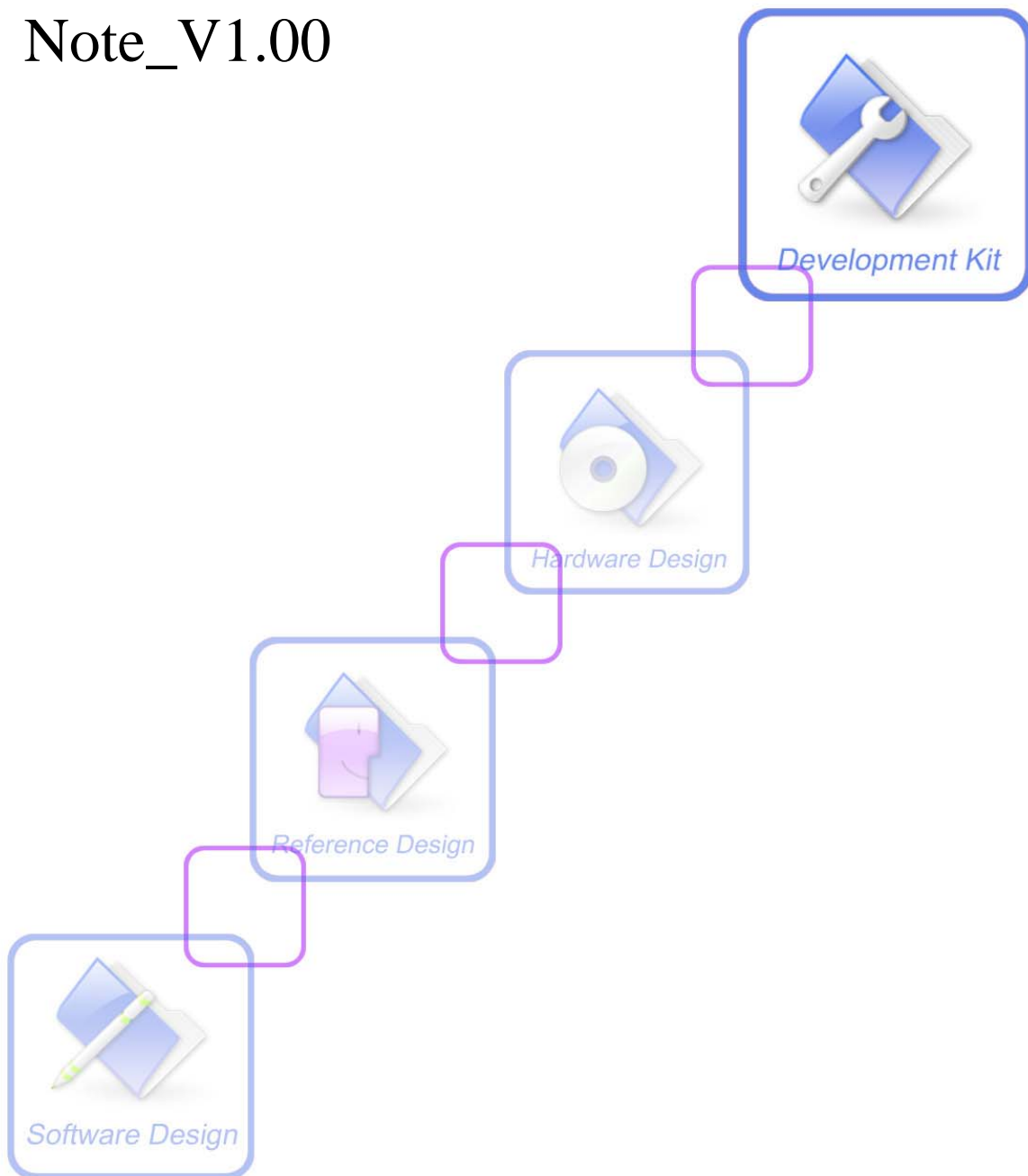




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# SIM900\_DDET\_Application Note\_V1.00



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## Version history

Date	Version	Description of change	Author
2011-6-17	1.00	Origin	wangzhengning

## 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.

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## AT COMMAND

DTMF detection can be set or activated by DDET command.

### AT+DDET

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

### 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:*
```

#### *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:\*

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