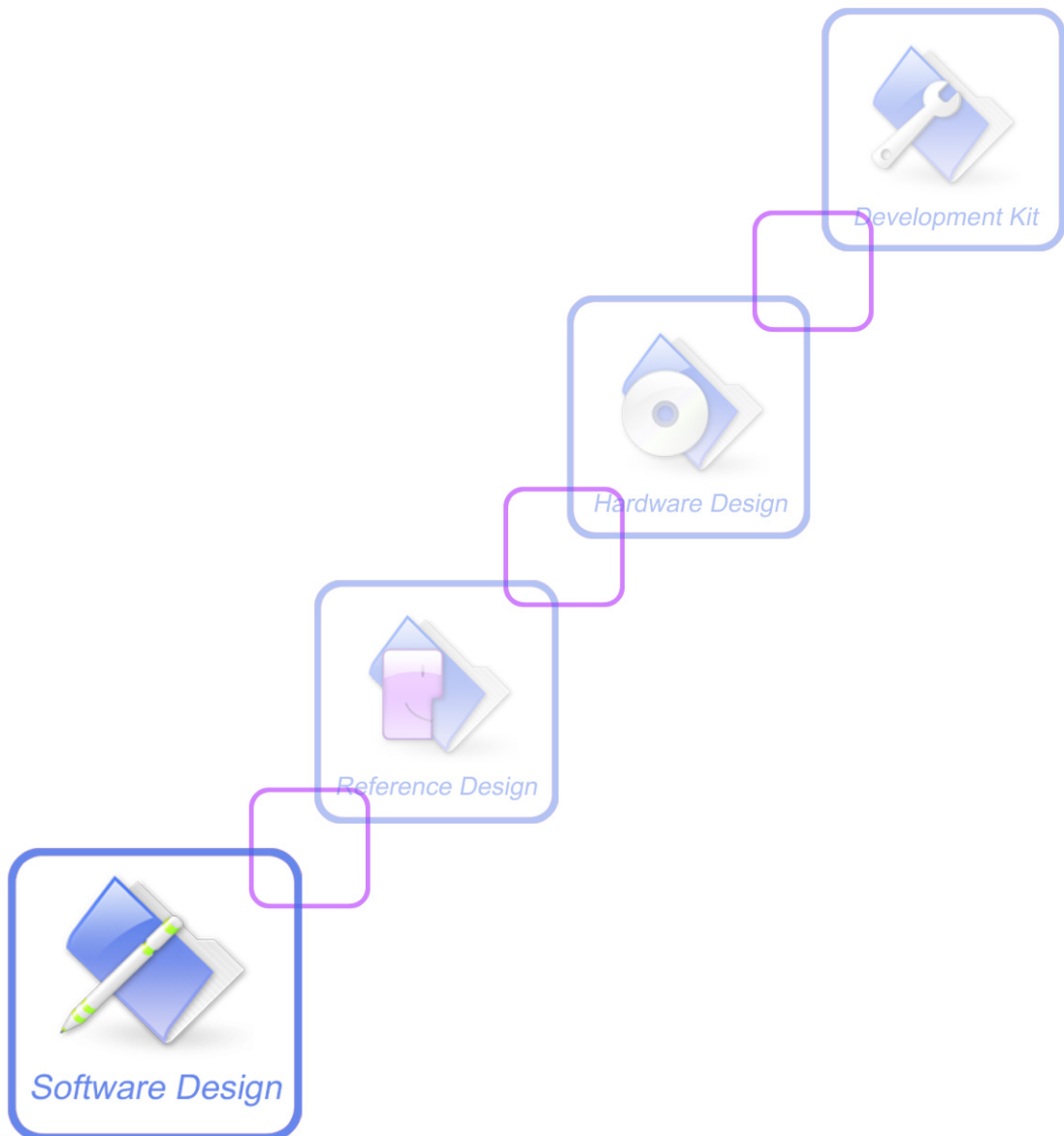




# **SIM7500\_SIM7600\_SIM7800 Series\_ECALL\_ATC\_V1.02.02**



<b>Document Title:</b>	SIM7500_SIM7600_SIM7800 Series_ECALL AT Command Set
<b>Version:</b>	1.02.02
<b>Date:</b>	2018-10-31
<b>Status:</b>	Release
<b>Document ID:</b>	SIM7500_SIM7600_SIM7800 Series_ECALL_ATC_V1.02.02

## General Notes

SIMCom offers this information as a service to its customers, to support application and engineering efforts that use the products designed by SIMCom. The information provided is based upon requirements specifically provided to SIMCom by the customers. SIMCom has not undertaken any independent search for additional relevant information, including any information that may be in the customer's possession. Furthermore, system validation of this product designed by SIMCom within a larger electronic system remains the responsibility of the customer or the customer's system integrator. All specifications supplied herein are subject to change.

