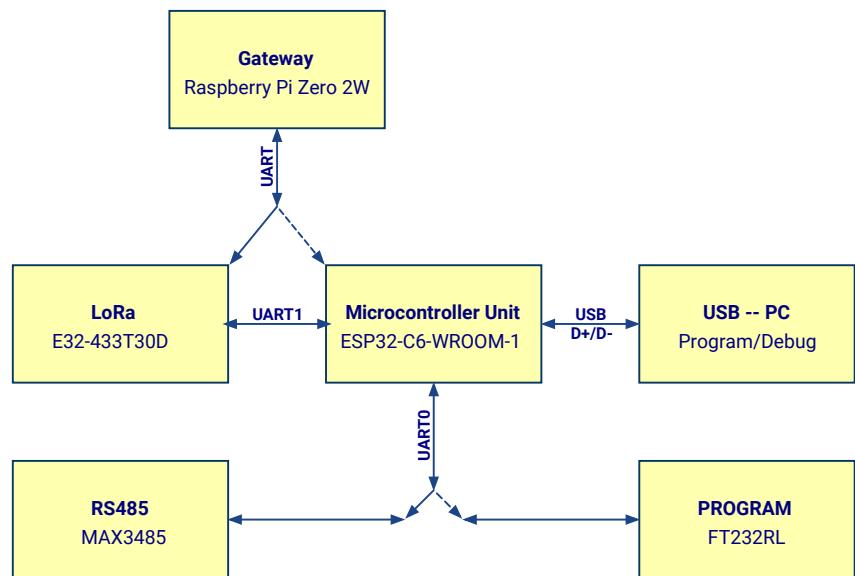
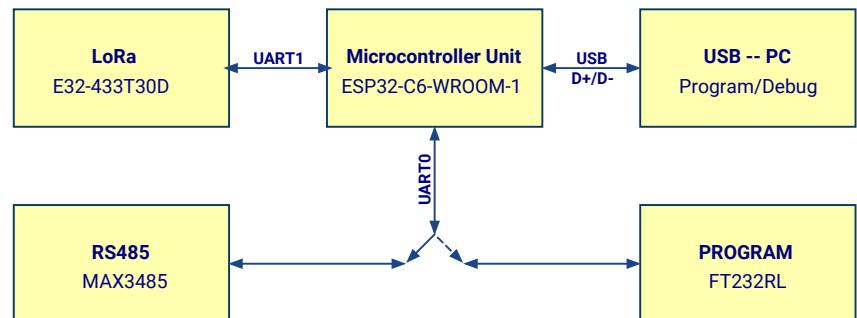


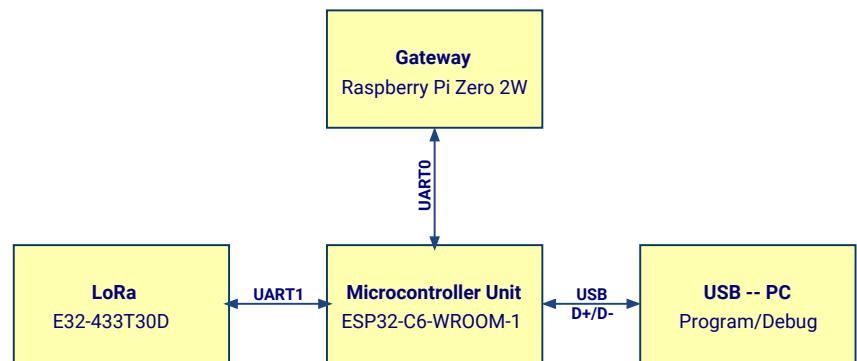
FULL BLOCK DIAGRAM



MODBUS NODE



GATEWAY LoRa



Title
[MP] Block diagram



Size A4	Number 1	Revision *
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1

