



SIM7080 Series_Email_Application Note

Version:1.01

Release Date:Feb 26, 2020

About Document

Document Information

Document	
Title	SIM7080 Series_Email_Application Note
Version	1.01
Document Type	Application Note
Document Status	Released/Confidential

Revision History

Revision	Date	Owner	Status / Comments
1.00	Oct 12, 2019	Wenjie.lai	First Release
1. 01	Feb 26, 2020	Yulong.zheng	Add SSL AT and examples

Related Documents

[1] SIM7080 Series AT Command Manual V1.02

This document applies to the following products:

Name	Type	Size (mm)	Comments
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

Copyrights

This document contains proprietary technical information which is the property of SIMCom Wireless Solutions Co.,Ltd. Copying of this document and giving it to others and the using or communication of the contents thereof, are forbidden without express authority. Offenders are liable to the payment of damages. All rights reserved in the event of grant of a patent or the registration of a utility model or design. All specification supplied herein are subject to change without notice at any time.

Contents

About Document	2
Document Information.....	2
Revision History.....	2
Related Documents.....	2
Copyrights	2
Contents.....	3
1 Purpose of this document	5
2 AT Commands for Email	5
2.1 Overview	5
2.2 Detailed Descriptions of Commands.....	6
2.2.1 AT+EMAILCID Set Email Bearer Profile Identifier	6
2.2.2 AT+EMAILTO Set Timeout Value of SMTP/POP3 Server Response.....	7
2.2.3 AT+SMTPSRV Set SMTP Server Address and Port.....	7
2.2.4 AT+SMTPAUTH Set User Name and Password for SMTP Authentication.....	8
2.2.5 AT+SMTPFROM Set Sender Address and Name.....	9
2.2.6 AT+SMTPRCPT Set the Email Recipient(TO/CC/BCC) Address and Name....	10
2.2.7 AT+SMTPSUB Set the Email Subject.....	11
2.2.8 AT+SMTPBODY Set the Email Body.....	12
2.2.9 AT+SMTPFILE Set the Email Attachment.....	12
2.2.10 AT+SMTPSEND Send the Email	13
2.2.11 AT+SMTPFT Transfer the Email Attachment.....	14
2.2.12 AT+SMTPCS Set the Email Charset.....	15
2.2.13 AT+POP3SRV Set POP3 Server and Account	16
2.2.14 AT+POP3IN Log in POP3 Server.....	17
2.2.15 AT+POP3NUM Get Email Number and Total Size.....	18
2.2.16 AT+POP3LIST Get the Specific Email Size	19
2.2.17 AT+POP3UIDL Get the Specific Email Unique-id	20
2.2.18 AT+POP3CMD Get Multi-line Response.....	20
2.2.19 AT+POP3READ Read Multi-line Response.....	22
2.2.20 AT+POP3DEL Mark the Specific Email to Delete	24
2.2.21 AT+POP3RSET Unmark the Emails that Be Marked as Deleted	25
2.2.22 AT+POP3OUT Log Out POP3 Server	25
2.2.23 AT+EMAILSSL Set Email SSL function.....	26
3 Exampels.....	27

3.1	Network Register.....	27
3.2	Bearer profile	27
3.3	Synchronize time.....	28
3.4	Send an Email.....	28
3.5	Send an Email with an attachment	29
3.6	Send a UTF-8 Email.....	30
3.7	Retrieve the Email	30
3.8	Delete the Email.....	31
3.9	Get the Email's size and unique-id	31
3.10	Email Send Encrypted Mail with Normal Port.....	32
3.11	Email Send Encrypted Mail with Encryption Port	33
3.12	Email Receive Encrypted Mail with Encryption Port	33
	Contact.....	35

1 Purpose of this document

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

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

2 AT Commands for Email

1. SIM7080 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. SIM7080 series supports to retrieve and delete the Email via POP3 protocol, the Email may be with attachments.
3. SIM7080 series supports all of POP3 commands but APOP. By these POP3 commands, you can get the specific Email's size and unique-id.
4. SIM7080 series does not support that SMTP and POP3 operations are executed at the same time.

2.1 Overview

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+SMTPPFT	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
AT+EMAILSSL	Set Email SSL function

2.2 Detailed Descriptions of Commands

2.2.1 AT+EMAILCID Set Email Bearer Profile Identifier

AT+EMAILCID Set Email Bearer Profile Identifier	
Test Command AT+EMAILCID=?	<p>Response</p> <p>+EMAILCID: (range of supported <cid>s)</p> <p>OK</p> <p>Parameters</p> <p>See Write Command</p>
Read Command AT+EMAILCID?	<p>Response</p> <p>+EMAILCID: <cid></p> <p>OK</p> <p>Parameters</p> <p>See Write Command</p>
Write Command AT+EMAILCID=<cid>	<p>Response</p> <p>OK</p> <p>If error is related to ME functionality:</p> <p>ERROR</p> <p>Parameters</p> <p><cid> Bearer profile identifier refer to AT+CNACT</p>
Parameter Saving Mode	NO_SAVE
Max Response Time	-
Reference	Note

