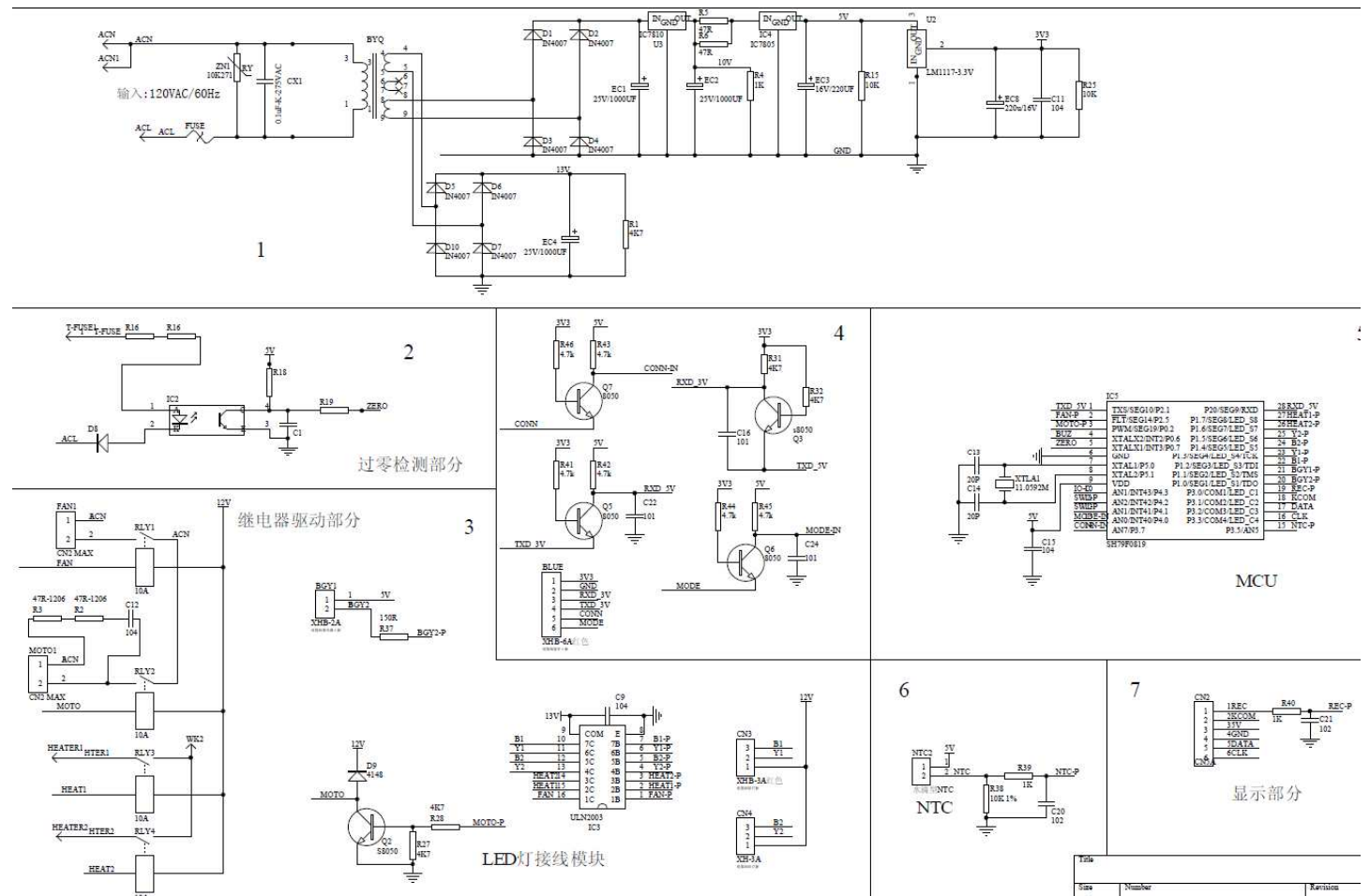


# Technical Description -1:



**Part1:** 电源供电部分，采用 120V/60Hz 输入两组 12V/0.5A 输出变压器做电压转换，通过三端稳压器 7810 做 10V 转换输出；通过三端稳压器 78L05 做 5V 转换；

Power supply,use 120V/60Hz input,two 12V/0.5A output transformer as voltage converter,three terminal regulator 7810 as 10V transform output,three terminal regulator 78L05 as 5V transform output.

**Part2:** T-FUSE 检测电路，采用 PC817 光耦检测信号，当 T-FUSE 断开则进行切断加热保护并显示故障；

T-FUSE detection circuit,use PC817 optocoupler detection signal,cut off the heat protection and display failure.

**Part3:** 加热、电机及 led 驱动电路，采用驱动 IC ULN2003 和三极管驱动；

Heat/motor/LED drive circuit,use drive IC ULN2003 and triode drive.

**Part4:** 蓝牙模块通讯驱动电路，三极管实现 5V 和 3.3V 电平转换，实现 5V 供电的 MCU 与 3.3V 供电的蓝牙模块之间的通讯；

Bluetooth module communication drive circuit,use triode as 5V and 3.3V level conversion,achive the communication between 5V power supply MCU and 3.3V power supply bluetooth module.

**Part5:** 通过 MCU: SH79F0819M 检测和驱动各部分电路；

SH79F0819M detection and drive each circuit through MCU.

