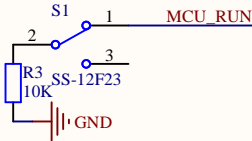
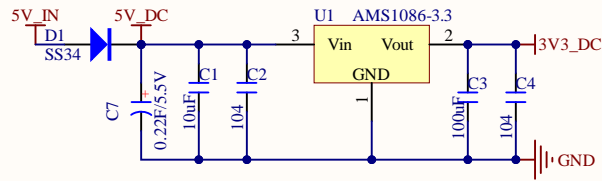
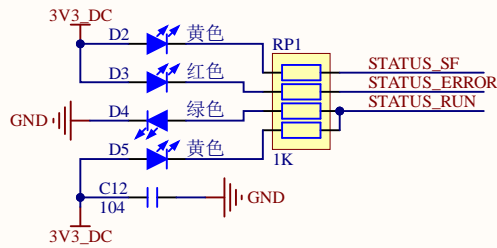


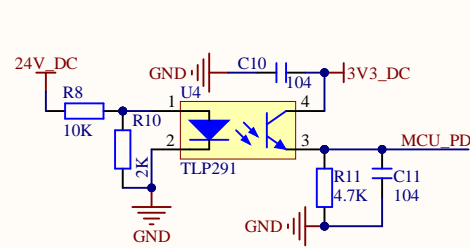
## LDO供电/运行拨码



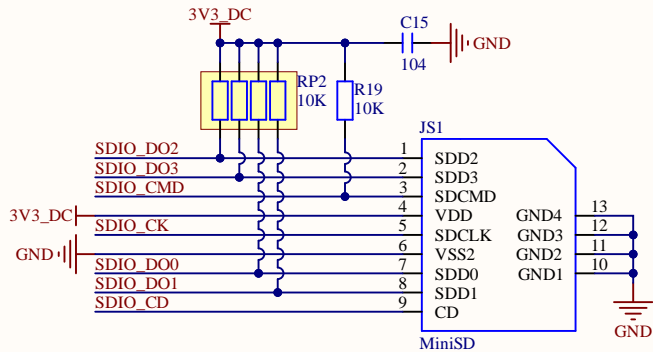
## 运行指示灯接口



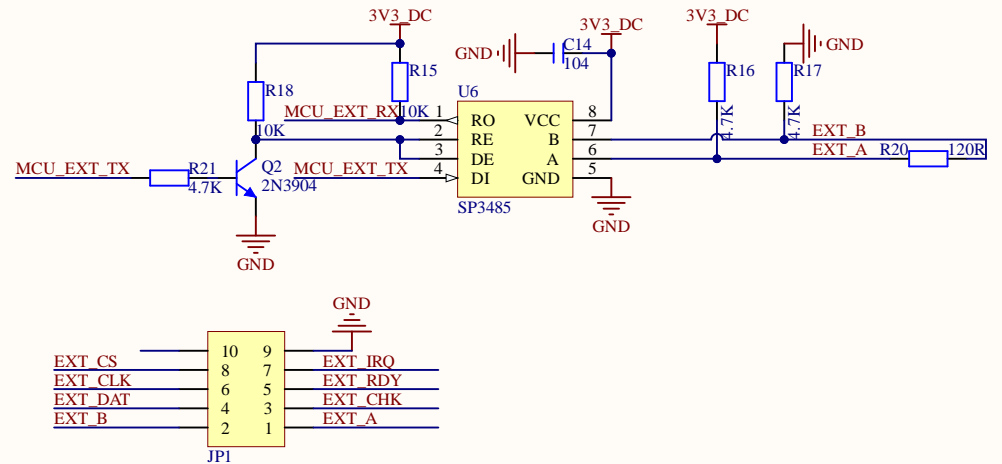
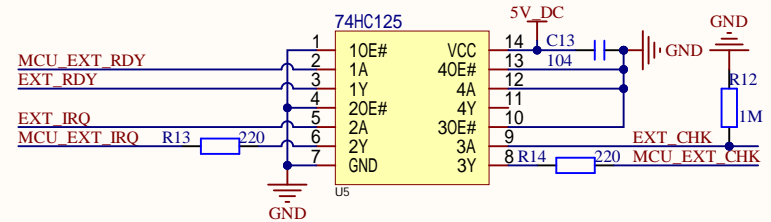
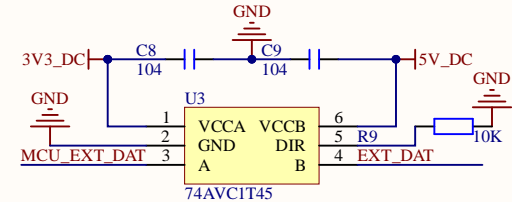
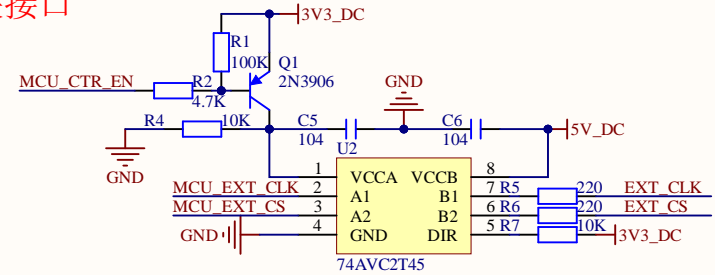
## 运行电源检测