2.2.2 AT+EMAILTO Set Timeout Value of SMTP/POP3 Server

Response

AT+EMAILTO Set Timeout Value of SMTP/POP3 Server Response	
Test Command AT+EMAILTO=?	Response +EMAILTO: (range of supported <timeout>s)
	OK
	Parameters See Write Command
Read Command AT+EMAILTO?	Response +EMAILTO: <timeout>
	OK
	Parameters See Write Command
Write Command AT+EMAILTO=<timeout>	Response OK If error is related to ME functionality: ERROR
	Parameters <timeout> The timeout value of SMTP/POP3 server response, in 1 second unit. 10-120 Default: 30(seconds)
Parameter Saving Mode	NO_SAVE
Max Response Time	-
Reference	Note

2.2.3 AT+SMTPSRV Set SMTP Server Address and Port

AT+SMTPSRV Set SMTP Server Address and Port	
Test Command AT+SMTPSRV=?	Response +SMTPSRV: <smtpServerLength>,(range of supported <smtpPort>s)
	OK

	Parameters See Write Command
Read Command AT+SMTPSRV?	Response +SMTPSRV: <smtpServer>,<smtpPort> OK Parameter See Write Command
Write Command AT+SMTPSRV=<smtpServer>[,<smtpPort>]	Response OK If error is related to ME functionality: ERROR Parameters <smtpServer> SMTP server address, string type. This parameter can be either: - IP address in the format: xxx.xxx.xxx.xxx - Host name to be solved with a DNS query <smtpPort> The SMTP port 1-65535 Default: 25 <smtpServerLength> The max length of <smtpServer>
Parameter Saving Mode	NO_SAVE
Max Response Time	-
Reference	Note

2.2.4 AT+SMTPAUTH Set User Name and Password for SMTP Authentication

AT+SMTPAUTH Set User Name and Password for SMTP Authentication	
Test Command AT+SMTPAUTH=?	Response +SMTPAUTH: (range of supported<authType>s),<userNameLength>,<passwordLength> OK Parameters See Write Command

Read Command AT+SMTPAUTH?	Response +SMTPAUTH: <authType>,<userName>,<password> OK
	Parameters See Write Command
Write Command AT+SMTPAUTH=<authType>[,<userName>,<password>]	Response OK If error is related to ME functionality: ERROR
	Parameters <authType> The type of SMTP authentication 0 SMTP server does not request authentication. <userName> and <password> must not be given. 1 SMTP server requests authentication <userName> The user name for SMTP authentication. <userNameLength> The max length of <userName> . <password> The password for SMTP authentication. <passwordLength> The max length of <password> .
Parameter Saving Mode	NO_SAVE
Max Response Time	-
Reference	Note

2.2.5 AT+SMTPFROM Set Sender Address and Name

AT+SMTPFROM Set Sender Address and Name	
Test Command AT+SMTPFROM=?	Response +SMTPFROM: <senderAddressLength>,<senderNameLength> OK
	Parameters See Write Command
Read Command AT+SMTPFROM?	Response +SMTPFROM: <senderAddress>,<senderName> OK
	Parameter See Write Command

Write Command AT+SMTPFROM=<senderAddress>[,<senderName>]	Response OK If error is related to ME functionality: ERROR
	Parameters <div> <div><senderAddress></div> <div>The Email sender address,string type.</div> </div> <div> <div><senderAddressLength></div> <div>The max length of <senderAddress></div> </div> <div> <div><senderName></div> <div>The Email sender name,string type.</div> </div> <div> <div><senderNameLength></div> <div>The max length of <senderName></div> </div>
Parameter Saving Mode	NO_SAVE
Max Response Time	-
Reference	Note

2.2.6 AT+SMTPRCPT Set the Email Recipient(TO/CC/BCC) Address and Name

AT+SMTPRCPT Set the Email Recipient(TO/CC/BCC) Address and Name	
Test Command AT+SMTPRCPT=?	Response +SMTPRCPT: (range of supported <rcptType>s),(range of supported <index>s),<rcptAddressLength>,<rcptNameLength> OK
	Parameters See Write Command
Read Command AT+SMTPRCPT?	Response [+SMTPRCPT: <rcptType>,<index>,<rcptAddress>,<rcptName>[<CR><LF>+SMTPRCPT: <rcptType>,<index>,<rcptAddress>,<rcptName>[...]]] OK
	Parameter See Write Command
Write Command AT+SMTPRCPT=<rcptType>[,<index>[,<rcptAddress>[,<rcptName>]]]	Response OK If error is related to ME functionality: ERROR
	Parameters

	<p><rcptType> The type of recipient, the types of TO and CC are used to construct e-mail header in the field:"To:" or "Cc:".</p> <p>0 TO, Normal Recipient.</p> <p>1 CC, Carbon Copy recipient.</p> <p>2 BCC, Blind Carbon Copy recipient.</p> <p><index> Index of the type of recipient, decimal format</p> <p><rcptAddress> The Email recipient address.</p> <p><rcptName> The Email recipient name.</p> <p><rcptAddressLength> The max length of <rcptAddress>.</p> <p><rcptNameLength> The max length of <rcptName>.</p>
Parameter Saving Mode	NO_SAVE
Max Response Time	-
Reference	<p>Note</p> <ul style="list-style-type: none"> ● If only <rcptType> is given, it will delete all items of <rcptType>. ● If only <rcptType> and <index> are given, it will delete the <index> item of <rcptType>.

