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SIM800 Series_FM_Application Note_V1.00

Document Title	SIM800 Series_FM_Application Note
Version	1.00
Date	2013-10-18
Status	Release
Document Control ID	SIM800 Series_FM_ Application Note_V1.00

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Version History

Date	Version	What is new	Author
2013-10-18	1.00	New version	Yong.lu

Scope

This document presents the AT commands of FM operation and application examples. This document can apply to SIM800 series modules, including SIM800L and SIM800H.

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1. FM Introduction

This chapter introduces the FM application features of SIM800 series modules.

1.1. Features

FM is frequency modulation radio. The frequency range is limited from 875 to 1080 (87.5MHZ-108.0MHZ). It supports auto search channel.

NOTE：If there is an incoming call after FM function is on, FM will be shut off automatically, when incoming call is finished, FM will not re-open automatically.

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2. AT Commands

SIM800 series FM AT command overview.

Command	Description
AT+FMOPEN	Open FM
AT+FMCLOSE	Close FM
AT+FMFREQ	Set FM Frequency
AT+FMVOLUME	Set FM Volume
AT+FMSCAN	Auto Search Channel
AT+FMSIGNAL	Query Signal Level

2.1. AT+FMOPEN Open FM

AT+FMOPEN Open FM	
Test Command **AT+FMOPEN=?**	Response **+FMOPEN: (0-1)** **OK**
	Parameter See Write Command
Read Command **AT+FMOPEN?**	Response **+FMOPEN: <status>,<device>** **OK**
	Parameter See Write Command If the status is 0,the default device is 0,but the device is meaningless.
Write Command **AT+FMOPEN=<device>**	Response **OK** **ERROR**
	Parameter **<status>** **0** FM is closed **1** FM is opened **<device>** **0** Main audio channel **1** Aux audio channel
Reference	Note

2.2. AT+FMCLOSE Close FM

AT+FMCLOSE Close FM	
Execution Command **AT+FMCLOSE**	Response **OK** **ERROR**
Reference	Note

2.3. AT+FMFREQ Set FM Frequency

AT+FMFREQ Set FM Frequency	
Test Command **AT+FMFREQ=?**	Response **+FMFREQ: (875-1080)** **OK**
	Parameter See Write Command
Read Command **AT+FMFREQ?**	Response **+FMFREQ: <freq>** **OK**
	Parameter See Write Command
Write Command **AT+FMFREQ=<freq>**	Response **OK** **ERROR**
	Parameter **<freq>** **875-1080** The FM frequency. The range is limited from 875 to 1080 (87.5 MHz - 108.0 MHz)
Reference	Note FM must have been opened.

2.4. AT+FMVOLUME Set FM Volume

AT+FMVOLUME Set FM Volume	
Test Command **AT+FMVOLUME=?**	Response **+FMVOLUME: (0-6)** **OK**
	Parameter See Write Command
Read Command **AT+FMVOLUM**	Response **+FMVOLUME: <value>**

E?	**OK**
	Parameter See Write Command
Write Command **AT+FMVOLUME=<value>**	Response **OK** **ERROR**
	Parameter **<value>** **0-6** volume level
Reference	Note

2.5. AT+FMSCAN Auto Search Channel

AT+FMSCAN Auto Search Channel	
Execution Command **AT+FMSCAN**	Response **[<channel>** **[<CR><LF> < channel > …]]** **OK**
	Parameter **<channel>** auto search channel
Reference	Note FM must have been opened.

2.6. AT+FMSIGNAL Query Signal Level

AT+FMSIGNAL Query Signal Level	
Write Command **AT+FMSIGNAL=<freq>**	Response **+FMSIGNAL: freq**[**<freq>**]:**<level>** **OK**
	Parameter **<freq>** **875-1080** The FM frequency. The range is limited from 875 to 1080 (87.5 MHz - 108.0 MHz) **<level>** **0-112** Signal Level
Reference	Note FM must have been opened.

3. Examples

In the "Grammar" columns of following tables, input of AT commands are in black , module return values are in blue.

Grammar	Description
AT+FMOPEN=1 OK	Open FM. FM data would be outputted through aux audio channel
AT+FMVOLUME=6 OK	Set FM volume
AT+FMSCAN 948 950 952 954 956 962 968 OK	Auto search FM channel
AT+FMFREQ=948 OK	Set FM channel at 94.8MHZ
AT+FMSIGNAL=948 +FMSIGNAL: freq[948]:32 OK	Query 94.8MHZ signal level
AT+FMCLOSE OK	Close FM

Appendix

A Related Documents

SN	Document name	Remark
[1]	SIM800 Series_AT Command Manual	

B Terms and Abbreviations

Abbreviation	Description
FM	Frequency Modulation Radio

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