

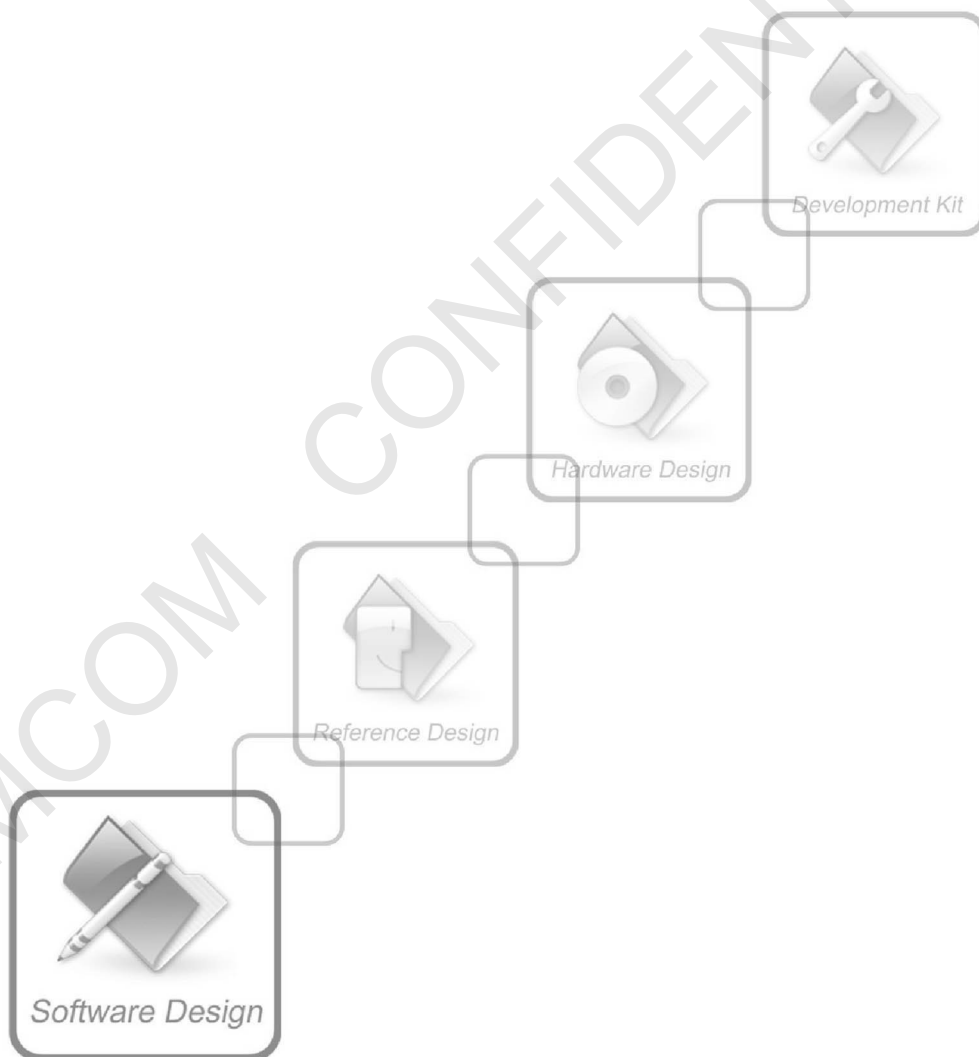
---

---

## **SIM5300E\_FTP\_Application Note**

---

---



---

<b>Document Title:</b>	SIM5300E_FTP_Application Note
<b>Version:</b>	1.00
<b>Date:</b>	2016-11-04
<b>Status:</b>	Release
<b>Document Control ID:</b>	SIM5300E_FTP_Application Note_V1.00

---

### **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 Limited., copying of this document and giving it to others and the using or communication of the contents thereof, are forbidden without express authority. Offenders are liable to the payment of damages. All rights reserved in the event of grant of a patent or the registration of a utility model or design. All specification supplied herein are subject to change without notice at any time.

**Copyright © Shanghai SIMCom Wireless Solutions Ltd. 2016**

---

# SCOPE

---

This document describes how to use the FTP function of SIM5300E through AT commands.

Examples are also given for reference.

This document can be used for SIM5300E.

This document is subject to change without notice at any time.

