|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| LCD2004 | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | I2C1 | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | GND | 3V3 | SDA | SCL |  |  |  |
|  |  |  |  |  |  |  |  |  |  | PC10 | PC11 | PC12 | PD2 | PB3 | PB4 | PB5 | PB6 | PB7 | BOOT0 | PB8 | PB9 | PC13  temper |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | USB | VDD | PRG | +3.3 | Gnd | Gnd |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | Data | Rst | Clk |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Crystall  32768  Hz | | CR2032 | |
|  |  |  |  |  |  |  |  |  |  |  |  | STM32F446RE | | | | | | | |  |
| USB |  | UART1 | RX | PA10 |  |  |  |  |  |  |  |  |
|  | TX | PA9 |  |  |  |  |  |  |  |  |
|  |  |  | PA8 |  |  |  |  |  |  |  |  | Crystall  4-25  MHz | |
|  |  |  | PC9 |  |  |  |  |  |  |  |  |
|  |  |  |  | PC8 |  |  |  |  |  |  |  |  |
|  |  |  |  | PC7 |  |  |  |  |  |  |  |  |
|  | GND | 3V3 |  | PC6 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | GND | 3V3 |  | PB15 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | GND | 3V3 |  | PB14 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | PB13 |  |  |  |  | IRQ | CE | MOSI | MISO | SCK | CS |  |  |  |  |  |  |  |  | RST BTN | |
|  |  |  |  | PB12 | PB10 | PB2 | PB1 | PB0 | PC5 | PC4 | PA7 | PA6 | PA5 | PA4 | PA3 | PA2 | PA1 | PA0 | PC3 | PC2 | PC1 | PC0 |
|  |  |  |  |  |  |  |  |  |  |  | SPI1 | | |  |  |  |  |  |  |  |  |  |  | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| VDD – +  VSS – GND   |  |  |  | | --- | --- | --- | |  | TX | RX | | USART 1 | A9/B6 | A10/B7 | | USART 2 | A2 | A3 | | USART 3 | B10/C5/C10 | C11 | | UART 4 | A0/C10 | A1/C11 |   PA15 USB Enable(REMAP) | &Kcy;&acy;&rcy;&tcy;&icy;&ncy;&kcy;&icy; &pcy;&ocy; &zcy;&acy;&pcy;&rcy;&ocy;&scy;&ucy; 24c64 |