SIM7100 GPIO Application Note

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Version History

Date	Version	Description of change	Author
2015-01-16	V0.01	New version	

Scope

This document describes how to use GPIO supplied by SIMCOM SIM7100 modules. This document can be used for SIMCom SIM7100 modules.

1 Introduction

This document will depict the usage of GPIO functions supplied by SIMCom SIM7100 module. User can get useful information about the SIMCom SIM7100 Module's GPIO function quickly through this document.

Each GPIO can be used as:

1. General Purpose Input/Output pin.
2. Interrupt pin
3. Special function pin.

2 Usage

2.1 GPIO supplied by SIM7100

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	SYS_APP	2
GPIO_42	GPIO	USIM_DET		0
GPIO_43	GPIO	WAKEUP_ME	SYS_APP	2
GPIO_44	GPIO	SD_DET		0

Table 1 GPIO supplied by SIM7100

2.2 GPIO Operations

Currently the following Functions can be used by special GPIO on SIM7100 module,

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

Example1:

AT+CGFUNC=40, 1 //set gpio-40 to PCM_MCLK function.

AT+CGFUNC=41, 2 //set gpio-41 to SYS_APP function.

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

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