SIMCOM CONFIDENTIAL FILE

## CONTENTS

---

<b>General Notes</b> .....	I
<b>Copyright</b> .....	I
<b>Copyright © Shanghai SIMCom Wireless Solutions Ltd. 2016</b> .....	I
1. Bearer Configure .....	1
1.1 Bearer Profile.....	1
2. FTP Get method .....	1
3. FTP Put method.....	2
4. FTP Time Out .....	4
5. FTP Error.....	4
6. FTP Operation Error .....	5
7. FTP read and write error .....	5
8. Set FTP download break point Parameter .....	6
9. FTP DELE Method .....	7
10. FTP SIZE Method .....	7
11. FTP MKD and RMD Method .....	8
12. FTP List Session.....	9
13. FTP Extend PUT Method .....	10
14. FTP Extend GET Method.....	11
15. FTP ETGET Method.....	11
16. FTP ETPUT Method.....	12
17. FTP QUIT Method.....	13
18. FTP Rename Method.....	14
19. FTP MDTM Method.....	15
Appendix.....	16
A. Related Documents.....	16

## 1. BEARER CONFIGURE

---

The bearer contexts of HTTP and FTP applications can be set or activated by SAPBR command.

### 1.1 BEARER PROFILE

Demonstration	Syntax	Expect Result
Configure bearer profile 1	AT+SAPBR=3,1,"Contype","GPRS"	OK
	AT+SAPBR=3,1,"APN","CMNET"	OK
To open a GPRS context.	AT+SAPBR=1,1	OK
To query the GPRS context.	AT+SAPBR=2,1	+SAPBR: 1,1,"10.89.193.1" OK
To close a GPRS context.	AT+SAPBR=0,1	OK
GPRS context is released by network		+SAPBR 1: DEACT

## 2. FTP GET METHOD

---

Download data from the remote machine

Demonstration	Syntax	Expect Result
Set parameters for FTP session.	AT+FTPCID=1	OK
	AT+FTPSERV="116.228.221.52"	OK
	AT+FTPUN="sim.cs1"	OK
	AT+FTPPW="*****"	OK
	AT+FTPGETNAME="1K.txt"	OK

	AT+FTPGETPATH="/"	OK
Open the FTP get session.	AT+FTPGET=1	OK
Data are available.		+FTPGET:1,1
Request to read 1024 bytes, but Only 50 bytes are now available.	AT+FTPGET=2,1024	+FTPGET:2,50 01234567890123456789 01234567890123456789 01234567890 OK
Request to read 1024 bytes again. No byte is now available, but it is not the end of session.	AT+FTPGET=2,1024	+FTPGET:2,0  OK
If the module receives data but user does not input "AT+FTPGET=2,<reqlength>" to read data, "+FTPGET:1,1" will be shown again in a certain time.		+FTPGET:1,1
Request to read 1024 bytes. 1024 bytes are now available.	AT+FTPGET=2,1024	+FTPGET:2,1024 01234567890123456789 01234567890123456789 01234567890.....1234 OK
Data transfer finished. The connection to the FTP server is closed.		+FTPGET:1,0

### 3. FTP PUT METHOD

Upload data to the remote machine

Demonstration	Syntax	Expect Result
---------------	--------	---------------

Set parameters for FTP session.	AT+FTPCID=1	OK
	AT+FTPSERV="116.228.221.52"	OK
	AT+FTPUN="sim.cs1"	OK
	AT+FTPPW="*****"	OK
	AT+FTPPUTNAME="1K.txt"	OK
	AT+FTPPUTPATH="/"	OK
Open the FTP put session.	AT+FTPPUT=1	OK
FTP session is ready for uploading. 1280 is the max length of data which can be sent at a time. It depends on the network status.		+FTPPUT:1,1,1360
Client requests to send 100 bytes. Response indicates that user must input 100 bytes for transferring now.	AT+FTPPUT=2,100	+FTPPUT:2,100 ..... //It is ready to receive data from uart, and DCD has been set to low. OK //All data has been received over, and DCD is set to high.
URC indicates that the FTP session is ready to transfer more data.		+FTPPUT:1,1,1360
No more data will be uploaded; the FTP session will be closed.	AT+FTPPUT=2,0	OK
Data transfer is finished. The connection to the remote machine is closed.		+FTPPUT:1,0

**During FTP session, different failure may occur because of bad network environment or other reasons. Some common failure includes timeout failure and wrong password failure.**

#### 4. FTP TIME OUT

---

Time out occurs during FTP session because of different reasons.

