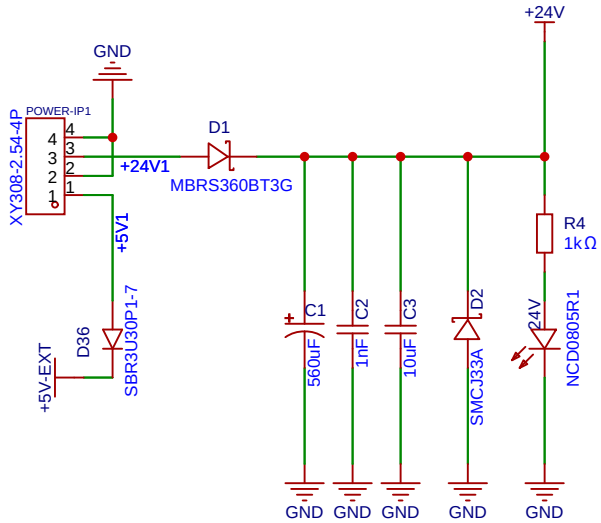
DC 24V PROTECTION

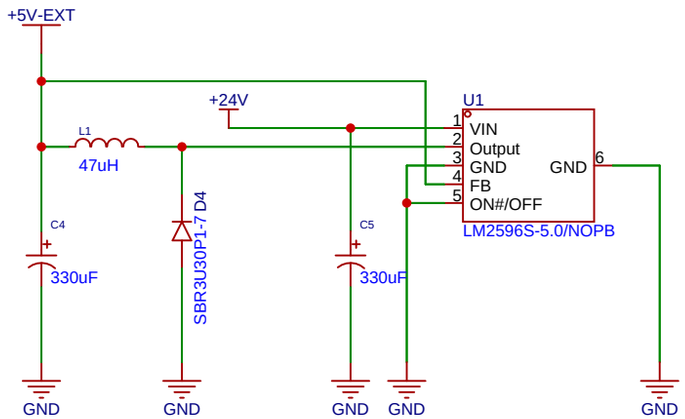


Schematic	Main-Controller-Schem_3	Update Date	2025-08-22
		Create Date	2025-08-21
Page	24V-Power-Protection	Part Number	JLCPCB-002
Drawn	EasyEDA	DAC-Main-controller	
Reviewed	EasyEDA		
		VER	SIZE
EasyEDA	V0.1	A4	EasyEDA.com

NOTES

CHANGE 1: Got rid of the BJT 5V Protection
CHANGE 2: Replaced inductor L1 (C167265) which saturated at 2.5A with (C149599) which saturates at 3A.
CHANGE 3: Got rid of 12V power protection and added 24V power protection.

BUCK 12V - 5V OUTPUT



Schematic	Main-Controller-Schem_3	Update Date	2025-08-21
		Create Date	2025-08-21
Page	5V-Power	Part Number	JLCPCB-002
Drawn	EasyEDA	DAC-Main-controller	
Reviewed	EasyEDA		
		VER	SIZE
		V0.1	A4

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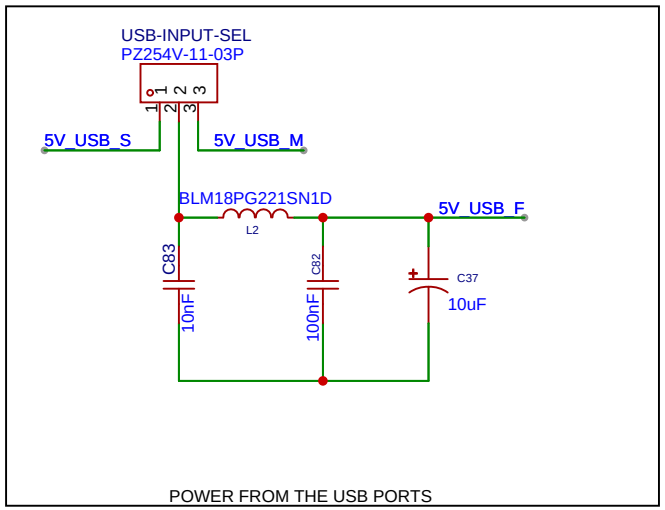
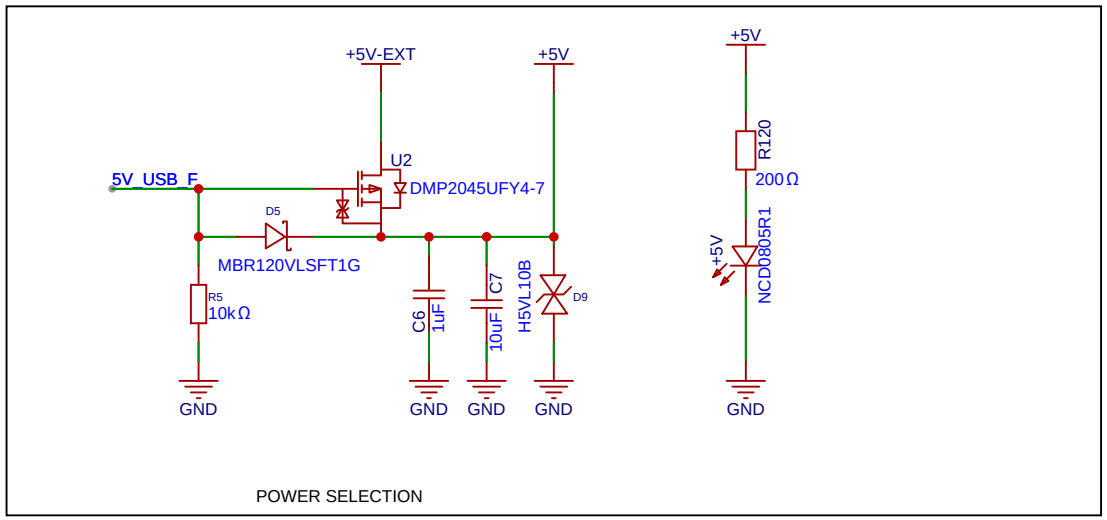
EasyEDA.com