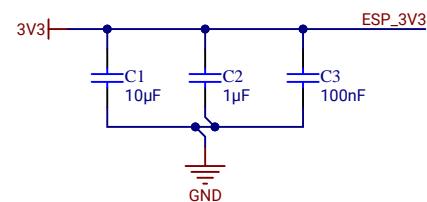
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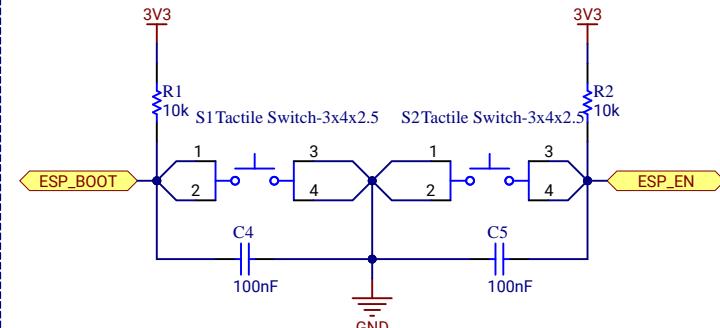
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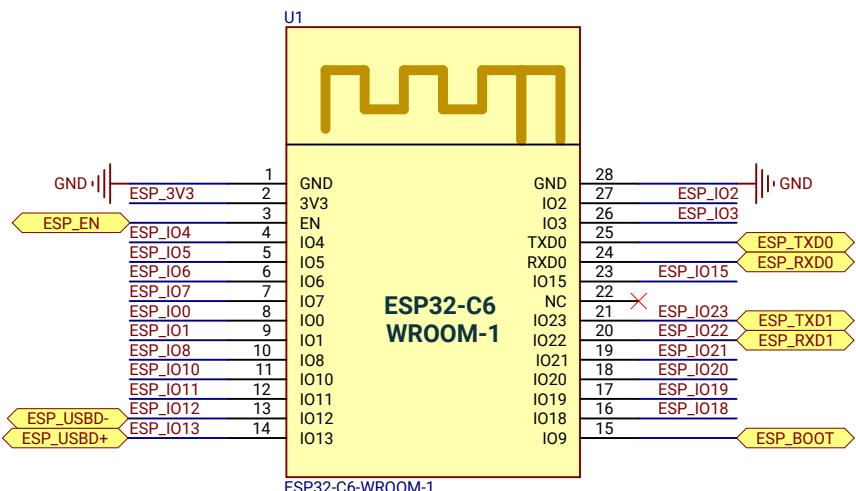
POWER FILTER



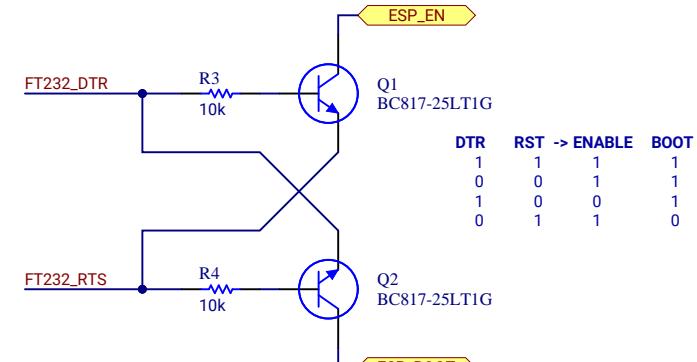
PHYSICAL RESET



MCU

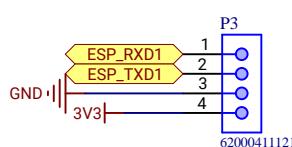


AUTO PROGRAMMING



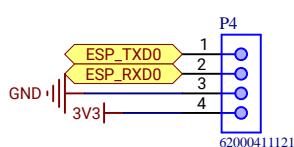
UART1 HEADER

TX1 - ESP_I04
RX1 - ESP_I05



UART0 HEADER

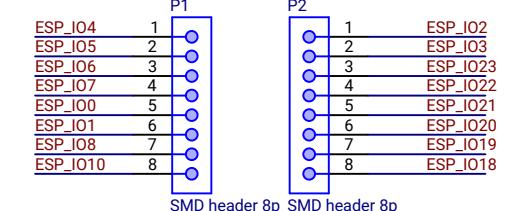
UART Debug



CONNECTION

ESP_I018	Relay_1
ESP_I019	Relay_2
ESP_I020	Relay_3
ESP_I021	Relay_4
ESP_I01	User_button1
ESP_I08	User_button2
ESP_I010	User_button3
ESP_I011	User_button4
ESP_I02	LED_1
ESP_I03	LED_2
FT232_RXD	FT232_RXD
FT232_RXD	FT232_RXD
RS485_RXD	RS485_RXD
RS485_RXD	RS485_RXD
E32_RXD	E32_RXD
E32_RXD	E32_RXD
E32_M0	ESP_I02
E32_M1	ESP_I03
E32_AUX	ESP_I010