2.2.7 AT+SMTPSUB Set the Email Subject

AT+SMTPSUB Set the Email Subject	
Test Command AT+SMTPSUB=?	<p>Response</p> <p>+SMTPSUB: <subjectLength></p> <p>OK</p> <p>Parameters</p> <p>See Write Command</p>
Read Command AT+SMTPSUB?	<p>Response</p> <p>+SMTPSUB: <subject></p> <p>OK</p> <p>Parameter</p> <p>See Write Command</p>
Write Command AT+SMTPSUB=<subject>	<p>Response</p> <p>OK</p> <p>If error is related to ME functionality:</p> <p>ERROR</p> <p>Parameters</p> <p><subject> The Email subject, string type. It will be present in the header of the Email sent by SMTP client in the field:</p>

		"Subject:" <subjectLength> The max length of <subject>.
Parameter	Saving Mode	NO_SAVE
Max Response Time		-
Reference		Note If the Email charset is not ASCII,<subject> must be in hexadecimal format.

2.2.8 AT+SMTPBODY Set the Email Body

AT+SMTPBODY Set the Email Body		
Test Command	Response	
AT+SMTPBODY=?	+SMTPBODY: <bodyLength>	
	OK	
	Parameters	See Write Command
Write Command	Response	
AT+SMTPBODY=<length>	DOWNLOAD	
,then type data as Email body. When body's length equal length, command is over!	OK	
	If error is related to ME functionality:	
	ERROR	
	Parameters	
	<length> The length of Email body.	
Parameter	Saving Mode	NO_SAVE
Max Response Time		-
Reference	Note	
	<ul style="list-style-type: none"> If the Email charset is not ASCII, the body of Email must be in hexadecimal format. After URC string "DOWNLOAD", User can input email's body. 	

2.2.9 AT+SMTPFILE Set the Email Attachment

AT+SMTPFILE Set the Email Attachment

<p>Test Command AT+SMTPFILE=?</p>	<p>Response +SMTPFILE: (range of <fileType>s),<fileNameLength>,(range of <encodeType>s)</p> <p>OK</p> <p>Parameters See Write Command</p>
<p>Read Command AT+SMTPFILE?</p>	<p>Response +SMTPFILE: <fileType>,<fileName>,<encodeType></p> <p>OK</p> <p>Parameter See Write Command</p>
<p>Write Command AT+SMTPFILE=<fileType>[,<fileName>,<encodeType>]</p>	<p>Response OK If error is related to ME functionality: ERROR</p> <p>Parameters <fileType> The type of the Email attachment. 0 No attachment 1 Attach a txt file 2 Attach a binary file (bmp, mp3, video...) <fileName> The name of the Email attachment. <fileNameLength> The max length of <fileName>. <encodeType> Content-Transfer-Encoding used for attachment 0 "7bit" means data all represented as short lines of US-ASCII data 1 "base64" designed to represent arbitrary sequences of octets in a form that need not be humanly readable </p>
<p>Parameter Saving Mode</p>	<p>NO_SAVE</p>
<p>Max Response Time</p>	<p>-</p>
<p>Reference</p>	<p>Note</p> <ul style="list-style-type: none"> ● If a txt file (<fileType>=1) is attached, <encodeType> must be 0. ● If a binary file (<fileType>=2) is attached, <encodeType> must be 1.

2.2.10 AT+SMTPSEND Send the Email

AT+SMTPSEND Send the Email

Test Command AT+SMTPSEND=?	Response OK
	Parameters
Execution Command AT+SMTPSEND	Response OK If error is related to ME functionality: ERROR If send successfully or not, return: +SMTPSEND: <code>
	Parameters <code> The result of sending Email. 1 The Email has been sent successfully. 61 Network error. 62 DNS resolve error 63 SMTP TCP connection error. 64 Timeout of SMTP server response 65 SMTP server response error 66 Not authentication 67 Authentication failed. SMTP user name or password may be not right. 68 Bad recipient.
Parameter Saving Mode	NO_SAVE
Max Response Time	-
Reference	Note

2.2.11 AT+SMTPFT Transfer the Email Attachment

AT+SMTPFT Transfer the Email Attachment	
Test Command AT+SMTPFT=?	Response OK
	Parameters See Write Command
Write Command AT+SMTPFT=<reqLength>	Response When the URC below is reported, the attachment can be transferred: +SMTPFT: 1,<maxLength> If <reqLength> is not 0 and send data successfully:

