

Title: *

Project: He_Thong_Phun_Suong Size A4

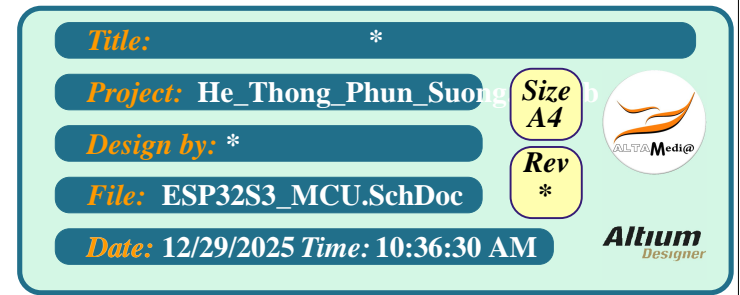
Design by: *

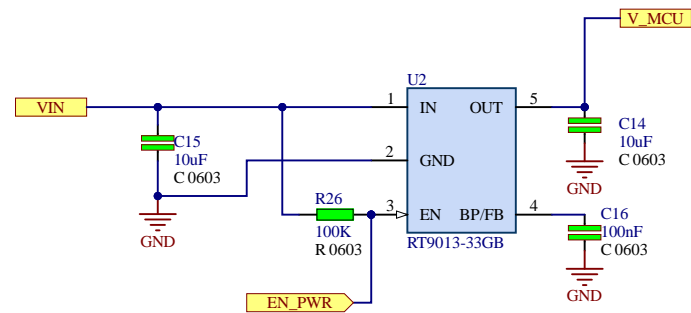
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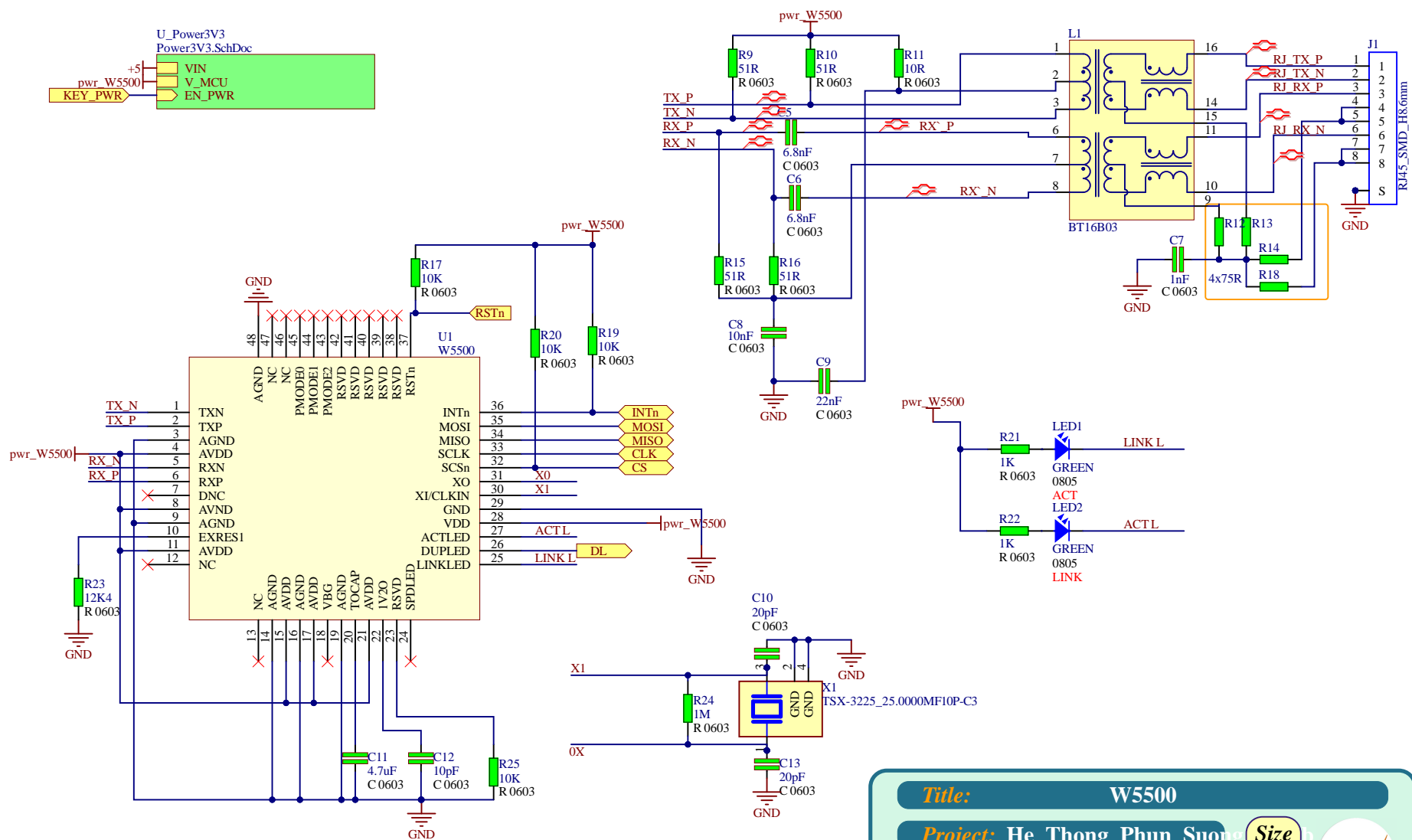
Date: 12/29/2025 Time: 10:36:29 AM



