

# MCU2 library for G-4511

## User Manual

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# Chapter 1 MCU2 Library

## 1.1 Function

Notice:

1. The MCU2 library needs OS7\_COM.lib. Please include it.
2. The MCU2 DO0 will keep its value after sleep.
3. The MCU2 DO0 and GSM Power will be turn off after deep sleep.
4. If the MCU2 Di0 was triggered in sleep mode, the main MCU (7186) will wake up from sleep mode.

## MCU2\_getLibVer

### Prototype:

```
void MCU2_getLibVer(char* libVer)
```

### Description:

Get library Version.

### Parameter:

libVer: a string of library version, format="V1.00 Jul 21 2010". Please declare string length 32 bytes

### Return:

No

## MCU2\_init

### Prototype:

int MCU2\_init(void)

### Description:

MCU2 Library initial.

### Parameter:

no

### Return:

<b>MCU2_CMDERROR:</b>	<b>initial fail</b>
<b>MCU2_COMERROR:</b>	<b>COM Port Error</b>

## MCU2\_setDo0

### Prototype:

```
int MCU2_setDo0(int status);
```

### Description:

set DO0 status

### Parameter:

status: 0=OFF, 1=ON

### Return:

MCU2_NOERROR:	No Error
MCU2_TIMEOUT:	TIMEOUT Error

## MCU2\_getDioStatus

### Prototype:

```
int MCU2_getDioStatus(void);
```

### Description:

get DIO status

### Parameter:

No

### Return:

DI/O status:            bit0=Di0 status, bit1=Do0 status  
MCU2\_TIMEOUT:        TIMEOUT ERROR

## MCU2\_Sleep

### Prototype:

```
int MCU2_Sleep(unsigned long ss);
```

Notice: precision of Timer in Sleep is +- 2/1000, for example:

MCU2\_Sleep(1000) maybe sleep 1002 seconds

### Description:

Sleep function. This function will power off main MCU

### Parameter:

ss : seconds, Max. Sleep time = 999999 seconds

### Return:

MCU2\_NOERROR: No Error  
MCU2\_TIMEOUT: TIMEOUT Error  
MCU2\_CMDERROR: Parameter Error



## MCU2\_DeepSleep

### Prototype:

```
int MCU2_DeepSleep(unsigned long ss);
```

### Description:

Deep sleep function. This function will power off main MCU

Notice: precision of Timer in Sleep is +- 2/1000, for example:

MCU2\_Sleep(1000) maybe sleep 1002 seconds

### Parameter:

ss : seconds, Max. Sleep time = 999999 seconds

### Return:

MCU2\_NOERROR: No Error  
MCU2\_TIMEOUT: TIMEOUT Error  
MCU2\_CMDERROR: Parameter Error

## MCU2\_getVBattery

### Prototype:

float MCU2\_getVBattery(void);

### Description:

Get Battery Voltage

### Parameter:

No

### Return:

Battery voltage: 0~15V

Error: 9999

## MCU2\_EnableGSM

### Prototype:

```
int MCU2_EnableGSM(unsigned int en);
```

### Description:

Enable GSM power

### Parameter:

en=0, power off GSM module

en=1, power on GSM module

### Return:

MCU2\_NOERROR: No Error

MCU2\_TIMEOUT: Timeout Error

MCU2\_CMDERROR: Command Error

## MCU2\_BatteryProtect

### Prototype:

```
int MCU2_BatteryProtect(unsigned int en);
```

### Description:

Enable Battery Protecting function

### Parameter:

en=0,    Disable Battery protecting

en=1,    Enable Battery protecting

### Return:

MCU2\_NOERROR:    No Error

MCU2\_TIMEOUT:    Timeout Error

MCU2\_CMDERROR:   Command Error

**Version Record**

Version	By	Date	Description
1.0.0	Malo	2013/05/02	release