburg, 197022 Ph: +7 (911) 701-51-99
Project: Industrial PLC			
Size A	Number: 0000-0000	Revision 0.1.0	Engineer: Podlesnyi Vasilii
Date: 17.10.2022 Time: 20:17:24		Sheet 2 of 21	
File: Industrial-Controller_Overview.SchDoc			

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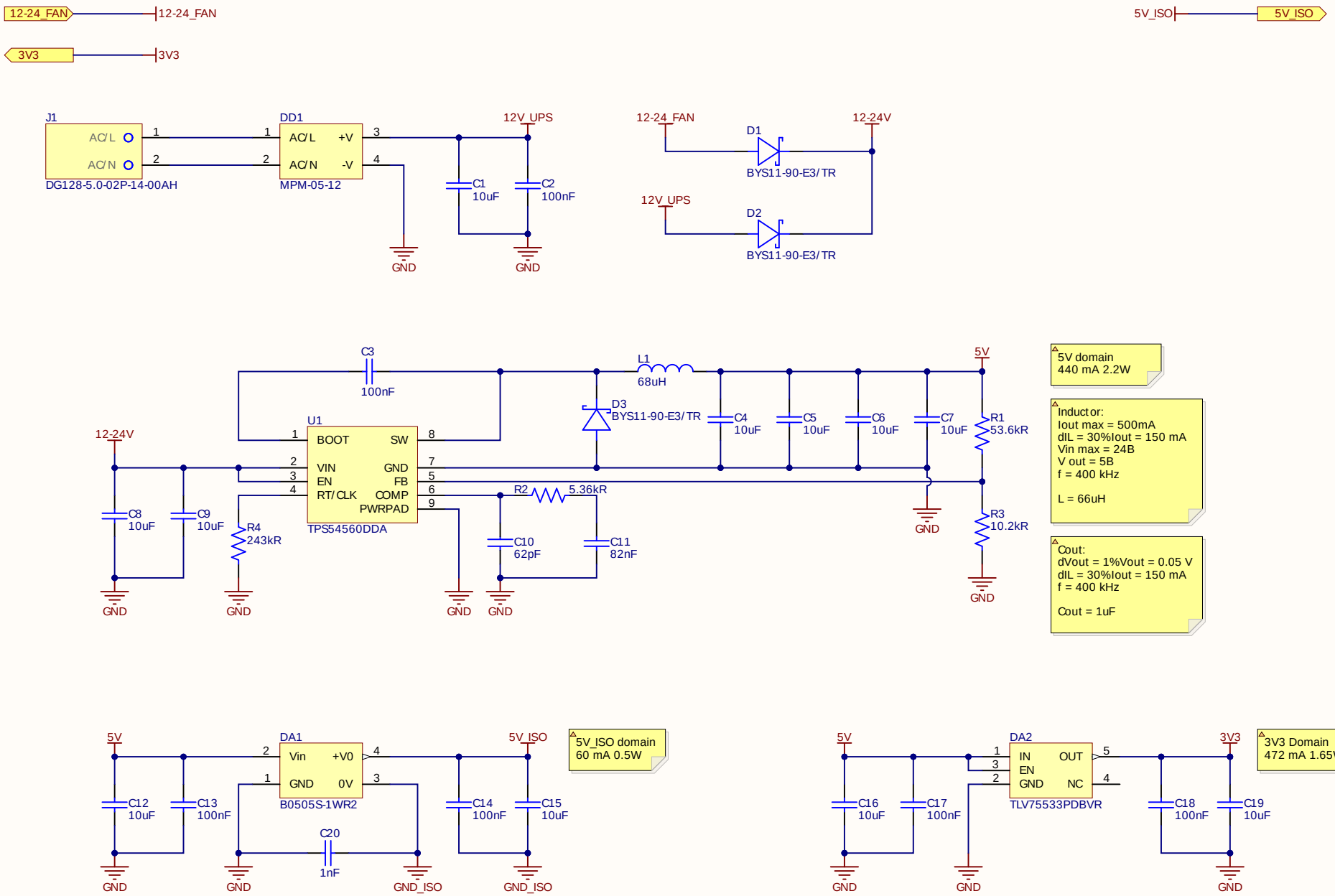

