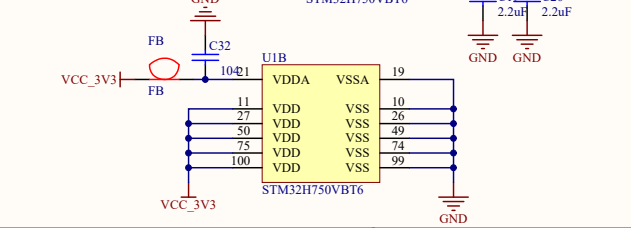
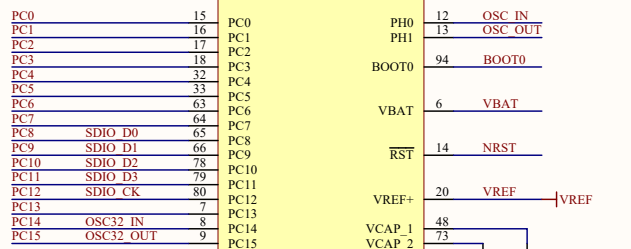
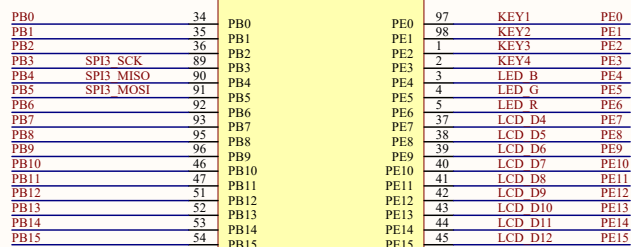
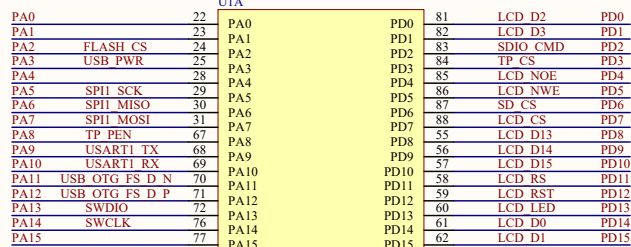
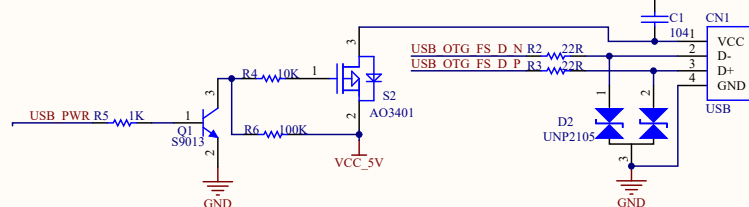
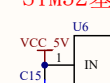


[illegible][illegible]


STM32基准电路



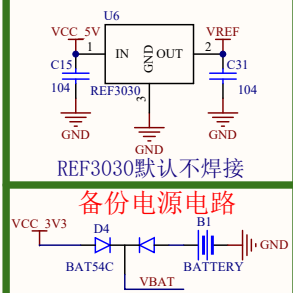
该原理图展示了STM32的基准电压源电路。核心元件是U6（REF3030），其IN引脚通过C15（104）连接到VCC_5V，其OUT引脚通过C31（104）连接到VREF。REF3030的GND引脚连接到公共地。图中还显示了VCC_5V和VREF的电源符号，以及104的电容标识。

REF3030默认不焊接

备份电源电路



该原理图展示了STM32的备份电源电路。VCC_3V3通过二极管D4（BAT54C）连接到VBAT。VBAT引脚还连接了一个电容B1（104）和BATTERY符号，用于在VCC_3V3断电时为STM32的备份寄存器提供电源。图中还显示了VCC_3V3和VBAT的电源符号，以及104的电容标识。

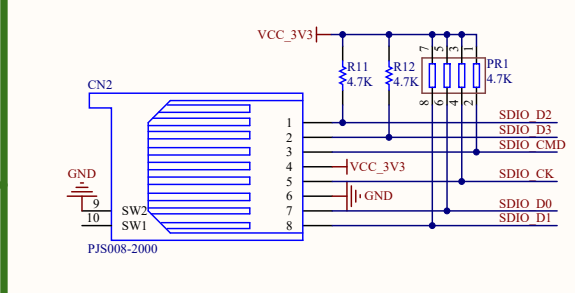


Mini SD卡电路

The diagram illustrates the electrical connections for a Mini SD card. The card's pins are numbered 1 through 8. The connections are as follows:

