|  |  |  |
| --- | --- | --- |
| 模块 | 接口 | 引脚 |
| 显示屏 | BLK | B26 |
| （不包括1.3寸TFT彩屏液晶st7789） | CS | B14 |
|  | DC | B11 |
|  | RES | B10 |
|  | SDA | B08 |
|  | SCL | B09 |
|  | VCC | P1/P2 |
|  | GND | P2/P1 |
| 注：上述配置核心板内已完成连接(P1/P2需自己选择连接) | | |
| 蜂鸣器 | GND | GND |
|  | I/O | B27 |
|  | VCC | 3V3 |
| 注：现有的蜂鸣器为低电平触发 | | |
| 红外测距传感 | DATA | A27 |
|  | GND | GND |
|  | VCC | 5V1 |
|  |  |  |
| 舵机1 | PWM | A12 |
|  | VCC | 5V0 |
|  | GND | GND |
| 舵机2 | PWM | A13 |
|  | VCC | 5V0 |
|  | GND | GND |
| 注：5V0专门给电流大的外设做电源 5V1专门给电流小的外设做电源 | | |
| L298N电机驱动模块 | GND | GND |
|  | VCC | 12V |
|  | IN1 | A17 |
|  | IN2 | A16 |
|  | IN3 | A08 |
|  | IN4 | A09 |
|  | OUT1 |  |
|  | OUT2 |  |
|  | OUT3 |  |
|  | OUT4 |  |
| 注：L298N驱动模块不做板内layer out，只引出所需引脚，方便接线 | | |
| tb6612电机驱动 | GND | GND |
|  | VCC | 5V0 |
|  | VM | 12V |
|  | STBY | 3V3 |
|  | PWMA | A16 |
|  | AN1 | A14 |
|  | AN2 | A15 |
|  | PWMB | A17 |
|  | BN1 | A12 |
|  | BN2 | A13 |
|  |  |  |
|  |  |  |
|  |  |  |
| 按键2 | GND | GND |
|  | VCC | B12 |
| 按键3 | GND | GND |
|  | VCC | B13 |
|  |  |  |
| OPENMV摄像头 | VCC | 5V1 |
|  | GND | GND |
|  | TXD(P5) | A09 |
|  | RXD(P5) | A08 |
|  |  |  |
| 金属探测器 | VCC | 5V1 |
|  | GND | GND |
|  | ECK | B02 |
|  | INTB | B03 |
|  | SCK | B18 |
|  | CSB | A08 |
|  | SDO | B17 |
|  | SDI | B19 |
|  | VIO | 3V3 |
|  | GND | GND |
| 注：本模块使用记得接上跳线帽 | | |
| USB转TTL | GND | GND |
|  | VCC | 3V3 |
|  | TX | A28 |
|  | RX | A31 |
|  |  |  |
| HC05蓝牙模块 | VCC | 5V1 |
|  | GND | GND |
|  | TX | B16 |
|  | RX | B15 |
|  | STATE | A07 |
|  |  |  |
| 陀螺仪MPU6050 | VCC | 3V3 |
|  | GND | GND |
|  | SDA | A00 |
|  | SCL | A01 |
|  | XDA | X |
|  | XCL | X |
|  | AD0 | X |
|  | INT | B04 |
| 模块IIC从机地址为0X68 | | |
| 无线串口 | RX | A25 |
|  | TX | A26 |
|  | GND | GND |
|  | VCC | 5V1 |
| 编码器1 | VCC | 5V0 |
|  | A相 | B06 |
|  | B相 | B07 |
|  | GND | GND |
| 编码器2 | VCC | 5V0 |
|  | A相 | B15 |
|  | B相 | B16 |
|  | GND | GND |