Altium Designer







Title: W5500

Project: He_Thong_Phun_Suong

Design by: Trần Ngọc Thân

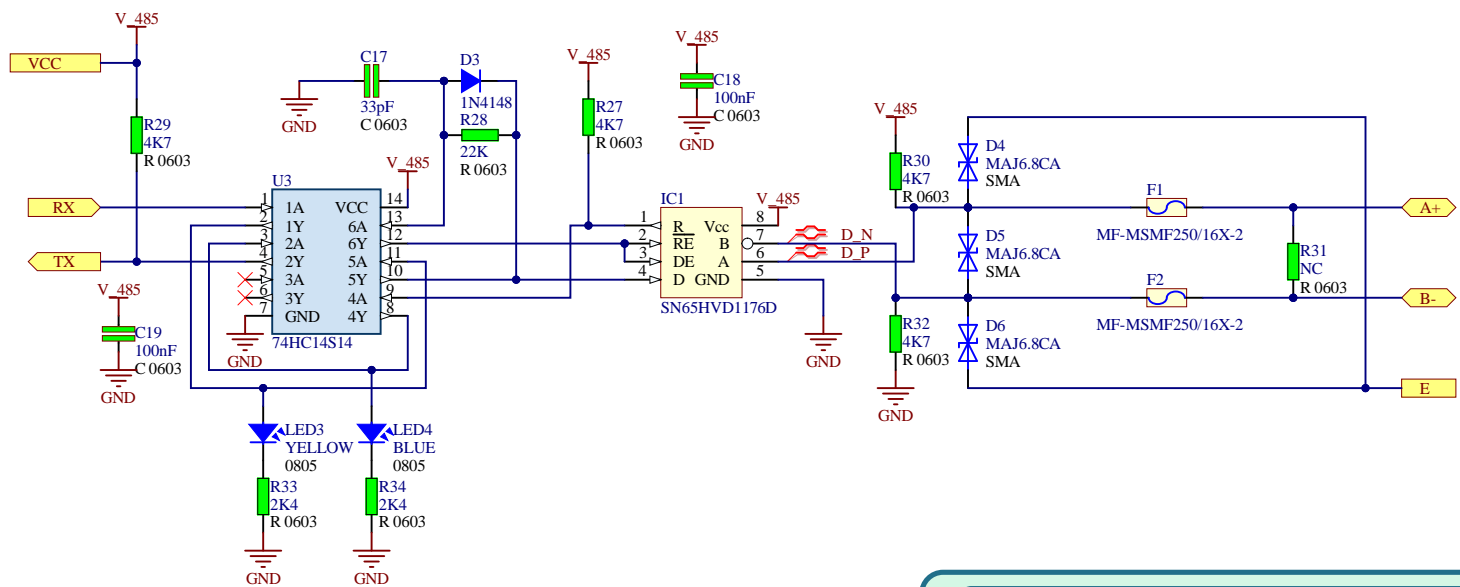
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Size
A4
Rev
*