BOTTOM IO HEADER



Title [MP] MCU

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1

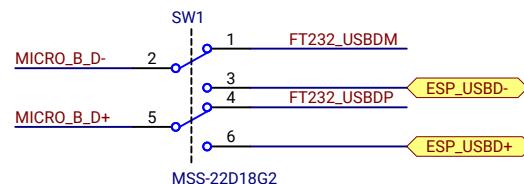
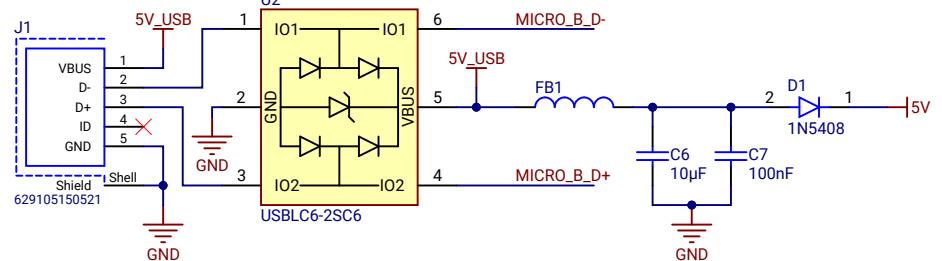
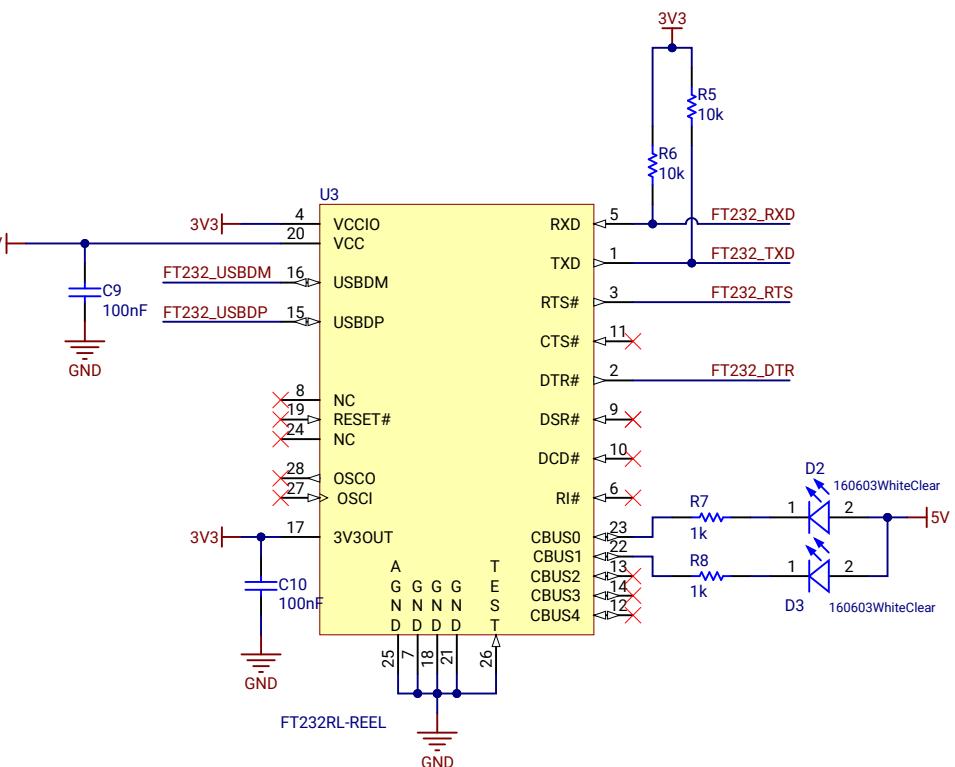
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3

4

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USB MICRO B

**B****B****C****C****D****D**

Title
[MP] TTL UART USB



Size

A4

Number

3

Revision

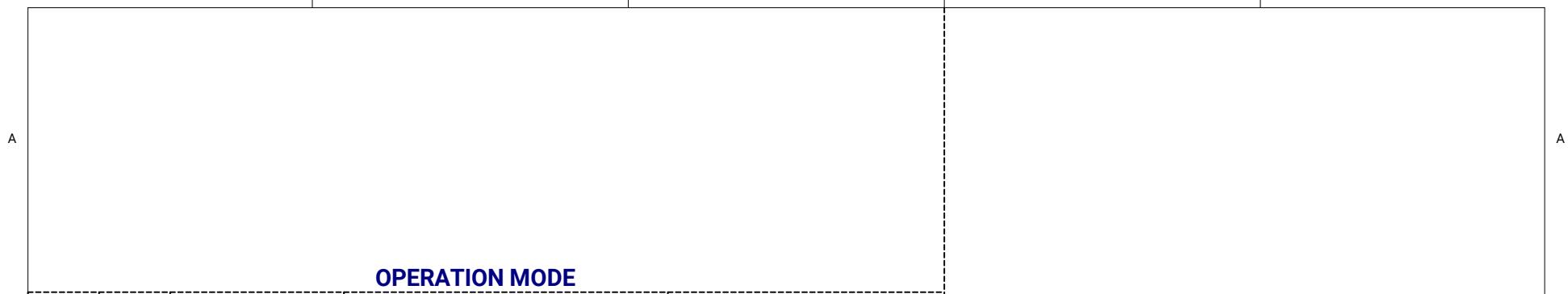
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Check by: *

