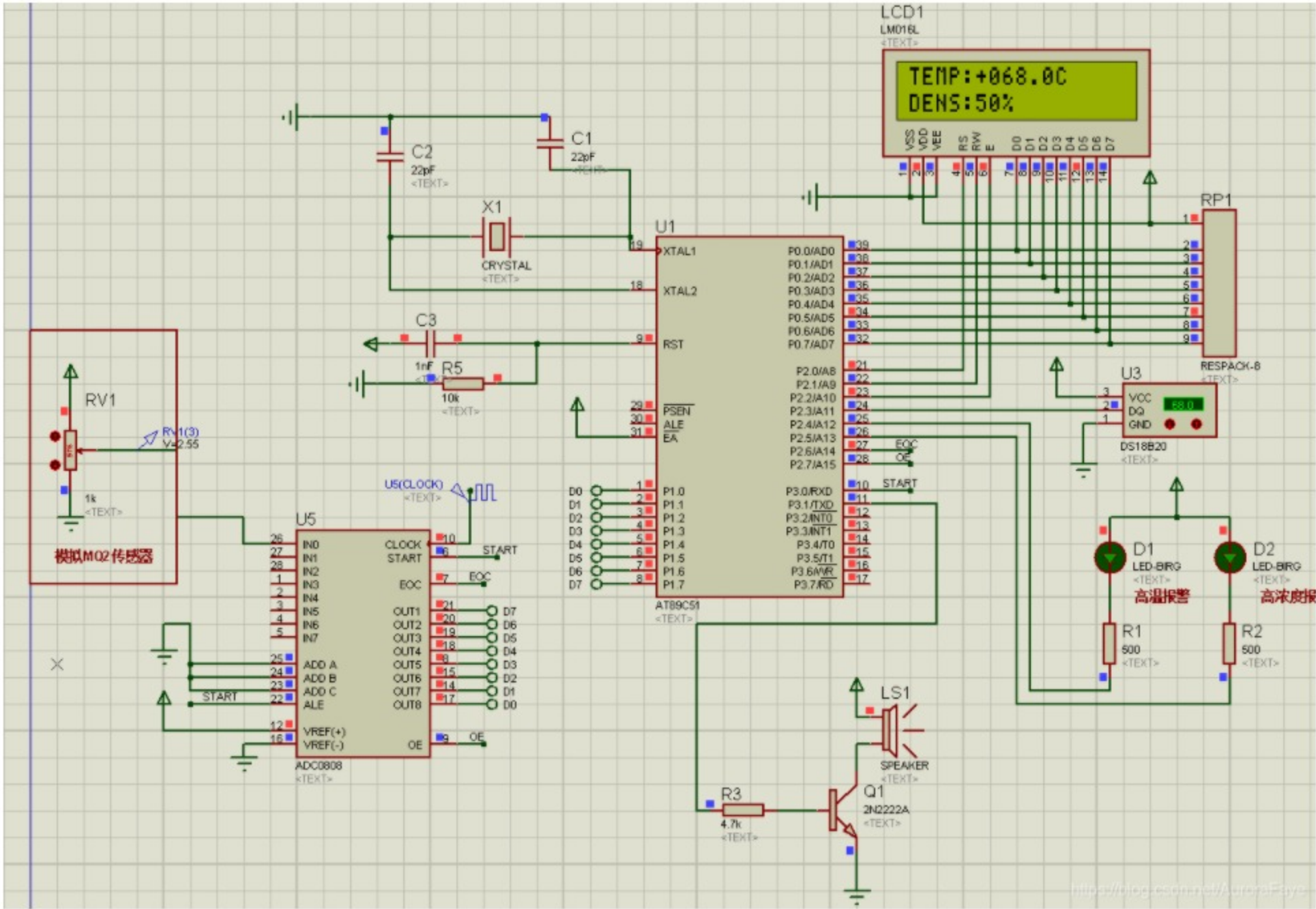


测量温度和烟雾实时检测，同时具有高温报警功能和高浓度报警功能，通过LED进行显示。



```
1  #include <reg51.h>//头文件，52单片机改为52
2  #include <intrins.h>
3
4  #define LCD_DATA P0
5  sbit LCD_RS = P2^0;
6  sbit LCD_RW = P2^1;
7  sbit LCD_EN = P2^2;
8  unsigned char dispBuff0[16]={'T','E','M',
9  'P',':',' ',' ',' ',' ',' ',' ',' ',' ',' ',' ',' ',' ',' '};//LCD第一行显示
10 unsigned char dispBuff1[16]={'D','E','N',
11 'S',':',' ',' ',' ',' ',' ',' ',' ',' ',' ',' ',' ',' ',' '};//LCD第二行显示
12
13 sbit DQ=P2^3; //DS18B20数据端
14 unsigned int temperature=0;//温度
15 unsigned char fuhao=0;//温度的正负符号
16
17 //AD0809的IO口以及变量定义
18 sbit OE=P2^7;
19 //sbit ALE=P3^0;
20 sbit EOC=P2^6;
21 sbit START=P3^0;
22 unsigned char density=0;//浓度
23
24 //LED报警指示的IO口以及变量定义
25 sbit LED1=P2^4;//温度报警指示
26 sbit LED2=P2^5;//浓度报警指示
27 #define off 1 //高电平时灯为关闭状态
28 #define on 0 //低电平时灯为开启状态
29
30 sbit speaker=P3^1;//蜂鸣器
31
32
33 void Delay20ms() ;
34 void LCD_WriteDat(unsigned char lcd_dat);
35 void LCD_WriteCmd(unsigned char lcd_cmd);
36 unsigned char LCD_ReadStatus(void);
37 void LCD_Goto(unsigned char x,unsigned char y);
38 void LCD_Display(unsigned char row,unsigned char *str);
39
40 void delay(unsigned int x)//延时公用程序
41 {
42     unsigned char j;
43     while(x--)
44     {
45         for(j=0;j<125;j++);
46     }
47 }
48
49 /*1、LCD模块子函数*/
50
51 void LCD_Init(void)
52 {
```