		<p>+SMTPFT: 2,<cnfLength> //Input data OK</p> <p>If <reqLength> is not 0 and send data unsuccessfully: +SMTPFT: 2,<cnfLength> //Input data ERROR</p> <p>If <reqLength> is 0,it indicates that transferring the attachment have finished: OK</p> <p>If error is related to ME functionality: ERROR</p> <p>If some error occur: +SMTPSEND: <code></p> <p>Parameters</p> <p><reqLength> Requested number of data bytes(0-<maxLength>) to be transmitted</p> <p><cnfLength> Confirmed number of data bytes to be transmitted</p> <p><maxLength> The max length of data can be sent at a time. It depends on the network status.</p> <p><code> See AT+SMTPSEND</p>
Parameter	Saving Mode	NO_SAVE
Max Response Time		-
Reference		<p>Note</p> <ul style="list-style-type: none"> ● <reqLength> does not be greater than <maxLength>. ● When "+SMTPFT: 1,<maxLength>" is reported, then use "AT+SMTPFT=<reqLength>" to send data.

2.2.12 AT+SMTPCS Set the Email Charset

AT+SMTPCS Set the Email Charset	
Test Command	Response
AT+SMTPCS=?	<p>+SMTPCS: <charsetLength></p> <p>OK</p> <p>Parameters</p> <p>See Write Command</p>

Read Command AT+SMTPCS?	Response +SMTPCS: <charset> OK
	Parameter See Write Command
Write Command AT+SMTPCS=<charset>	Response OK If error is related to ME functionality: ERROR
	Parameters <charset> The Email charset, string type. It shows which charset the subject and the body are encoded in. If <charset> is not ASCII but UTF-8 or other, the subject and the body must be in hexadecimal format (e.g. "TEST" should be converted to "54455354"). The default charset is ASCII. <charsetLength> The max length of <charset>.
Parameter Saving Mode	NO_SAVE
Max Response Time	-
Reference	Note

2.2.13 AT+POP3SRV Set POP3 Server and Account

AT+POP3SRV Set POP3 Server and Account	
Test Command AT+POP3SRV=?	Response +POP3SRV: <pop3ServerLength>,<userNameLength>,<passwordLength>,(range of supported <pop3Port>s) OK
	Parameters See Write Command
Read Command AT+POP3SRV?	Response +POP3SRV: <pop3Server>,<userName>,<password>,<pop3Port> OK
	Parameters See Write Command

Write Command AT+POP3SRV=<pop3Server>,<userName>,<password>[,<pop3Port>]	Response OK If error is related to ME functionality: ERROR
	Parameters <pop3Server> POP3 server address, string type. This parameter can be either: - IP address in the format: xxx.xxx.xxx.xxx - Host name to be solved with a DNS query <userName> The user name to log in POP3 server, string type. <password> The password to log in POP3 server, string type. <pop3Port> The port of POP3 server. 1-65535 Default: 110 <pop3ServerLength> The max length of <pop3Server>. <userNameLength> The max length of <userName>. <passwordLength> The max length of <password>.
Parameter Saving Mode	NO_SAVE
Max Response Time	-
Reference	Note

2.2.14 AT+POP3IN Log in POP3 Server

AT+POP3IN Log in POP3 Server	
Test Command AT+POP3IN=?	Response OK
	Parameters
Execution Command AT+POP3IN	Response OK If error is related to ME functionality: ERROR If logging in POP3 server or not, return: +POP3IN: <code>
	Parameters <code> The result of logging in POP3 server 1 Log in POP3 server successfully 61 Network error 62 DNS resolve error

		63	POP3 TCP connection error
		64	Timeout of POP3 server response
		65	POP3 server response error
		66	POP3 server rejects to log in
		67	Incorrect user name
		68	Incorrect user name or password
		69	Timeout of read data
Parameter	Saving Mode	NO_SAVE	
Max Response Time		-	
Reference		Note	

2.2.15 AT+POP3NUM Get Email Number and Total Size

AT+POP3NUM Get Email Number and Total Size			
Test Command AT+POP3NUM=?	Response	OK	
	Parameter		
Execution Command AT+POP3NUM	Response	OK If error is related to ME functionality: ERROR If POP3 server issues a positive response: +POP3NUM: 1,<totalNumber>,<totalSize> If POP3 server issues a negative response: +POP3NUM: 0 If some error occur: +POP3OUT: <code>	
	Parameters	<totalNumber> The Email number on the POP3 server, decimal format. <totalSize> The total size of all Email and the unit is in byte. <code> The result of logging out POP3 server 1 Normally log out POP3 server 61 Network error 62 DNS resolve error 63 POP3 TCP connection error 64 Timeout of POP3 server response	
Parameter	Saving	NO_SAVE	