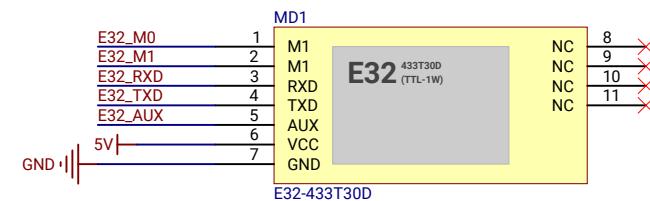
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OPERATION MODE

	M1	M0	MODE	MODE INTRODUCTION	REMARK
	0	0	0 - Normal	UART and wireless channel are open, transparent transmission is on	The receiver must work in mode 0 or mode 1
B	0	1	1 - Wake up	UART and wireless channel are open, the only difference with mode 0 is that before transmitting data, increase the wake up code automatically, so that it can awake the receiver under mode 3	The receiver could be 0, 1 or 2
	1	0	2 - Power saving	UART close, wireless is under air-awaken mode, after receiving data, UART open and send data	The transmitter must be mode 1, unable to transmit in this
	1	1	3 - Sleep	Sleep mode, receiving parameter setting command is available	It uses serial port 9600 & 8N1 to set module working



Altium Designer | Title **[MP] LoRa** | 

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A

