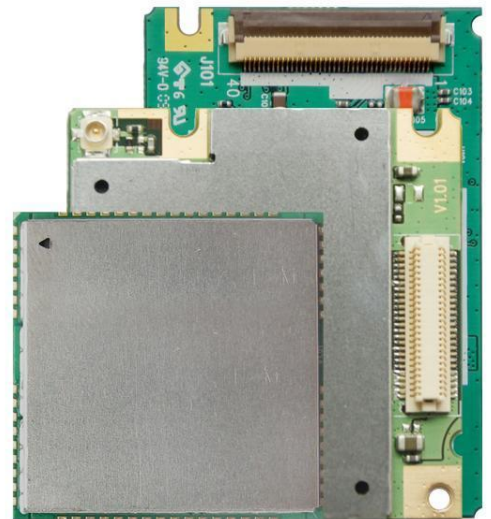




## Quectel Cellular Engine

### **GSM STK AT Commands**

GSM\_STK\_ATC\_V1.1

























































**051180865574064E2D002C00208ACB7A0D5019:** [alpha id](#)  
05: alpha id tag  
11: length  
**80865574064E2D002C00208ACB7A0D5019:** 處理中, 請稍候  
**8A0640AA182D3702":** [USSD string](#)  
8A: USSD string tag  
06: length  
40: GSM 7 bit default alphabet, the text is uncompressed,  
AA182D3702: USSD string content

#### 4.4.2.3. SEND SS proactive command:

+STKPCI: 1,"D0: proactive SIM command  
22: length  
8103011100: [command details](#)  
81: command details tag  
03: length  
01: command number  
1100: SEND SS  
82028183: [device id](#)  
82: device id tag  
02: length  
8183: source: SIM destination: Network  
**051180865574064E2D002C00208ACB7A0D5019:** [alpha id](#)  
05: alpha id tag  
11: length  
**80865574064E2D002C00208ACB7A0D5019:** 處理中, 請稍候  
**8904811A94FB":** [SS string](#)  
89: SS string tag  
04: length  
81: TON: Unknown, NPI: ISDN/telephony numbering plan  
1A94FB: SS or USSD string content

## 5. Appendix: STK protocol structure

Here list some structures which have been used in this document for better understanding. More details please refer to GSM 11.14.

### 5.1. Structure of SIM Application Toolkit communications

Please refer to GSM 11.14 Annex D.

**BER-TLV data object:**

Tag	Length	Value	1..n SIMPLE TLV objects
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**SIMPLE-TLV data object:**

Tag	Length	Value	1..m elements
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### 5.2. BER\_TLV tag in SIM to ME direction

Please refer to GSM 11.14 subclause 13.2.

Description	Length	Value
Proactive SIM command tag	1	D0

### 5.3. BER\_TLV tag in ME to SIM direction

Please refer to GSM 11.14 subclause 13.1.

Description	Length	Value
SMS-PP download tag	1	D1
Cell Broadcast download tag	1	D2
Menu Selection tag	1	D3
Call control tag	1	D4
MO Short message control tag	1	D5
Event download tag	1	D6
Timer expiration	1	D7

### 5.4. Simple TLV objects

Please refer to GSM 11.14 subclause 13.3 for Simple TLV tag value in both directions.

The structure of simple TLV data object is Tag, Length, Value elements. Below table lists tag value and elements.

Tag	Value	Elements	Reference in
Description	Value	Elements	Reference in

			GSM 11.14
Command details tag	01 or 81	Command number	12.6
		<a href="#">Type of command</a>	
		Command Qualifier	
Device identity tag	02 or 82	Source <a href="#">device identity</a>	12.7
		Destination <a href="#">device identity</a>	
Result tag	03 or 83	<a href="#">General result</a>	12.12
Alpha identifier tag	05 or 85	Alpha identifier (If the first byte is "80", it means UCS2 coding schema)	12.2
Address tag	06 or 86	TON and NPI	12.1
		Dialing number string	
SS string tag	09 or 89	TON and NPI	12.14
		SS or USSD string	
USSD string tag	0A or 8A	Data coding scheme	12.17
		USSD string	
SMS TPDU tag	0B or 8B	SMS TPDU	12.13
Text string tag	0D or 8D	Data coding scheme	12.15
		Text string	
Item tag	0F or 8F	Identifier of item	12.9
		Text string of item (If the first byte is "80", it means UCS2 coding schema)	
Item identifier tag	10 or 90	Identifier of item chosen	12.10
Response length tag	11 or 91	Minimum length of response	12.11
		Maximum length of response	

**Type of Command:** (Refer to GSM 11.14 subclause 13.4)

Value	Name
10	Set up Call
11	Send SS
12	Send USSD
13	Send short message
14	Send DTMF
21	Display text
23	Get input
24	Select item
25	Set up menu

**Device identity**

Value	Name
01	Keypad
02	Display
81	SIM

82	ME
83	Network

**General result:**

Value	Meaning
00	Command performed successfully
10	Proactive SIM session terminated by the user;
11	Backward move in the proactive SIM session requested by the user

**5.5. Structure of terminal response**

Please refer to GSM 11.14 subclause 6.8.

Description	M/O
<a href="#">Command details</a>	M
<a href="#">Device identities</a>	M
<a href="#">Result</a>	M
<a href="#">Text string</a>	M/O
<a href="#">Item identifier</a>	M/O

**5.6. Structure of envelope for menu selection**

Please refer to GSM 11.14 subclause 8.2.

Description	M/O
Menu selection tag="D3"	M
Length	M
<a href="#">Device identities</a>	M
<a href="#">Item identifier</a>	M
Help request	O

# QUECTEL



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