## TF卡接口



## 扩展模块接口



Title StuNetCtl_一款开源的软PLC和可编程运动控制器(W5500主控板)			
Size A4	Number 电源和扩展指示	Revision V1.0	
Date:	2/01/2024	Sheet of	1 of 4
File:	E:\08_github_seny\...\power.SchDoc	Drawn By:	SenySunny

# 控制器最小系统

U7

MCU\_D100 23  
MCU\_D101 24  
STATUS\_ERROR 25  
AD3 26  
DA1 29  
DA0 30  
MCU\_D102 31  
MCU\_D103 32  
MCU\_D007 67  
UART1\_TX 68  
UART1\_RX 69  
CAN\_RX 70  
CAN\_TX 71  
MCU\_D003 77

MCU\_D110 35  
MCU\_D111 36  
MCU\_D112 37  
WIZ\_CLK 89  
WIZ\_MISO 90  
WIZ\_MOSI 91  
MCU\_D010 92  
MCU\_D011 93  
MCU\_D002 95  
MCU\_D001 96  
FLASH\_CLK 47  
PB11 48  
PB12 51  
PB13 52  
FLASH\_DO 53  
FLASH\_DI 54

RS485\_RX2 97  
RS485\_TX2 98  
WIZ\_INT 1  
WIZ\_RST 2  
STATUS\_RUN 3  
MCU\_D000 4  
MCU\_D004 5  
MCU\_D113 38  
MCU\_D114 39  
MCU\_D106 40  
MCU\_D115 41  
MCU\_D107 42  
MCU\_PD 43  
MCU\_D005 44  
MCU\_D006 45  
FLASH\_CS 46

PA0/WKUP/ADC123\_IN0/T2C1ETR/T5C1/T8ETR  
PA1/ADC123\_IN1/T5C2/T2C2  
PA2/ADC123\_IN2/USART2\_Tx/T5C3/T2C3  
PA3/ADC123\_IN3/USART2\_Rx/T5C4/T2C4  
PA4/ADC123\_IN4/DAC\_OUT1/SPI1\_NSS  
PA5/ADC123\_IN5/DAC\_OUT2/SPI1\_SCK  
PA6/ADC123\_IN6/SPI1\_MISO/T8T1BKIN/T3C1  
PA7/ADC123\_IN7/SPI1\_MOSI/T8C1N/T3C2/T1C1N  
PA8/T1C1/MCO  
PA9/T1C2/USART1\_Tx  
PA10/T1C3/USART1\_Rx  
PA11/CAN\_Rx/T1C4/USBDM  
PA12/CAN\_Tx/T1ETR/USBDP  
PA15/JTDI/I2S3\_WS/JTDI/T2C1ETR/SPI3\_NSS