Mode	
Max Response Time	-
Reference	Note

2.2.16 AT+POP3LIST Get the Specific Email Size

AT+POP3LIST Get the Specific Email Size	
Test Command AT+POP3LIST=?	<p>Response</p> <p>+POP3LIST: (range of supported <msgNumber>s)</p> <p>OK</p> <p>Parameter See Write Command</p>
Write Command AT+POP3LIST=<msgNumber>	<p>Response</p> <p>OK</p> <p>If error is related to ME functionality: ERROR</p> <p>If POP3 server issues a positive response: +POP3LIST: 1,<msgNumber>,<size></p> <p>If POP3 server issues a negative response: +POP3LIST: 0</p> <p>If some error occur: +POP3OUT: <code></p> <p>Parameters</p> <p><msgNumber> The message number of Email.</p> <p><size> The size of Email <msgNumber> and the unit is in byte.</p> <p><code> The result of logging out POP3 server</p> <ul style="list-style-type: none"> 1 Normally log out POP3 server 61 Network error 62 DNS resolve error 63 POP3 TCP connection error 64 Timeout of POP3 server response
Parameter Saving Mode	NO_SAVE
Max Response Time	-
Reference	Note

2.2.17 AT+POP3UIDL Get the Specific Email Unique-id

AT+POP3UIDL Get the Specific Email Unique-id		
Test Command AT+POP3UIDL=?	Response	+POP3UIDL: (range of supported <msgNumber>s)
	OK	
	Parameters	See Write Command
Write Command AT+POP3UIDL=<msgNumber>	Response	OK
	If error is related to ME functionality:	ERROR
	If POP3 server issues a positive response:	+POP3UIDL: 1,<msgNumber>,<uid>
	If POP3 server issues a negative response:	+POP3UIDL: 0
	If some error occur:	+POP3OUT: <code>
	Parameters	<p><msgNumber> The message number of Email .</p> <p><UID> The Email unique-id, the unique-id is an arbitrary server-determined string, consisting of 1 to 70 characters in the range 0x21 to 0x7E, which uniquely identifies a message within a maildrop and which persists across sessions.</p> <p><code> The result of logging out POP3 server</p> <ul style="list-style-type: none"> 1 Normally log out POP3 server 61 Network error 62 DNS resolve error 63 POP3 TCP connection error 64 Timeout of POP3 server response
Parameter Saving Mode	NO_SAVE	
Max Response Time	-	
Reference	Note	

2.2.18 AT+POP3CMD Get Multi-line Response

AT+POP3CMD Get Multi-line Response

<p>Test Command AT+POP3CMD=?</p>	<p>Response +POP3CMD: (range of supported <cmdType>s),(range of supported <msgNumber>s),(range of supported <lineNumber>s)</p> <p>OK</p> <p>Parameters See Write Command</p>
<p>Write Command AT+POP3CMD=<cmdType>[,<msgNumber>[,<lineNumber>]]</p>	<p>Response OK If error is related to ME functionality: ERROR If POP3 server issues a positive response: +POP3CMD: 1 If POP3 server issues a negative response: +POP3CMD: 0 If some error occur: +POP3OUT: <code></p> <p>Parameters <cmdType> The values that supported POP3 user command</p> <ol style="list-style-type: none"> 1 List command The "List" command returns a multi-line "scan listing". For each message on the maildrop list of the server the POP3 service returns a line containing the message number and its size in bytes. A final "dotline" will be printed at the end of the "scan listing". If there are no messages on the maildrop list of the server, the POP3 service returns a positive response, i.e. It does not issue an error response, but the "scan listing" will be empty. In either case, each scan listing will be finished by so-called "dotline", i.e. a new line with just a single dot. <msgNumber> and <lineNumber> must not be given. 2 Uidl command The "Uidl" command returns a multi-line "unique-id Listing". For each message on the maildrop list of the Server the POP3 service returns a line containing the message number and its unique-id. A final "dotline" will be printed at the end of the "unique-id listing" If there are no messages on the maildrop list of the server. The POP3 service returns a positive response, i.e. It does not issue an error response, but the "unique-id listing" will be empty. In either case, each unique-id listing will be finished by so-called "dotline", i.e. a new line with just a singledot. <msgNumber> and <lineNumber>

		<p>must not be given.</p> <p>3 Top command</p> <p>The command retrieves the number of lines of the message's body from the POP3 server's maildrop list. The POP3 server sends the headers of the message, the blank line separating the headers from the body, and then the number of lines of the message's body. If the number of lines requested by The POP3 client is greater than the number of lines in the body, then the POP3 server sends the entire message. If no such message exists on the server the POP3 service issues an error response to the user. Each email will be finished by a so-called "dotline", i.e. a new line with just a single dot.</p> <p><msgNumber> and <lineNumber> must be given.</p> <p>4 Retrieve command</p> <p>The command retrieves the related message from the POP3 server's maildrop list. If no such message exists on the server the POP3 service issues an error response to the user. Each email will be finished by a so-called "dotline", i.e. a new line with just a single dot.</p> <p><msgNumber> must be given.</p> <p><msgNumber> The message number of Email.</p> <p><lineNumber> The number of lines of the message body.</p> <p><code> The result of logging out POP3 server</p> <ul style="list-style-type: none"> 1 Normally log out POP3 server 61 Network error 62 DNS resolve error 63 POP3 TCP connection error 64 Timeout of POP3 server response
Parameter	Saving	NO_SAVE
Mode		
Max Response Time		-
Reference		<p>Note</p> <p>After sending these POP3 commands and POP3 server issuing a positive response, you can get the response by "AT+POP3READ".</p>