A

B

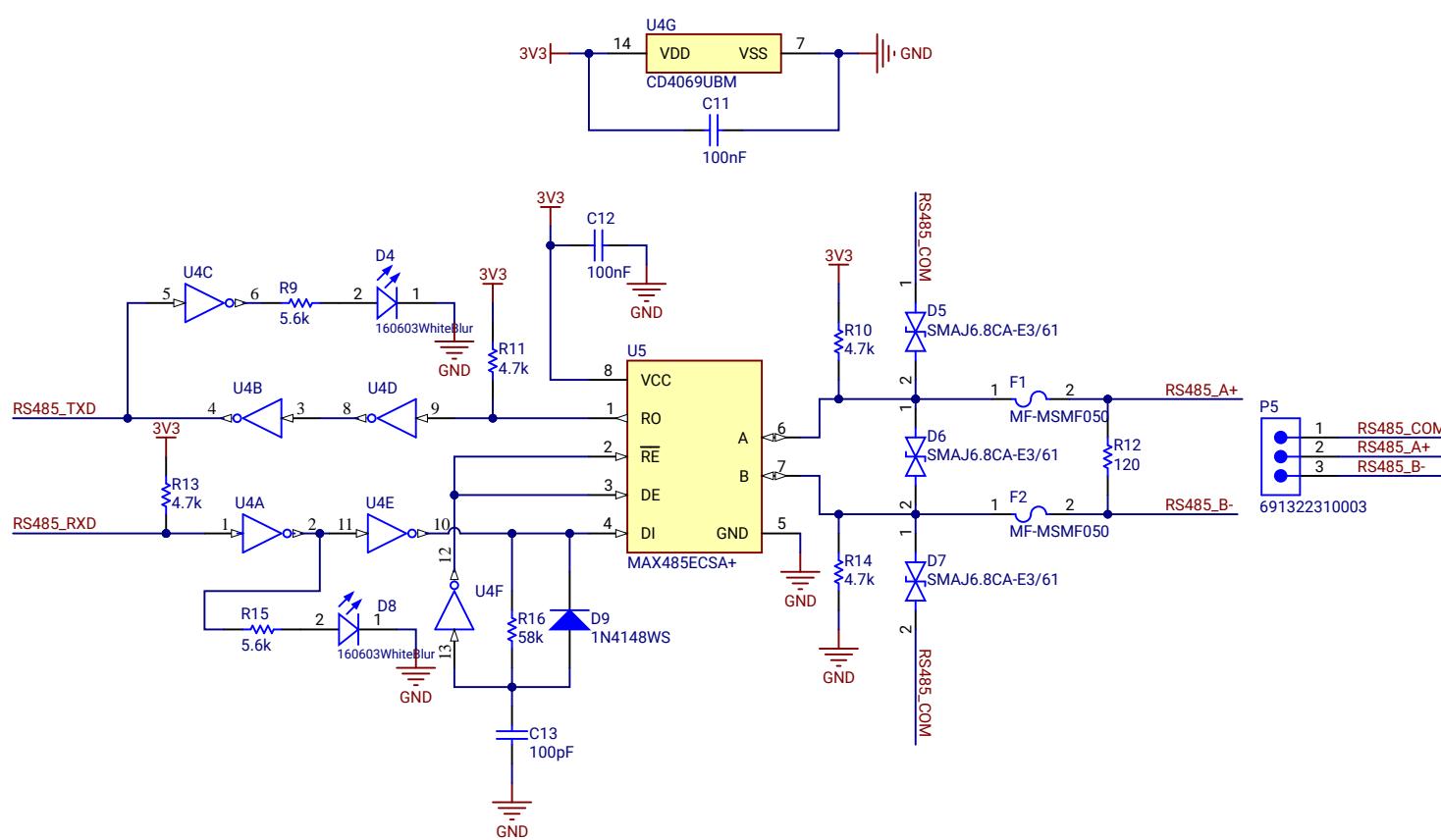
B

C

C

D

D



Title
[MP] RS485



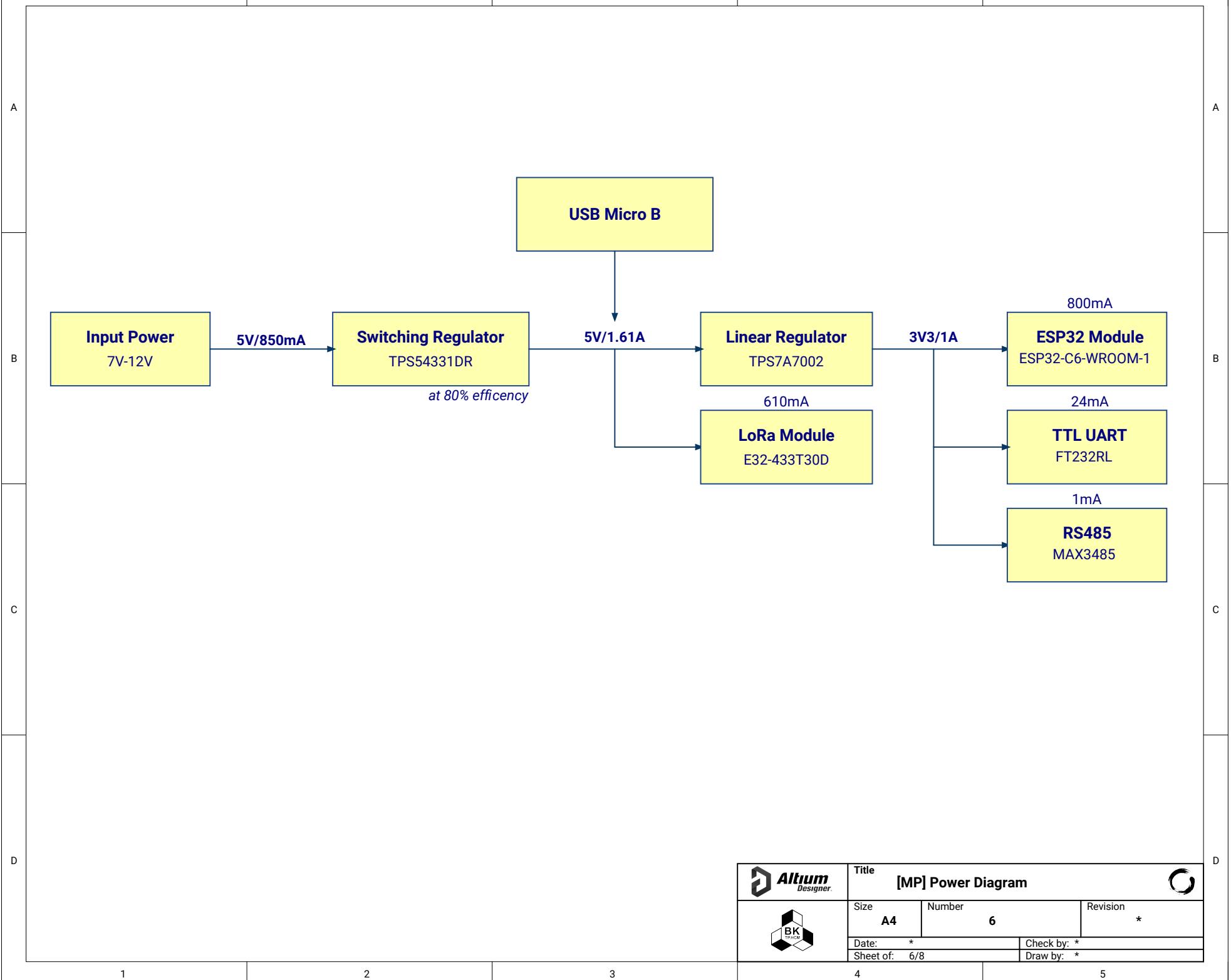
Size
A4

Number
5

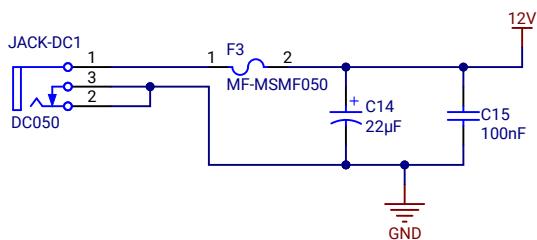
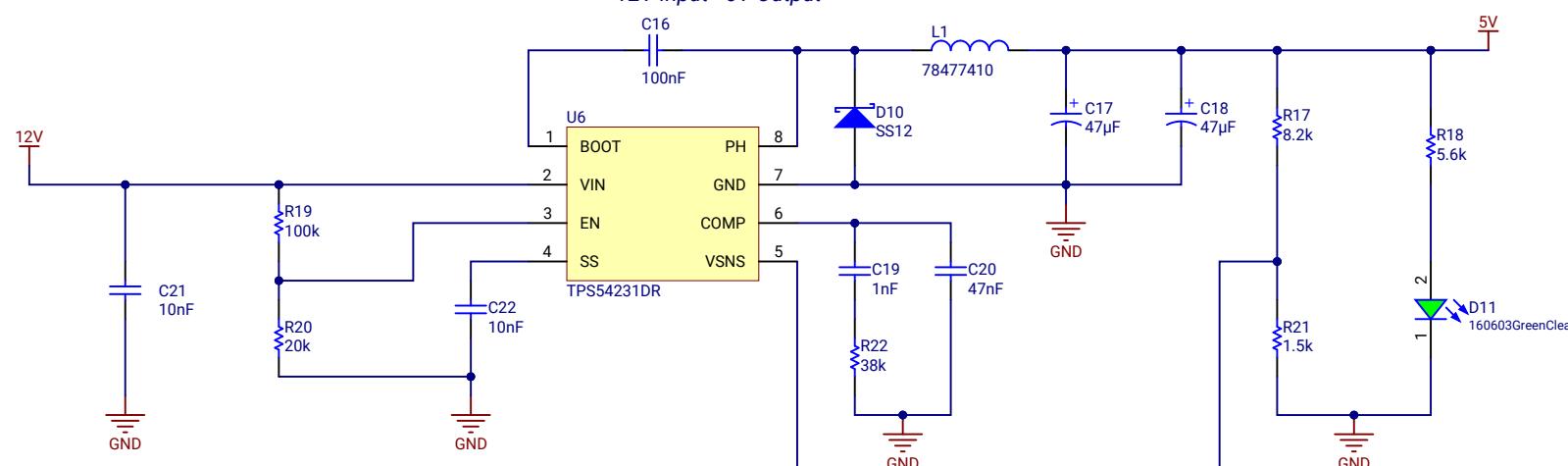
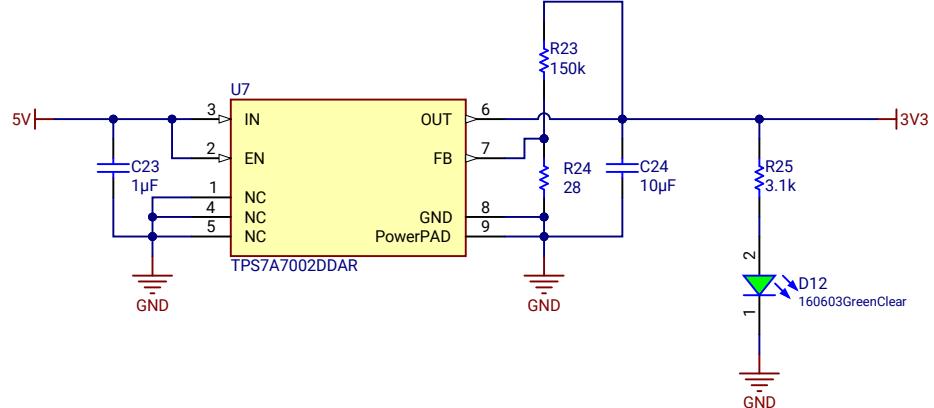
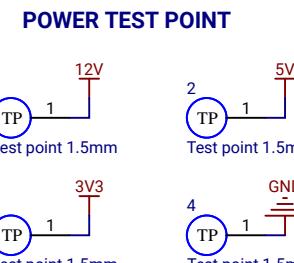
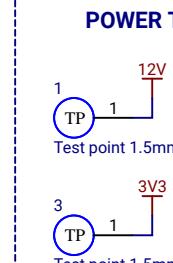
Revision
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1 2 3 4 5