PB0/ADC123\_IN8/T3C3/T8C2N/T1C2N  
PB1/ADC123\_IN9/T3C4/T8C3N/T1C3N  
PB2/BOOT1  
PB3/JTDO/SPI3\_SCK/I2S3\_CK/T2C2/SPI1\_SCK  
PB4/NJTRST/SPI3\_MISO/T3C1/SPI1\_MISO  
PB5/I2C1\_SMBA/I2S3\_SD/SPI3\_MOSI/T3C2/SPI1\_MOSI  
PB6/I2C1\_SCL/T4C1/USART1\_Tx  
PB7/I2C1\_SDA/FSMC\_NADV/USART1\_Rx  
PB8/SDIO\_D4/I2C1\_SCL/T4C3(7)/CAN\_Rx  
PB9/SDIO\_D5/I2C1\_SDA/T4C4/CAN\_Tx  
PB10/USART3\_Tx/I2C2\_SCL/T2C3  
PB11/USART3\_Rx/I2C2\_SDA/T2C4  
PB12/I2S2\_WS/T1BKIN/SPI2\_NSS/I2C2\_SMBA  
PB13/I2S2\_CK/T1CH1N/SPI2\_SCK  
PB14/T1CH2N/SPI2\_MISO  
PB15/I2S2\_SD/T1CH3N/SPI2\_MOSI

PE0/T4\_ETR/FSMC\_NBL0  
PE1/FSMC\_NBL1  
PE2/SPI4\_SCK/TMR3\_EXT/TMR20\_CH1  
PE3/TMR3\_CH1/TMR20\_CH2  
PE4/SPI4\_CS/CLKOUT1/TMR3\_CH2/TMR20\_CH1C  
PE5/SPI4\_MISO/TMR3\_CH3/TMR9\_CH1/TMR20\_CH2C  
PE6/SPI4\_MOSI/TMR3\_CH4/TMR9\_CH2/TMR20\_CH3C  
PE7/FSMC\_D4/T1ETR  
PE8/FSMC\_D5/T1CH1N  
PE9/FSMC\_D6/T1C1  
PE10/FSMC\_D7/T1CH2N  
PE11/FSMC\_D8/T1C2  
PE12/FSMC\_D9/T1CH3N  
PE13/FSMC\_D10/T1C3  
PE14/FSMC\_D11/T1C4  
PE15/FSMC\_D12/T1BKIN

PC0/UART7\_TX/SDIO2\_D0/ADC123\_IN10  
PC1/UART7\_RX/SPI2\_3\_MOSI/SDIO2\_D1/ADC123\_IN11  
PC2/UART8\_TX/SPI2\_MISO/SDIO2\_D2/ADC123\_IN12  
PC3/UART8\_RX/SPI2\_MOSI/SDIO2\_D3/ADC123\_IN13  
PC4/ADC123\_IN14  
PC5/ADC123\_IN15  
PC6/I2S2\_MCK/T8C1/T3C1/SDIO\_D6  
PC7/I2S3\_MCK/T8C2/T3C2/SDIO\_D7  
PC8/T8C3/T3C3/SDIO\_D0  
PC9/T8C4/T3C4/SDIO\_D1  
PC10/UART4\_Tx/SDIO\_D2  
PC11/UART4\_Rx/SDIO\_D3  
PC12/UART5\_Tx/SDIO\_CK

