

Ginkgo USB-PMBus Adapter VTG200A API Library Instruction v1.1



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1 Device Type

Adapter types are defined as follows:

Device Name	Туре
USB-I2C	1
USB-SPI	2
USB-CAN1	3
USB-CAN2	4
USB-PMBus	1
USB-SMBus	1



2 Error Code Definition

Ginkgo USB-PMBus adapter API function execution return code definition:

Name	Value	Description
ERR_SUCCESS	0	No error
ERR_PARAMETER_NULL	-1	Null pointer
ERR_INPUT_DATA_TOO_MUCH	-2	Input too much parameters
ERR_INPUT_DATA_TOO_LESS	-3	Input too less parameters
ERR_INPUT_DATA_ILLEGALITY	-4	Parameter input format is illegal
ERR_USB_WRITE_DATA	-5	USB write data error
ERR_USB_READ_DATA	-6	USB read data error
ERR_READ_NO_DATA	-7	No data returned when request
		data read
ERR_OPEN_DEVICE	-8	Device open failure
ERR_CLOSE_DEVICE	-9	Device close failure
ERR_EXECUTE_CMD	-10	Execute command failure
ERR_SELECT_DEVICE	-11	Device select failure
ERR_DEVICE_OPENED	-12	Device opened
ERR_DEVICE_NOTOPEN	-13	Device not open
ERR_BUFFER_OVERFLOW	-14	Buffer overflow
ERR_DEVICE_NOTEXIST	-15	Device not exist
ERR_LOAD_KERNELDLL	-16	DLL download failed
ERR_CMD_FAILED	-17	Execute command failure
ERR_BUFFER_CREATE	-18	Out of memory

Ginkgo USB-PMBus adapter API function bus operation return code definition:

Name	Value	Description
PMBUS_OK	0x00	No error
PMBUS_ERROR_SLAVE_NOT_SU	0x01	Slave not support the command
PPORTED		
PMBUS_ERROR_BUSOFF	0x02	Bus is off
PMBUS_ERROR_TXFULL	0x03	Sending buffer full
PMBUS_ERROR_BUSY	0x04	Bus busy
PMBUS_ERROR_RXEMPTY	0x05	Receiving buffer is empty
PMBUS_ERROR_OVERRUN	0x06	Memory overflow
PMBUS_ERROR_TIMEOUT	0x07	Bus operation time out
PMBUS_ERROR_INVALID_SIZE	0x08	Invalid size
PMBUS_ERROR_PACKET_TOO_L	0x09	Packt too long
ONG		

PMBUS_ERROR_PARAMETER	0x0A	Parameter error
PMBUS_ERROR_PEC	0x0B	PEC test failed
PMBUS_ERROR_NACK	0x0C	Salve no answer
PMBUS_ERROR_ARLO	0x0D	Bus arbitration error



3 Interface Function Specification

3.1 Device Operation Function

3.1.1 PMBus_ScanDevice

Description:

Initialize the driver and scan the devices connected to and numbered by the computer successfully.

Prototype:

```
int32_t WINAPI PMBus_ScanDevice(uint8_t NeedInit);
```

Parameter:

NeedInit

Check if driver initialization is necessary. Set the function as 1 at the first time after which set as 0.

Return code:

The number of the device connected to and numbered by the computer successfully. 0 indicates no device is connected; smaller than 0 means function call is failed.

Example:

```
#include <stdio.h>
#include "ControlPMBus.h"

int ret;
ret = PMBus_ScanDevice(1);
if(ret <= 0){
    printf("No device connect!\n");
    return ret;
}else{
    printf("Have %d device connected!\n",ret);
}</pre>
```

3.1.2 PMBus_OpenDevice

Description:

Open the devices.

Prototype:

```
int32_t WINAPI PMBus_OpenDevice(int32_t DevType,int32_t DevIndex,int32_t
```



Reserved);

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

Reserved

Reserve parameters which can be set as 0.