2.2.19 AT+POP3READ Read Multi-line Response

AT+POP3READ Read Multi-line Response

<p>Test Command</p> <p>AT+POP3READ=?</p>	<p>Response</p> <p>+POP3READ: (range of supported <reqLength>s)</p> <p>OK</p> <p>Parameters</p> <p>See Write Command</p>
<p>Write Command</p> <p>AT+POP3READ=<reqLength></p>	<p>Response</p> <p>If the data of response not to be read completely: +POP3READ: 1,<cnfLength></p> <p>If the data of response to be read completely: +POP3READ: 2,<cnfLength></p> <p>If some data need to be read,the URC below is reported: +POP3READ: 3,<dataLength></p> <p>If error is related to ME functionality: ERROR</p> <p>If some error occur: +POP3OUT: <code></p> <p>Parameters</p> <p><reqLength> Requested number of data bytes (1-1460) to be read</p> <p><cnfLength> Confirmed number of data bytes to be read, which may be less than <reqLength>. 0 indicates that no data can be read.</p> <p><dataLength> Received number of data bytes.</p> <p><code> The result of logging out POP3 server</p> <ul style="list-style-type: none"> 1 Normally log out POP3 server 61 Network error 62 DNS resolve error 63 POP3 tcp connection error 64 Timeout of POP3 server response 69 Read data timeout
<p>Parameter Saving Mode</p>	<p>NO_SAVE</p>
<p>Max Response Time</p>	<p>-</p>
<p>Reference</p>	<p>Note</p> <ul style="list-style-type: none"> ● Other AT commands (but "AT+POP3OUT") do not be executed until the data of response are read completely. ● If <cnfLength> is less than <reqLength>, you should wait for a URC "+POP3READ: 3,<dataLength>" reported. Then you may continue to read data by "AT+POP3READ". ● If the module has some unread data, the URC "+POP3READ: 3,<dataLength>" is reported every once in a while. After some time, these data are not still been read, the module will quit the POP3 process.

2.2.20 AT+POP3DEL Mark the Specific Email to Delete

AT+POP3DEL Mark the Specific Email to Delete	
Test Command AT+POP3DEL=?	<p>Response</p> <p>+POP3DEL: (range of supported <msgNumber>s)</p> <p>OK</p> <p>Parameters</p> <p>See Write Command</p>
Write Command AT+POP3DEL=<msgNumber>	<p>Response</p> <p>OK</p> <p>If error is related to ME functionality:</p> <p>ERROR</p> <p>If POP3 server issues a positive response:</p> <p>+POP3DEL: 1</p> <p>If POP3 server issues a negative response:</p> <p>+POP3DEL: 0</p> <p>If some error occur:</p> <p>+POP3OUT: <code></p> <p>Parameters</p> <p><msgNumber> The message number of Email</p> <p><code> The result of logging out POP3 server</p> <ul style="list-style-type: none"> 1 Normally log out POP3 server 61 Network error 62 DNS resolve error 63 POP3 TCP connection error 64 Timeout of POP3 server response
Parameter Saving Mode	NO_SAVE
Max Response Time	-
Reference	<p>Note</p> <p>The POP3 server marks the Email as deleted. Any future reference to the message-number associated with the Email in a POP3 command generates an error. The POP3 server does not actually delete the Email until the POP3 client logs out POP3 server and closes the session normally.</p>

2.2.21 AT+POP3RSET Unmark the Emails that Be Marked as Deleted

AT+POP3RSET Unmark the Emails that Be Marked as Deleted		
Test Command AT+POP3RSET=?	Response	OK
	Parameter	
Execution Command AT+POP3RSET	Response	OK If error is related to ME functionality: ERROR If POP3 server issues a positive response: +POP3RSET: 1 If POP3 server issues a negative response: +POP3RSET: 0 If some error occur: +POP3OUT: <code>
	Parameters	<code> The result of logging out POP3 server 1 Normally log out POP3 server 61 Network error 62 DNS resolve error 63 POP3 TCP connection error 64 Timeout of POP3 server response
Parameter Saving Mode		NO_SAVE
Max Response Time		-
Reference		Note

2.2.22 AT+POP3OUT Log Out POP3 Server

AT+POP3OUT Log Out POP3 Server		
Test Command AT+POP3OUT=?	Response	OK
	Parameters	

