



SIM7100_SIM7500_SIM7600 Series_GPIO_Application Note

LTE Module

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About Document

Version History

Version	Date	Owner	What is new
V2.00	2020.08.06	Zhichong Huang	Update the format
V3.00	2021.11.19	Haotian Wang	Update the format

Scope

This document applies to SIM7100 series, SIM7500 series and SIM7600 series.

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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.

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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