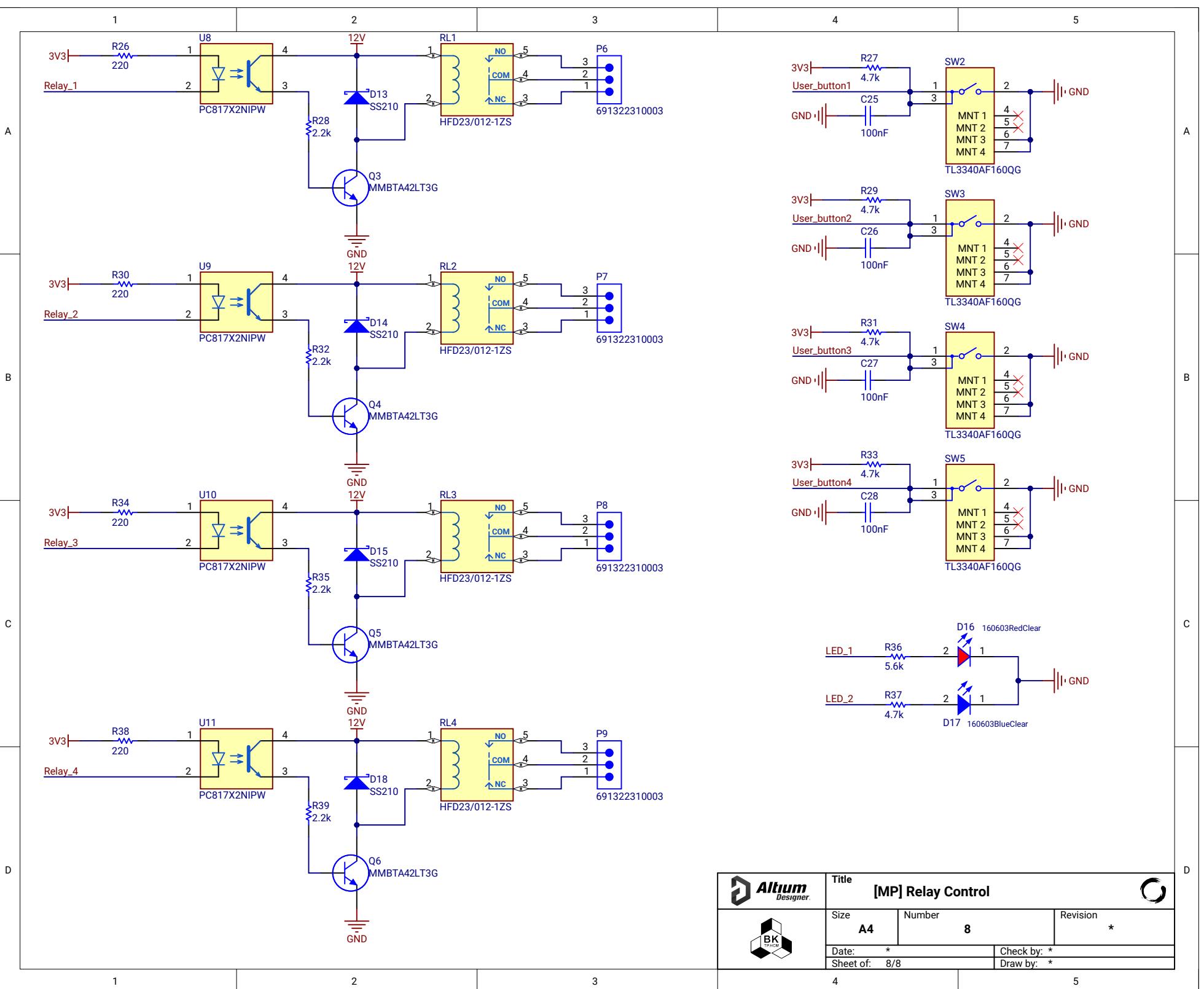
12V INPUT**SWITCHING REGULATOR**
12V Input - 5V Output**LINEAR REGULATOR**
5V Input - 3.3V Output**POWER TEST POINT****THROUGH HOLE**