Demonstration	Syntax	Expect Result
Open the FTP Get session.	AT+FTPGET=1	OK
If the status of the network is poor, it may be time out. The connection to the remote machine is closed.		+FTPGET:1,64
Open the FTP Get session.	AT+FTPGET	OK
Data are available.		+FTPGET:1,1
If customer does not use "AT+FTPGET=2,<reqlength>" to read data, "+FTPGET:1,1" will be shown again in a certain time.		+FTPGET:1,1 ..... +FTPGET:1,1
If the user does not read data for a long time, the session will time out. The connection to the remote machine will be closed.		+FTPGET:1,64

#### 5. FTP ERROR

---

Error occurs during FTP applications because of wrong parameter setting.

Demonstration	Syntax	Expect Result
Set wrong password	AT+FTPPW="3214567"	OK
Open the FTP Get session	AT+FTPGET=1	OK
FTP session password error. The connection to the		+FTPPUT:1,72



remote machine is closed.

**Note: Other errors, you can refer to “AT+FTPGET” command in SIM5300E ATC document.**

## 6. FTP OPERATION ERROR

Error occurs during FTP applications because of wrong operation.

Demonstration	Syntax	Expect Result
Open the FTP Get session.	AT+FTPGET=1	OK
The parameter of “get file name” is empty. It shows ftp operation error.		+FTPPUT:1,66
Open the FTP PUT session.	AT+FTPPUT=1	OK
Open the FTP PUT session again. Show ftp operation error.	AT+FTPPUT=1	OK +FTPPUT:1,66

## 7. FTP READ AND WRITE ERROR

Error occurs before FTP applications because of operating in wrong state.

Demonstration	Syntax	Expect Result
Open the FTP Get session.	AT+FTPGET=1	OK
Read data before “+FTPGET:1,1” is shown.	AT+FTPGET=2,1000	ERROR
Data are available		+FTPGET:1,1
Read data after “+FTPGET:1,1” is shown.	AT+FTPGET=1	+FTPGET:2,50 01234567890123456789 01234567890123456789 01234567890 OK
Data transfer finished. The connection to the remote machine is closed.		+FTPGET:1,0

Read data after FTP session is stopped.	AT+FTPGET=2,1000	ERROR
Open the FTP PUT session.	AT+FTPPUT=1	OK
Write data before "+FTPPUT:1,1,1280" is shown.	AT+FTPPUT=2,1000	ERROR
FTP session is ready for uploading.		+FTPPUT:1,1,1280
Write data after "+FTPPUT:1,1,1280" is shown.	AT+FTPPUT=2,100	+FTPPUT:2,100 ..... OK
No more data to be uploaded; the FTP session will be closed.	AT+FTPPUT=2,0	OK
Write data after FTP session is stopped.	AT+FTPPUT=2,100	ERROR

## 8. SET FTP DOWNLOAD BREAK POINT PARAMETER

It provides the method to use FTP broken download resuming function.

Demonstration	Syntax	Expect Result
Open the FTP Get session.	AT+FTPGET=1	OK
Data are available.		+FTPGET:1,1
Get data from the remote machine.	AT+FTPGET=2,1024	+FTPGET:2,29 wodeceshijieguo,zhgeshi geshia OK
Data transfer finished. The connection to the remote machine is closed.		+FTPGET:1,0
Set the broken point.	AT+FTPREST=20	OK
Open the FTP Get session.	AT+FTPGET=1	OK
Data are available.		+FTPGET:1,1

Get the data begin from the broken point.	AT+FTPGET=2,1024	+FTPGET:2,9 shigeshia OK
Data transfer is finished. The connection to the remote machine is closed.		+FTPGET:1,0

## 9. FTP DELE METHOD

Delete the specified file on the remote machine

Demonstration	Syntax	Expect Result
Set parameters for FTP session.	AT+FTPCID=1	OK
	AT+FTPSERV="116.228.221.5 2"	OK
	AT+FTPUN="sim.cs1"	OK
	AT+FTPPW="*****"	OK
	AT+FTPGETNAME="1K.txt"	OK
	AT+FTPGETPATH="/"	OK
Open the FTP DELE session.	AT+FTPDELE	OK
Delete file finished. The connection to the remote machine is closed.		+FTPDELE:1,0

## 10. FTP SIZE METHOD

Get the size of specified file on the remote machine

Demonstration	Syntax	Expect Result
Set parameters for FTP session.	AT+FTPCID=1	OK
	AT+FTPSERV="116.228.221.5 2"	OK

