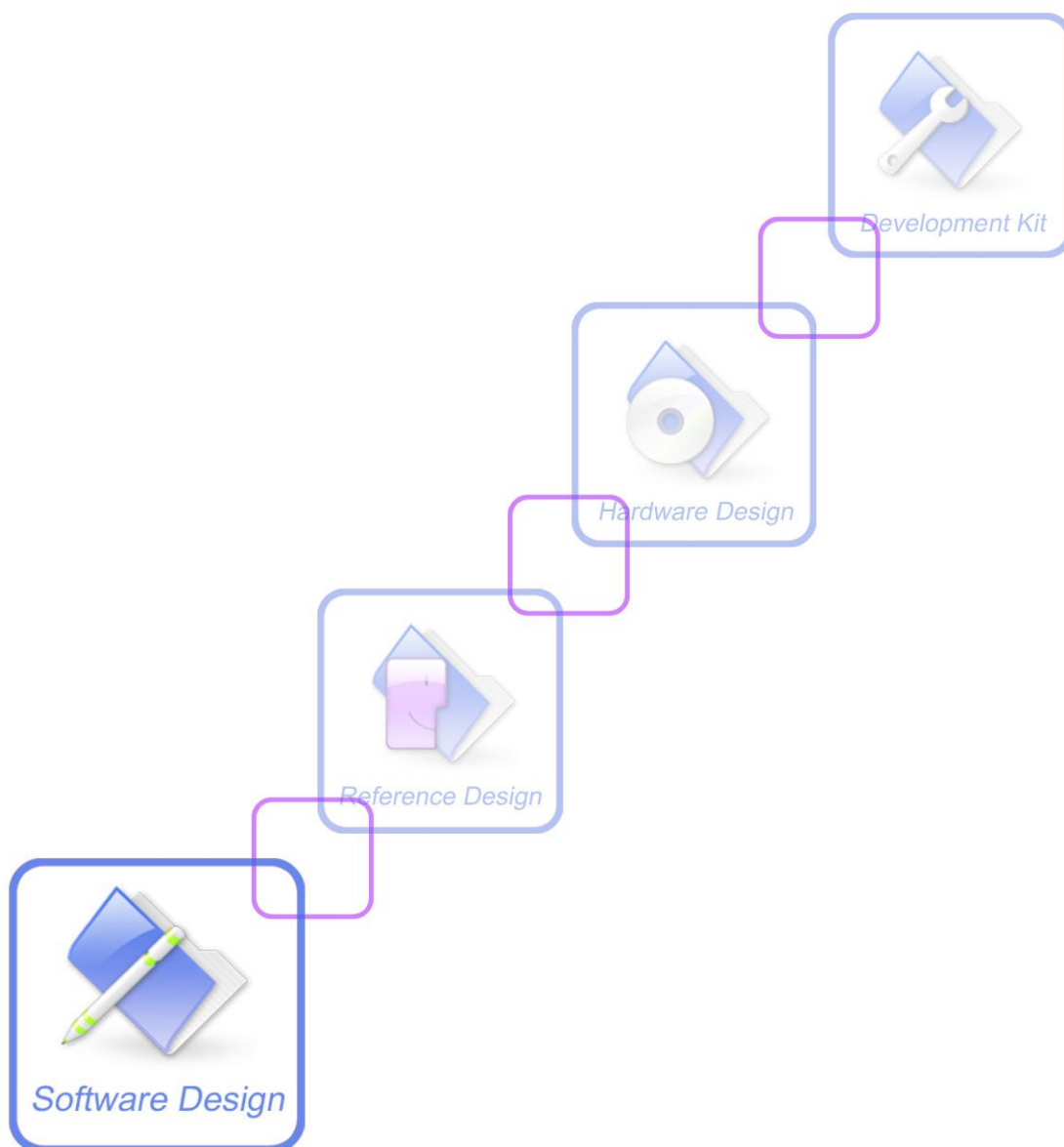




SIM5360 TTS Application Note



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Version History

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TTS Application Note

1. Introduction

1.1 Overview

This document gives the usage of SIM5360 TTS functions. User can get useful information about the SIM5360 TTS functions quickly through this document.

The TTS functions are provided in AT command format, and they are designed for customers to design their TTS applications easily. User can access these TTS AT commands through UART/ USB interface which communicates with SIM5360 module.

1.2 References

The present document is based on the following documents:

[1] SIMCOM_SIM5360_ATC_EN_V0.08.doc.

1. TTS Related AT Commands

Below is the TTS associated with AT commands. Related.