## Copyright

This document contains proprietary technical information which is the property of SIMCom Limited., 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.

**Copyright © Shanghai SIMCom Wireless Solutions Ltd. 2018**

---

## Version History

Version	Chapter	Comments
V1.00	New Version	
V1.01	1.1 AT+CECALLS 1.4 AT+CECALLPOS 1.6 AT+CMSDVERSION 1.8 AT+CMSDMESSAGEID 1.9 AT+CMSDOIDDATA	Modify these commands
V1.02.01	1.2 AT+CECALLE 1.6 AT+CMSDVERSION	Modify these commands
V1.02.02	1.8 AT+CMSDMESSAGEID	Modify this command

# Contents

<b>Version History</b> .....	0
<b>Contents</b> .....	1
<b>1 ECALL AT commands</b> .....	2
<b>1.1 AT+CECALLS Make e-call</b> .....	2
<b>1.2 AT+CECALLE Hang up e-call</b> .....	2
<b>1.3 AT+CECALLCFG Configure e-call MSD information</b> .....	3
<b>1.4 AT+CECALLPOS Set position information</b> .....	5
<b>1.5 AT+CECALLTIME Set timestamp</b> .....	6
<b>1.6 AT+CMSDVERSION Set MSD serialize version</b> .....	7
<b>1.7 AT+CECALLTOUT Set T5, T6, T7 timeout value</b> .....	8
<b>1.8 AT+CMSDMESSAGEID Set the initiatory message identifier of msd data Description</b> .....	9
<b>1.9 AT+CMSDOIDDATA Set the optional additional data</b> .....	10
<b>1.10 AT+CMSD Input hex Minimum set of data(MSD)</b> .....	10
<b>1.11 AT+CMSDCONTROL Set the control data in Minimum set of data (MSD)</b> .....	11
<b>Contact us</b> .....	13

# 1 ECALL AT commands

## 1.1 AT+CECALLS Make e-call

### Description

The command is used to make an e-call.

**Note:** Test call need to unlock PIN code, Emergency call does not need to unlock PIN code

SIM PIN	References
NO	Vendor

### Syntax

Test Command	Responses
AT+CECALLS=?	+CECALLS: (scope of <a href="#">&lt;cannedMSD&gt;</a> ) OK
Write Command	Responses
AT+CECALLS= <a href="#">&lt;num&gt;</a> , <a href="#">&lt;cannedMSD&gt;</a>	OK ERROR

### Defined values

[<num>](#)

Dialing number.

[<cannedMSD>](#)

Use the canned GPS information or real GPS information.

0 — Send real MSD

1 — Send canned MSD

### Examples

```
AT+CECALLS=18621008925,1
```

```
OK
```

## 1.2 AT+CECALLE Hang up e-call

### Description

The command is used to hang up the e-call.

SIM PIN	References
NO	Vendor

## Syntax

Test Command	Responses
AT+CECALLE=?	+CECALLE: (0-1) OK
Read Command	Responses
AT+CECALLE?	+CECALLE: <n> OK
Write Command	Responses
AT+CECALLE=<n>	OK VOICE CALL: END: <time>
	<i>No call:</i> OK

## Defined values

&lt;n&gt;

- 0 – Stop an active eCall, change the state into "ECALL\_APP\_ECALL\_INACTIVE" and clear callbackTimer. When set to 0, module cannot receive a MT ECALL from PSAP.
- 1 – End an active ecall, but keep state "ECALL\_APP\_IDLE\_ALLOW\_MT\_ECALL", not clear callbackTimer. When set to 1, module can receive a MT ECALL from PSAP.

&lt;time&gt;

Voice call connection time.

Format – HHMMSS (HH: hour, MM: minute, SS: second)

## Examples

AT+CECALLE=0

OK

## 1.3 AT+CECALLCFG Configure e-call MSD information

### Description

The command is used to configure the MSD information.

SIM PIN	References
NO	Vendor

## Syntax

Test Command	Responses
AT+CECALLCFG=?	OK

Write Command	Responses
AT+CECALLCFG=<vehicle type>,<storage>,<num>,<vin>,<vehicledirection>,<delta1_lon>,<delta1_lat>,<delta2_1_on>,<delta2_lat>	OK ERROR

## Defined values

### <vehicletype>

- 1 — Passenger vehicle class M1
- 2 — Buses and coaches class M2
- 3 — Buses and coaches class M3
- 4 — Light commercial vehicles class N1
- 5 — Heavy duty vehicles class N2
- 6 — Heavy duty vehicles class N3
- 7 — Motorcycles class L1e
- 8 — Motorcycles class L2e
- 9 — Motorcycles class L3e
- 10 — Motorcycles class L4e
- 11 — Motorcycles class L5e
- 12 — Motorcycles class L6e
- 13 — Motorcycles class L7e

### <storage>

Propulsion storage: It should choice multi-storage. decimal number

**NOTE** Example: Choice “Electric energy storage” and “Diesel tank present”, the <storage> must be set by 18. (i.e. 2 or 16 equal 18)

- 0 — Unknown or other type of energy storage
- 1 — Hydrogen storage
- 2 — Electric energy storage
- 4 — Liquid propane gas
- 8 — Compressed natural gas
- 16 — Diesel tank present
- 32 — Gas online tank present

Range is 0~63.