Title: Power			MRobot, LCC nab. reki Karpovki, d. 5/3E Saint-Petersburg, 197022 Ph: +7 (911) 701-51-99
Project: Industrial PLC			
Size A	Number: 0000-0000	Revision 0.1.0	Engineer: Podlesnyi Vasilii
Date: 17.10.2022 Time: 20:17:24		Sheet 3 of 21	
File: Industrial-Controller_Power.SchDoc			

MRobot
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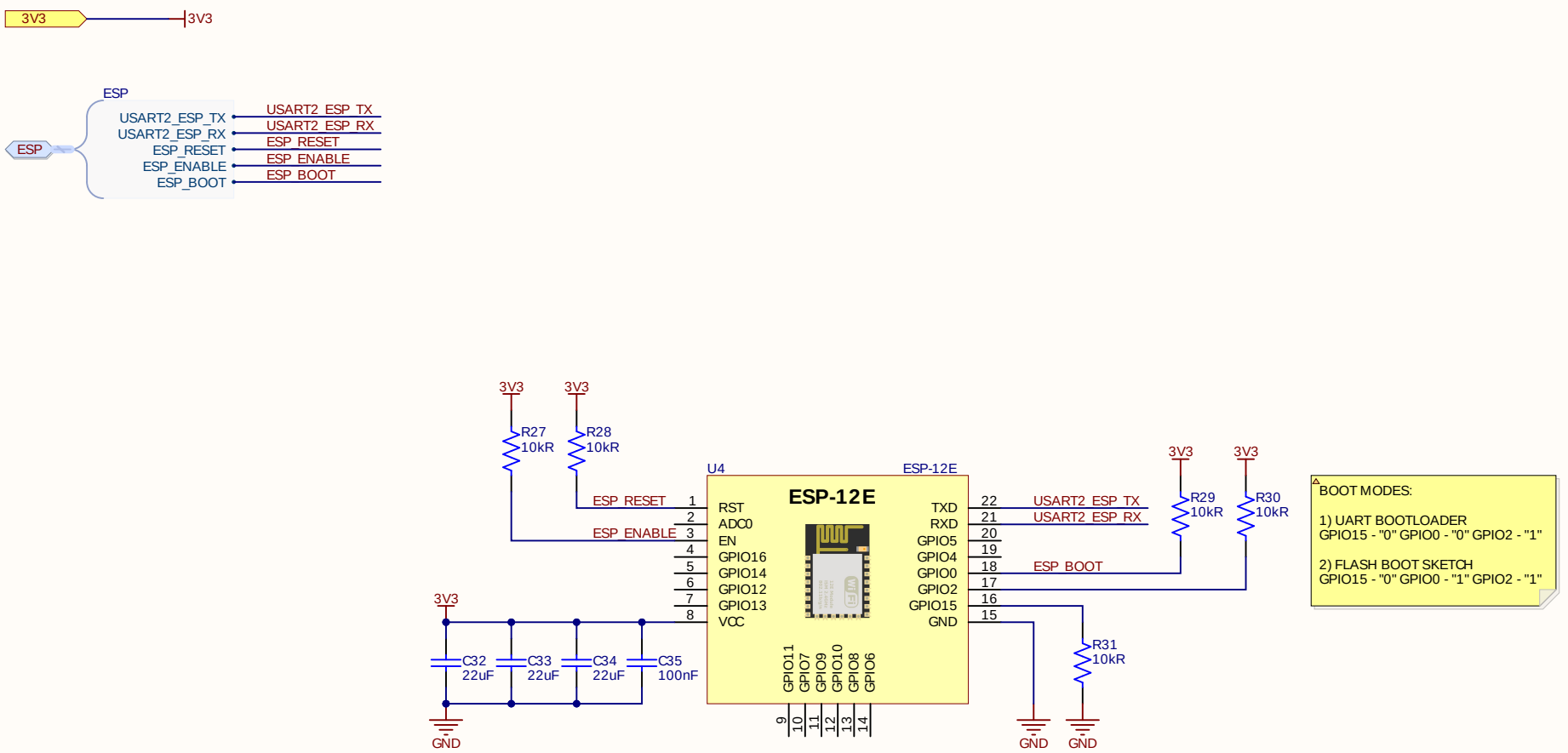

