

USB type-c座子

USB转串口

The diagram illustrates a USB-to-serial converter circuit. The central component is the CH340C chip, which interfaces between a USB port and a serial port. The USB port connections are as follows: Pin 1 (D-) is connected to a 5V supply through a 220Ω resistor; Pin 2 (D+) is connected to a 5V supply through a 220Ω resistor; Pin 3 (TXD) is connected to the TX pin of the serial port; Pin 4 (RXD) is connected to the RX pin of the serial port. The serial port connections are: Pin 16 (GND) is connected to the GND pin of the serial port; Pin 14 (RTS) is connected to the RTS pin of the serial port; Pin 13 (DTR) is connected to the DTR pin of the serial port; Pin 12 (DCD) is connected to the DCD pin of the serial port; Pin 11 (UD-) is connected to the UD- pin of the serial port; Pin 10 (UD+) is connected to the UD+ pin of the serial port; Pin 9 (XO) is connected to the XO pin of the serial port. The serial port is connected to a microcontroller (pins 1, 2, 3, 4, 5, 6, 7, 8) via a 300ΩF capacitor. The microcontroller is also connected to a 5V supply and a 10kΩ resistor.

POWER LED

EXIT键 主页键

主控 ESP32-S3-WROOM-1-N8R8

BOOT

RESET

GPIO接口

电池及控制电路

拨轮开关

The schematic diagram illustrates the connection of a TF Card to the Raspberry Pi 3B+. The TF Card is shown with its pins connected to the Pi's pins. The connections are as follows:

