



SIM82XX_SIM83XX Series _FOTA_Application Note

5G Module

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About Document

Version History

Version	Date	Owner	What is new
V1.00	2020.8.17	Yao.yu	First Release
V1.01	2021.11.25	Haotian.Wang	Update the format

Scope

This document applies to the SIMCom SIM820X series, SIM821X series, SIM826X series and SIM83XX series.

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 FOTA.....	6
2.1 AT Commands for FTP download FOTA.....	6
2.2 AT Commands for HTTP download FOTA.....	6
3 FOTA Examples.....	7
3.1 Examples for FTP download FOTA.....	7
3.2 Examples for HTTP download FOTA.....	8

1 Introduction

1.1 Purpose of the document

Based on module AT command manual, this document will introduce FOTA package download and update process.

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

1.2 Related Documents

[1] SIM82XX_SIM83XX Series_AT Command Manual

1.3 Conventions and abbreviations

2 AT Commands for FOTA

2.1 AT Commands for FTP download FOTA

Command	Description
AT+CFTPSSTART	Start FTP service
AT+CFTPSSINGLEIP=1	Set data socket server address same as the control socket
AT+CFTPSLOGIN	Log in FTP server
AT+CFTPSSIZE	Query the server FOTA package size
AT+CFTPSGETFILE	Download FOTA package to module
AT+FSCD=F:/	Switch to directory F
AT+FSATTRI	Query downloaded FOTA size in module
AT+CDELTA	Upgrade firmware

2.2 AT Commands for HTTP download FOTA

Command	Description
AT+HTTPINIT	Start HTTP service
AT+HTTPPARA	Set the URL of FOTA package
AT+HTTPACTION	Request the server to GET FOTA
AT+HTTPREADFILE	Download FOTA to module
AT+FSCD=F:/	Switch to directory F
AT+FSATTRI	Query the size of downloaded FOTA in module
AT+CDELTA	Upgrade firmware

NOTE

The FOTA package downloaded locally should be the same size as the server FOTA package before upgrading with AT+CDELTA

3 FOTA Examples

3.1 Examples for FTP download FOTA

```
AT+CFTPSSTART //Start FTP service
OK

+CFTPSSTART: 0
AT+CFTPSSINGLEIP=1 //Set data socket server address same as the
OK //control socket
AT+CFTPSLOGIN="serveraddr",21,"username" //Log in server
,"password",0
OK

+CFTPSLOGIN: 0
AT+CFTPSSIZE="update_ota.zip" //Query the server FOTA package size
OK

+CFTPSSIZE: 30552613
AT+CFTPSGETFILE="update_ota.zip" //Download the FOTA package to module
OK

+CFTPSGETFILE: 0
AT+FSCD=F:/ //Switch to directory F
+FSCD: F:/

OK
AT+FSATTRI=update_ota.zip //Query downloaded FOTA size in module
+FSATTRI: 30552613, 2008/04/28 10:24:46 Tue

OK
AT+CDELTA //Upgrading firmware
OK
```

3.2 Examples for HTTP download FOTA

```
AT+HTTPINIT //Start HTTP service
OK
AT+HTTPPARA="URL","http://fota_server/fota //Set the FOTA URL
.zip"
OK
AT+HTTPACTION=0 //Request the server to GET FOTA
OK

+HTTPACTION: 0,200, 30552613

AT+HTTPREADFILE="update_ota.zip" //Download the FOTA package to module
OK

+HTTPREADFILE: 0
AT+FSCD=F:/ //Switch to directory F
+FSCD: F:/

OK
AT+FSATTRI=update_ota.zip //Query the FOTA package locally
+FSATTRI: 30552613, 2008/04/28 10:24:46 Tue

OK
AT+CDELTA //Upgrading firmware
OK
```

NOTE

Use AT+SIMCOMATI and AT+CSUB to query version number information before and after the upgrade. It takes about 2 minutes to Perform the command AT+CDELTA. If it fails, re-download the FOTA package for upgrade.