Title: ESP8266			MRobot, LCC nab. reki Karpovki, d. 5/3E Saint-Petersburg, 197022 Ph: +7 (911) 701-51-99
Project: Industrial PLC			
Size A	Number: 0000-0000	Revision 0.1.0	Engineer: Podlesnyi Vasilii
Date: 17.10.2022 Time: 20:17:24		Sheet 13 of 21	
File: Industrial-Controller_ESP8266.SchDoc			

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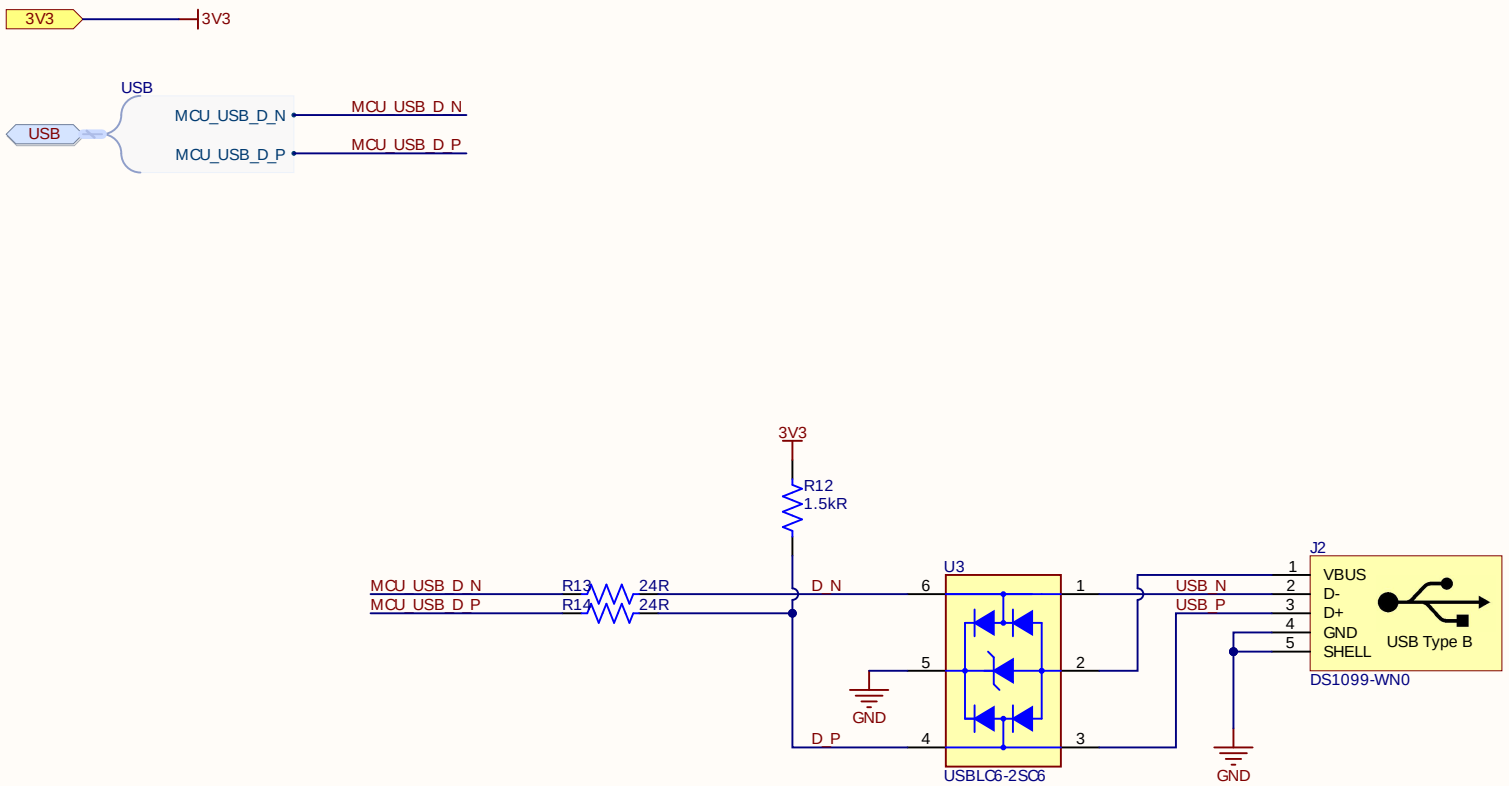

