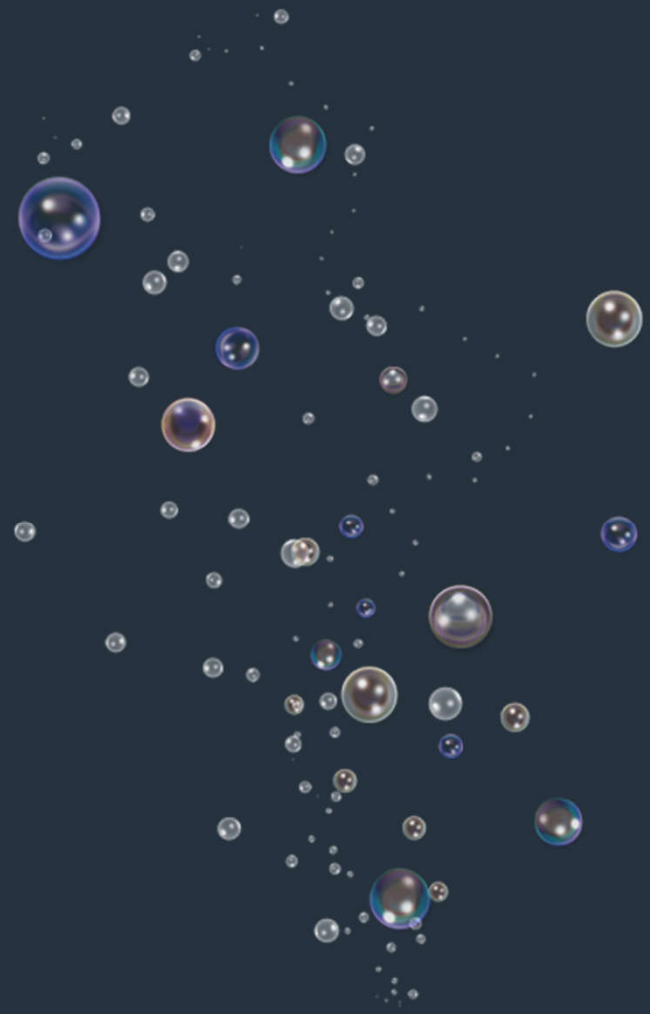

获取目录列表

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获得目录列表

- 打开目录文件

```
#include <unistd.h>
DIR* opendir(const char * path);
```

打开参数path指定的目录，并返回DIR* 形态的目录流，和fopen类似，接下来对目录的读取和搜索都要使用此返回值

读出目录文件的内容

readdir执行成功则返回指向dirent结构的指针，**以后每次调用都用新的目录项来替换dirent结构**。如果有错误发生或读取到目录文件尾则返回NULL。

```
#include<sys/types.h>
#include<dirent.h>
struct dirent * readdir(DIR * dir);
```

dirent目录结构

```
struct dirent
{
    ino_t d_ino;                    //此目录进入点的inode
    ff_t  d_off;                    //目录文件开头至此目录进入点的位移
    signed short int d_reclen;      //d_name的长度，不包含NULL字符
    unsigned char d_type;           //d_name所指的文件类型
    har d_name[256];                //文件名
};
```

关闭目录文件

- 关闭目录文件

```
#include<sys/types.h>
#include<dirent.h>
int closedir(DIR *dir);
```

例：ls功能的实现

```
#include <stdio.h>
#include <sys/types.h>
#include <dirent.h>
int main(int argc,char *argv[])
{
   DIR* dir;
   struct dirent* p;
   char* path;
   if(argc==1)
      path = "./";
   else
      path = argv[1];
   dir=opendir(path);
   p=readdir(dir);
   while(p!=NULL)
   {
      printf("%s\n",p->d_name);
      p=readdir(dir);
   }
   closedir(dir);
   return 0;
}
```

showdir.c

例：ls功能的实现

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```

```
struct dirent
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   ino_t d_ino;
   ff_t  d_off;
   signed short int d_reclen;
   unsigned char d_type;
   har d_name[256];        //文件名
};
```

showdir.c

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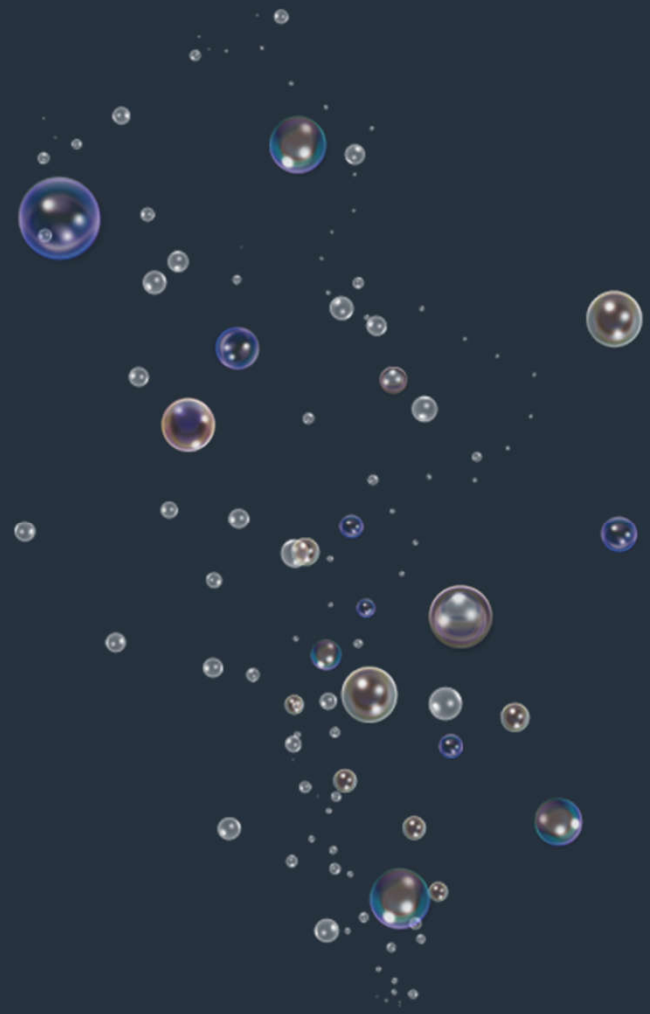
showdir.c



嵌入式软件设计

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