- Pin 1: SDIO D2
- Pin 2: SDIO D3
- Pin 3: SDIO CMD
- Pin 4: VCC_3V3
- Pin 5: SDIO CK
- Pin 6: SDIO D0
- Pin 7: SDIO D1
- Pin 8: GND

The card is labeled CN2, SW2, and SW1. The PCB components include resistors R11 (4.7K) and R12 (4.7K) connected to VCC_3V3, and a pull-up resistor PR1 (4.7K) connected to GND.



电源电路

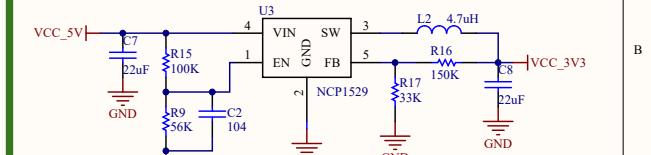
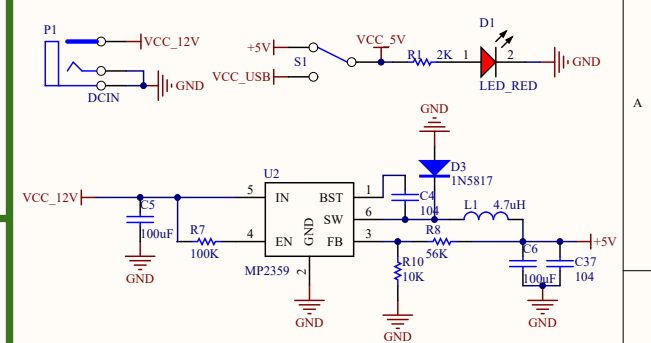
The power circuit diagram illustrates the power supply for the system. It starts with an input selection switch P1 that can connect to VCC_12V or DCIN. A +5V input is also shown, connected to VCC_USB via switch S1. The main power path is a DC-DC converter using the MP2359 (U2) in a boost configuration. The input to the converter is filtered by capacitor C5 (100uF) and resistor R7 (100K). The converter's output is connected to a series of components: a diode D3 (1N5817), a capacitor C4 (104), an inductor L1 (4.7uH), and a resistor R8 (56K). The output is then connected to a load LED_RED (D1) and a capacitor C6 (100uF). The output voltage is +5V. The ground connection is labeled GND.

STM32供电

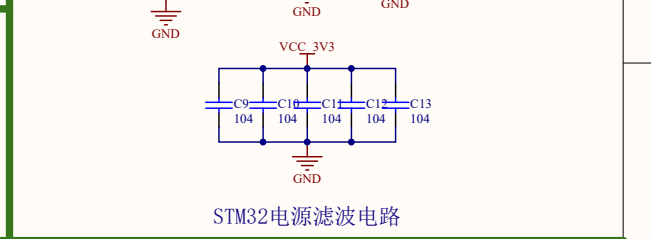
The STM32 power supply diagram shows the regulation of the +5V input to a +3.3V output. The input is filtered by capacitor C7 (22uF) and resistor R15 (100K). The voltage is then regulated by the NCP1529 (U3) in a buck configuration. The regulator's output is connected to a series of components: an inductor L2 (4.7uH), a resistor R16 (150K), and a capacitor C8 (22uF). The output voltage is +3.3V. The ground connection is labeled GND.

STM32电源滤波电路

The STM32 power supply decoupling circuit diagram shows a series of capacitors (C9, C10, C11, C12, C13) connected in parallel to the +3.3V supply line. Each capacitor has a value of 104. The ground connection is labeled GND.