PC13-TAMPER-RTC  
PC14-OSC32\_IN  
PC15-OSC32\_OUT  
PA13/JTMS/SWDIO  
PA14/JTCK/SWCLK

NRST  
BOOT0

PH1-OSC\_OUT

PH0-OSC\_IN

AT32F435V

SDIO\_CD 81  
MCU\_RUN 82  
SDIO\_CMD 83  
MCU\_EXT\_CHK 84  
MCU\_EXT\_DAT 85  
RS485\_TX 86  
RS485\_RX 87  
WIZ\_CS 88  
MCU\_EXT\_TX 55  
MCU\_EXT\_RX 56  
MCU\_EXT\_RDY 57  
MCU\_EXT\_IRQ 58  
MCU\_D104 59  
MCU\_D105 60  
MCU\_EXT\_CS 61  
MCU\_EXT\_CLK 62

AD0 15  
STATUS\_SF 16  
AD1 17  
AD2 18  
AD3 33  
AD4 34  
RS232\_TX 63  
RS232\_RX 64  
SDIO\_DO0 65  
SDIO\_DO1 66  
SDIO\_DO2 78  
SDIO\_DO3 79  
SDIO\_CK 80

MCU\_CTR\_EN 6  
Y1 32.768K  
C18 22pF  
C19 22pF

MCU\_RST 14  
R24 10K  
C20 10K  
R25 10K

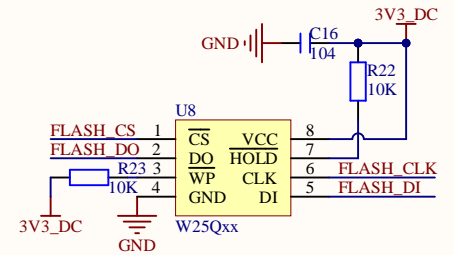
8MHz  
R26 1M  
C22 22pF  
C23 22pF

0R(NC)  
R29 0R(NC)  
R30 0R(NC)  
R31 0R

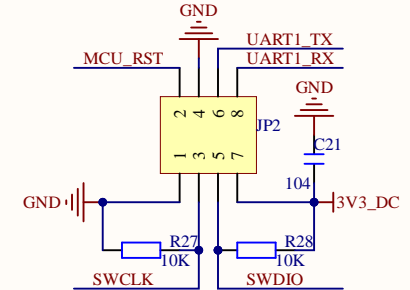
120R@100MHz  
L2 120R@100MHz  
U9 >TL431

5V\_DC  
R32 120R  
C33 104  
R33 2.4K(0.1%)  
R34 7.5K(0.1%)

## SPI\_FLASH



## 下载/调试接口



备注:

