FIBOCOM AT Commands_eSIM

Version: V1.0.3

Date: 2020-06-21

Application Type

No.	Product Model	Description
1	FG150 Series	NA
2	FM150 Series	NA
3	NL952 Series	NA

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Change History

Version	Author	Assessor	Approver	Update date	Description
V1.0.3	Zhou Jiajia	Ma Menghan	Wang Hailiang	2020-06-21	Standardized format
V1.0.2				2019-12-25	Optimize the doc
V1.0.1				2019-12-14	Add a param of "int slot" for all the function, for some type which eSIM is movable. Modify "set profile nickname" and "set default dp+ address" command
V1.0.0				2019-11-27	Initial version

Contents

1 +GTESIM

1.1 Download Profile

Description

The command uses for make the LPA to send the download profile process to eSIM.

Syntax

Command	Possible Rsponse(s)
AT+GTESIM=<slot>,"DOWNLOAD"	OK +GTESIM: <download result> or ERROR
AT+GTESIM=<slot>,"DOWNLOAD",<Activation Code>,[Confirmation Code]	OK +GTESIM: <download result> or ERROR

Remark: Activation Code and Confirmation Code get from eSIM company, and the Confirmation Code can be NULL, like you can use AT+GTESIM=2,"DOWNLOAD", "XXXXXX", (\n) or AT+GTESIM=2,"DOWNLOAD","XXXXXX"(\n).

Attributes

Pin Restricted	Persistent	Sync Mode	Execute Immediately	Time of Duration
Yes	Yes	No	Yes	< 1s

Defined Values

<slot>: integer type, the slot number your eSIM inserted, 1~5 is available, means slot1~slot5, others is not support.

<Activation code>: string type, get from the eSIM company.

<Comfirmation code>: string type, optional, get from the eSIM company, it is not must exist, it can be null.

<download result>: string type, value is the below value of Code.

Download Result Description

Code	Description
3F1000	Profile download success
3F1001	Auth init error

Code	Description
3F1002	Auth server error
3F1003	Auth client error
3F1004	Prepar download error
3F1005	Get profile error
3F1100	Init safe channel error
3F1101	Set ISDP error
3F1102	Field data error
3F1104	Update key error
3F1201	Profile value error
3F1202	Sign error
3F1203	Session Id error
3F1204	Not support crt value
3F1205	Remote operation type error
3F1206	No support this profile class
3F1207	Scp03 structure error
3F1208	SCP03 security error
3F1209	ICCID has exist
3F1211	interrupt
3F1212	PE deal error
3F1213	Data not match
3F1214	NaaKey is not right
3F1215	Ppr forbid
3F12FF	Other error

1.2 Profile Enable

Description

This command is used to enable the target in the eUICC card while disabling the profile that is currently enabled, and if any errors occur during the execution of the command, both the target profile and the current profile should remain in the state before the command is executed.

Syntax

Command	Possible Response(s)
AT+GTESIM=<slot>,"ENABLE",<iccid>	+GTESIM: <enable result> OK or ERROR

Attributes

Pin Restricted	Persistent	Sync Mode	Execute Immediately	Time of Duration
Yes	Yes	Yes	Yes	< 1s

Defined Values

<slot>: integer type, the slot number your eSIM inserted, 1~5 is available, means slot1~slot5, others are not support.

<iccid>: string type; Integrate Circuit Card Identity; e.g. 89860018190839008096

<enable result>: string type, value is the below value of Code.

Enable Result Code

Code	Description
BF3103800100	Enable success
BF3103800101	Iccid unknown
BF3103800102	Profile is not disable state
BF3103800103	Strategy not allowed
BF3103800104	Profile cannot active again
BF3103800105	Cat busy
BF31038001FF	Known error

1.3 Profile Disable

Description

This command is used to disable the target profile in the eUICC card, and if there is any error in the execution of the command, the target profile should remain in the state it was in before the command was executed.