### <num>

Number of passenger. Range is 0~255.

### <vin>

Vehicle id number. Length of <vin> must be 17.

VIN number according to ISO 3779. including:

1. World Manufacturer Index (WMI)
2. Vehicle Type Descriptor (VDS)
3. Vehicle Identification Sequence (VIS)

The character in VIN must be the member of this table:

("A".. "H"|"J".. "N"|"P"|"R".. "Z"|"0".. "9")

<vehicledirection>

The direction of travel in 2°-degrees steps from magnetic north (0– 358, clockwise). Only values from 0 to 179 are valid. If direction of travel is invalid or unknown, the value 0xFF shall be used. Unit is 2 degree. Range of <vehicledirection> is 0~179.

<delta1\_lon>

Description of recent vehicle longitude location before the incident. 1 Unit = 100 miliarcseconds, which is approximately 3m.

Coded value range (-512..511) representing -51200 to +51100 miliarcseconds, or from 51,2"S to 51,1"N from the reference position.

<delta1\_lat>

Description of recent vehicle latitude location before the incident. 1 Unit = 100 miliarcseconds, which is approximately 3m.

Coded value range (-512..511) representing -51200 to +51100 miliarcseconds, or from 51,2"S to 51,1"N from the reference position.

<delta2\_lon>

Description of recent vehicle longitude location before the incident. 1 Unit = 100 miliarcseconds, which is approximately 3m.

Coded value range (-512..511) representing -51200 to +51100 miliarcseconds, or from 51,2"S to 51,1"N from the reference position.

<delta2\_lat>

Description of recent vehicle latitude location before the incident. 1 Unit = 100 miliarcseconds, which is approximately 3m.

Coded value range (-512..511) representing -51200 to +51100 miliarcseconds, or from 51,2"S to 51,1"N from the reference position.

## Examples

```
AT+CECALLCFG=5,18,8,"WMJVDSVDSYA123456",14,10,-10,20,-20
```

```
OK
```

## 1.4 AT+CECALLPOS Set position information

### Description

The command is used to set position information.

SIM PIN	References
NO	Vendor

### Syntax



Test Command	Responses
AT+CECALLPOS=?	OK
Write Command	Responses
AT+CECALLPOS=<lon>,<lat>	OK
	ERROR

## Defined values

<lon>

Longitude of current position, format is ddd.dddddd. Unit is degree. Range is -180~180.

<lat>

Latitude of current position, format is dd.dddddd. Unit is degree. Range is -90~90.

## Examples

```
AT+CECALLPOS="121.354138","31.221938"
```

```
OK
```

## 1.5 AT+CECALLTIME Set timestamp

### Description

The command is used to set timestamp.

SIM PIN	References
NO	Vendor

### Syntax

Test Command	Responses
AT+CECALLTIME=?	OK
Write Command	Responses
AT+CECALLTIME=<flag>[<year>,<month>,<day>,<hour>,<minute>,<second>]	OK
	ERROR

## Defined values

<flag>

0 - use system time, not need to set <year>,<month>,<day>,<hour>,<minute>,<second>

1 - must set <year>,<month>,<day>,<hour>,<minute>,<second>

<year>

Year :integer  
Range is 1970~2100

<month>

Month : integer  
Range is 1~12

<day>

Day : integer  
Input range :  
Jan \ Mar \ May \ Jul \ Aug \ Oct \ Dec: 1~31  
Feb: 1~28 (1~29 if leap year)  
Apr \ Jun \ Sep \ Nov: 1~30

<hour>

Hour : integer  
Range is 0~23

<minute>

Minute : integer  
Range is 0~59

<second>

Second : integer  
Rang is 0~59

## Examples

AT+CECALLTIME=1,2011,10,20,15,30,30  
OK

## 1.6 AT+CMSDVERSION Set MSD serialize version

### Description

The command is used to set MSD pack format

SIM PIN	References
NO	Vendor

### Syntax

Test Command	Responses
AT+CMSDVERSION=?	+CMSDVERSION: (1-2) OK
Read Command	Responses
AT+CMSDVERSION?	+CMSDVERSION: <ver> OK

Write Command	Responses
AT+CMSDVERSION=<ver>	OK
	ERROR

## Defined values

<ver>

- 1 - set MSD serialize version 1 (qualcomm default version, other European country)
- 2 - set MSD serialize version 2 (just for Russia ecall)

