SIM7100_SIM7500_SIM7600 Series_LBS_Application Note

LTE Module

Document Title:	SIM7100_SIM7500_SIM7600 Series_LBS_Application Note
Version:	3.00
Date:	2021.11.19
Status:	Released

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

SIMCom Wireless Solutions Limited

SIMCom Headquarters Building, Building 3, No. 289 Linhong 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

About Document

Version History

Version	Date	Owner	What is new
V2.00	2020.8.6	Wangbao.Cao	Update the format
V3.00	2021.11.19	Ning.Lv	Update the format

Contents

1.Introduction

1.1 Purpose of the document

This document gives the usage of LBS. Users can get useful information about the LBS functions quickly through this document.

The Cell Location functions are provided in AT command format, and they are designed for customers to design their GPS applications easily. User can access LBS AT commands through UART/ USB interface which communicates with SIM7100/SIM7500/SIM7600/SIM7800 module.

2.LBS Configuration

The purpose of this section is to help get you set and query the LBS configuration.

2.1   Set/Query customer ID

This is used to set and query the customer ID.

● Query the customer ID:

AT+CLBSCFG=0,1

● Set the customer ID:

AT+CLBSCFG=1,1,"test"   (This step is not necessary, if no using, it could be omitted.)

2.2   Query the times have used positioning command

We can use this AT to query the times have used positioning command (This command take effective when Server's address is not free).

Query the times have used positioning command:
AT+CLBSCFG=0,2   (This step is not necessary, if no using, it could be omitted.)

2.3   Set/Query the server's address

We can use this AT to set and query the server's address.
Query server's address:
AT+CLBSCFG=0,3

Set server's address:
AT+CLBSCFG=1,3,"lbs-simcom.com:3002"   (This step is not necessary, if no using, it could be omitted.)

3.AT Commands for LBS

Command	Description
AT+CLBS	Base station location
AT+CLBSCFG	Base station location Configure

For detail information, please refer to "SIM7500_SIM7600 Series_AT Command Manual".

4.LBS Samples

4.1 Relation AT Configure

4.1.1 Set APN

```
//Example of APN Set
AT+CGDCONT=1,"IP","apn"
OK
AT+CSOCKSETPN=1
OK
```

Note: If not private network, steps above could be omitted.

4.1.2 Start Network

```
//Example of network start
AT+CNETSTART
+CNETSTART: 0

OK
```

Note: Return value 0 is successful, other are failed, and execute LBS will be failed if not 0.

4.1.3 Stop Network

```
//Example of network stop
AT+CNETSTOP
+CNETSTOP: 0

OK
```

4.2 Execute LBS

4.2.1 LBS Configure

//Configure LBS Server Address
AT+CLBSCFG=1,3,"lbs-simcom.com:3002"
OK

Note: This step is not necessary, if no using, it could be omitted.

4.2.2 Get LBS Location

//Example of LBS GET.
AT+CLBS=1

OK
+CLBS: 0,31.228525,121.380295,500