

```

1  /*******
2  // defs.h    global definitions for IPC project
3  // Author:   M. Thaler
4  // Date:     3/2011
5  /*******
6
7  #ifndef THE_GLOBAL_DEFINITIONS
8  #define THE_GLOBAL_DEFINITIONS
9
10 //-----
11
12 #define PGROUP      "MyName"
13 #define PGROUPNR    0
14
15 // fflush requires stdio.h
16 #include <stdio.h>
17
18 #define ClearScreen() printf("\033[H\033[J"); fflush(stdout)
19 #define HomeScreen()  printf("\033[H");          fflush(stdout)
20
21 #define mSLEEP(delay) usleep((int)(delay*1000))
22
23 #define COMPANY "Green Systems\n\n\n"
24
25 #define BUF_SIZE 256           // max size of buffers
26
27 #define SENSOR_MAX_NUM 8      // max number of devices
28
29 #define COMM_PORT 44444       // sensor ports
30
31 //-----
32
33 typedef struct {              // sensor data
34     unsigned deviceID;        // sensor ID
35     unsigned sequenceNr;      // sequence number of data
36     float    valIS;           // temperature: measured
37     float    valREF;          // temperature: reference
38     int      status;          // status
39 } SensorData, *SensorDataPtr;
40
41 //-----
42
43 typedef struct {              // message data
44     int      sequenceNr;
45     int      deviceID;
46     float    delta;
47     char     statusText[64];
48 } MessageData, *MessageDataPtr;
49
50 #define MSG_TYPE 3333L        // message type
51
52 typedef struct {              // message
53     long      msgType;         // type
54     MessageData mdata;         // data
55 } Message, *MessagePtr;
56
57 #define MSG_LENGTH (sizeof(Message) - sizeof(long)) // length of message
58
59 //-----
60
61 #define MSG_TYPE1 3334L        // message type
62

```

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63 typedef struct {                                // message type 1
64     long  msgType;                                //      type
65     int   numOfSensors;                          //      number of sensors
66     float ctrl[SENSOR_MAX_NUM];                  //      data
67 } Msg, *MsgPtr;
68
69 #define MSG_LENGTH1 (sizeof(Msg) - sizeof(long)) // length of message
70
71 //-----
72
73 #define PROJECT_ID      201
74 #define SEM_KEY_FILE    (const char *)("/tmp/my_sem_key.tmp")
75 #define SHM_KEY_FILE    (const char *)("/tmp/my_shm_key.tmp")
76 #define MBOX_KEY_FILE   (const char *)("/tmp/my_box_key.tmp")
77
78 //-----
79
80 #endif
```