

```
1  #ifndef __OSDEFS_H
2
3  #include <stdint.h>
4  #include <stdio.h>
5  #include <LPC17xx.h>
6  #include <stdbool.h>
7
8  //global constants
9  #define MAX_STACK 0x2000
10 #define STACK_SIZE 512
11 #define MAX_THREADS ((MAX_STACK - STACK_SIZE)/STACK_SIZE)
12
13 #define ACTIVE 0
14 #define WAITING 1
15 #define SLEEPING 2
16
17 #define TIMESLICE_DEFAULT 1000
18 #define TIMESLICE_IDLE 500
19
20 //define thread struct
21 typedef struct{
22     uint32_t* TSP; //store thread stack pointer
23     void (*fun_ptr)(void); //store thread's function pointer
24
25     int status;
26     int timer; //in ms
27     int sleepTime;
28     int timeslice;
29
30 } threadStruct;
31
32 #endif
```