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# **SIM800 Series\_Email\_Application Note\_V1.00**



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## Version History

Date	Version	Description of change	Author
2013-08-01	V1.00	New version	Ping.zhang

## Scope

This document presents the AT command of Email operation and application examples. This document can apply to SIM800 series modules, including SIM800, SIM800W, SIM800V, SIM800L and SIM800H.

# 1 Introduction

This document presents the AT command of Email operation for SIM800 Series.

## 1.1 Features

1. SIM800 Series supports to send an Email with an attachment via SMTP protocol. It also supports carbon copy (abbreviated Cc:) recipient and blind carbon copy (abbreviated Bcc:) recipient.
2. SIM800 Series supports to retrieve and delete the Email via POP3 protocol, the Email may be with attachments.
3. SIM800 Series supports all of POP3 commands but APOP. By these POP3 commands, you can get the specific Email's size and unique-id.
4. SIM800 Series does not support that SMTP and POP3 operations are executed at the same time.

## 2 AT commands

Below is the email associated with AT commands, detailed information please refer to document [1].

Through these AT commands can achieve the following functions.

- 1) Via the SMTP protocol to send e-mail with attachments.
- 2) Through the POP3 protocol to accept or delete e-mail.
- 3) To obtain the specified mail message (size and unique identifiers).

Command	Description
AT+EMAILCID	Set Email Bearer Profile Identifier
AT+EMAILTO	Set Timeout Value of SMTP/POP3 Server Response
AT+SMTPSRV	Set SMTP Server Address and Port
AT+SMTPAUTH	Set User Name and Password for SMTP Authentication
AT+SMTPFROM	Set Sender Address and Name
AT+SMTPRCPT	Set the Email Recipient(TO/CC/BCC) Address and Name
AT+SMTPSUB	Set the Email Subject
AT+SMTPBODY	Set the Email Body
AT+SMTPFILE	Set the Email Attachment
AT+SMTPSEND	Send the Email
AT+SMTPFT	Transfer the Email Attachment
AT+SMTPPCS	Set the Email Charset
AT+POP3SRV	Set POP3 Server and Account
AT+POP3IN	Log In POP3 Server
AT+POP3NUM	Get Email Number and Total Size
AT+POP3LIST	Get the Specific Email Size
AT+POP3UIDL	Get the Specific Email Unique-id
AT+POP3CMD	Get Multi-line Response
AT+POP3READ	Read Multi-line Response
AT+POP3DEL	Mark the Specific Email to Delete
AT+POP3RSET	Unmark the Emails that Be Marked as Deleted
AT+POP3OUT	Log Out POP3 Server

### 3 Examples

There are some examples to explain how to use these commands.

In the "Grammar" columns of following tables, input of AT commands are in black , module return values are in blue.

#### 3.1 Bearer profile

Grammar	Description
AT+SAPBR=3,1,"Contype","GPRS" OK	Configure bearer profile 1
AT+SAPBR=3,1,"APN","CMNET" OK	
AT+SAPBR=1,1 OK	To open a GPRS context.
AT+SAPBR=2,1 +SAPBR:1,1,"10.89.193.1" OK	To query the GPRS context
AT+SAPBR=0,1 OK	To close a GPRS context.
+SAPBR 1: DEACT	GPRS context is released by network

#### 3.2 Send an Email

Grammar	Description
AT+EMAILCID=1 OK	Set parameters of Email
AT+EMAILTO=30 OK	
AT+SMTPSRV="mail.sim.com",25 OK	Set SMTP server address and port
AT+SMTPAUTH=1,"john","123456" OK	Set user name and password
AT+SMTPFROM="john@sim.com","john" OK	Set sender address and name
AT+SMTPRCPT=0,0,"john@sim.com","john" OK	Set the recipient(To:)

AT+SMTPRCPT=1,0,"john@sim.com","john" OK	Set the recipient(Cc:)
AT+SMTPRCPT=2,0,"john@sim.com","john" OK	Set the recipient(Bcc:)
AT+SMTPSUB="Test"	Set the subject
AT+SMTPBODY=19 DOWNLOAD This is a new Email  OK	Set the body
AT+SMTSEND OK  +SMTSEND: 1	Send the Email

### 3.3 Send an Email with an attachment

Grammar	Description
AT+EMAILCID=1 OK	Set parameters of Email
AT+EMAILTO=30 OK	
AT+SMTPSRV="mail.sim.com",25 OK	Set SMTP server address and port
AT+SMTPAUTH=1,"john","123456" OK	Set user name and password
AT+SMTPFROM="john@sim.com","john" OK	Set sender address and name
AT+SMTPRCPT=0,0,"john@sim.com","john" OK	Set the recipient (To:)
AT+SMTPRCPT=1,0,"john@sim.com","john" OK	Set the recipient (Cc:)
AT+SMTPRCPT=2,0,"john@sim.com","john" OK	Set the recipient (Bcc:)
AT+SMTPSUB="Test" OK	Set the subject
AT+SMTPBODY=19 DOWNLOAD This is a new Email	Set the body