	AT+FTPUN="sim.cs1"	OK
	AT+FTPPW="*****"	OK
	AT+FTPGETNAME="1K.txt"	OK
	AT+FTPGETPATH="/"	OK
Open the FTP SIZE session.	AT+FTPSIZE	OK
Get the size of file finished. The connection to the remote machine is closed.		+FTPSIZE:1,0,1024

## 11. FTP MKD AND RMD METHOD

Make and remove directory on the remote machine

Demonstration	Syntax	Expect Result
Set parameters for FTP session.	AT+FTPCID=1	OK
	AT+FTPSERV="116.228.221.52"	OK
	AT+FTPUN="sim.cs1"	OK
	AT+FTPPW="*****"	OK
	AT+FTPGETPATH="/test"	OK
Open the FTP session.	AT+FTPMKD	OK
The directory "test" is made on the remote machine		+FTPMKD:1,0
Open the FTP session.	AT+FTPRMD	OK
The directory "test" is removed from the remote machine		+FTPRMD:1,0

## 12. FTP LIST SESSION

List contents of remote directory or get the information of a certain file on the remote machine.

Demonstration	Syntax	Expect Result
Set parameters for FTP session.	AT+FTPCID=1	OK
	AT+FTPSERV="116.228.221.52"	OK
	AT+FTPUN="sim.cs1"	OK
	AT+FTPPW="*****"	OK
	AT+FTPGETPATH="/ "	OK
Open the FTP session.	AT+FTPLIST=1	OK
Data are available.		+FTPLIST:1,1
Request to read 1024 bytes, but only 126 bytes are now available.	AT+FTPLIST=2,1024	+FTPLIST:2,126 total 0 drw-rw-rw- 1 user group 0 Oct 12 14:58 . drw-rw-rw- 1 user group 0 Oct 12 14:58 ..
		OK
Data transfer finished. The connection to the remote machine is closed.		+FTPLIST:1,0
Get the information of a certain file "1K.txt"	AT+FTPGETPATH="/1K.txt "	OK
Open the FTP session.	AT+FTPLIST=1	OK
Data are available.		+FTPLIST:1,1
Request to read 1024 bytes, in fact only 78 bytes are now available.	AT+FTPLIST=2,1024	+FTPLIST:2,78 -rw-rw---- 1 zhangkun simcom 8807854 Mar 19 13:31 /1K.txt

		OK //Returns information of the file "1K.txt"
Data transfer finished. The connection to the remote machine is closed.		+FTPLIST:1,0

### 13. FTP EXTEND PUT METHOD

Extend Upload data to the remote machine

Demonstration	Syntax	Expect Result
Set parameters for FTP session.	AT+FTPCID=1	OK
	AT+FTPSERV="116.228.221.52"	OK
	AT+FTPUN="sim.cs1"	OK
	AT+FTPPW="*****"	OK
	AT+FTPPUTNAME="1K.txt"	OK
	AT+FTPPUTPATH="/"	OK
Set FTP to extend put method.	AT+FTPEXTPUT=1	OK
Client requests to send 1024 bytes. Response indicates that user must input 1024 bytes for transferring. It is saved in the module.	AT+FTPEXTPUT=2,0,1024,10000	+FTPEXTPUT:0,1024 ..... //It is ready to receive data from uart, and DCD has been set to low.  OK //All data has been received over, and DCD is set to high.
Open the FTP PUT session. Waiting for the module to upload the data to the	AT+FTPPUT=1	OK

remote machine.		
Data transfer is finished. The connection to the remote machine is closed.		+FTPPUT:1,0
Set FTP to normal put method.	AT+FTPEXTPUT=0	OK

#### 14. FTP EXTEND GET METHOD

Extend Download data to the local flash

Demonstration	Syntax	Expect Result
Set parameters for FTP session.	AT+FTPCID=1	OK
	AT+FTPSERV="116.228.221.52"	OK
	AT+FTPUN="sim.cs1"	OK
	AT+FTPPW="*****"	OK
	AT+FTPGETNAME="1K.txt"	OK
	AT+FTPGETPATH="/"	OK
Set FTP to extend get method and request to get the file data.	AT+FTPEXTGET=1	OK
Data transfer is finished. The connection to the remote machine is closed.		+FTPEXTGET:1,0
Read the downloaded data.	AT+FTPEXTGET=3,0,100	+FTPEXTGET:100 0123456.... OK
Set FTP to normal get method.	AT+FTPEXTGET=0	OK

