



# SIM82XX\_SIM83XX Series \_TTS\_Application Note

5G Module

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# About Document

## Version History

Version	Date	Author	What is new
V1.00	2020.8.17	You Zhu	First Release
V1.01	2020.11.25	Shuai.Wang	Update the format

## Scope

This document applies to the SIMCom SIM820X series, SIM821X series, SIM826X series and SIM83XX series.

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# 1 Introduction

## 1.1 Purpose of the document

Based on module AT command manual, this document will introduce TTS application process. Developers could understand and develop application quickly and efficiently based on this document.

## 1.2 Related documents

[1] SIM82XX\_SIM83XX Series\_AT Command Manual

## 1.3 Conventions and abbreviations

## 2 TTS Introduction

TTS (Text To Speech) is one of the applications of speech synthesis. TTS can translate text to sound, automatic recognition of Chinese and English, support Chinese and English mixed reading.

### 2.1 Characteristic

TTS, when you input a string of a text, engineer can translate it to sound. The encoding methods supported are ASCII, UCS2 and GBK.

### 2.2 The process of Using TTS AT Commands

Step 1: Ensure TTS function is available.

Step 2: Set play path by AT+CDTAM, if necessary, default is play to local.

Step 3: Set play parameters by AT+CTTSPARAM, if necessary, default parameters are set when power on.

Step 4: Use AT+CTTS to play TTS.

## 3 AT Commands for TTS

Command	Description
AT+CDTAM	TTS play path, local or remote
AT+CTTSPARAM	TTS Parameters, set or get
AT+CTTS	TTS operation, play or stop

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## 4 TTS Examples

### 4.1 Set Local or Remote audio play

```
//Example of set play path
AT+CDTAM=1 //Set remote path
+CDTAM:

OK
AT+CDTAM=0 // Set local path
+CDTAM:

OK
```

### 4.2 Play synthetic speech with UCS2 text

```
//Example of TTS play with UCS2
AT+CTTS=1,"6B228FCE4F7F75288BED97F354 //text UCS2 coding format.
0862107CFB7EDF"
OK //Speech synthetic successful, the tts voice will
play with the current channel.
+CTTS:0 //Speech played over. User needs to wait this
response to play the next speech!
```

### 4.3 Play synthetic speech with GBK text

```
// Example of TTS play with normal text
AT+CTTS=2,"hello , 欢迎使用语音合成系统" //English is ASCII coding format, Chinese is GBK
coding format.
OK //Speech synthetic successful, the tts voice will
```



```
+CTTS:0                                play with the current channel.  
  
//Speech played over, User needs to wait this  
response to play the next speech!
```

## 4.4 Stop the synthetic speech

```
// Example of TTS stop  
AT+CTTS=0                                //Stop playing synthetic speech.  
+CTTS:0  
OK  
  
//synthetic speech is successful end.
```

## 4.5 Set the speech parameters

```
// Example of TTS set parameters  
AT+CTTSPARAM=1,3,0,1,1                //Set the speech parameters.  
OK
```

## 4.6 TTS to wav format

```
// Example of TTS to wav format  
AT+CTTS=3," 欢迎使用语音合成系统 //English is ASCII coding format, Chinese is GBK  
","E:/tts.wav"                    coding format.  
OK                                //E is map to /data/media  
  
+CTTS:0  
  
//Transform end.
```