- TF Card Pin 1 (GND):** Connected to Pi Pin P1 (GND).
- TF Card Pin 2 (VCC):** Connected to Pi Pin P2 (3V3).
- TF Card Pin 3 (GND):** Connected to Pi Pin P3 (GND).
- TF Card Pin 4 (VCC):** Connected to Pi Pin P4 (3V3).
- TF Card Pin 5 (GND):** Connected to Pi Pin P5 (GND).
- TF Card Pin 6 (VCC):** Connected to Pi Pin P6 (3V3).
- TF Card Pin 7 (GND):** Connected to Pi Pin P7 (GND).
- TF Card Pin 8 (VCC):** Connected to Pi Pin P8 (3V3).
- TF Card Pin 9 (GND):** Connected to Pi Pin P9 (GND).
- TF Card Pin 10 (VCC):** Connected to Pi Pin P10 (3V3).
- TF Card Pin 11 (GND):** Connected to Pi Pin P11 (GND).
- TF Card Pin 12 (VCC):** Connected to Pi Pin P12 (3V3).
- TF Card Pin 13 (GND):** Connected to Pi Pin P13 (GND).
- TF Card Pin 14 (VCC):** Connected to Pi Pin P14 (3V3).
- TF Card Pin 15 (GND):** Connected to Pi Pin P15 (GND).
- TF Card Pin 16 (VCC):** Connected to Pi Pin P16 (3V3).
- TF Card Pin 17 (GND):** Connected to Pi Pin P17 (GND).
- TF Card Pin 18 (VCC):** Connected to Pi Pin P18 (3V3).
- TF Card Pin 19 (GND):** Connected to Pi Pin P19 (GND).
- TF Card Pin 20 (VCC):** Connected to Pi Pin P20 (3V3).
- TF Card Pin 21 (GND):** Connected to Pi Pin P21 (GND).
- TF Card Pin 22 (VCC):** Connected to Pi Pin P22 (3V3).
- TF Card Pin 23 (GND):** Connected to Pi Pin P23 (GND).
- TF Card Pin 24 (VCC):** Connected to Pi Pin P24 (3V3).
- TF Card Pin 25 (GND):** Connected to Pi Pin P25 (GND).
- TF Card Pin 26 (VCC):** Connected to Pi Pin P26 (3V3).
- TF Card Pin 27 (GND):** Connected to Pi Pin P27 (GND).
- TF Card Pin 28 (VCC):** Connected to Pi Pin P28 (3V3).
- TF Card Pin 29 (GND):** Connected to Pi Pin P29 (GND).
- TF Card Pin 30 (VCC):** Connected to Pi Pin P30 (3V3).
- TF Card Pin 31 (GND):** Connected to Pi Pin P31 (GND).
- TF Card Pin 32 (VCC):** Connected to Pi Pin P32 (3V3).
- TF Card Pin 33 (GND):** Connected to Pi Pin P33 (GND).
- TF Card Pin 34 (VCC):** Connected to Pi Pin P34 (3V3).
- TF Card Pin 35 (GND):** Connected to Pi Pin P35 (GND).
- TF Card Pin 36 (VCC):** Connected to Pi Pin P36 (3V3).
- TF Card Pin 37 (GND):** Connected to Pi Pin P37 (GND).
- TF Card Pin 38 (VCC):** Connected to Pi Pin P38 (3V3).
- TF Card Pin 39 (GND):** Connected to Pi Pin P39 (GND).
- TF Card Pin 40 (VCC):** Connected to Pi Pin P40 (3V3).
- TF Card Pin 41 (GND):** Connected to Pi Pin P41 (GND).
- TF Card Pin 42 (VCC):** Connected to Pi Pin P42 (3V3).
- TF Card Pin 43 (GND):** Connected to Pi Pin P43 (GND).
- TF Card Pin 44 (VCC):** Connected to Pi Pin P44 (3V3).
- TF Card Pin 45 (GND):** Connected to Pi Pin P45 (GND).
- TF Card Pin 46 (VCC):** Connected to Pi Pin P46 (3V3).
- TF Card Pin 47 (GND):** Connected to Pi Pin P47 (GND).
- TF Card Pin 48 (VCC):** Connected to Pi Pin P48 (3V3).
- TF Card Pin 49 (GND):** Connected to Pi Pin P49 (GND).
- TF Card Pin 50 (VCC):** Connected to Pi Pin P50 (3V3).
- TF Card Pin 51 (GND):** Connected to Pi Pin P51 (GND).
- TF Card Pin 52 (VCC):** Connected to Pi Pin P52 (3V3).
- TF Card Pin 53 (GND):** Connected to Pi Pin P53 (GND).
- TF Card Pin 54 (VCC):** Connected to Pi Pin P54 (3V3).
- TF Card Pin 55 (GND):** Connected to Pi Pin P55 (GND).
- TF Card Pin 56 (VCC):** Connected to Pi Pin P56 (3V3).
- TF Card Pin 57 (GND):** Connected to Pi Pin P57 (GND).
- TF Card Pin 58 (VCC):** Connected to Pi Pin P58 (3V3).
- TF Card Pin 59 (GND):** Connected to Pi Pin P59 (GND).
- TF Card Pin 60 (VCC):** Connected to Pi Pin P60 (3V3).
- TF Card Pin 61 (GND):** Connected to Pi Pin P61 (GND).
- TF Card Pin 62 (VCC):** Connected to Pi Pin P62 (3V3).
- TF Card Pin 63 (GND):** Connected to Pi Pin P63 (GND).
- TF Card Pin 64 (VCC):** Connected to Pi Pin P64 (3V3).
- TF Card Pin 65 (GND):** Connected to Pi Pin P65 (GND).
- TF Card Pin 66 (VCC):** Connected to Pi Pin P66 (3V3).
- TF Card Pin 67 (GND):** Connected to Pi Pin P67 (GND).
- TF Card Pin 68 (VCC):** Connected to Pi Pin P68 (3V3).
- TF Card Pin 69 (GND):** Connected to Pi Pin P69 (GND).
- TF Card Pin 70 (VCC):** Connected to Pi Pin P70 (3V3).
- TF Card Pin 71 (GND):** Connected to Pi Pin P71 (GND).
- TF Card Pin 72 (VCC):** Connected to Pi Pin P72 (3V3).
- TF Card Pin 73 (GND):** Connected to Pi Pin P73 (GND).
- TF Card Pin 74 (VCC):** Connected to Pi Pin P74 (3V3).
- TF Card Pin 75 (GND):** Connected to Pi Pin P75 (GND).
- TF Card Pin 76 (VCC):** Connected to Pi Pin P76 (3V3).
- TF Card Pin 77 (GND):** Connected to Pi Pin P77 (GND).
- TF Card Pin 78 (VCC):** Connected to Pi Pin P78 (3V3).
- TF Card Pin 79 (GND):** Connected to Pi Pin P79 (GND).
- TF Card Pin 80 (VCC):** Connected to Pi Pin P80 (3V3).
- TF Card Pin 81 (GND):** Connected to Pi Pin P81 (GND).
- TF Card Pin 82 (VCC):** Connected to Pi Pin P82 (3V3).
- TF Card Pin 83 (GND):** Connected to Pi Pin P83 (GND).
- TF Card Pin 84 (VCC):** Connected to Pi Pin P84 (3V3).
- TF Card Pin 85 (GND):** Connected to Pi Pin P85 (GND).
- TF Card Pin 86 (VCC):** Connected to Pi Pin P86 (3V3).
- TF Card Pin 87 (GND):** Connected to Pi Pin P87 (GND).
- TF Card Pin 88 (VCC):** Connected to Pi Pin P88 (3V3).
- TF Card Pin 89 (GND):** Connected to Pi Pin P89 (GND).
- TF Card Pin 90 (VCC):** Connected to Pi Pin P90 (3V3).
- TF Card Pin 91 (GND):** Connected to Pi Pin P91 (GND).
- TF Card Pin 92 (VCC):** Connected to Pi Pin P92 (3V3).
- TF Card Pin 93 (GND):** Connected to Pi Pin P93 (GND).
- TF Card Pin 94 (VCC):** Connected to Pi Pin P94 (3V3).
- TF Card Pin 95 (GND):** Connected to Pi Pin P95 (GND).
- TF Card Pin 96 (VCC):** Connected to Pi Pin P96 (3V3).
- TF Card Pin 97 (GND):** Connected to Pi Pin P97 (GND).
- TF Card Pin 98 (VCC):** Connected to Pi Pin P98 (3V3).
- TF Card Pin 99 (GND):** Connected to Pi Pin P99 (GND).
- TF Card Pin 100 (VCC):** Connected to Pi Pin P100 (3V3).