Title: USB			MRobot, LCC nab. reki Karpovki, d. 5/3E Saint-Petersburg, 197022 Ph: +7 (911) 701-51-99
Project: Industrial PLC			
Size A	Number: 0000-0000	Revision 0.1.0	Engineer: Podlesnyi Vasilii
Date: 17.10.2022 Time: 20:17:24		Sheet 14 of 21	
File: Industrial-Controller_USB.SchDoc			

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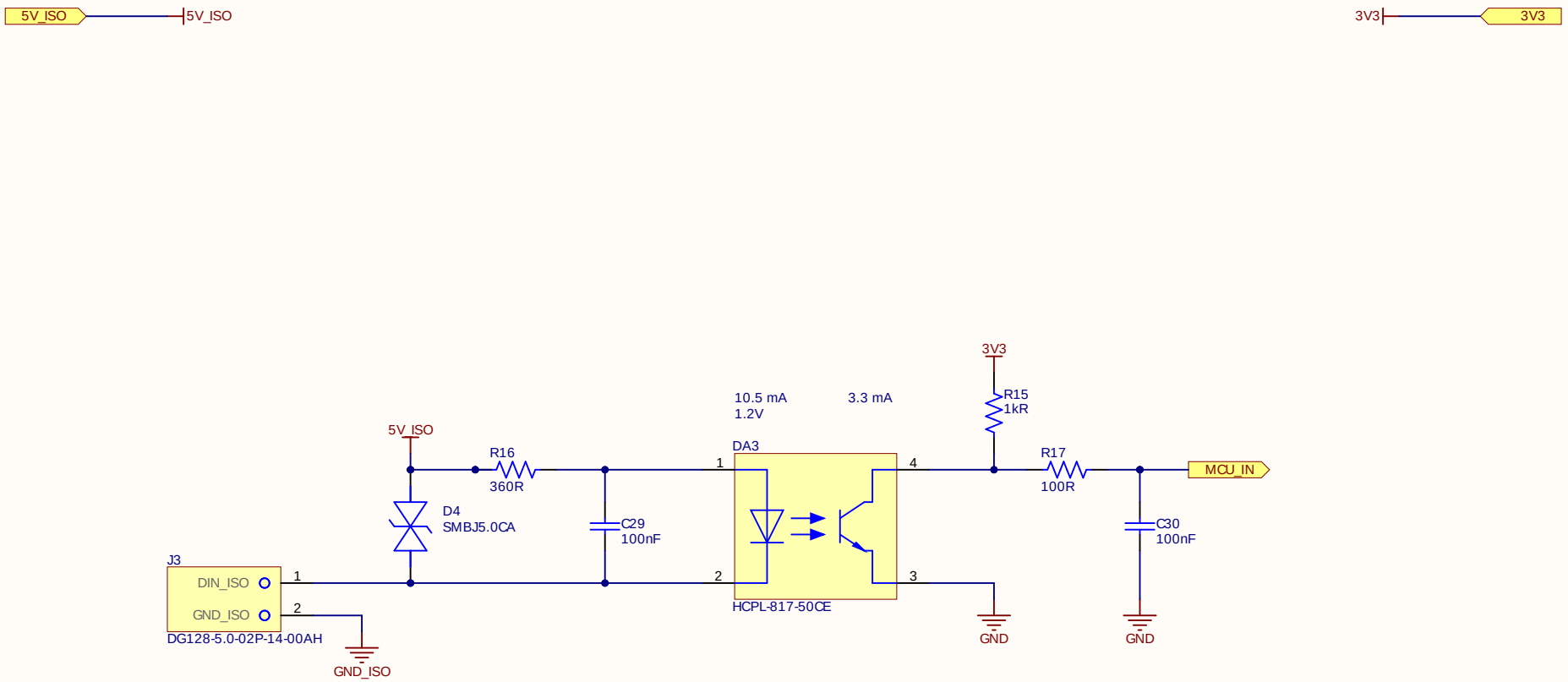

