

Quectel Cellular Engine

Video Call Application Notes

U10_Video_Call_AN_V1.0



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Contents

Contents	
0. Revision history	
1. Introduction	
1.1. Reference4	
1.2. Terms and abbreviations4	
2. AT Commands for Video Call	
2.1. AT+QRAT Radio Access Technology Mode and GPRS/EDGE Status	
2.2. AT+CBST Select bearer service type	ļ
3. How to Use Video Call	
3.1. Setup Video Call Preparation7	
3.2. Receive a video call from Cell Phone	
3.3. Originate a Video Call to Cell Phone	
4. Notes	
4.1. Before making a Video Call	
4.2. URC information	



0. Revision history

Revision	Date	Author	Description of change
1.0	2012-05-15	Amon WU	Initial

U10_Video_Call_V1.0

1. Introduction

This document describes how to make a video call using Quectel U10 module in details, which can help the customer to establish the video call easily.

1.1. Reference

Table 1: Reference

SN	Document name	Remark
[1]	Uxx_ATC	The introduction of AT commands for Quectel Module

1.2. Terms and abbreviations

Table 2: Terms and abbreviations

Abbreviation	Description
USB	Universal Serial Bus
COM Port	Communication Port
WCDMA	Wideband Code Division Multiple Access
VT	Video Telephone/Video Call

2. AT Commands for Video Call

2.1. AT+QRAT Radio Access Technology Mode and GPRS/EDGE Status

AT+QRAT Radio Access Technology Mode and GPRS/EDGE Status				
Test Command	Response			
AT+ QRAT=?	+QRAT: (0,2,255),(0,1),(0-2,255)			
	ОК			
	Parameter			
	See Write Comma	nd		
Read Command	Response			
AT+ QRAT?	+QRAT: <curren< th=""><th>nt RAT>,<</th><th><pre><gprs status="">,<rat mode=""></rat></gprs></pre></th></curren<>	nt RAT>,<	<pre><gprs status="">,<rat mode=""></rat></gprs></pre>	
	ОК			
	Parameter			
	See Write Comma	nd.		
Write Command	Response			
AT+	OK/ERROR	OK/ERROR		
QRAT= <rat< th=""><th>If error is related t</th><th colspan="3">If error is related to ME functionality:</th></rat<>	If error is related t	If error is related to ME functionality:		
mode>	+CME ERROR:	<err></err>		
	Parameter			
	<current rat=""></current>	RAT of	current PLMN	
		0	GSM	
		2	UMTS	
		255	Unknown	
	<gprs status=""></gprs>	0	GPRS	
		1	EDGE	
	< RAT mode >	RAT mode setting of MS		
		0	GSM only	
		1	WCDMA only	
		<u>2</u>	Auto	
		255	Unknown	
Reference				

AT+CBST Select	t bearer service type		
Test Command AT+CBST=?	Response +CBST: (list of supported <speed>s) ,(list of supported <name>s) ,(list of supported <ce>s)</ce></name></speed>		
	OK		
	Parameter		
	See Write Command.		
Read Command	Response		
AT+CBST?	+CBST: <speed>,<name>,<ce></ce></name></speed>		
	ОК		
	Parameter		
	See Write Command.		
AT+CBST-I <spe< td=""><td>Response</td><td></td></spe<>	Response		
ed>]	connection element con to be used when data calls are originated		
[, <name>[,<ce>]]</ce></name>	OK		
1			
	Parameters		
	<speed> 0 Autobauding</speed>		
	4 2400 bps(V.22bis)		
	5 2400 bps(V.26ter)		
	6 4800 bps(V.32)		
	<u>7</u> 9600 bps(V.32)		
	12 9600 bps(V.34)		
	14 14400 bps(V.34)		
	68 2400 bps(V.110 or X.31 flag stuffing)		
	70 4800 bps(V.110 or X.31 flag stuffing)		
	71 9600 bps(V.110 or X.31 flag stuffing)		
	75 14400 bps(V.110 or X.31 flag stuffing)		
	134 64000 bps (multimedia)		
	<name> 0 Data circuit asynchronous (UDIor 3.1kHzModem)</name>		
	1 Data circuit synchronous (UDIor 3.1kHzModem)		
	4 Data circuit asynchronous(RDI)		
	<ce> 0 Transparent</ce>		
Reference 3GPP TS27.007	Note: 3GPP TS22.002 (GSM 02.02): lists the allowed combinations of the sub parameters.		

2.2. AT+CBST Select bearer service type

3. How to Use Video Call

3.1. Setup Video Call Preparation

Make sure that the 3G WCDMA USIM card supports video call (China Unicom).

Use **AT+QRAT** command to only register to the 3G network. Please refer to *chapter 2.1*. **AT + QRAT = 1 OK**

Check whether the module is registered to the network or not.

AT+CREG? +CREG: 0,1 // 1 indicates that the module has been registered to the network.

OK

3.2. Receive a video call from Cell Phone



RING // The cell phone dials video call to the module, i.e., the MT initiates a video call. The module receives the incoming call alert "RING". RING

RING	
ATA	// The module executes ATA command to accept the video call.
CONNECT 64000	// It reports "CONNECT 64000" and "OK" when the connection is established. Then the cell phone and the module can call and see each other's video.
ОК	
ATH	// The module sends ATH command to end the video call.
DISCONNECT 6400	0
OK	

3.3. Originate a Video Call to Cell Phone



AT+CBST=134,1,0	// Send +CBST command to set the parameters.
ОК	
ATD18621856384	// Use ATD to originate a video call. Please do NOT input ";" (";" is for
	voice call).
ОК	
CONNECT 64000	// The video call connection is established after the far end accepts it.
DISCONNECT 6400	00 // The connection is end for some reasons, for example, the far end hangs up it. Of course, the module can also send ATH command to hang up it

4. Notes

4.1. Before making a Video Call

It is recommended that before making a Video Call, mobile phones and other terminals are only registered to the 3G network.

The module and phone will automatically register to the corresponding network according to the network signal strength. If they are registered to the 2G network, you cannot establish a Video Call.

4.2. URC information

1. CONNECT 64000

It means the video call connection has been established.

2. DISCONNECT 64000

It means the video call connection has been disconnected.





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