#### 15. FTP ETGET METHOD

Download data from the remote machine

Demonstration	Syntax	Expect Result
Set parameters for FTP session.	AT+FTPCID=1	OK
	AT+FTPSERV="116.228.221.5 2"	OK
	AT+FTPUN="sim.cs1"	OK
	AT+FTPPW="*****"	OK
	AT+FTPGETNAME="1k.txt"	OK
	AT+FTPGETPATH="/"	OK
Open the ftp etget session	AT+FTPETGET=1	OK
Enter data transfer mode		+FTPETGET:1,1
Data transfer finished. The connection to the remote machine is closed.		01234567890123456789 01234567890123456789 01234567890....1234 <ETX> //To notify the user that all data transfer has been finished, switch from data mode to command mode. +FTPETGET:1,0

## 16. FTP ETPUT METHOD

Upload data to the remote machine

Demonstration	Syntax	Expect Result
Set parameters for FTP session.	AT+FTPCID=1	OK
	AT+FTPSERV="116.228.221.5	OK



	2"  AT+FTPUN="sim.cs1"  AT+FTPPW="*****"  AT+FTPPUTNAME="1K.txt"  AT+FTPPUTPATH="/"	OK  OK  OK  OK
Open the ftp etput session	AT+FTPETPUT=1	OK
FTP session is ready for uploading.		+FTPETPUT:1,1
Client requests to send data. Response indicates that user must input data for transferring now.	AT+FTPETPUT=2	+FTPETPUT:2,1 ..... //It is ready to receive data from uart, and DCD has been set to low. <ETX> //To notify the module that all data has been sent, switch from data mode to command mode OK //All data has been received over, and DCD is set to high.
Data transfer finished. The connection to the remote machine is closed.		+FTPETPUT:1,0

## 17. FTP QUIT METHOD

Close the connection to the remote machine

Demonstration	Syntax	Expect Result
Set parameters for FTP session.	AT+FTPCID=1	OK

	AT+FTPSERV="116.228.221.52"	OK
	AT+FTPUN="sim.cs1"	OK
	AT+FTPPW="*****"	OK
	AT+FTPPUTNAME="1K.txt"	OK
	AT+FTPPUTPATH="/"	OK
Open the ftp put session	AT+FTPPUT=1	OK
Quit FTP session	AT+FTPQUIT	OK
The connection to the remote machine is closed.		+FTPPUT:1,80

## 18. FTP RENAME METHOD

Rename the specified file of remote machine

Demonstration	Syntax	Expect Result
Set parameters for FTP session.	AT+FTPCID=1	OK
	AT+FTPSERV="116.228.221.52"	OK
	AT+FTPUN="sim.cs1"	OK
	AT+FTPPW="*****"	OK
	AT+FTPGETPATH="/"	OK
	AT+FTPGETNAME="1K.txt" //The old file name is "1K.txt"	OK
	AT+FTPPUTNAME="1.txt" //The new file name is "1.txt"	OK

Execute rename function	AT+FTPRENAME //Rename the file "1K.txt" to "1.txt".	OK
Rename action succeed.		+FTPRENAME:1,0 //The file was renamed successfully

## 19. FTP MDTM METHOD

Get the last modification timestamp of specified file on the remote machine.

Demonstration	Syntax	Expect Result
Set parameters for FTP session.	AT+FTPCID=1	OK
	AT+FTPSERV="116.228.221.5 2"	OK
	AT+FTPUN="sim.cs1"	OK
	AT+FTPPW="*****"	OK
	AT+FTPGETNAME="1K.txt"	OK
	AT+FTPGETPATH="/"	OK
Get the last modification timestamp.	AT+FTPMDTM	OK
Return the timestamp successfully.		+FTPMDTM:1,0,20140409060951

## Appendix

---

### A. RELATED DOCUMENTS

SN	Document name	Remark
[1]	<i>SIM5300E AT Commands</i>	SIM5300E_ATC_V1.01

SIMCOM CONFIDENTIAL FILE

## CONTACT US:

---

Shanghai SIMCom Wireless Solutions Ltd.

Add: Bldg A, SIM Technology Bldg., No.633, Jinzhong Road, Changning Dist., Shanghai P.R. China  
200335

Tel: +86 21 32523424

Fax: +86 21 32523020

URL: [www.simcomm2m.com](http://www.simcomm2m.com)

SIMCOM CONFIDENTIAL FILE