

SIM800 Series_Email_Application Note_V1.00





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Version History

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

3.2 Send an Email

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



| 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+SMTPSEND OK +SMTPSEND: 1 | Send the Email |

3.3 Send an Email with an attachment

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



| OK | |
|---|---|
| AT+SMTPFILE=1,"test.txt",0 OK | Set the attachment |
| AT+SMTPSEND OK | Send the Email |
| +SMTPFT: 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+SMTPFT=100 +SMTPFT: 2,100 //Input data | SMTP client requests to send 100 bytes. Response will indicates that user must input 100 bytes for transferring now. |
| OK | |
| +SMTPFT: 1,1360 | URC indicates that more data can be sent |
| AT+SMTPFT=0 OK | The attachment has been transferred completely. |
| +SMTPSEND: 1 | URC indicates that the entire email has been send successfully |
| 3.4 Send a UTF-8 Email | |
| | D |

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



| 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+SMTPSEND OK +SMTPSEND: 1 | Send the Email |

3.5 Retrieve the Email

| | 1/2 0 |
|---|---------------------------------|
| Grammar | Description |
| AT+EMAILCID=1 | Set parameters of Email |
| OK | |
| | |
| AT+EMAILTO=30 | |
| OK | |
| AT+POP3SRV="mail.sim.com","john","123456",110 | Set POP3 server and account |
| OK | |
| AT+POP3IN | Log in POP3 server |
| OK | |
| | |
| +POP3IN: 1 | |
| AT+POP3NUM | Get Email number and total size |
| OK | |
| | |
| +POP3NUM: 1,2,11124 | |
| AT+POP3LIST=1 | Get the specific Email's size |
| OK | |
| | |
| +POP3LIST: 1,1,5556 | |
| AT+POP3CMD=4,1 | Retrieve the specific Email |
| OK | |
| | |
| +POP3CMD: 1 | |
| AT+POP3READ=1460 | Get the Email content |
| +POP3READ: 1,1460 | |
| | |



| OK | |
|-------------------|--|
| AT+POP3READ=1460 | |
| +POP3READ: 1,1460 | |
| | |
| OV. | |
| OK | |
| AT+POP3READ=1460 | The Email's content is read completely |
| +POP3READ: 2,1183 | |
| | |
| | |
| OK | |
| AT+POP3OUT | Log out POP3 SERVER |
| OK | |
| | |
| +POP3OUT: 1 | |

3.6 Delete the Email

| Grammar | Description |
|---|---------------------------------|
| AT+EMAILCID=1 | Set parameters of Email |
| OK | |
| ATT FINANCES OF | |
| AT+EMAILTO=30 OK | |
| | Set POP3 server and account |
| AT+POP3SRV="mail.sim.com","john","123456",110 | Set POP3 server and account |
| AT+POP3IN | Log in POP3 server |
| OK | 208 11 01 0 101 101 |
| | |
| +POP3IN: 1 | |
| AT+POP3NUM | Get Email number and total size |
| OK | |
| 2020424 | |
| +POP3NUM: 1,2,11124 | |
| AT+POP3DEL=1 | Mark the Email to delete |
| OK | |
| +POP3DEL: 1 | |
| AT+POP3OUT | Log out POP3 SERVER |
| OK | Log out 1013 blick like |
| | |



+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 | Get the specific Email's unique-id |
| +POP3UIDL: 1,1, AAAFOpdCAAAv60+tksFqRqk3/6ogog+g | |
| 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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