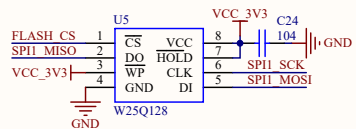


STM32电源滤波电路



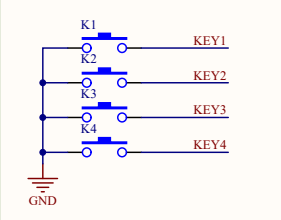
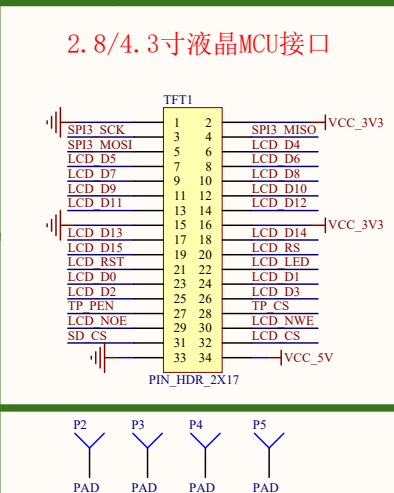
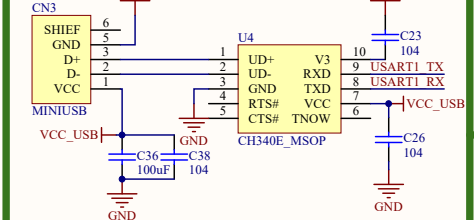
16MB SPI FLASH电路

The diagram shows the connection of a W25Q128 16MB SPI FLASH memory to a microcontroller. The microcontroller pins are labeled U5: CS, VCC, DO, HOLD, WP, CLK, DI, and GND. The flash chip pins are labeled 1 (FLASH CS), 2 (SPI_MISO), 3 (VCC_3V3), 4 (GND), 5 (SPI_MOSI), 6 (SCK), 7 (SCK), 8 (VCC_3V3), and 9 (C24 104). A 104 capacitor is connected between VCC_3V3 and GND. The chip is labeled W25Q128.



独立按键电路

The diagram shows four push buttons labeled KEY1, KEY2, KEY3, and KEY4. Each button has two terminals. The top terminal of each button is connected to a common horizontal line. The bottom terminal of each button is connected to a common ground (GND) symbol. The buttons are represented by a rectangle with a diagonal line and a small circle at the bottom.

[illegible]

STM32引出10接口

Pin	Function	Pin	Function
1	VCC_5V	1	VCC_5V
2	VCC_5V	2	VCC_5V
3	GND	3	GND
4	VCC_5V	4	VCC_5V
5	VCC_5V	5	VCC_5V
6	VCC_5V	6	VCC_5V
7	VCC_5V	7	VCC_5V
8	VCC_5V	8	VCC_5V
9	VCC_5V	9	VCC_5V
10	VCC_5V	10	VCC_5V
11	VCC_5V	11	VCC_5V
12	VCC_5V	12	VCC_5V
13	VCC_5V	13	VCC_5V
14	VCC_5V	14	VCC_5V
15	VCC_5V	15	VCC_5V
16	VCC_5V	16	VCC_5V
17	VCC_5V	17	VCC_5V
18	VCC_5V	18	VCC_5V
19	VCC_5V	19	VCC_5V
20	VCC_5V	20	VCC_5V
21	VCC_5V	21	VCC_5V
22	VCC_5V	22	VCC_5V
23	VCC_5V	23	VCC_5V
24	VCC_5V	24	VCC_5V
25	VCC_5V	25	VCC_5V
26	VCC_5V	26	VCC_5V
27	VCC_5V	27	VCC_5V
28	VCC_5V	28	VCC_5V
29	VCC_5V	29	VCC_5V
30	VCC_5V	30	VCC_5V
31	VCC_5V	31	VCC_5V
32	VCC_5V	32	VCC_5V
33	VCC_5V	33	VCC_5V
34	VCC_5V	34	VCC_5V
35	VCC_5V	35	VCC_5V
36	VCC_5V	36	VCC_5V
37	VCC_5V	37	VCC_5V
38	VCC_5V	38	VCC_5V
39	VCC_5V	39	VCC_5V
40	VCC_5V	40	VCC_5V
41	VCC_5V	41	VCC_5V
42	VCC_5V	42	VCC_5V
43	VCC_5V	43	VCC_5V
44	VCC_5V	44	VCC_5V
45	VCC_5V	45	VCC_5V
46	VCC_5V	46	VCC_5V
47	VCC_5V	47	VCC_5V
48	VCC_5V	48	VCC_5V
49	VCC_5V	49	VCC_5V
50	VCC_5V	50	VCC_5V
51	VCC_5V	51	VCC_5V
52	VCC_5V	52	VCC_5V

PIN_HDR_2X26

