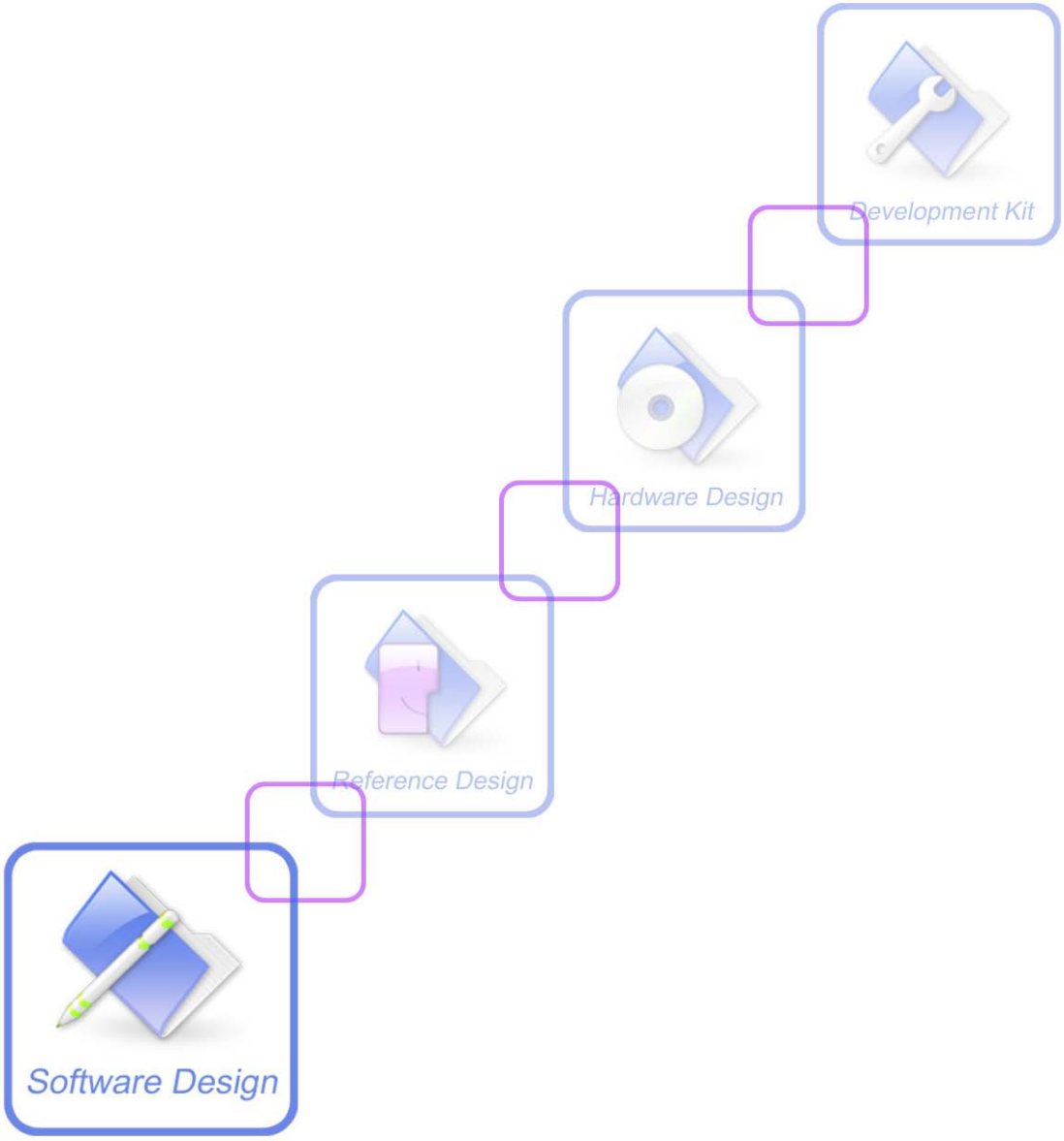
# AT Command Set

## SIMCOM_SIM7100_ECALL_ATC_V0.01



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# Version History

| Version | Chapter | Comments |
|---|---|---|
| V0.01 | New Version | |

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# 1 SIM DM 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 <cannedMSD>)<br>OK |
| **Write Command** | **Responses** |
| AT+CECALLS=<num>,<cannedMSD> | OK |
| | ERROR |