POWER SUPPLY SELECTION



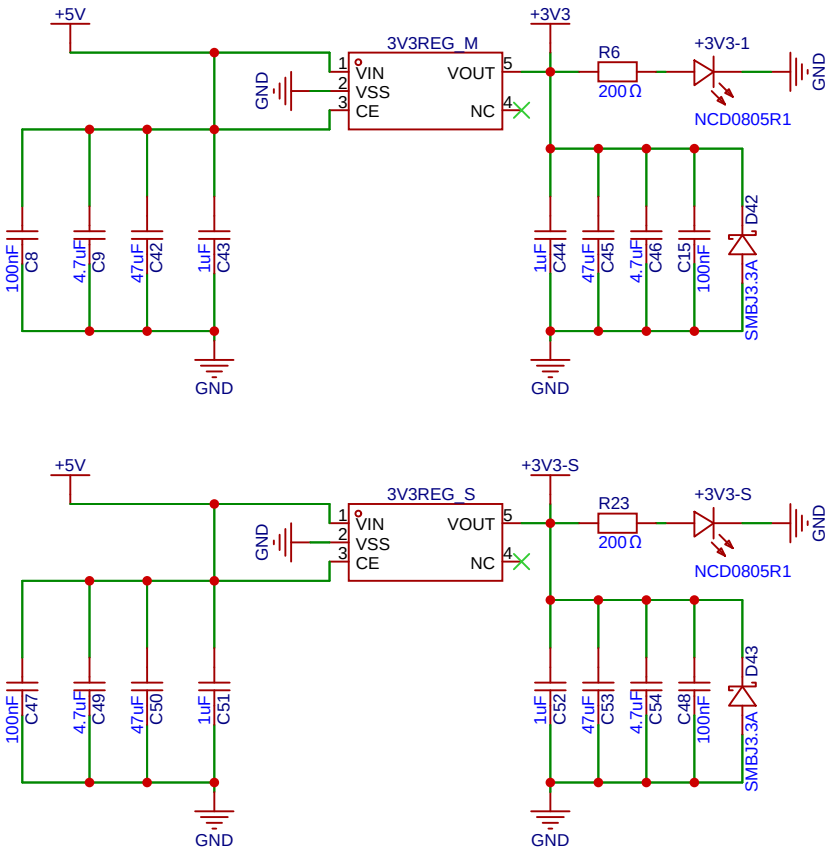
POWER FROM THE USB PORTS



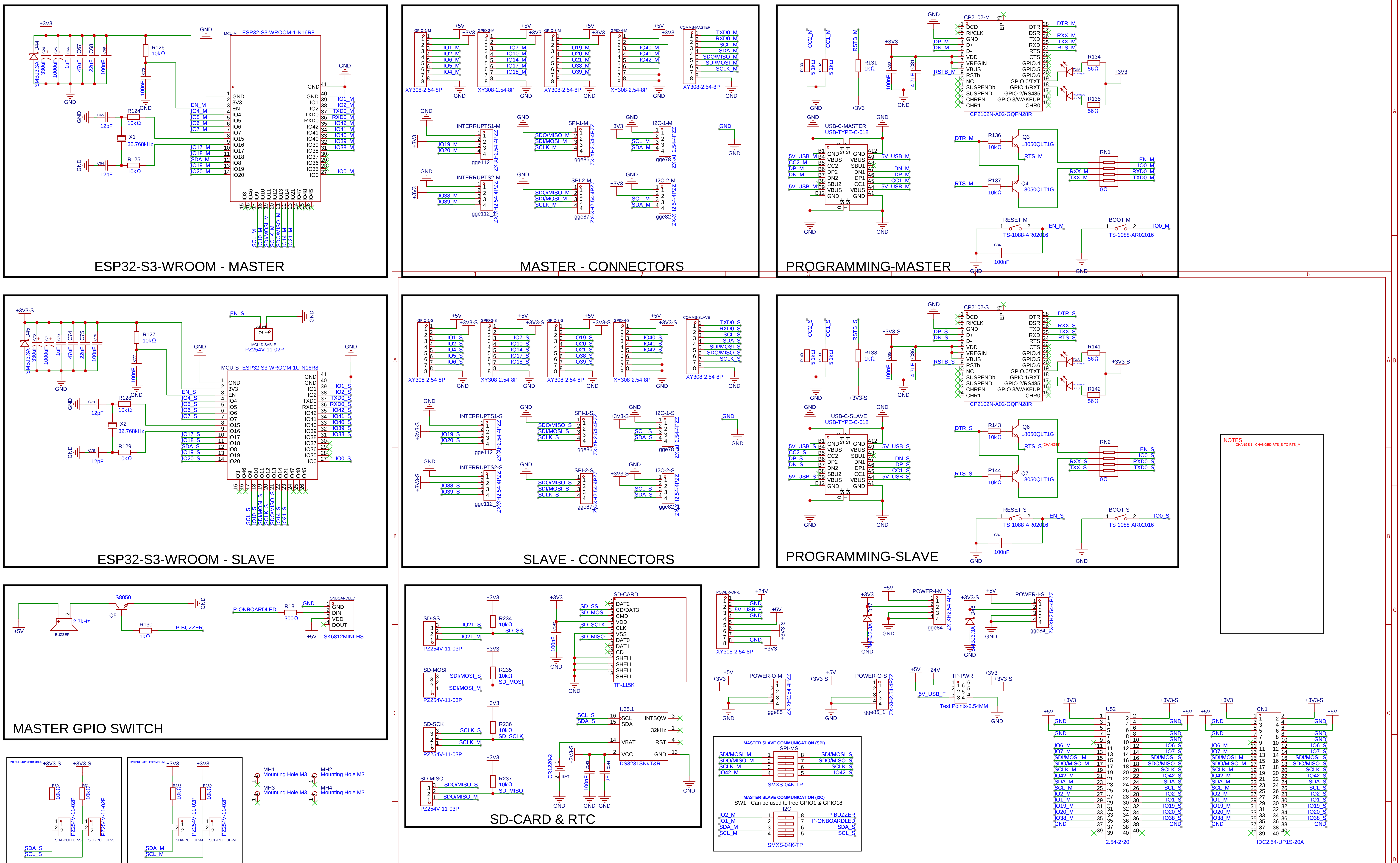
POWER SELECTION

Schematic	Main-Controller-Schem_3	Update Date	2025-10-16
		Create Date	2025-08-21
Page	Power-Selection	Part Number	JLCPCB-002
Drawn	EasyEDA	DAC-Main-controller	
Reviewed	EasyEDA		
		VER	SIZE
		V0.1	A4
EasyEDA		PAGE 3 OF 9	EasyEDA.com