Current consumption: (5V-1.2V) / 360 Ом = 10.5 mA

Power dissipation: 0.0105 A * 0.0105 A * 360 Ом =0.04 W (0.1 max)

Title: Isolated inputs			MRobot, LCC nab. reki Karpovki, d. 5/3E Saint-Petersburg, 197022 Ph: +7 (911) 701-51-99
Project: Industrial PLC			
Size A	Number: 0000-0000	Revision 0.1.0	Engineer: Podlesnyi Vasilii
Date: 17.10.2022 Time: 20:17:24		Sheet 17 of 21	
File: Industrial-Controller_Input.SchDoc			

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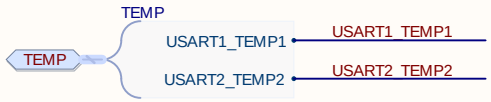

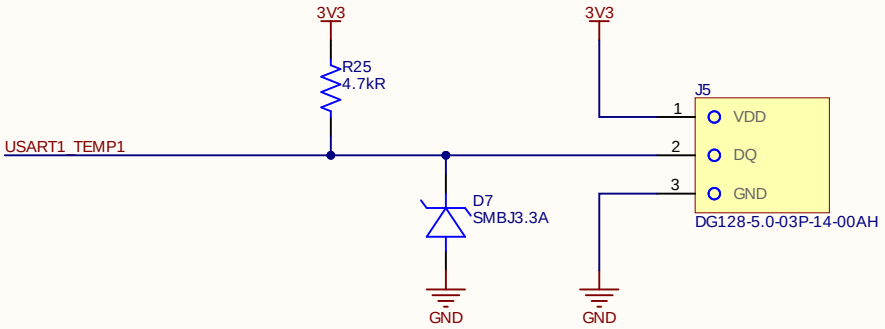

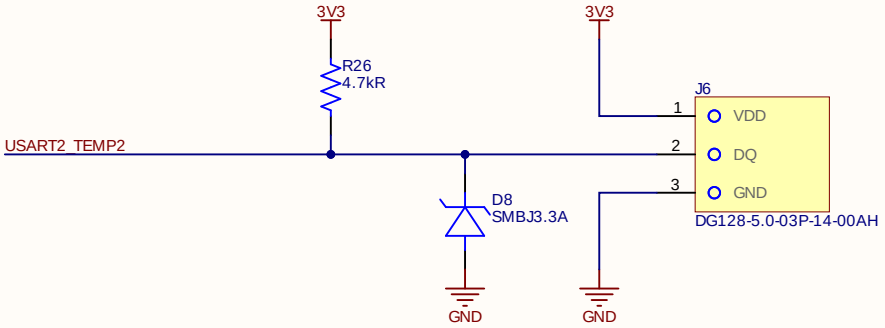

Title: Temp sensor			MRobot, LCC nab. reki Karpovki, d. 5/3E Saint-Petersburg, 197022 Ph: +7 (911) 701-51-99
Project: Industrial PLC			
Size A	Number: 0000-0000	Revision 0.1.0	Engineer: Podlesnyi Vasilii
Date: 17.10.2022 Time: 20:17:24		Sheet 18 of 21	
File: Industrial-Controller_Temperature.SchDoc			

