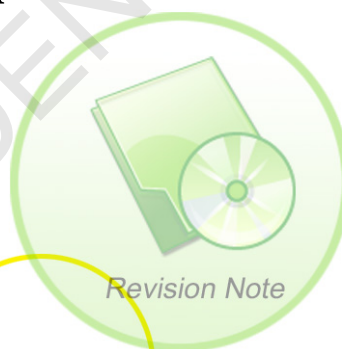




# **SIM7X00 Series\_Delta Package**

## **Update\_Application**

### **Note\_V1.00**



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## Version History

Date	Version	What is new	Author
2016-07-09	1.00	New version	Dongshan.liu

## Scope

This document presents the AT command of Delta Package Update operation and application examples. This document can apply to SIM7X00 series modules, including SIM7100C, SIM7100CE, SIM7100E, SIM7100JE, SIM7100JC .

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# 1 Introduction

## 1.1 Overview

The purpose of this document is to describe the usage of Delta package update with SIM7X00 modules.

## 1.2 References

SIM7X00 Series\_AT Command Manual\_Vx.xx.doc

## 1.3 Terms and Abbreviations

For the purpose of this document, following abbreviations apply:

□ AT (Attention); the first two-character abbreviation are used to start a command line to be sent from TE/DTE to TA/DCE.

## 2 Software Version management

The commands AT+CGMR and AT+CSUB can be used to get the current software version information:

1. AT+CGMR //query software version  
4534B08SIM7100C //CP version
2. AT+CSUB  
B08V01 //CP branch version  
MDM9X15\_AP\_S\_V1.56\_160512 //AP version

In order to update software version by delta method, user must select the correct delta file according to:

1) Current software version and target software version provided by command AT+CGMR and AT+CSUB.

2) For example:

V1: 4534B08SIM7100C  
B08V01  
MDM9X15\_AP\_S\_V1.56\_160512  
V2: 4534B09SIM7100C  
B09V01  
MDM9X15\_AP\_S\_V1.57\_160513

Suppose V1 is the current version, and V2 is the target version, the delta file should be B08V01\_B09V01\_SIM7100C.zip

## 3 Use Delta Package Update

### 3.1 Step by Step

The FOTA process can be divided into 3 steps

- 1) Download the delta package
- 2) Write the Delta package into module flash

Delta package name and size can be queried by the AT commd :AT+FSLS=4, if have no the delta package need to download it again.

- 3) Reset module to finish the FW updating

Download the delta package into the “cache” of the module by FTPS method, the “cache” is the dedicated flash resource for the delta package.

#### 3.1.1 Download the delta package by FTPS GET method

- 1) Put current delta package file to FTPS server site;
- 2) Download the delta package into the cache using FTPS commands:

```
AT+CFTPSSINGLEIP=TYPE //set the FTP/FTPS data socket address type
AT+CFTPSSSTART // acquire the FTPS stack
AT+CFTPSSLOGIN="FTP ADDRESS","PORT","USERNAME","PASSWORD",0 //login
the FTP/FTPS server
AT+CFTPSSGET="/DELTA_PACKAGE_FILENAME ",0,0, "/cache"
//get the delta package DELTA_PACKAGE_FILENAME from FTPS server into cache
AT+CFTPSSLOGOUT //logout the FTP/FTPS server
AT+CFTPSSSTOP //stop the FTP/FTPS stack
```

TYPE : the FTPS server type

FTP ADDRESS: the FTPS server address;

PORT: the FTPS server port

USERNAME: the username

PASSWORD: the password

DELTA\_PACKAGE\_FILENAME : the file name of the delta package.

For example:

```
AT+CFTPSSINGLEIP=1
OK
```

```
AT+CFTPSSSTART
OK
```

+CFTPSSTART:0

AT+CFTPSLOGIN ="67.208.64.240",21,"zyf","zyf",0  
OK

+CFTPSLOGIN:0

AT+CFTPSGET= "/B08V01\_B09V01\_SIM7100C",0,0,"/cache"  
OK

+ CFTPSGET:0

AT+CFTPSLOGOUT

OK

+ CFTPSLOGOUT : 0

AT+CFTPSSTOP

+ CFTPSSTOP : 0

### 3.1.2 Check the delta package in cache

AT+FSLS=4

+FSLS: FILES: //the list of file and its size

update\_ota.zip ,380880 //Delta package name and size, if have no it need to download again.

update.zip ,15135261

OK

### 3.1.3 Using AT+CDELTA to update software version

AT+CDELTA

OK

### 3.1.4 Using AT+CRESET to reset Module to finish the FOTA process

AT+CRESET //User must manual reset module to finish the fota process

OK



## 4 Query Software version

1. AT+CGMR //query software version  
4534B09SIM7100C //CP version
2. AT+CSUB  
B09V01 //CP branch version  
MDM9X15\_AP\_S\_V1.57\_160513 //AP version

From the two points as above can judge software version upgrade is successful .

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