### Defined values

| <num> |
|---|
| Dialing number. |
| <cannedMSD> |
| Use the canned GPS information or real GPS information.<br>0 — Send real MSD<br>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=? | OK |
| Execution Command | Responses |
| AT+CECALLE | OK<br>VOICE CALL: END: <time> |
| | *No call:*<br>OK |

### Defined values

| <time> |
|---|
| Voice call connection time.<br>Format – HHMMSS (HH: hour, MM: minute, SS: second) |

### Examples

| *AT+CECALLE* |
|---|
| *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=<vehicletype>,<storage>,<num>,<vin>,<vehicledirection>,<delta1_lon>,<delta1_lat>,<delta2_lon>,<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<br>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<br>Range is 1970~2100 |
| <month> |
| Month : integer<br>Range is 1~12 |
| <day> |
| Day : integer<br>Input range :<br>Jan \ Mar \ May \ Jul \ Aug \ Oct \ Dec: 1~31<br>Feb: 1~28 (1~29 if leap year) |

| |
|---|
| Apr \ Jun \ Sep \ Nov: 1~30 |
| <hour> |
| Hour : integer<br>Range is 0~23 |
| <minute> |
| Minute : integer<br>Range is 0~59 |
| <second> |
| Second : integer<br>Rang is 0~59 |

### Examples

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

## 1.6 AT+CECALLFMT Set MSD serialize format

### Description

The command is used to set MSD pack format

| SIM PIN | References |
|---|---|
| NO | Vendor |

### Syntax

| Test Command | Responses |
|---|---|
| AT+CECALLFMT=? | + CECALLFMT:（list of supported <fmt>）<br>OK |
| **Read Command** | **Responses** |
| AT+CECALLFMT? | + CECALLFMT: <fmt><br>OK |
| **Execution Command** | **Responses** |
| AT+CECALLFMT=<fmt> | OK |
| | ERROR |

### Defined values

| <fmt> |
|---|
| 0 - set MSD serialize format as bytes (qualcomm default format,other European country) |
| 1 - set MSD serialize format as bits (just for Russia ecall) |

### Examples

| |
|---|
| *AT*+CECALLFMT=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

| Test Command | Responses |
|---|---|
| AT+CECALLTOUT=? | +CECALLTOUT:T5=2000,T6=5000,T7=20000<br>(T5 default value 2000 ms,<br>T6 default value 5000 ms,<br>T7 default value 20000 ms)<br>OK |
| Execution Command | Responses |
| AT+CECALLTOUT=<TX>,<br><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.<br>Range is 2000-255000 ms.<br><br>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.<br>Range is 5000-255000 ms.<br><br>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.

**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: (1-255)<br>OK |
| Read Command | Responses |
| AT+CMSDMESSAGEID? | +CMSDMESSAGEID: 1<br>OK |
| Execution Command | Responses |
| AT+CMSDMESSAGEID=<messageid> | OK<br>ERROR |

## 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 |
| Execution Command | Responses |

| | |
|---|---|
| AT+CMSDOIDDATA=<oid>,<odata> | OK<br>ERROR |

### Defined values

| |
|---|
| <oid> |
| Object identifier which uniquely identifies the format and meaning of the data which follows. (oid is decimal string) |
| <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 |
| Execution Command | Responses |
| AT+CMSDOIDDATA=<msd> | OK<br>ERROR |

### Defined values

| |
|---|
| <msd> |
| the hex msd data generated by user which maximum size is 140 bytes. |

### Examples

```
AT+CMSD="015C068150820442001426400042 0D101404E80DA4C89A3B2F09905B6440E829F6829EC020301027D04303046460"
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 Minimun set of data(MSD)

| SIM PIN | References |
|---|---|
| NO | Vendor |

### Syntax

| Test Command | Responses |
|---|---|
| AT+CMSDCONTROL=? | OK |
| Execution Command | Responses |
| AT+CMSDCONTROL=<activationType>,<callType>,<positionCanBeTrusted> | OK<br>ERROR |

### Defined values

| <activationType > |
|---|
| Manual activation(by pushing the emergency button) or automatic activation(by hitting sensors).<br>0 — Manual activation<br>1 — Automatic activation |
| < callType> |
| e-call type:<br>0 — Emergency call<br>1 — Test call |
| < positionCanBeTrusted > |
| 0 — low confidence in position<br>1 — Position can be trusted |

### Examples

```
AT+CMSDCONTROL=1,1,1
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 3300

Fax: +86 21 3252 3301

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