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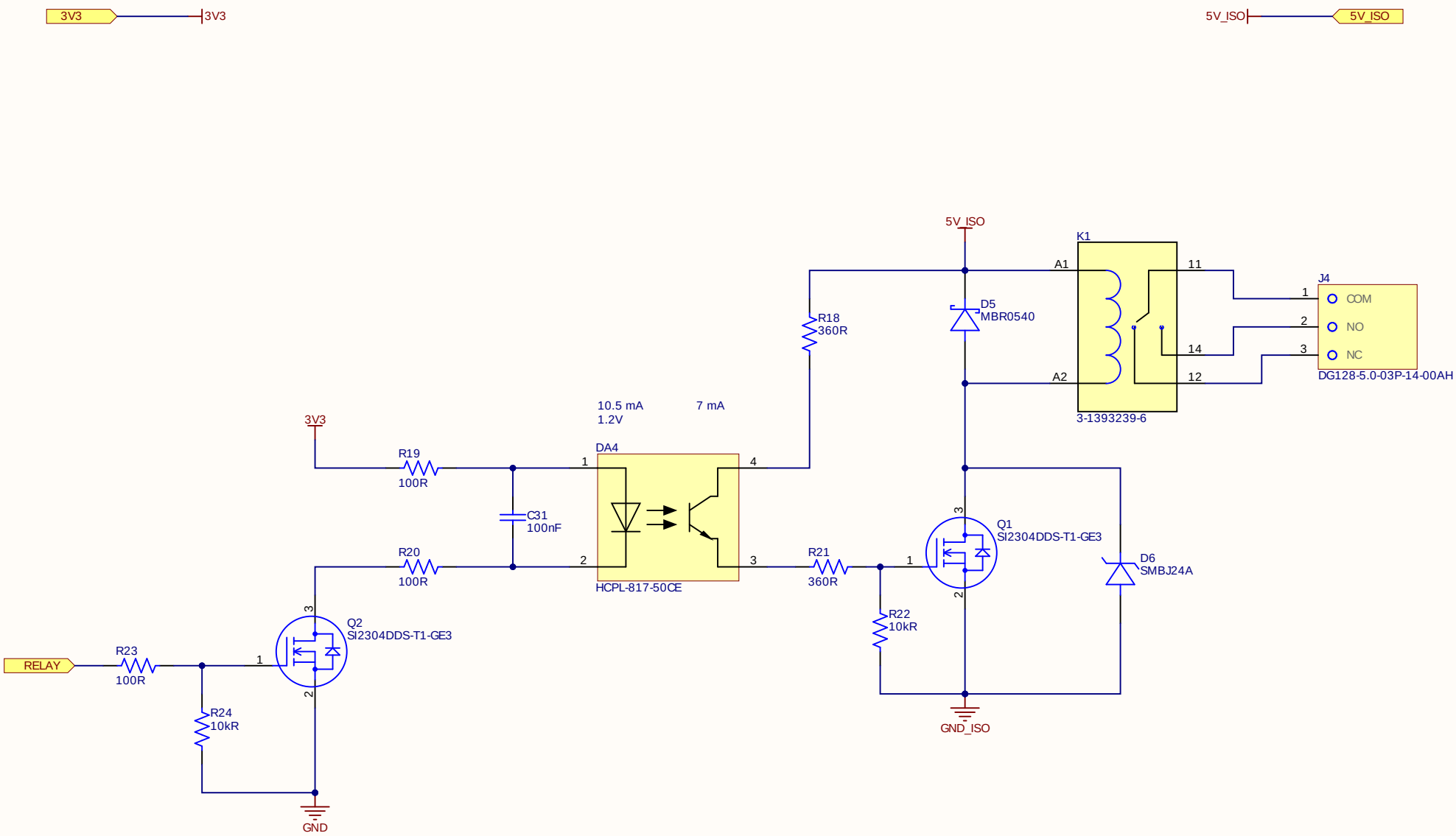

Current consumption: (3.3V-1.2V) / 200 Ом = 10.5 mA

Power dissipation: 0.0105 A * 0.0105 A * 200 Ом =0.02 W (0.1 max)

Title: Relays			MRobot, LCC nab. reki Karpovki, d. 5/3E Saint-Petersburg, 197022 Ph: +7 (911) 701-51-99
Project: Industrial PLC			
Size A	Number: 0000-0000	Revision 0.1.0	Engineer: Podlesnyi Vasilii
Date: 17.10.2022	Time: 20:17:24	Sheet 19 of 21	
File: Industrial-Controller_Relay.SchDoc			