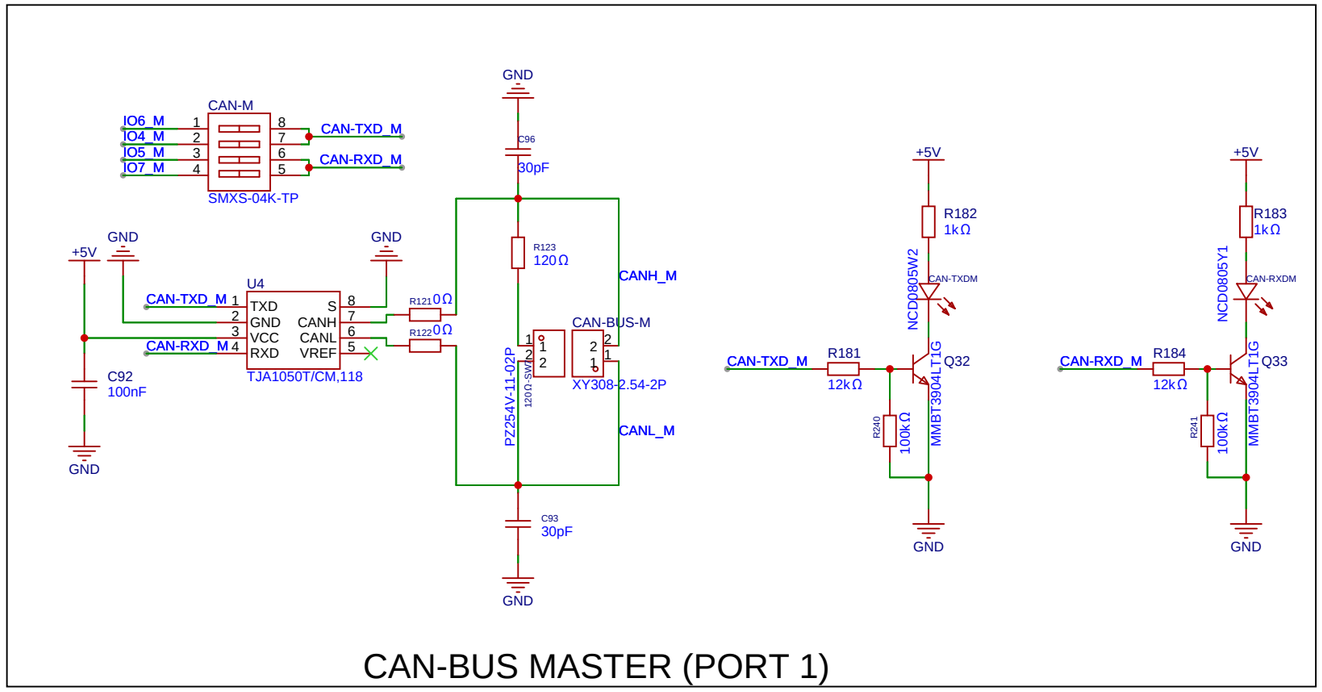
DC 5V TO DC 3V3



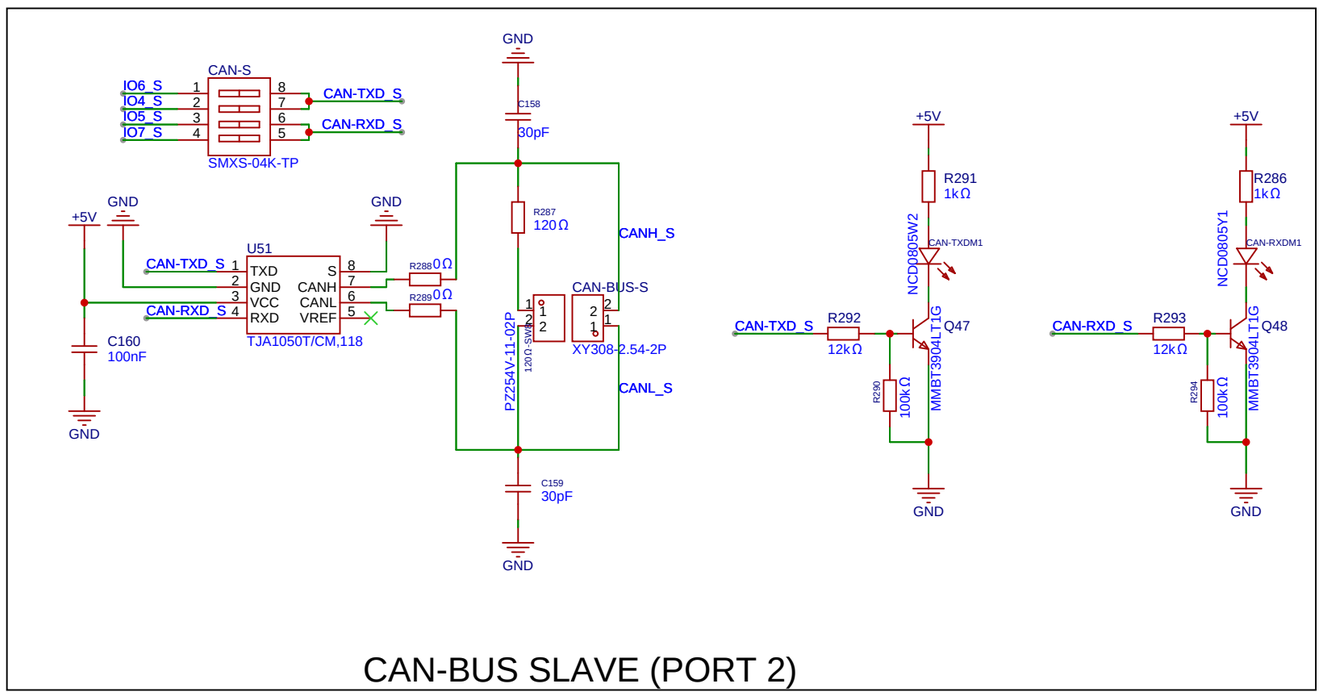
Schematic	Main-Controller-Schem_3	Update Date	2025-09-08
		Create Date	2025-08-21
Page	3V3-Power	Part Number	JLCPCB-002
Drawn	EasyEDA	DAC-Main-controller	
Reviewed	EasyEDA		
		VER	SIZE
		PAGE 4 OF 9	
EasyEDA		V0.1	A4
		EasyEDA.com	



Schematic	Main-Controller-Schem_3	Update Date	2025-10-16
		Create Date	2025-08-21
Page	ESP32-Modular	Part Number	001
Drawn	OC-I & C		
Reviewed	OC-I & C	DAC-Main-controller	
	VER	SIZE	PAGE 5 OF 9
EasyEDA	V2.0	A3	OctaviaCarbon