## Examples

AT+CMSDVERSION=1

OK

## 1.7 AT+CECALLTOUT Set T5, T6, T7 timeout value

### Description

The command is used to set T5, T6, T7 timeout value

SIM PIN	References
NO	Vendor

### Syntax

Read Command	Responses
AT+CECALLTOUT?	+CECALLTOUT: T5=<timeoutvalue>, T6=<timeoutvalue>, T7=<timeoutvalue>  OK
Write Command	Responses
AT+CECALLTOUT=<TX>,<timeoutvalue>	OK ERROR

## Defined values

<TX>

T5 - The timer of IVS waiting for START, default timeout value is 2 seconds. The timeout value will not be saved to NV. You should set the timeout value before organizing the eCall. For further information about this timer, please refer to EN 16062.

Range is 2000-255000 ms. Default value 2000 ms

T6 - The timer of IVS waiting for HACK, default timeout value is 5 seconds. The timeout value will not be saved to NV. You should set the timeout value before organizing the eCall. For further information about this timer, please refer to EN 16062.

Range is 5000-255000 ms. Default value 5000 ms.

T7 - The timer for MSD transmission, default timeout value is 20 seconds. The timeout value will not be saved to NV. You should set the timeout value before organizing the eCall. For further information about this timer, please refer to EN 16062.

Range is 20000-255000 ms. Default value 20000 ms

## Examples

```
AT+CECALLTOUT="T5",4000
```

```
OK
```

## 1.8 AT+CMSDMESSAGEID Set the initiatory message identifier of msd data Description

The command is used to set the initiatory message identifier of msd data

SIM PIN	References
NO	Vendor

## Syntax

Test Command	Responses
AT+CMSDMESSAGEID=?	+CMSDMESSAGEID: (list of supported <messageid>)
Read Command	Responses
AT+CMSDMESSAGEID?	+CMSDMESSAGEID: <messageid> OK
Write Command	Responses
AT+CMSDMESSAGEID=<messageid>	OK ERROR

## Defined values

<messageid>

starting with 1 for each new eCall session and to be incremented with every application layer MSD retransmission following a new 'Send MSD' request after the incident event .(1-255)

## Examples

```
AT+CMSDMESSAGEID=1
OK
```

## 1.9 AT+CMSDOIDDATA Set the optional additional data

The command is used to set the optional additional data

SIM PIN	References
NO	Vendor

## Syntax

Test Command	Responses
AT+CMSDOIDDATA=?	OK
Write Command	Responses
AT+CMSDOIDDATA=<oid> >,<odata>	OK
	ERROR

## Defined values

<oid>
Object identifier which uniquely identifies the format and meaning of the data which follows. (oid is decimal string x.x.xxx), the length must be 7.
<odata>
Transparent optional additional data. (odata is hex string) which maximum size is 100 bytes.

## Examples

```
AT+CMSDOIDDATA="1.2.125","30304646"
OK
```

## 1.10 AT+CMSD Input hex Minimum set of data(MSD)

The command is used to input hex Minimum set of data

SIM PIN	References
NO	Vendor

## Syntax

Test Command	Responses
--------------	-----------

AT+CMSD=?	OK
Write Command	Responses
AT+CMSDOIDDATA=<MSD>,<activationType>,<eCallType>	OK
	ERROR

## Defined values

<msd>
the hex msd data generated by user which maximum size is 140 bytes.
< activationType >
0 - Manual activation
1 - Automatic activation
< eCallType >
0 - Emergency call
1 - Test call

## Examples

```
AT+CMSD="015C0681508204420014264000420D101404E80DA4C89A3B2F09905B6440E829F6829EC020301027D04303046460",0,1
OK
```

## 1.11 AT+CMSDCONTROL Set the control data in Minimum set of data (MSD)

The command is used to set the control data in Minimum set of data(MSD)

SIM PIN	References
NO	Vendor

## Syntax

Test Command	Responses
AT+CMSDCONTROL=?	OK
Write Command	Responses
AT+CMSDCONTROL=<activationType>,<callType>,<positionCanBeTrusted>	OK
	ERROR

## Defined values

<activationType >

Manual activation(by pushing the emergency button) or automatic activation(by hitting sensors).

0 — Manual activation

1 — Automatic activation

< callType>

e-call type:

0 — Test call

1 — Emergency call

< positionCanBeTrusted >

0 — low confidence in position

1 — Position can be trusted

## Examples

AT+CMSDCONTROL=0,0,1

OK

## Contact us

### Shanghai SIMCom Wireless Solutions Ltd.

Add: Building A, SIM Technology Building, No.633, Jinzhong Road, Changning District  
200335

Tel: +86 21 3252 3450

URL: <http://www.sim.com/wm/>

SIMCOM CONFIDENTIAL FILE