Syntax

Command	Possible Response(s)
AT+GTESIM=<slot>,"DISABLE",<iccid>.	+GTESIM: <disable result> OK or ERROR

Attributes

Pin Restricted	Persistent	Sync Mode	Execute Immediately	Time of Duration
Yes	Yes	Yes	Yes	< 1s

Defined Values

<slot>: integer type, the slot number your eSIM inserted, 1~5 is available, means slot1~slot5, others is not support.

<iccid>: string type; Integrate Circuit Card Identity; e.g. 89860018190839008096

<disable result>: string type, value is the below value of Code.

Disable Result Code

Code	Description
BF3203800100	Disable success
BF3203800101	Iccid unknown
BF3203800102	Profile is not enable state
BF3203800103	Strategy not allowed
BF3203800105	Cat busy
BF32038001FF	Known error

1.4 Profile Delete

Description

This instruction is used to delete the target profile in the eUICC card, if there is any error in the execution of the command, the target profile should remain in the state before the execution of the command, the instruction can be sent at any time;

Syntax

Command	Possible Response(s)
AT+GTESIM=\<slot\>,"DELETE",\<iccid\>	+GTESIM: \<delete result\> OK or ERROR

Attributes

Pin Restricted	Persistent	Sync Mode	Execute Immediately	Time of Duration
Yes	Yes	Yes	Yes	< 1s

Defined Values

\<slot\>: integer type, the slot number your eSIM inserted, 1~5 is available, means slot1~slot5, others is not support.

\<iccid\>: string type; Integrate Circuit Card Identity; e.g. 89860018190839008096

\<delete result\>: string type, value is the below value of Code.

Delete Result Code

Code	Description
BF3303800100	Delete success
BF3303800101	Iccid unknown
BF3303800102	Profile is not disable state
BF3303800103	Strategy not allowed
BF33038001FF	Unknown error

1.5 Acquire Profile List

Description

This instruction is used to obtain all information about all profiles that have been installed on the eUICC card, including profile status, profile metadata, etc., and the instruction may also obtain only the profile ID and status of the profile.

Syntax

Command	Possible Response(s)
AT+GTESIM=<slot>,"PROFILELIST"	+GTESIM: <profileList> OK or ERROR
AT+GTESIM=<slot>,"PROFILELIST","ICCID"	+GTESIM: [iccid,status];[iccid,status];…;[iccid,status] OK or ERROR

Attributes

Pin Restricted	Persistent	Sync Mode	Execute Immediately	Time of Duration
Yes	No	Yes	Yes	< 1s

Defined Values

<slot>: integer type; the slot number your eSIM inserted, 1~5 is available, means slot1~slot5, others are not support.

<iccid>: string type; Integrate Circuit Card Identity; e.g. 89860018190839008096

<status>: integer type; indicates the profile state;"1" means enable,"0" means disable.

<profileList>: string type; list the <profileId,type> , the "profileId" is set by the eSIM for each profiles for their flag, value is 1-8 limits, the "type" value is 0 or 1, 0 means the profile type is regular type, 1 means the profile type is emergency type.

1.6 Set Profile Nickname

Description

This instruction is used to set the nickname of the target in the eUICC card; If the target profile already has a nickname, the target profile should update the profile nickname, and

1. if the "nickname" param is exist and we not set,

(like the command is " AT+GTESIM=1,"NICKNAME","123", "), this is means that the nickname is deteled and it set empty.

2. If the "nickname" param is not exist (like the command is "AT+GTESIM=1,"NICKNAME","123" "), this is

means that we query the nickname value we set.

Syntax

Command	Possible Response(s)
AT+GTESIM=<slot>,"NICKNAME", <iccid> [,nickname]	+GTESIM: <set nickname result> OK or ERROR or +GTESIM: <nickname string> OK

Attributes

Pin Restricted	Persistent	Sync Mode	Execute Immediately	Time of Duration
Yes	Yes	Yes	Yes	< 1s

Defined Values

<slot>: integer type; the slot number your eSIM inserted, 1~5 is available, means slot1~slot5, others is not support.

