

```
1  /*
2  * This is the .h file for the Si7051 sensor
3  * This sensor is used in the globe thermometer
4  */
5  #ifndef _CLOSEDCUBE_SI7051_h
6
7  #define _CLOSEDCUBE_SI7051_h
8  #define MAX_READ_COUNT 5
9  #define ADDR_MRT 0x40
10 #define DEFAULT_AVERAGE 128
11 #include <Arduino.h>
12
13 class ClosedCube_Si7051 {
14 public:
15     ClosedCube_Si7051();
16
17     float readT(); // short-cut for readTemperature
18     float run_mrt(void);
19     bool start_mrt(void);
20     float get_MRT_ave(void);
21
22 private:
23     uint8_t _address;
24     void begin(uint8_t address);
25     float readTemperature();
26     float T_buf[MAX_READ_COUNT];
27     float T_ave;
28     int read_count;
29 };
30
31 #endif
32
33
```