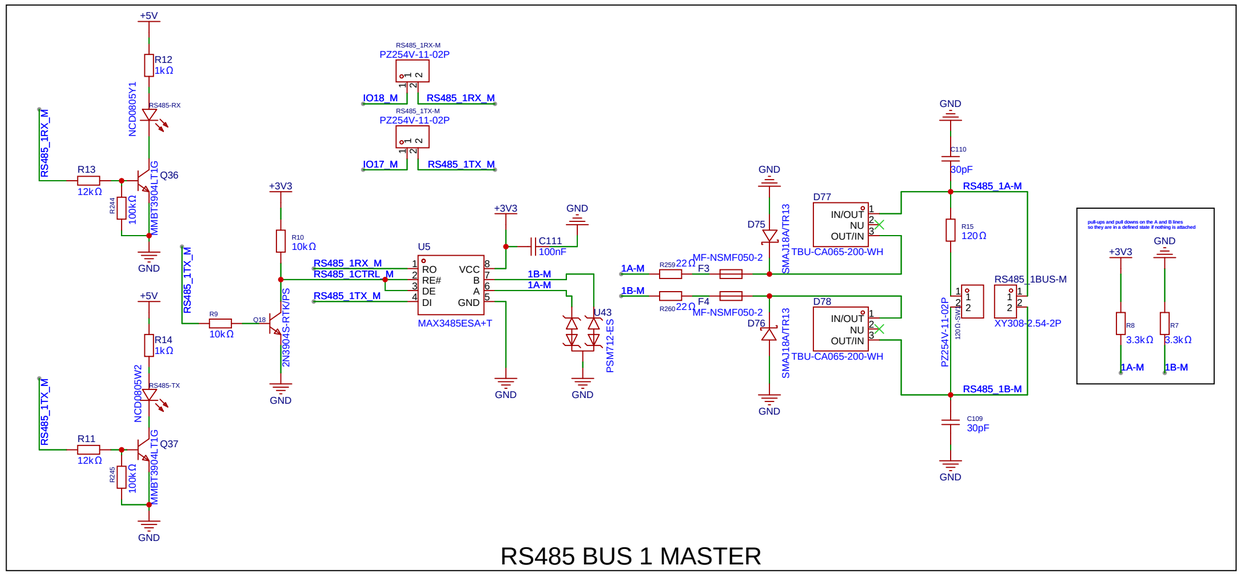


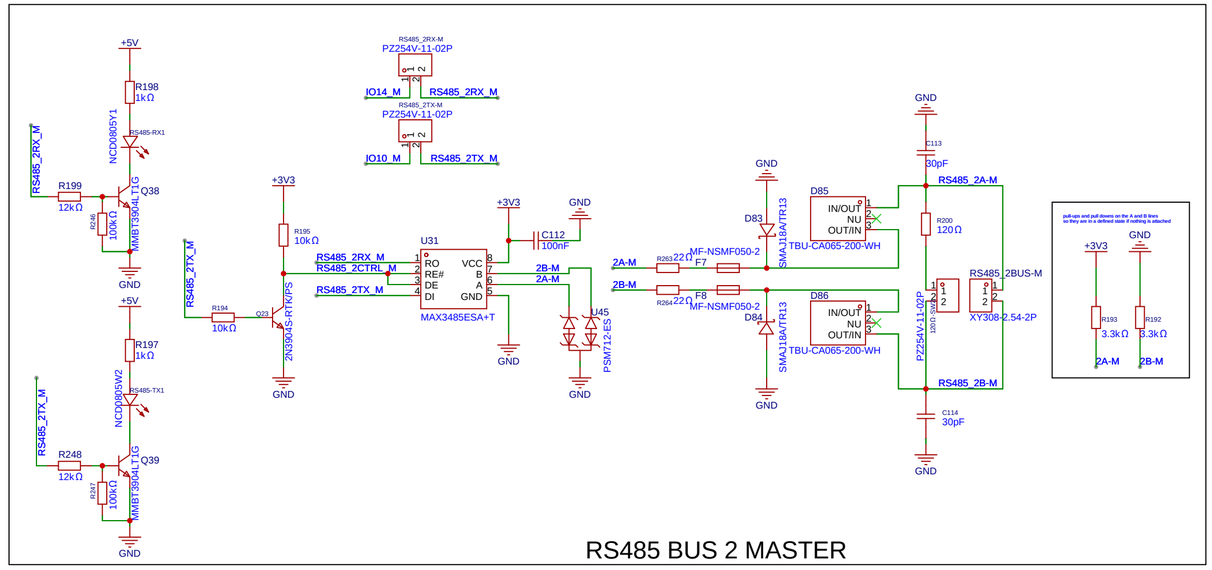
CAN-BUS MASTER (PORT 1)

