SIM7070_SIM7080_SIM7090 Series_FS_Application Note

LPWA Module
GENERAL NOTES

SIMCOM OFFERS THIS INFORMATION AS A SERVICE TO ITS CUSTOMERS, TO SUPPORT APPLICATION AND ENGINEERING EFFORTS THAT USE THE PRODUCTS DESIGNED BY SIMCOM. THE INFORMATION PROVIDED IS BASED UPON REQUIREMENTS SPECIFICALLY PROVIDED TO SIMCOM BY THE CUSTOMERS. SIMCOM HAS NOT UNDERTAKEN ANY INDEPENDENT SEARCH FOR ADDITIONAL RELEVANT INFORMATION, INCLUDING ANY INFORMATION THAT MAY BE IN THE CUSTOMER’S POSSESSION. FURTHERMORE, SYSTEM VALIDATION OF THIS PRODUCT DESIGNED BY SIMCOM WITHIN A LARGER ELECTRONIC SYSTEM REMAINS THE RESPONSIBILITY OF THE CUSTOMER OR THE CUSTOMER’S SYSTEM INTEGRATOR. ALL SPECIFICATIONS SUPPLIED HEREIN ARE SUBJECT TO CHANGE.

COPYRIGHT

THIS DOCUMENT CONTAINS PROPRIETARY TECHNICAL INFORMATION WHICH IS THE PROPERTY OF SIMCOM WIRELESS SOLUTIONS LIMITED COPYING, TO OTHERS AND USING THIS DOCUMENT, ARE FORBIDDEN WITHOUT EXPRESS AUTHORITY BY SIMCOM. OFFENDERS ARE LIABLE TO THE PAYMENT OF INDEMNIFICATIONS. ALL RIGHTS RESERVED BY SIMCOM IN THE PROPRIETARY TECHNICAL INFORMATION, INCLUDING BUT NOT LIMITED TO REGISTRATION GRANTING OF A PATENT, A UTILITY MODEL OR DESIGN. ALL SPECIFICATION SUPPLIED HEREIN ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.

SIMCom Wireless Solutions Limited
Building B, SIM Technology Building, No.633 Jinzhong Road, Changning District, Shanghai P.R. China
Tel: +86 21 31575100
Email: simcom@simcom.com

For more information, please visit:
https://www.simcom.com/download/list-863-en.html

For technical support, or to report documentation errors, please visit:
https://www.simcom.com/ask/ or email to: support@simcom.com

Copyright © 2020 SIMCom Wireless Solutions Limited All Rights Reserved.
About Document

Version History

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Owner</th>
<th>What is new</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1.00</td>
<td>2019.9.2</td>
<td>Xiangning.Meng</td>
<td>First Release</td>
</tr>
<tr>
<td>V1.01</td>
<td>2020.2.26</td>
<td>Wenjie.Lai</td>
<td>Added product types</td>
</tr>
<tr>
<td>V1.02</td>
<td>2020.7.8</td>
<td>Wenjie.Lai</td>
<td>All</td>
</tr>
</tbody>
</table>

Scope

This document applies to the following products

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Size(mm)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIM7080G</td>
<td>CAT-M/NB</td>
<td>17.6<em>15.7</em>2.3</td>
<td>N/A</td>
</tr>
<tr>
<td>SIM7070G/SIM7070E</td>
<td>CAT-M/NB/GPRS</td>
<td>24<em>24</em>2.4</td>
<td>N/A</td>
</tr>
<tr>
<td>SIM7070G-NG</td>
<td>NB/GPRS</td>
<td>24<em>24</em>2.4</td>
<td>N/A</td>
</tr>
<tr>
<td>SIM7090G</td>
<td>CAT-M/NB</td>
<td>14.8<em>12.8</em>2.0</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Contents

About Document.......................................................................................................................... 3
  Version History....................................................................................................................... 3
  Scope.................................................................................................................................... 3

Contents...................................................................................................................................... 4

1 Introduction............................................................................................................................. 5
  1.1 Purpose of the document................................................................................................. 5
  1.2 Related documents........................................................................................................... 5
  1.3 Conventions and abbreviations....................................................................................... 5

2 AT Commands for FS............................................................................................................. 6

3 FS Examples............................................................................................................................ 7
  3.1 Download a file............................................................................................................... 7
  3.2 Upload a file.................................................................................................................... 7
  3.3 Delete a file..................................................................................................................... 8
  3.4 Rename a file.................................................................................................................. 8
  3.5 Get the free size of File System...................................................................................... 9
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


1.3 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

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT+CFSINIT</td>
<td>Get Flash Data Buffer</td>
</tr>
<tr>
<td>AT+CFSWFFILE</td>
<td>Write File to the Flash Buffer Allocated by CFSINIT</td>
</tr>
<tr>
<td>AT+CFSRFILE</td>
<td>Read File from Flash</td>
</tr>
<tr>
<td>AT+CFSDFILE</td>
<td>Delete the File from the Flash</td>
</tr>
<tr>
<td>AT+CFSGFIS</td>
<td>Get File Size</td>
</tr>
<tr>
<td>AT+CFSREN</td>
<td>Rename a file</td>
</tr>
<tr>
<td>AT+CFSGFRS</td>
<td>Get the size of file system</td>
</tr>
<tr>
<td>AT+CFSTERM</td>
<td>Free the Flash Buffer Allocated by CFSINIT</td>
</tr>
</tbody>
</table>

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

DOWNLOAD

... OK

AT+CFSFIS=0,"001.txt"
+CFSFIS: 100

OK

AT+CFSTERM
OK

3.2 Upload a file

//Upload Examples

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

... OK

AT+CFSTERM
OK
3.3 Delete a file

Delete the file “001.txt” from the module flash.

//Delete file Examples

AT+CFSINIT  //Allocate the data buffer.
OK
AT+CFSDFILE=0,"001.txt"  //Delete the file "001.txt" in /custapp/ folder.
OK
AT+CFSTERM  //Free the data buffer.
OK

3.4 Rename a file

Rename the AMR file “001.txt” as “002.txt”.

//Rename file Examples

AT+CFSINIT  //Allocate the data buffer.
OK
AT+CFSREN=0,"001.txt","002.txt"  //Rename the file "001.txt" to "002.txt".
OK
AT+CFSTERM  //Free the data buffer.
OK
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