<iccid>: string type; Integrate Circuit Card Identity; e.g. 89860018190839008096

<nickname>: string type; if not exist, the command is query the nickname we set.

<nickname string>: string type; the nickname we set before.

<set nickname result>: string type; the value is the below value of Code

Set Nickname Result

Code	Description
BF2903800100	Set success
BF2903800101	Iccid unknown
BF29038001FF	Unknown error

Note:

when the <[,nickname]> exist, the response is like:

+GTESIM: <set nickname result>

OK

or

ERROR

When the <[,nickname]> not exist, we return the nickname we set before, like:

+GTESIM: <nickname string>

OK

example

AT+GTESIM=<slot>,"NICKNAME",<iccid>

+GTESIM: <nickname string>

OK

AT+GTESIM=<slot>,"NICKNAME",<iccid>,<nickname>

+GTESIM:<set nickname result>

OK

1.7 Acquire EID

Description

This instruction is used to obtain the EID of the eUICC card and can be sent at any time

Syntax

Command	Possible Response(s)
AT+GTESIM=<slot>,"EID"	+GTESIM: <eid result> OK or ERROR

Attributes

Pin Restricted	Persistent	Sync Mode	Execute Immediately	Time of Duration
Yes	Yes	Yes	Yes	<1s

Defined Values

<slot>: integer type, the slot number your eSIM inserted, 1~5 is available, means slot1~slot5, others is not support.

<eid result>: string type; eSIM card numbers (max len 32 bytes).

1.8 EUICC Memory Reset

Description

This directive is used to delete data such as profile on eUICC card, configuration of the default DP-plus address, and delete profile ignores its status and policy;

Syntax

Command	Possible Response(s)
AT+GTESIM=<slot>,"memoryReset"	+GTESIM: <memory reset result> OK or ERROR

Attributes

Pin Restricted	Persistent	Sync Mode	Execute Immediately	Time of Duration
Yes	Yes	Yes	Yes	< 1s

Defined Values

<slot>: integer type, the slot number your eSIM inserted, 1~5 is available, means slot1~slot5, others is not support.

Memory Reset Result

Code	Description
BF3403800100	Reset success
BF3403800101	Not delete any data
BF3403800105	Cat busy
BF34038001FF	Unknown error

1.9 Set Default DP+ Address

Description

This instruction is used to set the default DP-address of eUICC card, if the address value is not empty, then the card updates the DP-plus address, if the address value is empty, then the card DP-address is query the value we set.

Syntax

Command	Possible Response(s)
AT+GTESIM=<slot>,"dpAddress"[,address]	+GTESIM: <set DP+ Address result> OK or ERROR or +GTESIM: <DP+ Address> OK

Attributes

Pin Restricted	Persistent	Sync Mode	Execute Immediately	Time of Duration
Yes	Yes	Yes	Yes	< 1s

Defined Values

<slot>: integer type, the slot number your eSIM inserted, 1~5 is available, means slot1~slot5, others are not support.

<address>: string type, if not exist, the command is query the dpAddress we set.

<DP+ Address>: string type, the address we set.

<set DP+ Address result>: string type, value is the below value of Code.

set DP+ Address result

Code	Description
BF3F03800100	Set success
BF3F038001FF	Unknown error

Note:

when the <[,address]> exist, the response is

+GTESIM: <set DP+ Address result>

OK

or

ERROR

When the <[,address]> not exist, we return the address we set before, like

+GTESIM: <DP+ Address>

OK

example

AT+GTESIM=<slot>,"dpAddress"

+GTESIM: <DP+ Address>

OK

AT+GTESIM=<slot>,"dpAddress",[address]

+GTESIM:<set DP+ Address result>

OK