



SIM7100_SIM7500_SIM7600 Series_UIM HOT SWAP_Application Note

LTE Module

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About Document

Version History

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V2.00	2020.8.6	Yangyang Zhang	Update the format
V3.00	2021.3.29	Haotian Wang	Update the format

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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:

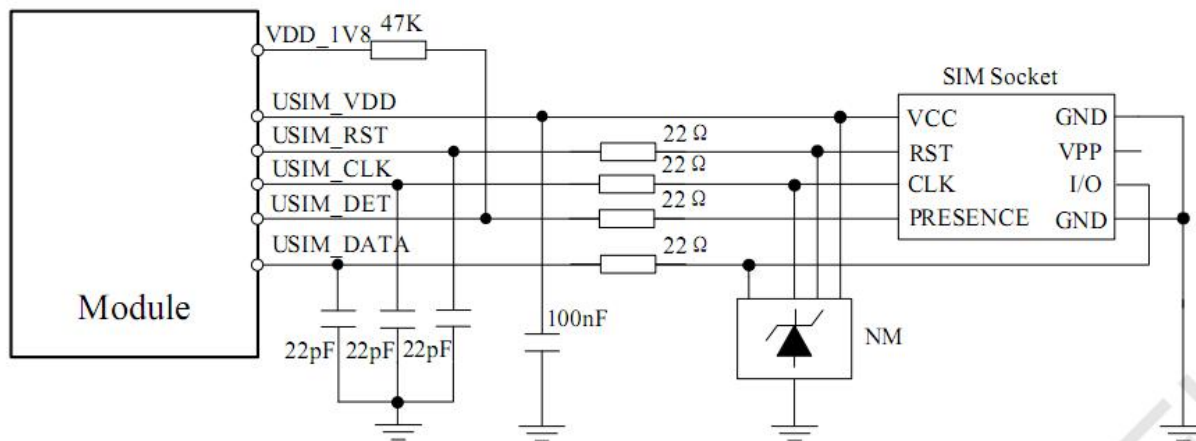
TE (Terminal Equipment);

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”.

4 Enable UIM Hot Swap

4.1 Enable UIM Hot Swap

//Example of enable UIM Hot Swap

AT+UIMHOTSWAPLEVEL?

+UIMHTOSWAPLEVEL: 1

OK

//The default value is 1

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