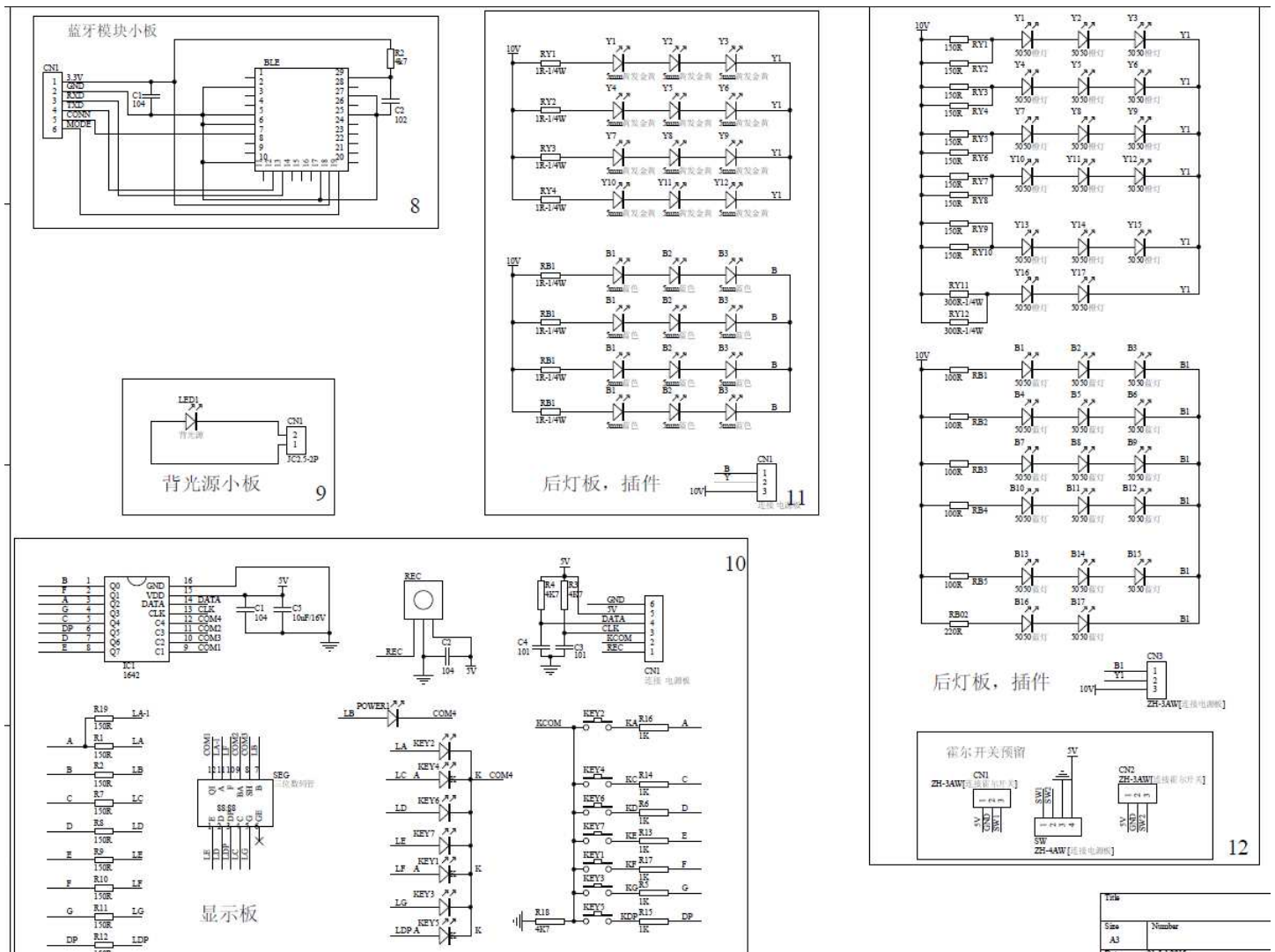
**Part6:** NTC 传感器检测电路，检测环境温度，转换为电平信号给 MCU；

NTC sensor detecioncircuit,detectenviromenttemperature,convert to level signal to MCU.

**Part7:** 按键显示接口，连接电源板和按键显示板接口；

Key display interface,connect power panel and key display interface.

## Technical Description -2:



**Part8:** 蓝牙模块电路，蓝牙模块接收到手机的命令后，通过 UART 串口把数据发给 MCU，MCU 做相应的指令动作，并反馈状态给模块，模块收到状态后转给手机；

Bluetooth module circuit,when bluetooth module receives the command of mobilephone,it will send the data to MCU by UART serial port,MCU acts accordingly and response to module,module pass info to mobilephone.

### Part9: 商标 LOGO 显示电路, ;

Logo display circuit.

**Part10:** 按键显示板，通过驱动 IC1642 进行对数码管显示驱动和按键扫描；接收头接收到遥控器发出的红外指令后转给 MCU；

Button display board, start nixie tube display driver and key scan through driver IC1642; after the receiver receives infrared command from remote control, then pass to MCU.

### Part11: 火焰灯 LED 显示电路:

The flame lamp LED display circuit.

## Part12: 碳床灯 LED 显示电路;

## Log set lamp LED display circuit