

SIM7100_SIM7500_SIM7600

FAQ

Revision Note

Series_UIM HOT SWAP

_Application Note_V1.01

Application Note



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Version History

Date	Version	What is new	Author	
2017-03-03	1.00	New version		
2017-04-13	1.01	Modify document name, scope and Add AT command		
		to active condition		

Scope

This document presents the AT command of UIM HOT SWAP operation and application examples. This document can apply to SIM7100/SIM7500/SIM7600 series modules.



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1 Introduction

1.1 Overview

This document introduces UIM card detection and UIM hot swap.

1.2 References

The present document is based on the following documents:

SIM7X00 Series_AT Command Manual.

1.3 Terms and Abbreviations

For the purposes of the present document, the following abbreviations apply:

- PIN Personal Identification Number
- PUK Personal Unlock Key
- SIM Subscriber Identity Module



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

3.1 Enable UIM Hot Swap

	Response	Note
Query current active level:		<u>.</u>
AT+UIMHOTSWAPLEVEL?	+UIMHOTSWAPLEVEL: 1	The default value 1
	ОК	
Set UIM card detection level:		
AT+UIMHOTSWAPLEVEL=0	ОК	Set UIM card detection
		level to active low
		//Refer to the used SIM
		card holder, usually it's a
		"normal open kind" one.
Set hot swap on:		
AT+UIMHOTSWAPON=1	ОК	Enable hot swap.
		//Reset module to take
		effect.
Reboot system:		
AT+CRESET	ОК	



4 UIM Hot Swap Commands

4.1 AT+UIMHOTSWAPON Set UIM hot swap function on

Description

This command is used to set uim hot swap function on. The setting will be taken effect on the next power up.

SIM PIN	References
NO	Vendor

Syntax

Read Command	Responses
AT+ UIMHOTSWAPON?	+UIMHOTSWAPON: <onoff></onoff>
	ОК
Write Command	Responses
AT+UIMHOTSWAPON	ОК
= <onoff></onoff>	ERROR

Defined values

<onoff>

 $\underline{0}$ – The UIM hot swap function is disabled

1 – The UIM hot swap function is enabled

Examples

```
AT+UIMHOTSWAPON?
+UIMHOTSWAPON: 0
OK
AT+UIMHOTSWAPON=1
OK
```

4.2 AT+UIMHOTSWAPLEVEL Set UIM card detection level

Description

This command is used to set UIM card detection active level. The setting will be taken effect on the next power up.

SIM PIN References



Smart Machine Smart Decision

NO Vendor

Syntax

Read Command	Responses	
AT+UIMHOTSWAPLEVE	+UIMHOTSWAPLEVEL: <level></level>	
L?	OK	
Write Command	Responses	
AT+UIMHOTSWAPLEVE	ОК	
L = <level></level>	ERROR	
Note: Module reset to take		
effect		

Defined values

<level></level>		
0 –	ACTIVE	LOW

<u>1</u> – ACTIVE_HIGH

Examples

AT+UIMHOTSWAPLEVEL?
+UIMHOTSWAPLEVEL: 1
ОК
AT+UIMHOTSWAPLEVEL=0
ОК

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