Execution Command AT+POP3OUT		<p>Response</p> <p>OK</p> <p>If error is related to ME functionality:</p> <p>ERROR</p> <p>If the process is completed, return:</p> <p>+POP3OUT: <code></p>
		<p>Parameters</p> <p><code> The result of logging out POP3 server</p> <p>1 Normally log out POP3 server</p> <p>61 Network error</p> <p>62 DNS resolve error</p> <p>63 POP3 TCP connection error</p> <p>64 Timeout of POP3 server response</p> <p>69 Timeout of read data</p>
Parameter Saving	Mode	NO_SAVE
Max Response Time		-
Reference		Note

2.2.23 AT+EMAILSSL Set Email SSL function

AT+EMAILSSL Set Email SSL function	
Test Command AT+EMAILSSL=?	<p>Response</p> <p>+EMAILTO: (list of supported <ssltype>s), (list of supported <index>s),<len_calist>,<len_certname></p> <p>OK</p>
	<p>Parameters</p> <p>See Write Command</p>
Read Command AT+EMAILSSL?	<p>Response</p> <p>+EMAILSSL: <ssltype>,<index>,<ca list>,<cert name></p> <p>OK</p>
	<p>Parameters</p> <p>See Write Command</p>
Write Command AT+EMAILSSL=<ssltype>,<index>,<calist>,<certname>	<p>Response</p> <p>OK</p> <p>If error is related to ME functionality:</p> <p>ERROR</p>

		Parameters <ssltype> email ssl type:startssl/ssl/no ssl <index> CSSLCFG set Configure index <ctxindex> <ca list> Ca Certificate name <cert name> Cert Certificate name <len_calist> Interger type.Maximum length of parameter <ca list>. <len_certname> Interger type.Maximum length of parameter <cert name>.
Parameter Saving Mode		NO_SAVE
Max Response Time		-
Reference		Note

3 ExampIs

3.1 Network Register

AT Command	Response	Description
AT+CPIN?	+CPIN:READY OK	Check SIM card status
AT+CSQ	+CSQ: 20,0 OK	Check RF signal
AT+CGATT?	+CGATT: 1 OK	Check PS service. 1 indicates PS has attached.
AT+COPS?	+COPS: 0,0,"CHN-CT",9 OK	Query Network information, operator and network mode 9, NB-IOT network

3.2 Bearer profile

AT Command	Response	Description
AT+CGNAPN	+CGNAPN: 1,"ctnb" OK	Query CAT-M or NB-IOT network after the successful registration of APN
AT+CNACT=0,1	OK	Activating network bearing

	+APP PDP: 0,ACTIVE	
AT+CNACT?	+CNACT: 0,1,"10.94.36.44"	Get local IP
	+CNACT: 1,0,"0.0.0.0"	
	+CNACT: 2,0,"0.0.0.0"	
	+CNACT: 3,0,"0.0.0.0"	
	OK	

3.3 Synchronize time

AT Command	Response	Description
AT+CNTPCID?	+CNTPCID: 1	Query GPRS bearer profile's ID
	OK	
AT+CNTP="ntp1.aliyun.com",32	OK	Set server and time zone
AT+CNTP	OK	Synchronize Network Time
	+CNTP: 1,"2018/12/26,10:36:49"	
AT+CCLK?	+CCLK: "18/12/26,10:36:57+32"	Query clock time
	OK	

3.4 Send an Email

AT Command	Response	Description
AT+EMAILCID=0	OK	Set parameters of Email
AT+EMAILTO=30	OK	Set parameters of Email
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"	OK	Set sender address and name
AT+SMTPRCPT=0,0,"john@sim.com"	OK	Set the recipient(To:)
AT+SMTPRCPT=1,0,"john@sim.com"	OK	Set the recipient(Cc:)
AT+SMTPRCPT=2,0,"john@sim.com"	OK	Set the recipient(Bcc:)
AT+SMTPSUB="Test"		Set the subject
AT+SMTPBODY=19	DOWNLOAD	Set the body
	This is a new Email	

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

3.5 Send an Email with an attachment

AT Command	Response	Description
AT+EMAILCID=0	OK	Set parameters of Email
AT+EMAILTO=30	OK	Set parameters of Email
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 OK	Set the body
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 OK	SMTP client requests to send 100 bytes. Response will indicates that user must input 100 bytes for transferring now.
	+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

3.6 Send a UTF-8 Email

AT Command	Response	Description
AT+EMAILCID=0	OK	Set parameters of Email
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 38546869732069732061206E6 57720456D61696C OK	Set the body
AT+SMTPSEND	OK +SMTPSEND: 1	Send the Email

3.7 Retrieve the Email

AT Command	Response	Description
AT+EMAILCID=0	OK	Set parameters of Email
AT+EMAILTO=30	OK	Set parameters of Email
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	Retrieve the specific Email
	+POP3CMD: 1	
AT+POP3READ=1460	+POP3READ: 1,1460	Get the Email content
	...	
	OK	
AT+POP3READ=1460	+POP3READ: 1,1460	
	...	
	OK	
AT+POP3READ=1460	+POP3READ: 2,1183	The Email's content is read completely
	...	
	OK	
AT+POP3OUT	OK	Log out POP3 SERVER
	+POP3OUT: 1	