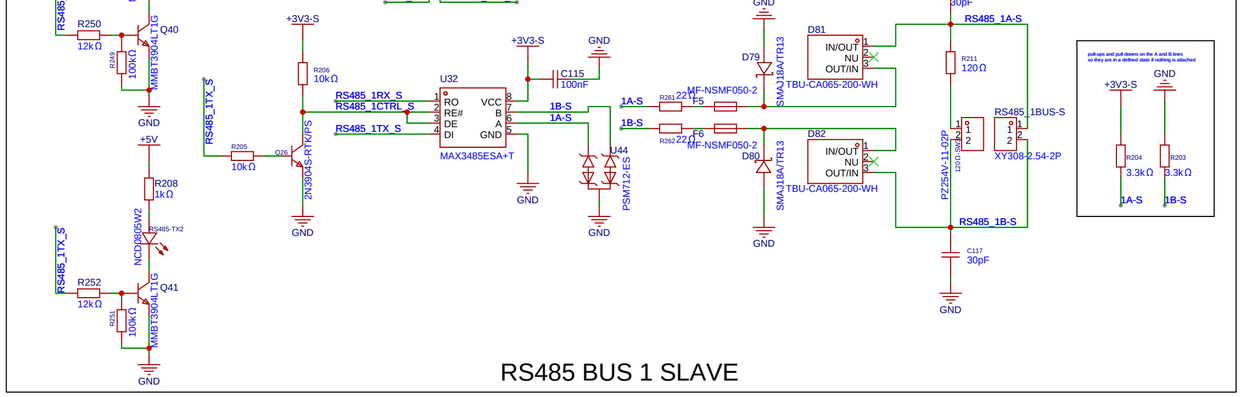


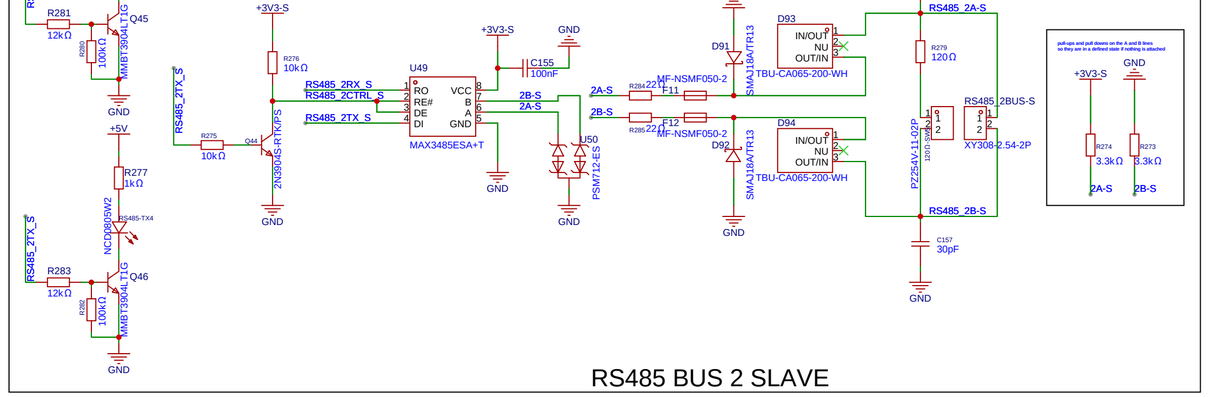
CAN-BUS SLAVE (PORT 2)

Schematic	Main-Controller-Schem_3	Update Date	2025-10-16
		Create Date	2025-08-21
Page	CAN-Bus	Part Number	JLCPCB-002
Drawn	EasyEDA	DAC-Main-controller	
Reviewed	EasyEDA		
		VER / SIZE / PAGE	V0.1 / A4 / 6 OF 9
EasyEDA		EasyEDA.com	