Command	Description
AT+CTTS	TTS operation
AT+CTTSPARAM	Set TTS parameters

2.1 AT+CTTS TTS operation

AT+CTTS TTS Operation	
Test Command AT+CTTS=?	Response OK No parameter
Read Command AT+CTTS?	Response +CTTS: <status>

	<p>OK</p> <p>Parameter</p> <p><status></p> <p>0 Idle status</p> <p>1 Play status</p>
<p>Write Command</p> <p>AT+CTTS=<mode>,<text></p>	<p>Response</p> <p>If <mode>is 0, return:</p> <p>OK</p> <p>If <mode>is 1 or 2, return:</p> <p>OK</p> <p>+CTTS:0 //speech synth and play end</p> <p>If error is related to MS functionality,response:</p> <p>+CME ERROR: <err></p> <p>Parameter</p> <p><mode></p> <p>0 Stop the speech synth and play</p> <p>1 Start to synth and play, <text> is in UCS2 coding format.</p> <p>2 Start to synth and play, <text> is in ASCII coding format, Chinese text is in GBK coding format</p> <p><text> The text which is synthesized to speed to be played,maximum data length is 250 bytes.。</p>
Reference	Note

2.2 AT+CTTSPARAM Set TTS Parameters

AT+CTTSPARAM Set TTS Parameters	
<p>Test Command</p> <p>AT+CTTSPARAM=?</p>	<p>Response</p> <p>+CTTSPARAM: (0-2),(0-3),(0-3),(0-2),(0-2)</p> <p>OK</p> <p>No parameter</p>
<p>Read Command</p> <p>AT+CTTSPARAM?</p>	<p>Response</p> <p>+CTTS: <volume>,<sysvolume>,<digitmode>,<pitch>,<speed></p> <p>OK</p>

<p>Write Command</p> <p>AT+ CTTSPARAM</p> <p>=<volume>[,<sysvolume>[,<digitmode>[,<pitch>[,<speed>]]]]</p>	<p>Response</p> <p>OK</p> <p>If error is related to MS functionality,response: +CME ERROR: <err></p> <p>Parameter</p> <p><volume> TTS Speech Volume, 0-2 0 The mix volume 1 The normal volume 2 The max volume</p> <p>< sysvolume> The module system volume, 0-3 0 The mix system volume 1 The small system volume 2 The normal system volume 3 The max system volume</p> <p><digitmode> The digit read mode 0-3 0 Auto read digit based on number rule first. 1 Auto read digit bases on telegram rule first. 2 Read digit based on telegram rule. 3 Read digit based on number rule.</p> <p><pitch> The voice tone 0-2 0 The mix voice tone. 1 The normal voice tone. 2 The max voice tone.</p> <p><speed> The voice speed 0-2 0 The mix speed 1 The normal speed 2 The max speed</p>
Reference	Note

2.3 AT+DTAM Set Local or Remote Audio Play

AT+DTAM Set Local or Remote Audio Play	
<p>Read Command</p> <p>AT+DTAM?</p>	<p>Response</p> <p>+CTTS: <mode></p> <p>OK</p>

	Parameter See Write Command
Write Command AT+DTAM=<mode>	Response OK
	Parameter <mode> <u>0</u> Play audio locally(Default value) 1 Play audio remotely
Reference	Note

2. TTS Application example

Below is the TTS associated with application examples

3.1 Play synthetic speech with UCS2 text

```

AT+DTAM=0                                     //play audio locally.

AT+CTTS=1,"6B228FCE4F7F75288BED97F3540862107CFB7EDF" //note:txt UCS2 coding
OK                                              //note:speech synthetic
                                                //note:speech successful, the tts voice
                                                //note:speech will play with the
                                                //note:speech current channel.
+CTTS:0                                        //note:Speech played
                                                //note:Speech over;User need s to
                                                //note:Speech waiting this response to
                                                //note:Speech play the next speech!

AT+DTAM=1                                     //play audio remotely.

AT+CTTS=1,"6B228FCE4F7F75288BED97F3540862107CFB7EDF" //note:txt UCS2 coding
                                                //note:txt UCS2 coding
                                                //note:txt coding
                                                //note:txt format.

```


OK *//note:speech synthetic successful, the tts voice will play with the current channel.*

+CTTS:0 *//note:Speech played over;User need s to waiting this response to play the next speech!*

3.2 Play synthetic speech with normal text

AT+DTAM=0 *//play audio locally.*

AT+CTTS=1,"hello, 欢迎使用语音合成系统" *//note:txt ASIIC coding format, chinese is GBK coding format.*

OK *//note:speech synthetic successful, the tts voice will play with the current channel.*

+CTTS:0 *//note:Speech played over;User need s to waiting this response to play the next speech!*

AT+DTAM=1 *//play audio remotely.*

AT+CTTS=1,"hello, 欢迎使用语音合成系统" *//note:txt ASIIC coding format, chinese is GBK coding format.*

OK *//note:speech synthetic successful, the tts voice will play with the current channel.*

+CTTS:0 *//note:Speech played over;User need s to waiting this response to play the next speech!*

3.3 Stop the synthetic speech

AT+CTTS=0

*//note:stop playing
synthetic speech.*

OK

*//note:synthetic
speech.is successful end*

3.4 Set the speech parameters

AT+CTTSPARAM=1,3,0,1,1

*//note:set the speech
parameters*

OK

*//note:set the successful
for parameter.*

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