

A76XX Series_UIM HOT SWAP_Application Note

LTE Module

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About Document

Version History

Version	Date	Chapter	What is new
1.00	2020.09.18		Initial release
1 01	2021.05.14		GENERAL NOTES
1.01			COPYRIGHT
V1.02	2021.11.08	Scope	Scope description is updated



Scope

Based on module AT command manual, this document will introduce UIM Hot swap application process. Developers could understand and develop application quickly and efficiently based on this document. This document applies to A1803S Series, A1603 Series, A1601 Series and A1802 Series.









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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] A76XXSeries_ATCommandManual

1.3 Conventions and abbreviations

Table 1: Abbreviation and description

Abbreviation	Description
ME	Mobile Equipment
MS	Mobile Station
TA	Terminal Adapter
DCE	Data Communication Equipment
PIN	Personal Identification Number
PUK	Personal Unlock Key
SIM	Subscriber Identity Module
TE	Terminal Equipment
DTE	Data Terminal Equipment



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

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

For detail information, please refer to "A76XXSeries_AT Command Manual".



4 UIM Hot Swap Exampls

4.1 Enable UIM Hot Swap

//Example of enable UIM Hot Swap

AT+UIMHOTSWAPLEVEL? +UIMHTOSWAPLEVEL: 1

OK AT+UIMHOTSWAPLEVEL=0 OK

AT+UIMHOTSWAPON=1 OK AT+CRESET OK //The default value is 1

//Set UIM card detection level to active low
//Refer the used SIM card holder, usually it's a
"normal open kind" one
//Enable hotswap.

//Reset the module to take effect