



SIM7100_SIM7500_SIM7600 Series_GPIO_Application Note

LTE Module

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About Document

Version History

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Contents

About Document	3
Version History.....	3
Contents	4
1. Document Overview	5
2. GPIO Managed	6
2.1 GPIO supplied by Module.....	6
2.2 GPIO AT Operations.....	6

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1.Document Overview

This document describes how to use GPIO supplied by SIMCOM **SIM7100 SIM7500 SIM7600** modules.
This document can be used for SIMCom **SIM7100 SIM7500 SIM7600** modules.

This document will depict the usage of GPIO functions supplied by SIMCom **SIM7100 SIM7500 SIM7600** module. User can get useful information about the SIMCom **SIM7100 SIM7500 SIM7600** Module's GPIO function quickly through this document.

Each GPIO can be used as:

- General Purpose Input/Output pin.
- Interrupt pin
- Special function pin.

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2.GPIO Managed

2.1 GPIO supplied by Module

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

PIN name	GPIO function	Function1	Function2	Default Function
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
GPIO_40	GPIO	PCM_MCLK		0
GPIO_41	GPIO	WAKEUP_HOST	SYS_APP	2

Table 1 GPIO supplied by SIM7100

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

PIN name	GPIO function	Function1	Function2	Default Function
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

2.2 GPIO AT 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.
- AT+CGISR set interrupt trigger condition and start this interruption. When the interruption happened, the following URC will be sent to host

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