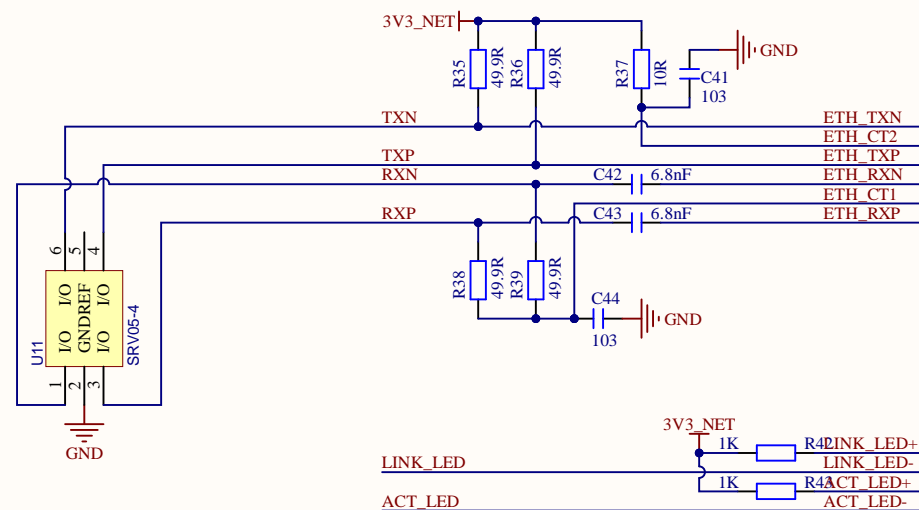
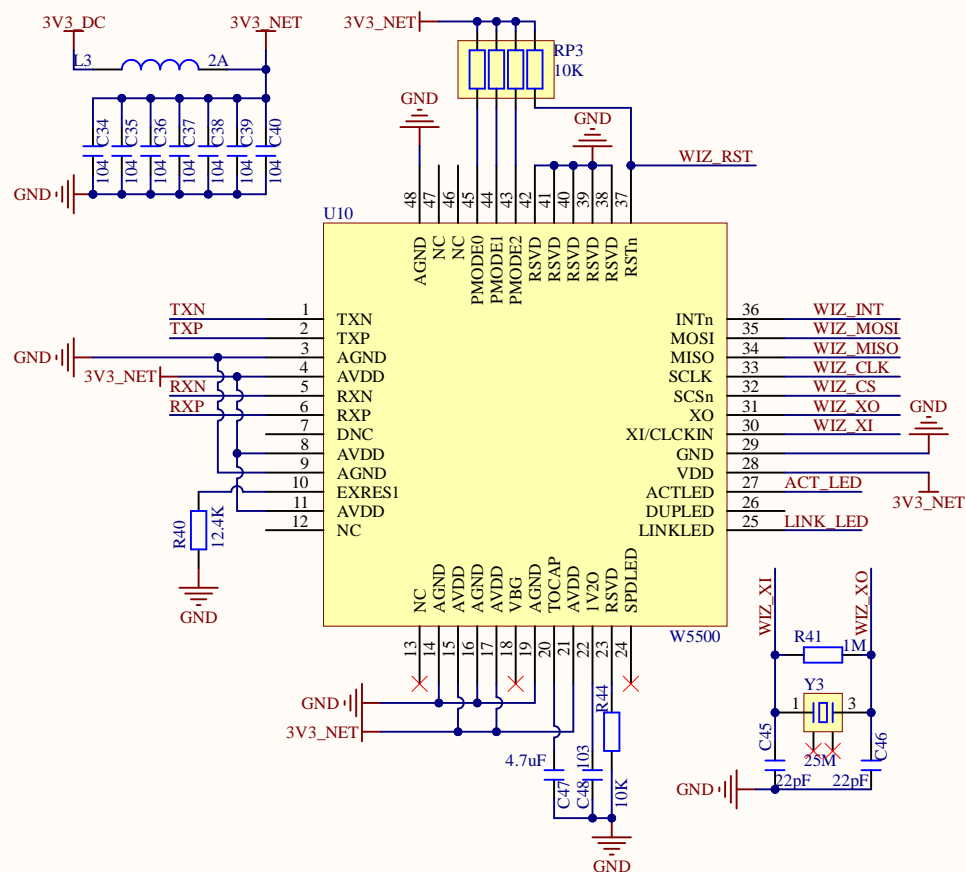
1、默认采用AT32F435, C24, C25, R29, R30。都不焊接

