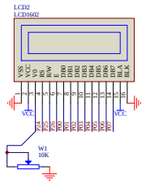
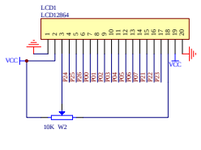
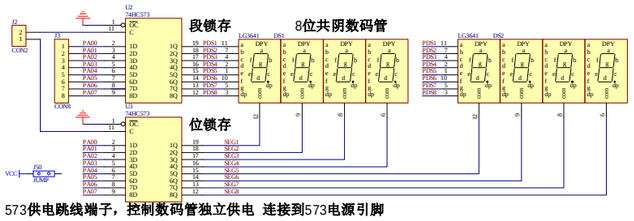


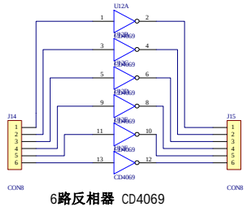
1602液晶插座及对比度调节



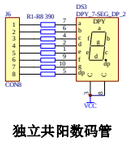
12864液晶插针及对比度调节



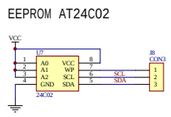
573供电跳线端子，控制数码管独立供电 连接到573电源引脚



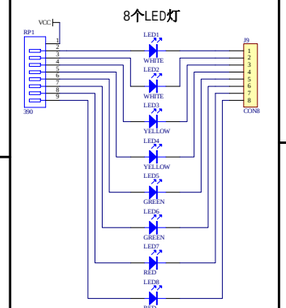
6路反相器 CD4069



独立共阳数码管

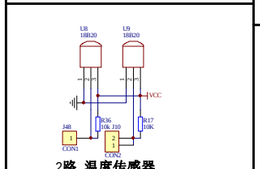


光敏和热敏电阻

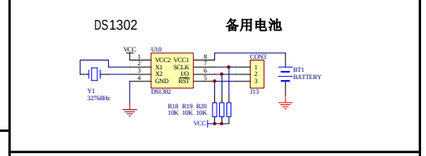


8个LED灯

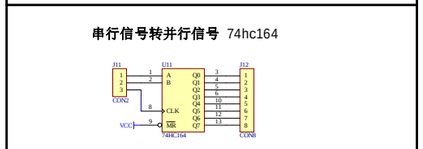
四周固定螺孔



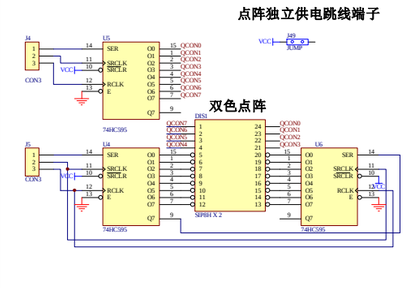
2路 温度传感器



DS1302 备用电池



串行信号转并行信号 74hc164

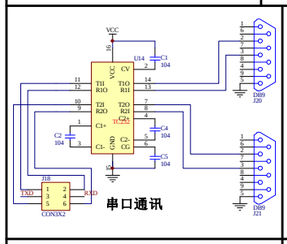


点阵独立供电跳线端子

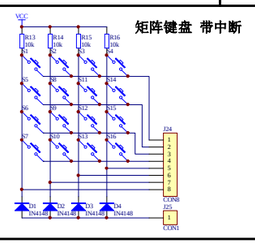
双色点阵

品 名：单片机开发板
型 号：LY-51S
版本号：V2.3 2013款
DOFLY（德飞莱）品牌

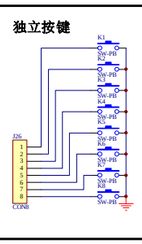
本电路应用于指定型号产品，如有任何更新，dofly不另行通知用户。
如果用户发现产品与该电路不符，须以最终以产品为准，请到销售商处索取对应更新资料！
请务份该资料并妥善保存，因意外导致损坏或丢失本公司不负任何责任！