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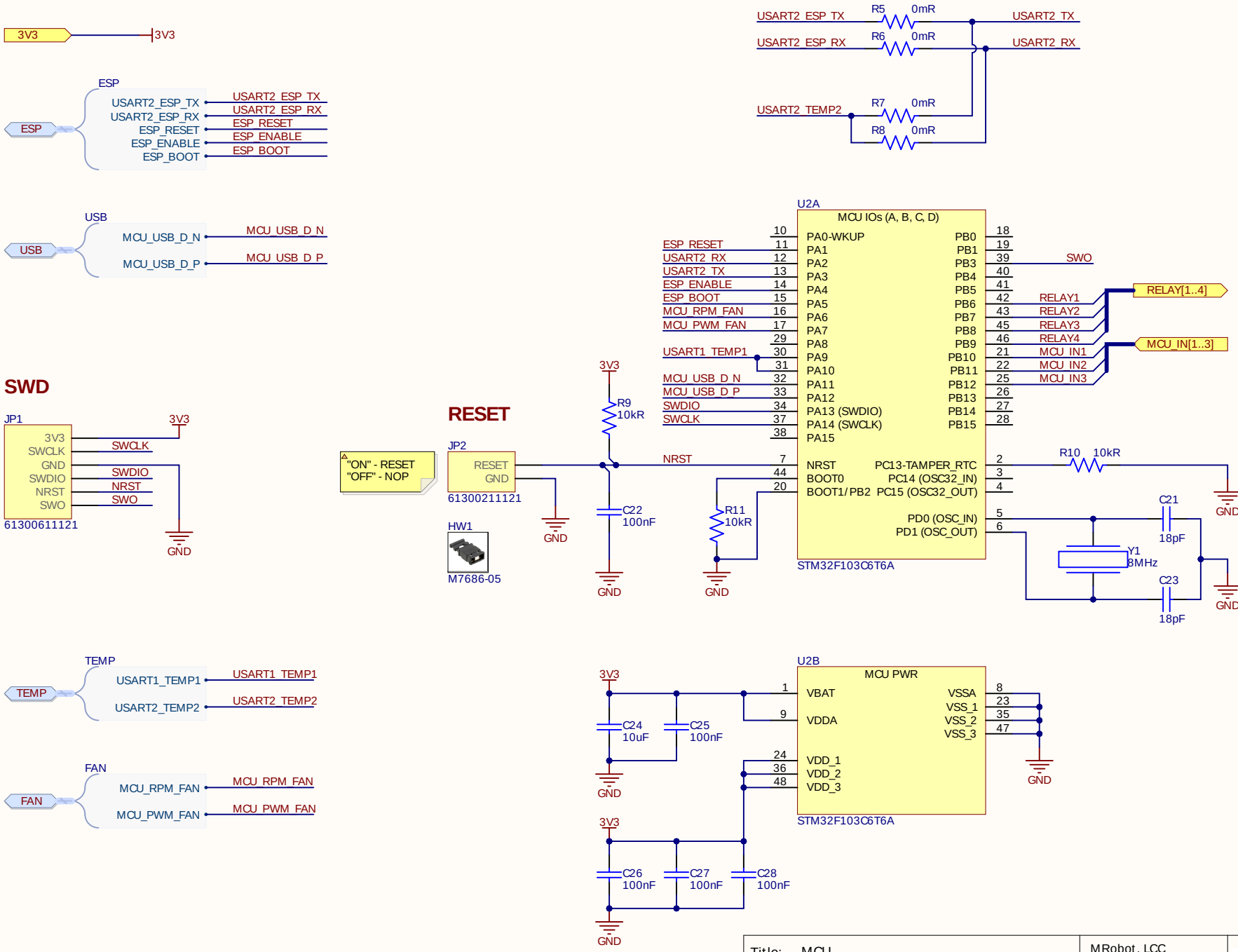

Title: MCU			MRobot, LCC nab. reki Karpovki, d. 5/3E Saint-Petersburg, 197022 Ph: +7 (911) 701-51-99
Project: Industrial PLC			
Size A	Number: 0000-0000	Revision 0.1.0	Engineer: Podlesnyi Vasilii
Date: 17.10.2022 Time: 20:17:24		Sheet 19 of 21	
File: Industrial-Controller_MCU.SchDoc			

