# STM32F103C8T6 基础板

3.7锂电池输入

3.3V稳压

电池电压监控

外部扩展供电
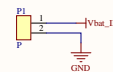
按钮
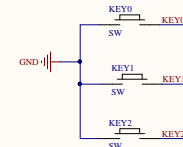
指示灯
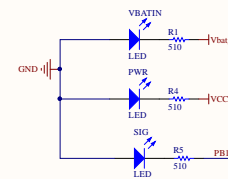
温度监控
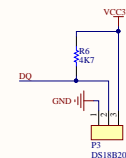
单片机晶振
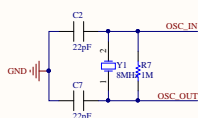
单片机滤波
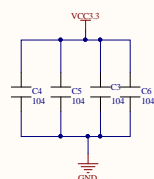
STM32F103C8T6

拓展ROM

启动方式

单片机复位

SWD调试接口
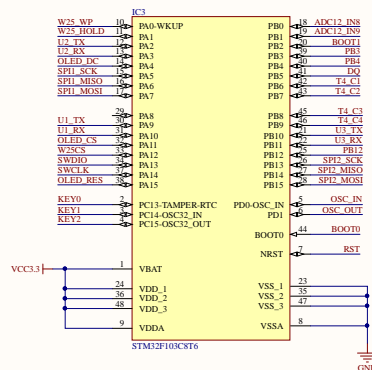
16P FPC外扩接口
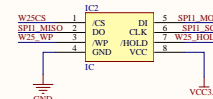
Type-C 充电 串口

OLED12864

STM32F103C8T6基础板

16Pin FPC接口0.5mm间距,翻盖下接

DS18B20温度传感器直插卧倒
复位按钮用短接焊盘,其它贴片侧卧
PCB尺寸控制在45mm X 45mm之间

注意:需要关闭JTAG功能才能操作部分引脚
通过FPC拓展的器件不能使用基础板的电源进行功率供电！
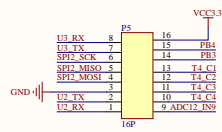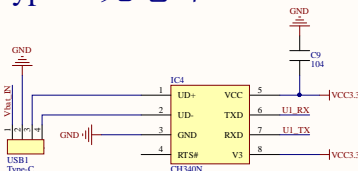
湖南工学院 机械创新实验室 庞碧璋
2021/10/18

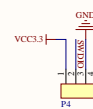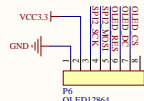| Comment | Description | Designator | Footprint | LibRef | Quantity |
|---|---|---|---|---|---|
| 22pF | | C2 | C 0603 | 电容 | 1 |
| 104 | | C3 | C 0603 | 电容 | 1 |
| 104 | | C4 | C 0603 | 电容 | 1 |
| 104 | | C5 | C 0603 | 电容 | 1 |
| 104 | | C6 | C 0603 | 电容 | 1 |
| 22pF | | C7 | C 0603 | 电容 | 1 |
| 104 | | C8 | C 0603 | 电容 | 1 |
| 104 | | C9 | C 0603 | 电容 | 1 |
| AMS1117 | | IC1 | SOT-223 | AMS1117-3.3 | 1 |
| IC | | IC2 | SOP-8 | w25q16 | 1 |
| STM32F103C8T6 | | IC3 | LQPF48 7X7 | stm32f103c8t6 | 1 |
| CH340N | | IC4 | SOP-8 | CH340N | 1 |
| SW | | KEY0 | SW SMD 3x6x2.5 | 弹簧开关 | 1 |
| SW | | KEY1 | SW SMD 3x6x2.5 | 弹簧开关 | 1 |
| SW | | KEY2 | SW SMD 3x6x2.5 | 弹簧开关 | 1 |
| 10uH | | L1 | L 0603 | 电感 | 1 |
| P | | P1 | HEAD_1X2 | 1X2排针 | 1 |
| P | | P2 | 电池焊盘 | 1X2排针 | 1 |
| DS18B20 | | P3 | TO92 | 1X3排针 | 1 |
| SWD | | P4 | MX1.25 | 1X4排针 | 1 |
| 16P | | P5 | FPC 0.5mm 16P | 16P | 1 |
| OLED12864 | | P6 | HEAD_1X8 | 1X8排针 | 1 |
| LED | Typical INFRARED | PWR | LED 0603 | LED | 1 |
| 510 | Resistor | R1 | R 0603 | Res | 1 |
| 1M | Resistor | R2 | R 0603 | Res | 1 |
| 1M | Resistor | R3 | R 0603 | Res | 1 |
| 510 | Resistor | R4 | R 0603 | Res | 1 |
| 510 | Resistor | R5 | R 0603 | Res | 1 |
| 4K7 | Resistor | R6 | R 0603 | Res | 1 |
| 1M | Resistor | R7 | R 0603 | Res | 1 |
| 10K | Resistor | R8 | R 0603 | Res | 1 |
| 10K | Resistor | R9 | R 0603 | Res | 1 |
| 10K | Resistor | R10 | R 0603 | Res | 1 |
| SW | | RST | SW SMD 3x6x2.5 | 弹簧开关 | 1 |
| LED | Typical INFRARED | SIG | LED 0603 | LED | 1 |
| 10uF | | TAN1 | TAN 0805 | 极性电容 | 1 |
| 10uF | | TAN2 | TAN 0805 | 极性电容 | 1 |
| Type-C | | USB1 | USB Type-C | 1X4排针 | 1 |
| SW | | VBAT | 拨动开关 9X3.5X3.| 开关 | 1 |
| LED | Typical INFRARED | VBATIN | LED 0603 | LED | 1 |
| 8MHz | Crystal Oscillator | Y1 | OSC SMD | 晶振 | 1 |