



SIM7100_SIM7500_SIM7600 Series_UIM HOT SWAP_Application Note

LTE Module

SIMCom Wireless Solutions Limited

Building B, SIM Technology Building, No.633, Jinzhong Road
Changning District, Shanghai P.R. China

Tel: 86-21-31575100

support@simcom.com

www.simcom.com

Document Title:	SIM7100_SIM7500_SIM7600 Series_UIM HOT SWAP_Application Note
Version:	2.00
Date:	2020.8.6
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

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

Version	Date	Owner	What is new
V2.00	2020.8.6	Yangyang.zhang	Update the format

SIMCom
Confidential

Contents

About Document.....	3
Version History.....	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. USIM hot-swap detect Application Guide.....	6
3. AT Command Example.....	7
4. Enable UIM Hot Swap.....	8
4.1 Enable UIM Hot Swap.....	8

1.Introduction

1.1 Purpose of the document

Based on module AT command manual, this document introduces UIM card detection and UIM hot swap. Developers could understand and develop application quickly and efficiently based on this document.

1.2 Related documents

[1] SIM7500_SIM7600 Series_AT Command Manual

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);

PIN Personal Identification Number

PUK Personal Unlock Key

SIM Subscriber Identity Module

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:

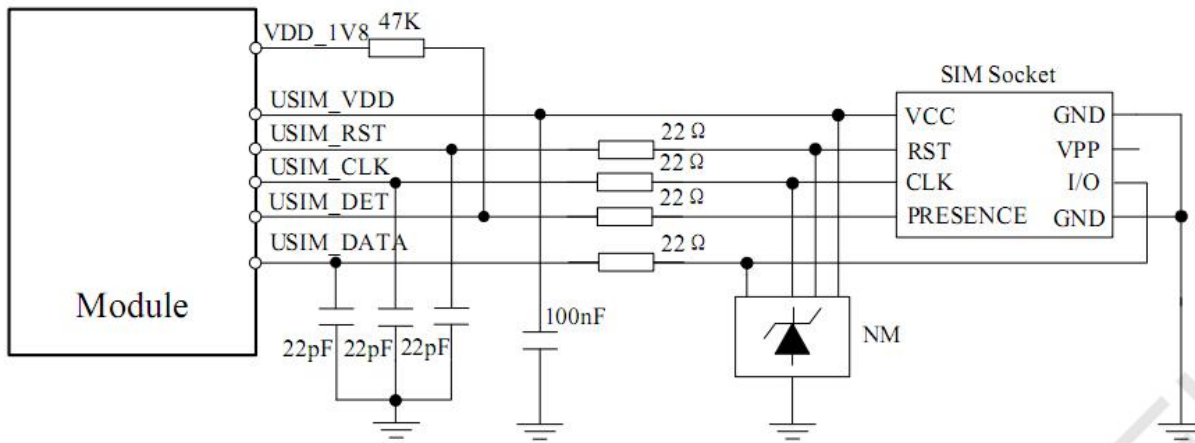
TE (Terminal Equipment);

DTE (Data Terminal Equipment) or plainly "the application" which is running on an embedded system;

2.USIM hot-swap detect Application Guide

It is recommended to use an ESD protection component such as ESDA6V1W5 produced by ST (www.st.com) or SMF15C produced by ON SEMI (www.onsemi.com). Note that the USIM peripheral circuit should be close to the USIM card socket. The following figure shows the 8-pin SIM card holder reference circuit.

Customer should use AT+UIMHOTSWAPON=1 to open the hot-swap detect function. If the SIM card holder is normal open kind, customer should use the command AT+UIMHOTSWAPLEVEL=0, If the SIM card holder is normal close kind, customer should use the command AT+UIMHOTSWAPLEVEL=1.



3.AT Command Example

Command	Description
AT+UIMHOTSWAPON	Set UIM hotswap function on
AT+UIMHOTSWAPLEVEL	Set UIM card detection level

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

SIMCom
Confidential

4.Enable UIM Hot Swap

4.1 Enable UIM Hot Swap

//Example of enable UIM Hot Swap

AT+UIMHOTSWAPLEVEL?
+UIMHTOSWAPLEVEL: 1

//The default value is 1

OK

AT+UIMHOTSWAPLEVEL=0

OK

//Set UIM card detection level to active low

//Refer the used SIM card holder, usually it's a
"normal open kind" one

AT+UIMHOTSWAPON=1

OK

//Enable hotswap.

//Reset the module to take effect

AT+CRESET

OK