Altium
Designer



Title: Modbus Rs485

Project: He_Thong_Phun_Suong

Design by: Trần Ngọc Thân

File: MAX458.SchDoc

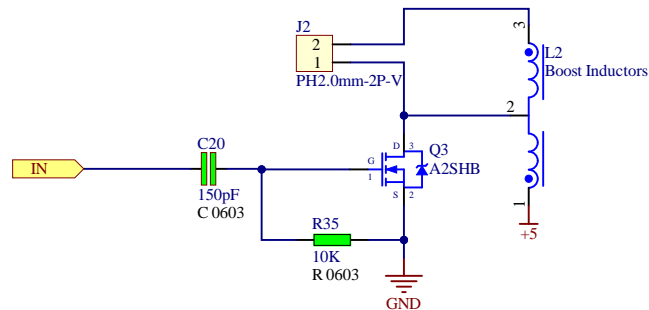
Date: 12/29/2025 Time: 10:36:30 AM

Size
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Rev
3.1



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Designer



Title: *

Project: He_Thong_Phun_Suong

Design by: *

File: Out_phun_suong.SchDoc

Date: 12/29/2025 Time: 10:36:30 AM

Size
A4

Rev
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Designer

Comment	Description	Designator	Footprint	LibRef	Quantity
100uF	Cap P 0.1uF <22uF , 16 - 50V	C1	SMD 3528	CP0	1
1nF		C2, C7	C-0603	CN5	2
10nF		C3, C8, C24, C33	C-0603	CN5	4
100nF		C4, C16A, C16B, C18, C19, C21, C27, C30, C31	C-0603	CN5	9
6.8nF		C5, C6	C-0603	CN5	2
22nF		C9	C-0603	CN5	1
20pF		C10, C13	C-0603	CN5	2
4.7uF		C11	C-0603	CN5	1
10pF		C12	C-0603	CN5	1
10uF		C14A, C14B, C15A, C15B, C28	C-0603	CN5	5
33pF		C17	C-0603	CN5	1
150pF		C20A, C20B	C-0603	CN5	2
1.3pF		C22, C23	C-0402	CN5	2
14pF		C25, C26	C-0603	CN5	2
1uF		C29, C32	C-0603	CN5	2
RED	LED Single colour Green and Red	D1	LED-0805-Blue	LED	1
GREEN	LED Single colour Green and Red	D2, LED1, LED2	LED-0805-Blue	LED	3
1N4148	DO-5A	D3	DIO-SMD-123	DO-5A	1
MAJ6.8CA	11-2V Clamp 134A Ipp Tvs Diode Surface Mount DO-214AB (SMCJ)	D4, D5, D6	DIO-SMD-106	SMCJA 5CA	3
MF-MSMF250/16X-2	Fuse	F1, F2	FUSER_MF-MSMF250/16X	Fuse	2
SN65HVD1176D	5V RS 485 TRANSCEIVERS	IC1	SOIC-8N	RS485 SN65HVD11	1
RJ45_SMD_H8.6mm	MODULAR JACK, RJ45, SMT TYPE, AU: 6u"	J1	RJ45_SMD_H8.6mm	RJ45_SMD_H8.6mm	1
PH2.0mm-2P-V	Connector 2	J2A, J2B	PH-2.0MM-2P-V	Con2	2
Ipex	Microcoaxial RF, 50 Ohm, PCB Vertical Jack Receptacle, SMT, 1.25mm Mounted Height	J3	CON RF	CON RF	1
GH-1.25mm-4P	Connector Header Surface Mount, Right Angle 2 position 0.079 (2.00mm)	J4	JST_B4B-PH-SM4-TB	PH-2.0mm-4P	1
XH2.54mm-3P	Connector 3	JP1	CON_3P_R	Con3	1
PH-2.0mm-6P	Connector 6	JP2, JP3	JST_B4B-PH-SM4-TB(LF)(SN)	Con6	2
BT16803		L1	SOT16-127P1030X265-16N	BT16803_1	1
Boost Inductors	Inductor	L2A, L2B	Boost Inductors - duplicate	Boost Inductors	2
2.4nH	Inductor	L3	L-0402	L1	1
2nH	Inductor	L4	L-0603	L1	1
YELLOW	LED Single colour Yellow	LED3	LED-0805-Blue	LED	1
BLUE	LED Single colour Green and Red	LED4	LED-0805-Blue	LED	1
A15HB	HEXFET P-Channel Power MOSFET	Q1, Q2	SOT23A	IRF9540	2
A25HB	MOSFET N - CHANNEL	Q3A, Q3B	SOT23	A25HB	2
2K2	Resistor 1/4W	R1, R6	R-0603	RES	2
100K		R2, R5, R26A, R26B	R-0603	RES	4
100R		R3, R7	R-0603	RES	2
10K		R4, R6, R17, R19, R20, R25, R35A, R35B, R36, R38	R-0603	RES	10
51R		R9, R10, R15, R16	R-0603	RES	4
10R		R11	R-0603	RES	1
75R		R12, R13, R14, R18	R-0603	RES	4
1K		R21, R22	R-0603	RES	2
12K4		R23	R-0603	RES	1
1M		R24	R-0603	RES	1
4K7		R27, R29, R30, R32	R-0603	RES	4
22K		R28	R-0603	RES	1
NC		R31	R-0603	RES	1
2K4		R33, R34	R-0603	RES	2
0R		R37	R-0402	RES	1
22R		R39, R40	R-0603	RES	2
4x3 3x2 5mm	Switch button 2 pin	SW1, SW2	SW_3x4x2.5mm_4P	SW2	2
W5500		U1	LOFP 48 - duplicate	W5500	1
RT9013-33GB	Linear Voltage Regulator IC 1 Output 500mA SOT-23-5	U2A, U2B	SOT95P280X145-SN	MIC5225-3.3YM5-TR	2
74HC14514		U3	SOIC14	74HC14514	1
ESP32-S3FH4R2	RF System on a Chip - SoC, SMD IC ESP32-S3FH4R2, dual-core MCU, Wi-Fi 2.4G & BLE 5.0 combo, 4 MB flash and 2 MB PSRAM inside, QFN 56-pin, 7*7 mm	U4	QFN56	ESP32-S3FH4R2	1
TSX-3225_25.0000MF10P-C3	25 MHz ±±10ppm Crystal 18pF 40 Ohms 4-SMD, No Lead	X1	XTAL_TSX-3225	TSX-3225_25.0000MF10P-C3	1
TSX-3225 40.0000MF15Y-K0	25 MHz ±±10ppm Crystal 18pF 40 Ohms 4-SMD, No Lead	X2	XTAL_TSX-3225	TSX-3225_25.0000MF10P-C3	1