2、如果采用STM32F407/F427等兼容芯片, C24, C25焊接2.2uF电容, R30焊接0Ω电阻, R29不焊接。

3、如果采用AT32F407/STM32F103等兼容芯片, C25, R29焊接0Ω电阻, C24, R30不焊接

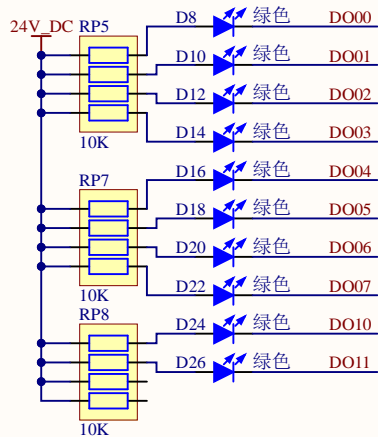
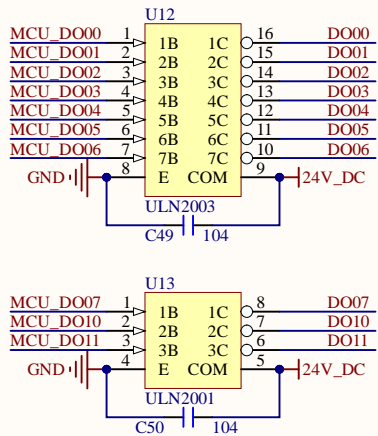
Title StuNetCtl_一款开源的软PLC和可编程运动控制器(W5500主控板)			
Size A4	Number 主控最小系统和存储	Revision V1.0	
Date: 2/01/2024	Sheet of 2 of 4		
File: E:\08_github_senyl\cpu.SchDoc	Drawn By: SenySunny		

## 网络控制芯片



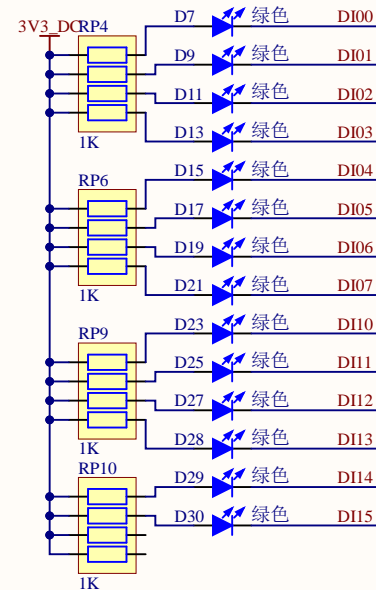
Title <b>StuNetCtl_一款开源的软PLC和可编程运动控制器(W5500主控板)</b>		
Size A4	Number <b>网络通信</b>	Revision <b>V1.0</b>
Date: File:	2/01/2024 E:\08_github_senvy\...\net.SchDoc	Sheet of Drawn By: 3 of 4 SenvySunny

## DO输出和指示灯

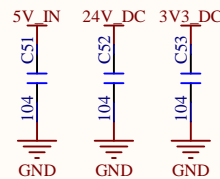
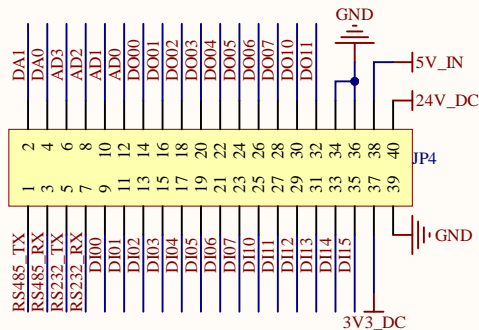
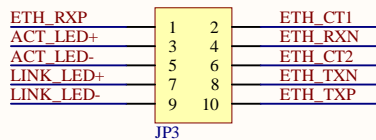


## DI输入和指示灯

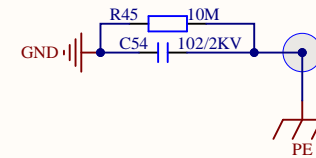
MCU_DI00	DI00
MCU_DI01	DI01
MCU_DI02	DI02
MCU_DI03	DI03
MCU_DI04	DI04
MCU_DI05	DI05
MCU_DI06	DI06
MCU_DI07	DI07
MCU_DI10	DI10
MCU_DI11	DI11
MCU_DI12	DI12
MCU_DI13	DI13
MCU_DI14	DI14
MCU_DI15	DI15



## 外部接插件模块



## 接地



Title StuNetCtl_一款开源的软PLC和可编程运动控制器(W5500主控板)			
Size A4	Number DIDO和接口		Revision V1.0
Date: 2/01/2024	Sheet of 4 of 4		Drawn By: SenySunny
File: E:\08_github_seny\...\io_interface.SchDoc			