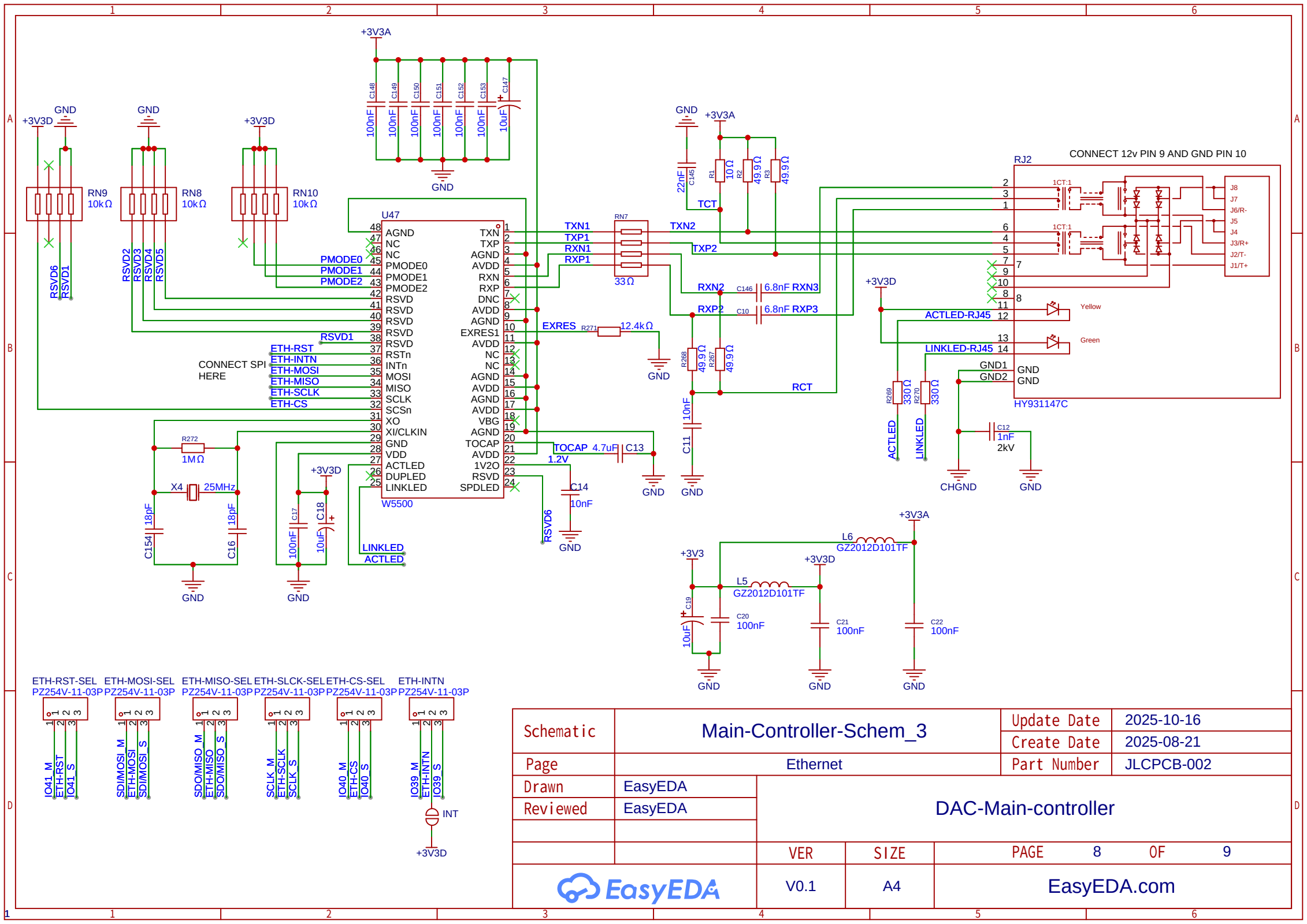




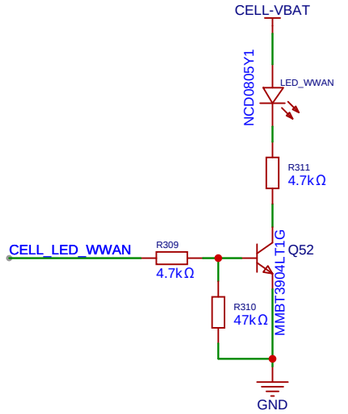


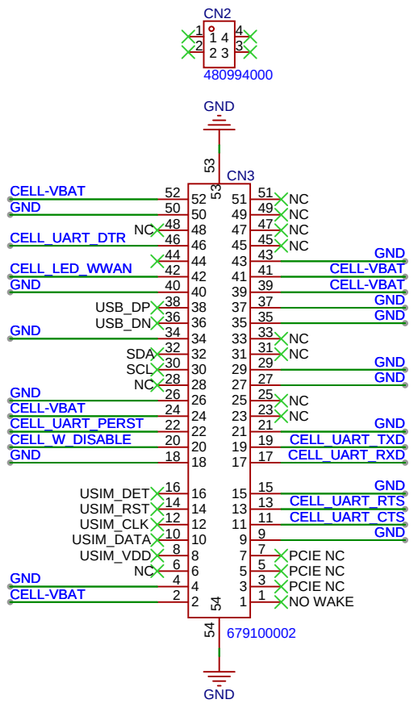


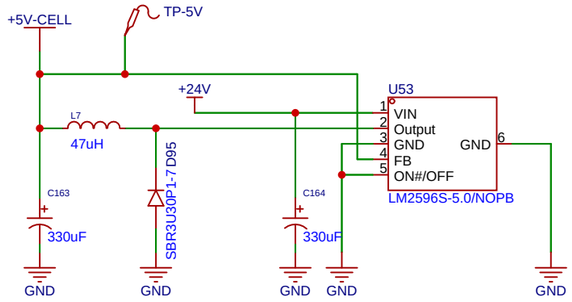
Schematic	Main-Controller-Schem_3	Update Date	2025-09-12
		Create Date	2025-08-21
Page	RS485-Bus	Part Number	JLCPCB-002
Drawn	EasyEDA	DAC-Main-controller	
Reviewed	EasyEDA		
		VER	V0.1
		SIZE	A4
		PAGE	7 OF 9
EasyEDA		EasyEDA.com	

