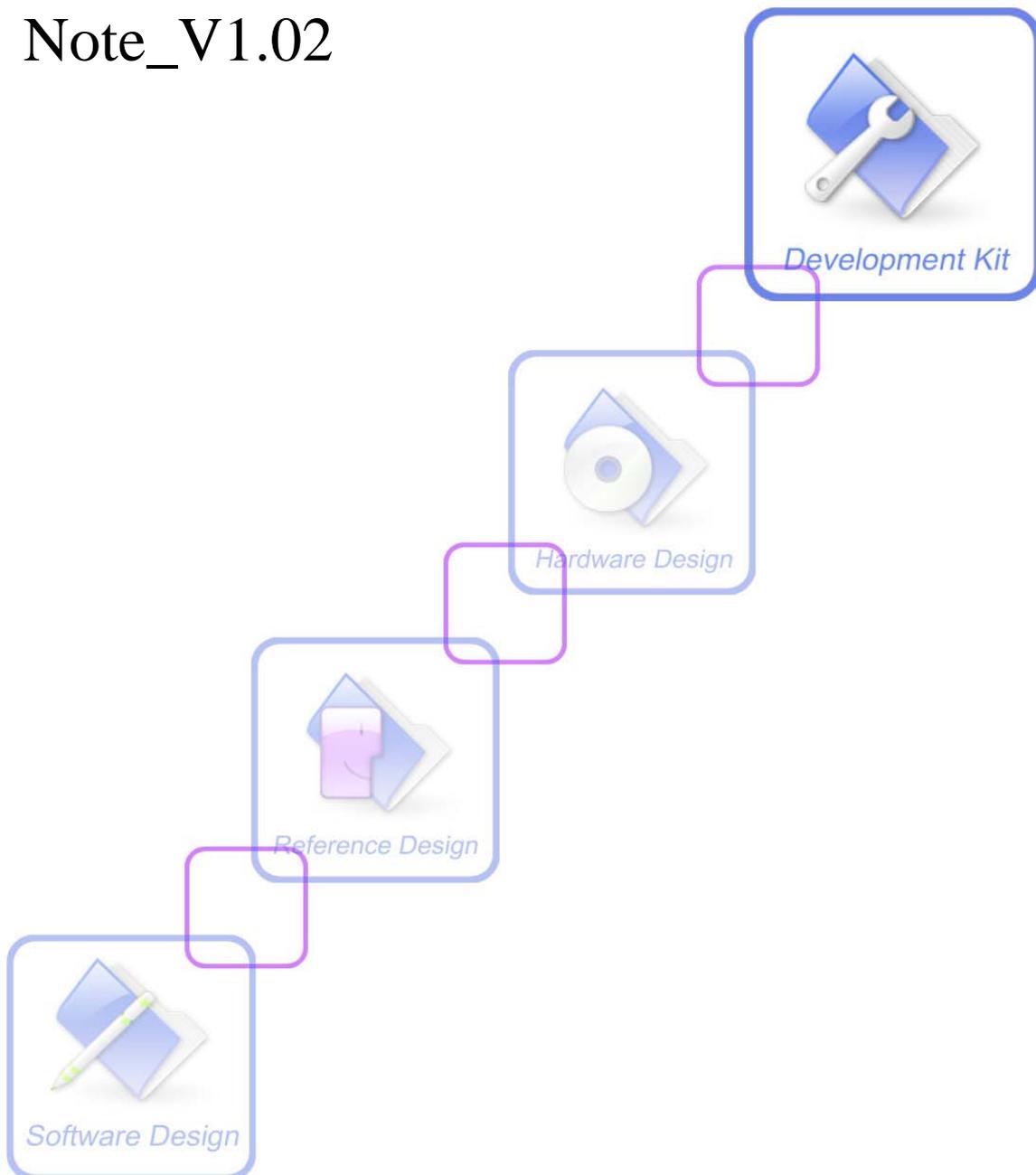




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SIM900_DDET_Application Note_V1.02



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Version history

| Date | Version | Description of change | Author |
|------------|---------|-------------------------|---------------|
| 2011-6-17 | 1.00 | Origin | Wangzhengning |
| 2011-7-26 | 1.01 | Add tips | Wangzhengning |
| 2013-12-09 | 1.02 | Added DTMF strings E,F. | Chenyang |

SCOPE

This document describes how to use the DTMF Detection function of SIM900 through AT commands.

Examples are also given for reference. This document can be used for SIM900 serial modules, like SIM900 and SIM900D.

This document is subject to change without notice at any time.

AT COMMAND

DTMF detection can be set or activated by DDET command.

AT+DDET

| AT+DDET | |
|--|--|
| Write Command AT+DDET=<status> > | Response OK or ERROR or +CME ERROR: <err> |
| | Parameters <status> 0 disable DTMF detection 1 enable DTMF detection |
| Reference | Note <ul style="list-style-type: none"> ● This command can be set only when sim card is available and cpin is ready. ● This command cannot be set during a call. If you want use this function, we suggest setting this command before dialing a call. ● Switch of f sidetone algorithm may benefit to the accuracy of DTMF detection. (e.g. AT+SIDET=0,0) ● When a call is connected, DTMF detection will start in 300ms ● “1,2,3,4,5,6,7,8,9,0,#,*,E,F” only these DTMF strings can be detected. “E” represents 1400HZ, “F” represents 2300HZ. |

Example:

AT+DDET=1 //enable DTMF detection

Set up a call connection

ATD*****; //set up a call and wait for call connected

OK

If module detected DTMF, URC will be reported via serial port

+DTMF:1 //report DTMF value

+DTMF:2

+DTMF:3

+DTMF:4

+DTMF:5

+DTMF:6

+DTMF:7

+DTMF:8

+DTMF:9

+DTMF:0

+DTMF:#

+DTMF:*

+DTMF:E

+DTMF:F

Receive an incoming call

RING

ATA; //answering an incoming call

OK

If module detected DTMF, URC will be reported via serial port

+DTMF:1 //report DTMF value

+DTMF:2

+DTMF:3

+DTMF:4

+DTMF:5

+DTMF:6

+DTMF:7

+DTMF:8

+DTMF:9

+DTMF:0

+DTMF:#

+DTMF:*

+DTMF:E

+DTMF:F

Contact us:

Shanghai SIMCom Wireless Solutions Ltd.

Add: Building A, SIM Technology Building, No.633 Jinzhong Road, Changning District, Shanghai, P. R. China 200335

Tel: +86 21 3252 3300

Fax: +86 21 3252 3301

URL: www.sim.com/wm