3.8 Delete the Email

AT Command	Response	Description
AT+EMAILCID=0	OK	Set parameters of Email
AT+EMAILTO=30	OK	Set parameters of Email
AT+POP3SRV="mail.sim.com","john","123456",110	OK	Set POP3 server and account
AT+POP3IN	OK	Log in POP3 server
	+POP3IN: 1	
AT+POP3NUM	OK	Get Email number and total size
	+POP3NUM: 1,2,11124	
AT+POP3DEL=1	OK	Mark the Email to delete
	+POP3DEL: 1	
AT+POP3OUT	OK	Log out POP3 SERVER
	+POP3OUT: 1	

3.9 Get the Email's size and unique-id

AT Command	Response	Description
------------	----------	-------------

AT+EMAILCID=0	OK	Set parameters of Email
AT+EMAILTO=30	OK	Set parameters of Email
AT+POP3SRV="mail.sim.com","john", "123456",110	OK	Set POP3 server and account
AT+POP3IN	OK	Log in POP3 server
	+POP3IN: 1	
AT+POP3NUM	OK	Get Email number and total size
	+POP3NUM: 1,2,35797	
AT+POP3LIST=1	OK	Get the specific Email's size
	+POP3LIST: 1,1,16601	
AT+POP3UIDL=1	OK	Get the specific Email's unique-id
	+POP3UIDL: 1,1, AAAFOpdCAAAv60+tk5FqRqk3/6ogog+g	
AT+POP3OUT	OK	Log out POP3 SERVER
	+POP3OUT: 1	

3.10 Email Send Encrypted Mail with Normal Port

AT Command	Response	Description
AT+EMAILCID=0	OK	Set parameters of Email
AT+EMAILTO=30	OK	Set parameters of Email
AT+EMAILSSL=2,0,"email.cer","email.pem"	OK	Set EMAIL begin encrypt transmission with normal port
AT+SMTPSRV="SMTP.GMAIL.COM"	OK	Set SMTP server address, port is omitted, means use the default ports: 25
AT+SMTPAUTH=1,"account","password"	OK	Set user name and password
AT+SMTPFROM="account@GMAIL.COM","account"	OK	Set sender address and name
AT+SMTPSUB="Test"	OK	Set the subject
AT+SMTPRCPT=0,0,"john@sim.com","john"	OK	Set the recipient (To:)
AT+SMTPBODY=19	DOWNLOAD This is a new Email	Set the body
	OK	

AT+SMTPSEND OK Send the Email

+SMTPSEND: 1

3.11 Email Send Encrypted Mail with Encryption Port

AT Command	Response	Description
AT+EMAILCID=0	OK	Set parameters of Email
AT+EMAILTO=30	OK	Set parameters of Email
AT+EMAILSSL=1,0,"email.cer","email.pem"	OK	Set EMAIL begin encrypt transmission with normal port
AT+SMTPSRV="SMTP.GMAIL.COM"	OK	Set SMTP server address, port is omitted, means use the default ports: 465
AT+SMTPAUTH=1,"account","password"	OK	Set user name and password
AT+SMTPFROM="account@GMAIL.COM","account"	OK	Set sender address and name
AT+SMTPSUB="Test"	OK	Set the subject
AT+SMTPRCPT=0,0,"john@sim.com","john"	OK	Set the recipient (To:)
AT+SMTPBODY=19	DOWNLOAD This is a new Email	Set the body
	OK	
AT+SMTPSEND	OK	Send the Email
	+SMTPSEND: 1	

3.12 Email Receive Encrypted Mail with Encryption Port

AT Command	Response	Description
AT+EMAILCID=0	OK	Set parameters of Email
AT+EMAILTO=30	OK	Set parameters of Email
AT+EMAILSSL=1,0,"email.cer","email.pem"	OK	Set EMAIL begin encrypt transmission with normal port
AT+POP3SRV="mail.sim.com","john","123456"	OK	Set POP3 server and account, port is omitted, means use the default ports 110
AT+POP3IN	OK	Log in POP3 server
	+POP3IN: 1	

AT+POP3NUM	OK	Get Email number and total size
	+POP3NUM: 1,2,11124	
AT+POP3LIST=1	OK	Get the specific Email's size
	+POP3LIST: 1,1,5556	
AT+POP3CMD=4,1	OK	Retrieve the specific Email
	+POP3CMD: 1	
AT+POP3READ=1460	+POP3READ: 1,1460 ...	Get the Email content
	OK	
AT+POP3READ=1460	+POP3READ: 2,1183 ...	The Email's content is read completely
	OK	
AT+POP3OUT	OK	Log out POP3 SERVER
	+POP3OUT: 1	

Contact

SIMCom Wireless Solutions Co.,Ltd

Address: Building B, No.633 Jinzhong Road, Changning District, Shanghai P.R.China 200335

Tel: +86-21-31575126

Support: support@simcom.com