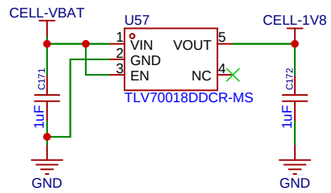


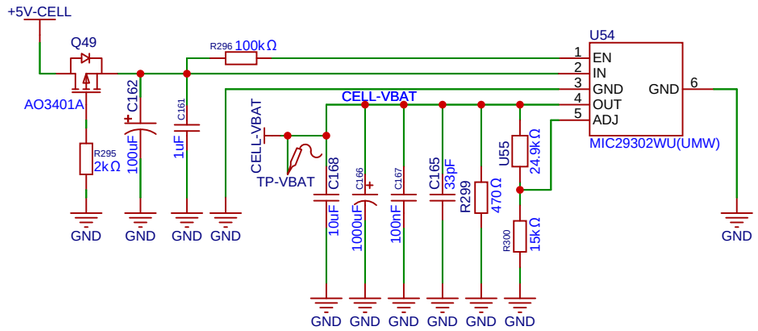
Schematic	Main-Controller-Schem_3	Update Date	2025-10-16
		Create Date	2025-08-21
Page	Ethernet	Part Number	JLCPCB-002
Drawn	EasyEDA	DAC-Main-controller	
Reviewed	EasyEDA		
		VER	SIZE / PAGE 8 OF 9
EasyEDA		V0.1	A4 / EasyEDA.com

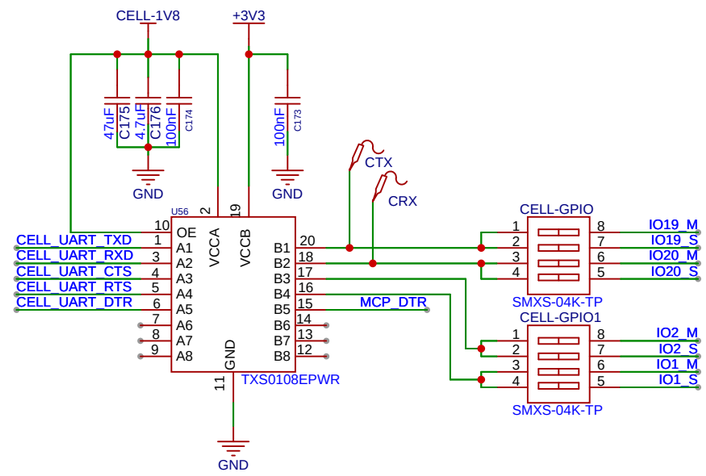


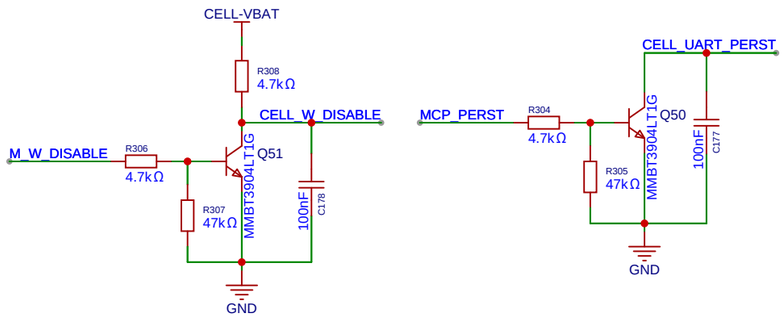


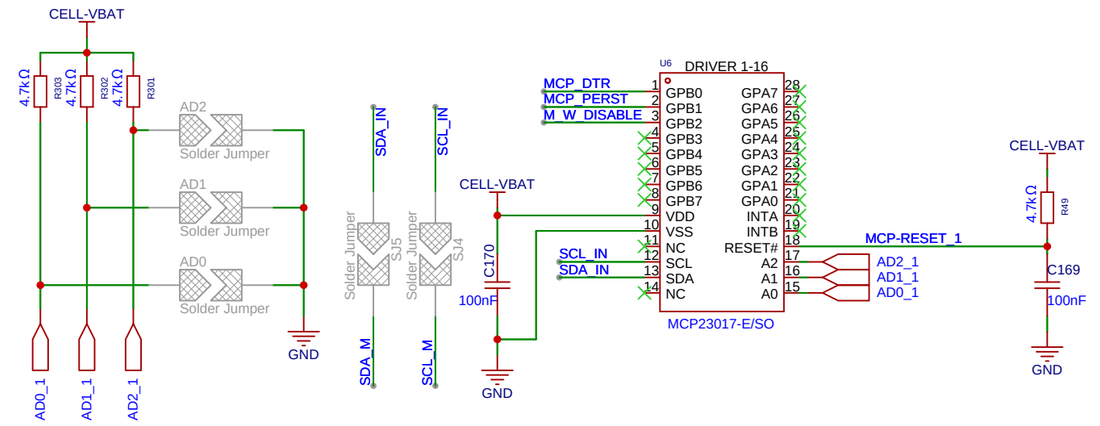












Schematic	Main-Controller-Schem_3	Create at	2025-09-08
		Update at	2025-10-16
Board	Main-Controller_V3	Page	Cellular
Drawn		DAC-Main-controller	
Reviewed			
		Version	Size / Page 9 Total 9
EasyEDA		V1.0	A4 / EasyEDA.com