Title [MP] Power Circuit



Size	Number	Revision
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1 2 3 4 5



Altium
Designer

Title
[MP] Relay Control

Size
A4

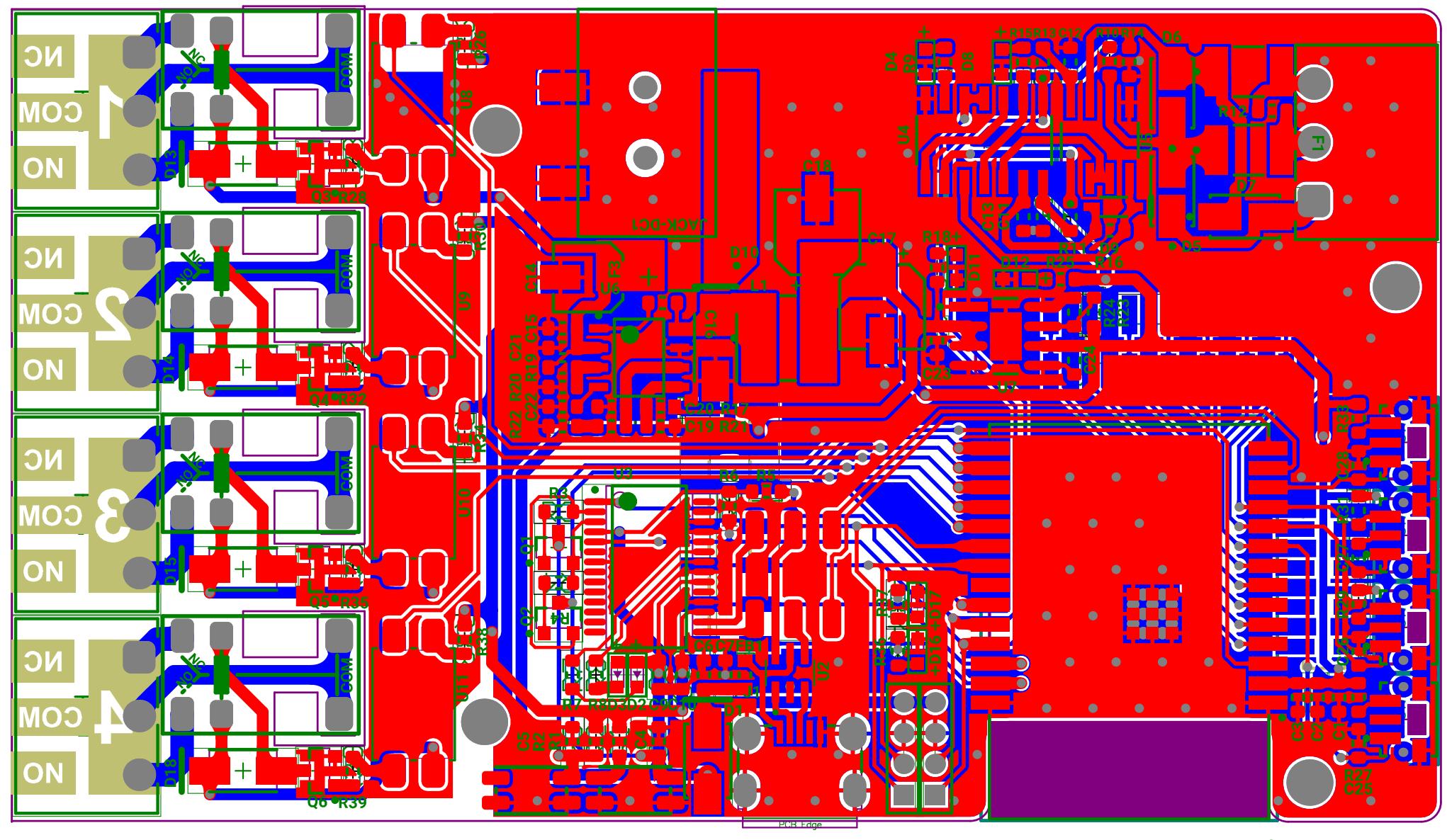


Number
8

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1

