



SIM7080 Series_PING_Application Note

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About Document

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1.00	Sept 2, 2019	Jiangting.Ding	First Release
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Related Documents

[1] SIM7080 Series_AT Command Manual_V1.02

This document applies to the following products:

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SIM7080G	CAT-M/NB	17.6*15.7 *2.3	N/A
SIM7070G/SIM7070E	CAT-M/NB/EGPRS	24*24*2.4	N/A
SIM7070G-NG	NB/EGPRS	24*24*2.4	N/A
SIM7090G	CAT-M/NB	14.8*12.8*2.0	N/A

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1 Purpose of this document

Based on module AT command manual, this document will introduce PING application process.

Developers could understand and develop application quickly and efficiently based on this document.

2 Introduction

Ping is a computer network administration software utility used to test the reachability of a host on an Internet Protocol (IP) network. It is available for virtually all operating systems that have networking capability, including most embedded network administration software.

Ping measures the round-trip time for messages sent from the originating host to a destination computer that are echoed back to the source. The name comes from active sonar terminology that sends a pulse of sound and listens for the echo to detect objects under water.

Ping operates by sending Internet Control Message Protocol (ICMP) echo request packets to the target host and waiting for an ICMP echo reply. The program reports errors, packet loss, and a statistical summary of the results, typically including the minimum, maximum, the mean round-trip times, and standard deviation of the mean.

The command-line options of the ping utility and its output vary between the numerous implementations. Options may include the size of the payload, count of tests, limits for the number of network hops (TTL) that probes traverse, and interval between the requests. Many systems provide a companion utility ping6, for testing on Internet Protocol version 6 (IPv6) networks, which implement ICMPv6.

3 AT Commands for PING

Command	Description
AT+SNPDPID	Select PDP Index for PING
AT+SNPING4	Sends an IPv4 PING
AT+SNPING6	Sends an IPv6 PING

For detail information, please refer to “SIM7080 Series_AT Command Manual”.

4 PING test sample

4.1 PING request for IPv4

AT Command	Response	Description
AT+CNACT=0,1	OK	App Network Active.
	+APP PDP: 0,ACTIVE	
AT+SNPDPID=0	OK	Select PDP Index for PING.
AT+SNPING4="www.bai du.com",3,16,1000	+SNPING4: 1,180.97.33.108,147 +SNPING4: 2,180.97.33.108,546 +SNPING4: 3,180.97.33.108,278	Sends IPv4 Ping request.
	OK	

4.2 PING request for IPv6

AT Command	Response	Description
AT+CNACT=0,1	OK	App Network Active.
	+APP PDP: 0,ACTIVE	
AT+SNPDPID=0	OK	Select PDP Index for PING.
AT+SNPING6="ipv6.bai du.com",3,16,1000	+SNPING6: 1,2400:da00:2::29,147 +SNPING6: 2,2400:da00:2::29,546 +SNPING6: 3,2400:da00:2::29,278	Sends IPv6 Ping request.
	OK	

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