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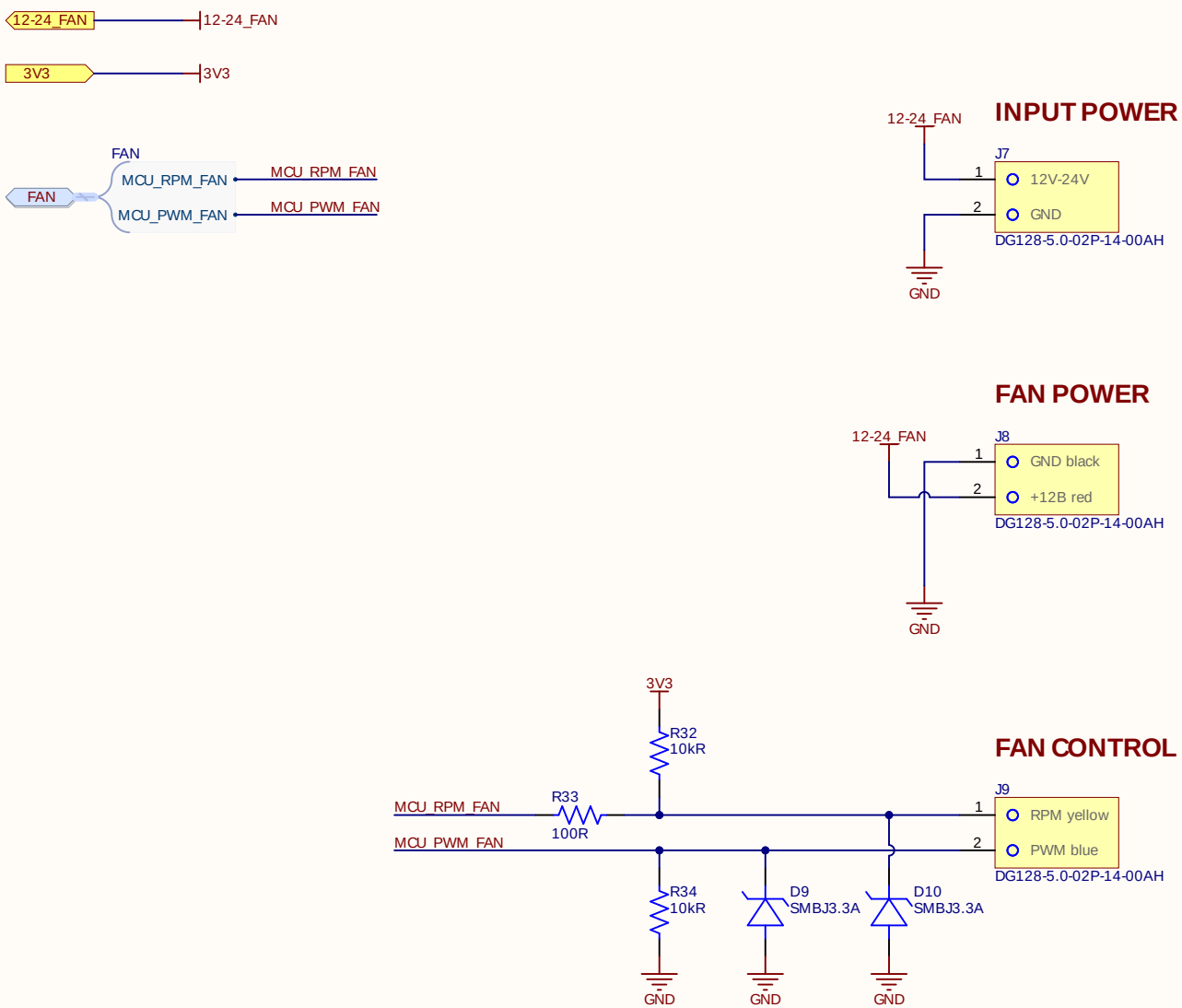

Title: Fan			MRobot, LCC nab. reki Karpovki, d. 5/3E Saint-Petersburg, 197022 Ph: +7 (911) 701-51-99
Project: Industrial PLC			
Size A	Number: 0000-0000	Revision 0.1.0	Engineer: Podlesnyi Vasilii
Date: 17.10.2022 Time: 20:17:24		Sheet 20 of 21	
File: Industrial-Controller_Fan.SchDoc			

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