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SIM7X00 Series_GPIO_Application Note_V1.00



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Version History

Date	Version	What is new	Author
2016-07-09	1.00	New version	Dongshan.liu

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Scope

This document presents the AT command of GPIO operation and application examples. This document can apply to SIM7X00 series modules, including SIM7600C, SIM7600CE, SIM7500A and SIM7500JE.

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1. Introduction

This document will depict the usage of GPIO functions supplied by SIMCom SIM7X00 module. User can get useful information about the SIMCom SIM7X00 Module's GPIO function quickly through this document.

Each GPIO can be used as:

1. General Purpose Input/Output pin.
2. Interrupt pin

Special function pin.

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2. Usage

2.1 GPIO supplied by SIM7X00

Currently the following pins can be used as a function on SIM7100:

Name	Functions			
	0	1	2	Default function value
GPIO_40	GPIO	PCM_MCLK		0
GPIO_41	GPIO	WAKEUP_HOST	AUDIO_USE	2
GPIO_43	GPIO	WAKEUP_ME	MIFI_USE	If is mifi version The value is 2 Else The value is 0
GPIO_44	GPIO	SD_DET		0

Table 1 GPIO supplied by SIM7100

Currently the following pins can be used as a function on SIM7500/ SIM7600:

Name	Functions			
	0	1	2	Default function value
GPIO_40	GPIO	STATUS		1
GPIO_41	GPIO			0
GPIO_43	GPIO			0
GPIO_44	GPIO	SD_DET		0

Table 2 GPIO supplied by SIM7500/ SIM7600

Currently the following pins can be used as a function on SIM7500A/ SIM7500JE:

Name	Functions			
	0	1	2	Default function value
GPIO_40	GPIO	STATUS		1
GPIO_37	GPIO			0
GPIO_49	GPIO			0

Table 3 GPIO supplied by SIM7500A/ SIM7500JE

2.2 GPIO Operations

Currently the following Functions can be used by special GPIO on SIM7X00 module,

- 1) AT+CGFUNC is used to set GPIO function.

Example1:

```
AT+CGFUNC=40, 1 //set gpio-40 to function 1
AT+CGFUNC=41, 2 //set gpio-41 to function 2.
```

- 2) AT+ CGDRT is used to configure GPIO pin as output/input, before must be set the GPIO to GPIO function.
- 3) AT+ CGSETV is used to set GPIO HIGH/LOW, before must be set the GPIO to GPIO function.

- 4) AT+ CGGETV is used to get GPIO HIGH/LOW, before must be set the GPIO to GPIO function.
- 5) AT+ CGISR set interrupt trigger condition and start this interruption. When the interruption happened, the following URC will be sent to host

Appendix

A Related Documents

SN	Document name	Remark

B Terms and Abbreviations

Abbreviation	Description

Contact us:

SIMCom Wireless Solutions Co., Ltd.

Add: Building A, SIM Technology Building, No.633, Jinzhong Road, Changning District
200335

Tel: 86-21-32523300

Fax: 86-21-32523020

Email: simcom@sim.com

Website: www.simcomm2m.com

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