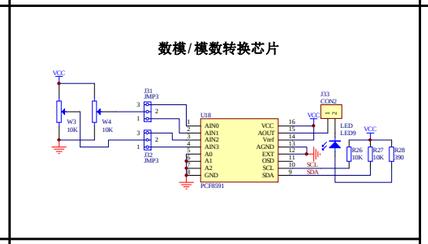
串口通讯



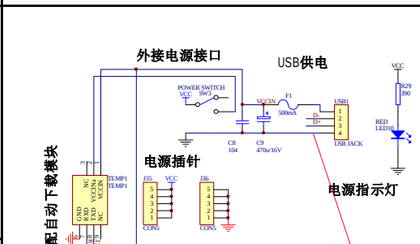
矩阵键盘 带中断



独立按键



数模/模数转换芯片



外接电源接口

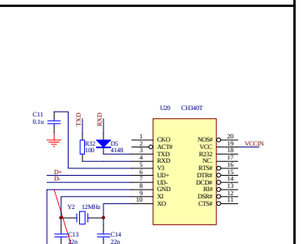
USB供电

电源插针

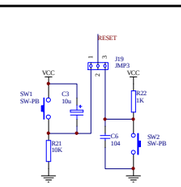
电源指示灯

可选配自动下载模块

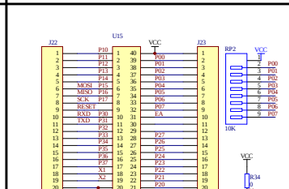
输入电压DC 5V



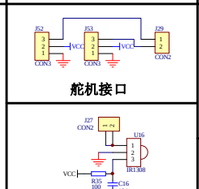
集成usb转串口芯片CH340



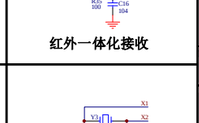
阻容复位



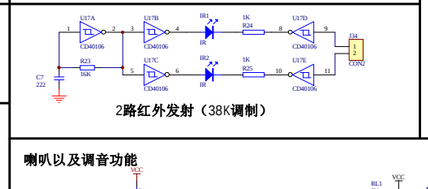
锁紧插座 和 扩展插针



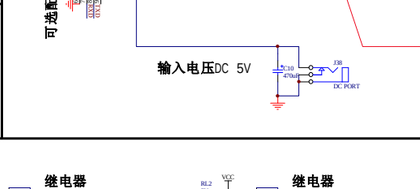
舵机接口



红外一体化接收



2路红外发射（38K调制）



喇叭以及调音功能

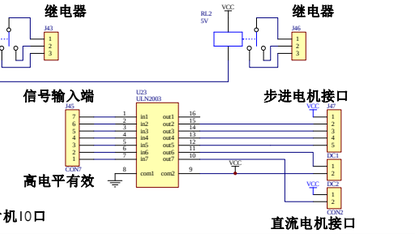
高电平有效

信号输入端

步进电机接口

继电器

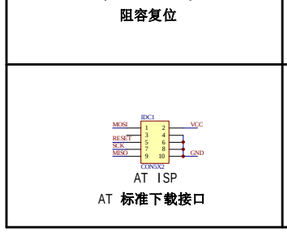
借助杜邦线
将对应端口接到单片机IO口



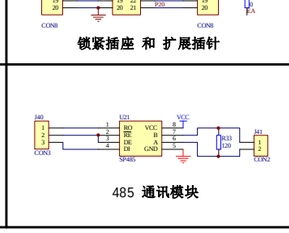
原理图只提供基本电气连接
具体芯片功能请参考相关芯片资料

电路图导读：
1、电路图使用模块独立显示，使用网络标号表示之间连接信息
2、元器件标号与电路板一一对应
3、部分芯片没有显示出电源引脚，对应引脚直接连接到VCC，GND

网络标号含义：
如图虚线指示2处器件，网络标号分别是D-、D+，说明标有同一个网络标号的线是有电气连接的。



AT ISP
AT 标准下载接口



485 通讯模块

可更换晶振