



SIM7070_SIM7080_SIM7090 Series_FS _Application Note

LPWA Module

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About Document

Version History

Version	Date	Owner	What is new
V1.00	2019.9.2	Xiangning.Meng	First Release
V1.01	2020.2.26	Wenjie.Lai	Added product types
V1.02	2020.7.8	Wenjie.Lai	All

Scope

This document applies to the following products

Name	Type	Size(mm)	Comments
SIM7080G	CAT-M/NB	17.6*15.7*2.3	N/A
SIM7070G/SIM7070E	CAT-M/NB/GPRS	24*24*2.4	N/A
SIM7070G-NG	NB/GPRS	24*24*2.4	N/A
SIM7090G	CAT-M/NB	14.8*12.8*2.0	N/A

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1 Introduction

1.1 Purpose of the document

Based on module AT command manual, this document will introduce FS application process.

Developers could understand and develop application quickly and efficiently based on this document.

1.2 Related documents

[1] SIM7070_SIM7080_SIM7090 Series_AT Command Manual

1.3 Conventions and abbreviations

In this document, the GSM engines are referred to as following term:

- ME (Mobile Equipment);
- MS (Mobile Station);
- TA (Terminal Adapter);
- DCE (Data Communication Equipment) or facsimile DCE (FAX modem, FAX board);

In application, controlling device controls the GSM engine by sending AT Command via its serial interface. The controlling device at the other end of the serial line is referred to as following term:

- TE (Terminal Equipment);
- DTE (Data Terminal Equipment) or plainly "the application" which is running on an embedded system;

2 AT Commands for FS

Command	Description
AT+CFSINIT	Get Flash Data Buffer
AT+CFSWFILE	Write File to the Flash Buffer Allocated by CFSINIT
AT+CFSRFILE	Read File from Flash
AT+CFSDFILE	Delete the File from the Flash
AT+CFSGFIS	Get File Size
AT+CFSREN	Rename a file
AT+CFSGFRS	Get the size of file system
AT+CFSTERM	Free the Flash Buffer Allocated by CFSINIT

For detail information, please refer to "SIM7070_SIM7080_SIM7090 Series_AT Command Manual".

3 FS Examples

3.1 Download a file

//Download Examples

AT+CFSINIT

//Allocate the data buffer.

OK

AT+CFSWFILE=0,"001.txt",0,100,10000

//Set file parameters and get ready to write the data to the beginning to the end of the file "001.txt" in /custapp/ folder, which size is 100 bytes.

DOWNLOAD

//It is ready to receive data from UART, and DCD has been set to low.

...

//Begin to download data to UART. "..." means data. "OK" means data transfer is finished and DCD is set to high.

OK

AT+CFSGFIS=0,"001.txt"

//Get the txt file size.

+CFSGFIS: 100

//The file size is 100 bytes.

OK

AT+CFSTERM

//Free the data buffer.

OK

3.2 Upload a file

//Upload Examples

AT+CFSINIT

//Allocate the data buffer.

OK

AT+CFSRFILE=0,"001.txt",0,100,0

//Set file parameters and get ready to read the data from the beginning to the end of the file "001.txt" in /custapp/ folder, which size is 100 bytes.

...

//Begin to received data from UART. "..." means data. "OK" means data transfer is finished and

```
AT+CFSGFIS=0,"001.txt"
+CFSGFIS: 100

OK
AT+CFSTERM
OK
```

DCD is set to high.
//Get the txt file size.
//The file size is 100 bytes.

//Free the data buffer.

3.3 Delete a file

Delete the file "001.txt" from the module flash.

```
//Delete file Examples

AT+CFSINIT
OK
AT+CFSDFILE=0,"001.txt"
OK
AT+CFSTERM
OK
```

//Allocate the data buffer.
//Delete the file "001.txt" in /custapp/ folder.
//Free the data buffer.

3.4 Rename a file

Rename the AMR file "001.txt" as "002.txt".

```
//Rename file Examples

AT+CFSINIT
OK
AT+CFSREN=0,"001.txt","002.txt"
OK
AT+CFSTERM
OK
```

//Allocate the data buffer.
//Rename the file "001.txt" to "002.txt".
//Free the data buffer.

3.5 Get the free size of File System

Get the free size of file system.

//Rename file Examples

```
AT+CFSINIT //Allocate the data buffer.
OK
AT+CFSGFRS? //Get the size of File System.
+CFSGFRS: 22151168 //the free size of file system is 22151168
OK
AT+CFSTERM //Free the data buffer.
OK
```

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