OK	
AT+SMTPFILE=1,"test.txt",0	Set the attachment
OK	
AT+SMTPSEND	Send the Email
OK	
+SMTPPFT: 1,1360	URC indicates that the attachment may be send.1360 is the max length of data which can be sent at a time. It depends on the network status.
AT+SMTPPFT=100 +SMTPPFT: 2,100 ..... //Input data	SMTP client requests to send 100 bytes. Response will indicates that user must input 100 bytes for transferring now.
OK	
+SMTPPFT: 1,1360	URC indicates that more data can be sent
AT+SMTPPFT=0	The attachment has been transferred completely.
OK	
+SMTPSEND: 1	URC indicates that the entire email has been send successfully

### 3.4 Send a UTF-8 Email

Grammar	Description
AT+EMAILCID=1 OK AT+EMAILTO=30 OK	Set parameters of Email
AT+SMTPPCS="UTF-8" OK	Set the mail charset
AT+SMTPSRV="mail.sim.com",25 OK	Set SMTP server address and port
AT+SMTPAUTH=1,"john","123456" OK	Set user name and password
AT+SMTPFROM="john@sim.com","john" OK	Set sender address and name
AT+SMTPRCPT=0,0,"john@sim.com","john" OK	Set the recipient(To:)
AT+SMTPRCPT=1,0,"john@sim.com","john" OK	Set the recipient(Cc:)

AT+SMTPRCPT=2,0,"john@sim.com","john" OK	Set the recipient(Bcc:)
AT+SMTPSUB="54455354"	Set the subject
AT+SMTPBODY=40 DOWNLOAD 38546869732069732061206E657720456D61696C OK	Set the body
AT+SMTSEND OK +SMTSEND: 1	Send the Email

### 3.5 Retrieve the Email

Grammar	Description
AT+EMAILCID=1 OK	Set parameters of Email
AT+EMAILTO=30 OK	
AT+POP3SRV="mail.sim.com","john","123456",110 OK	Set POP3 server and account
AT+POP3IN OK +POP3IN: 1	Log in POP3 server
AT+POP3NUM OK +POP3NUM: 1,2,11124	Get Email number and total size
AT+POP3LIST=1 OK +POP3LIST: 1,1,5556	Get the specific Email's size
AT+POP3CMD=4,1 OK +POP3CMD: 1	Retrieve the specific Email
AT+POP3READ=1460 +POP3READ: 1,1460 ...	Get the Email content

<p>OK</p> <p>AT+POP3READ=1460</p> <p>+POP3READ: 1,1460</p> <p>...</p> <p>OK</p>	
<p>AT+POP3READ=1460</p> <p>+POP3READ: 2,1183</p> <p>...</p> <p>OK</p>	The Email's content is read completely
<p>AT+POP3OUT</p> <p>OK</p> <p>+POP3OUT: 1</p>	Log out POP3 SERVER

### 3.6 Delete the Email

Grammar	Description
<p>AT+EMAILCID=1</p> <p>OK</p>	Set parameters of Email
<p>AT+EMAILTO=30</p> <p>OK</p>	
<p>AT+POP3SRV="mail.sim.com","john","123456",110</p> <p>OK</p>	Set POP3 server and account
<p>AT+POP3IN</p> <p>OK</p> <p>+POP3IN: 1</p>	Log in POP3 server
<p>AT+POP3NUM</p> <p>OK</p> <p>+POP3NUM: 1,2,11124</p>	Get Email number and total size
<p>AT+POP3DEL=1</p> <p>OK</p> <p>+POP3DEL: 1</p>	Mark the Email to delete
<p>AT+POP3OUT</p> <p>OK</p>	Log out POP3 SERVER

+POP3OUT: 1

### 3.7 Get the Email's size and unique-id

Grammar	Description
AT+EMAILCID=1 OK	Set parameters of Email
AT+EMAILTO=30 OK	
AT+POP3SRV="mail.sim.com","john","123456",110 OK	Set POP3 server and account
AT+POP3IN OK  +POP3IN: 1	Log in POP3 server
AT+POP3NUM OK  +POP3NUM: 1,2,35797	Get Email number and total size
AT+POP3LIST=1 OK  +POP3LIST: 1,1,16601	Get the specific Email's size
AT+POP3UIDL=1 OK  +POP3UIDL: 1,1, AAAFOPdCAAav60+tkSFqRqk3/6ogog+g	Get the specific Email's unique-id
AT+POP3OUT OK  +POP3OUT: 1	Log out POP3 SERVER

## Appendix

### A Related Documents

SN	Document name	Remark
[1]	SIM800 Series_AT Command Manual	
[2]	SIM800 Series_TCPIP_Application Note	

### B Terms and Abbreviations

Abbreviation	Description
GPRS	General Packet Radio Service
IP	Internet Protocol
EMAIL	Electronic Mail
SMTP	Simple Mail Transfer Protocol
POP3	Post Office Protocol 3

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