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SIM800 Series_FS_Application Note_V1.00



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Version History

| Date | Version | What is new | Author |
|------------|---------|-------------|---------|
| 2013-10-31 | 1.00 | New version | Yong.lu |

Scope

This document presents the AT commands of FS operation and application examples. This document can apply to “1308B01SIM800H32_BT” version.

1. FS Introduction

This chapter introduces the FS application features.

1.1. Features

Local storage space is mapped to “C:”, the system will create User directory in “C:” after first boot, and storage space of SD card is mapped to “D:”.

As PCM interface and SD card interface is multiplexing function, shown as below table. At the first time to use SD card, customer must execute “AT+SD2PCM=0” and “AT&W”, then reboot the module by AT command or pwrkey.

PCM and SD card multiplexing function:

| Pin name | Pin number | Mode 0(default) | Mode 1 | Mode 2 | Mode 3 |
|----------|------------|-----------------|-----------|--------|--------|
| PCMCLK | 29 | PCMCLK | DISP_RSTB | MC3CM0 | GPIO18 |
| PCMOUT | 30 | PCMOUT | DISP_DI | MC3DA3 | GPIO19 |
| PCMSYNC | 65 | PCMSYNC | DISP_CEB | MC3CK | GPIO20 |
| PCMIN | 66 | PCMIN | DISP_DA | MC3DA2 | GPIO21 |
| GPIO2 | 27 | GPIO2 | DISP_A0DA | MC3DA0 | - |
| GPIO3 | 28 | GPIO3 | DISP_CLK | MC3DA1 | - |

2. AT Commands

SIM800 series FS AT command overview.

| Command | Description |
|-------------|------------------------|
| AT+FSCREATE | Create File |
| AT+FSREAD | Read File |
| AT+FSWRITE | Write File |
| AT+FSDEL | Delete File |
| AT+FSLS | List Directories/Files |
| AT+FSFLSIZE | Get File Size |

2.1. AT+FSCREATE Create File

| AT+FSCREATE Create File | |
|---|--|
| Test Command AT+FSCREATE =? | Response OK or ERROR |
| Write Command AT+FSCREATE =<filename> | <div>Response OK or ERROR</div> <div>Parameter <filename> String without double quotes, the length of the file name should be less than or equal to 64 characters</div> |
| Reference | Note |

2.2. AT+FSREAD Read File

| AT+FSREAD Read File | |
|--|---|
| Test Command AT+FSREAD=? | Response OK or ERROR |
| Write Command AT+FSREAD =<filename>,<mode>,<filesize>,<position> | Response <data> OK or ERROR Parameter <filename> String without double quotes, the file should have already existed. The length of the file name should be less than or equal to 64 characters <mode> 0 Read data at the beginning of the file 1 Read data at the <position> of the file <filesize> The size of the file that you want to read, the size should be less than or equal to 10240.If the <filesize> is more than the file real size, the <filesize> will be set to the file real size. <position> The starting position that will be read in the file. The <position> should be less than the file size <data> The readed data will be putted out by uart port |
| Reference | Note When <mode> is 0 , <position> is invalid. |

2.3. AT+FSWRITE Write File

| AT+FSWRITE Write File | |
|--|--|
| Test Command AT+FSWRITE =? | Response OK or ERROR |
| Write Command AT+FSWRITE =<filename>,<mode>,<filesize>,<inputtime> | Response > OK or ERROR or TimeOut |

| | |
|-----------|---|
| | <p>Parameter</p> <p><filename> String without double quotes, the file should have already existed. The length of the file name should be less than or equal to 64 characters.</p> <p><mode> 0 Write data at the beginning of the file 1 Write data at the end of the file</p> <p><filesize> The size of the file that you want to write, the size should be less than or equal to 10240.</p> <p><inputtime> Second, user should send file during this period or you can not send file when time out</p> |
| Reference | Note |

2.4. AT+FSDEL Delete File

| AT+FSDEL Delete File | |
|--|--|
| Test Command AT+FSDEL=? | Response OK or ERROR |
| Write Command AT+FSDEL =<filename> | <p>Response OK or ERROR</p> <p>Parameter <filename> String without double quotes, the file should have already existed. The length of the file name should be less than or equal to 64 characters</p> |
| Reference | Note |

2.5. AT+FSLS List Directories/Files

| AT+FSLS List Directories/Files | |
|---|---|
| Test Command AT+FSLS=? | Response OK or ERROR |
| Write Command AT+FSLS =<filepath> | <p>Response <list of subdirectories/files></p> <p>OK or</p> |

| | |
|-----------|---|
| | ERROR |
| | <p>Parameter</p> <p><filepath> String without double quotes, directory for selection. The length of the directory name should be less than or equal to 64 characters. The string format such as C:\, the directory must have “\”</p> |
| Reference | <p>Note</p> <p>If the last character of the result string is “\”, this means that it is a directory, otherwise, it is a file.</p> |

2.6. AT+FSFLSIZE Get File Size

| AT+FSFLSIZE Get File Size | |
|---|---|
| <p>Test Command</p> <p>AT+FSFLSIZE</p> <p>=?</p> | <p>Response</p> <p>OK</p> <p>or</p> <p>ERROR</p> |
| <p>Write Command</p> <p>AT+ FSFLSIZE</p> <p>=<filename></p> | <p>Response</p> <p>+FSFLSIZE: <n></p> <p>OK</p> <p>or</p> <p>ERROR</p> <p>Parameter</p> <p><filename> String without double quotes, the file should have already existed. The length of the file name should be less than or equal to 64 characters</p> <p><n> The file size</p> |
| Reference | Note |

3. Examples

In the "Grammar" columns of following tables, input of AT commands are in black , module return values are in blue.

| Grammar | Description |
|---|--|
| AT+SD2PCM=0 OK AT&W OK AT+CFUN=1,1 OK | SD mode is valid In this example, reboot the module by AT command, customer can reboot the module by pwrkey instead of AT command |
| AT+FSLS=D:\ Images\ Audio\ OK AT+FSCREATE=D:\test.txt OK AT+FSLS=D:\ Images\ Audio\ test.txt OK | Create test.txt |
| AT+FSFLSIZE=D:\test.txt +FSFLSIZE: 20 OK | |
| AT+FSREAD=D:\test.txt,0,100,1 asdfghjklolytedfttg OK | |
| AT+FSWRITE=D:\test.txt,0,2,10 > OK | Write "cc" at the beginning of the file |
| AT+FSREAD=D:\test.txt,0,100,0 ccdghjklolytedfttg OK | The first two characters is "cc" |
| AT+FSREAD=D:\test.txt,1,100,2 | The offset of reading position is 2 |

dfghjkloiypedfttg
OK

SIMCOM CONFIDENTIAL FILE

Appendix

A Related Documents

| SN | Document name | Remark |
|-----|---------------------------------|--------|
| [1] | SIM800 Series_AT Command Manual | |

B Terms and Abbreviations

| Abbreviation | Description |
|--------------|-------------|
| | |
| | |
| | |

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