The diagram illustrates the EPD screen interface circuit. The screen (U4) is connected to the microcontroller (U1) through a 0.5_FFC_24P connector. The screen has pins for GDR, RESE, IO48_BUSV, IO47_RES, IO46_DIC, IO45_CS, IO44_SPI_CLK, IO43_SPI_MOSI, PREVGH, PREVGL, VDIHR, VDD, VSH, VSL, and VCOM. The microcontroller (U1) has pins for GDR, RESE, IO48_BUSV, IO47_RES, IO46_DIC, IO45_CS, IO44_SPI_CLK, IO43_SPI_MOSI, PREVGH, PREVGL, VDIHR, VDD, VSH, VSL, and VCOM. The circuit includes a 3V3 power supply, a 10k pull-up resistor, a 2.2k resistor, and a 100nF capacitor. The screen is connected to the microcontroller via a 0.5_FFC_24P connector.

系统3.3V电源

串口电平转换

TF LCD使能

The top diagram shows a 2N7002 MOSFET with its gate connected to a 100K resistor (labeled Q9) and its source connected to GND. The LCD_GND is connected to pin 3 of the MOSFET.

The bottom diagram shows a 2N7002 MOSFET with its gate connected to a 100K resistor (labeled Q10) and its source connected to GND. The TF_GND is connected to pin 3 of the MOSFET.