Return code:

Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

Example:

```
#include <stdio.h>
#include "ControlPMBus.h"

int ret;
ret = PMBus_OpenDevice(VII_USBI2C, 0, 0);
if (ret != ERR_SUCCESS){
    printf("Open device error!\n");
    return;
}
```

3.1.3 PMBus CloseDevice

Description:

Close the opened device.

Prototype:

```
int32_t WINAPI PMBus_CloseDevice(int32_t DevType,int32_t DevIndex);
```

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

Return code:

Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

Example:



```
#include <stdio.h>
#include "ControlPMBus.h"

int ret;
ret = PMBus_CloseDevice(VII_USBI2C, 0);
if (ret != ERR_SUCCESS){
    printf("Close device error!\n");
    return;
}
```

3.2 USB-PMBus Related Function

3.2.1 PMBus_HardInit

Description:

Initialize USB-PMBus adapter according to PMBus slave settings.

Prototype:

```
int32_t WINAPI PMBus_HardInit(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint32_t ClockSpeed, uint8_t OwnAddr);
```

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBus channel needs to be initialized. Set the index as 0 or 1.

ClockSpeed

Bus clock frequency which ranges from 10000 to 100000.

OwnAddr

Adapter own address with random settings.

Return code:

Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

Example:

```
#include <stdio.h>
#include "ControlPMBus.h"

int ret;
```



```
ret = PMBus_HardInit(VII_USBI2C, 0,0,100000,0x20);
if (ret != PMBUS_OK){
    printf("Initialize device error!\n");
    return;
}
```

3.2.2 PMBus_WriteByte

Description:

Send 1 byte data in accordance with PMBus protocol.

Prototype:

```
int32_t WINAPI PMBus_WriteByte(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint8_t SlaveAddr,uint8_t CommandCode,uint8_t Data,uint8_t PEC);
```

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

SlaveAddr

PMBus slave address. The lowest bit of the slave address is a read&write bit. Adapter judges read or write operation according to the function called. The lowest bit here can be set as 0.

CommandCode

PMBus command code. For its parameter settings, please refer to PMBus protocol document.

Data

Data to be sent.

PEC

Enable PEC function. 0 --- not send or receive PEC data and no PEC check; 1 --- send or receive PEC data and check PEC.

Return code:

Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

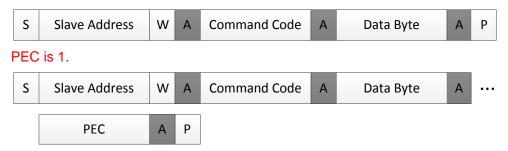
Example:

N/A.

Schematic diagram:



PEC is 0.



3.2.3 PMBus_ReadByte

Description:

Read 1 byte data in accordance with PMBus protocol.

Prototype:

int32_t WINAPI PMBus_ReadByte(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint8_t SlaveAddr,uint8_t CommandCode, uint8_t *pData,uint8_t PEC);

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

SlaveAddr

PMBus slave address. The lowest bit of the slave address is a read&write bit. Adapter judges read or write operation according to the function called. The lowest bit here can be set as 0.

CommandCode

PMBus command code. For its parameter settings, please refer to PMBus protocol document.

pData

Data receiving pointer.

PEC

Enable PEC function. 0 --- not send or receive PEC data and no PEC check; 1 --- send or receive PEC data and check PEC.

Return code:

Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

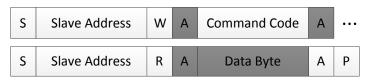
Example:

N/A.



Schematic diagram:

PEC is 0.



PEC is 1.



3.2.4 PMBus_SendByte

Description:

Send 1 byte command code in accordance with PMBus protocol.

Prototype:

int32_t WINAPI PMBus_SendByte(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint8_t SlaveAddr,uint8_t CommandCode,uint8_t PEC);

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

SlaveAddr

PMBus slave address. The lowest bit of the slave address is a read&write bit. Adapter judges read or write operation according to the function called. The lowest bit here can be set as 0.

CommandCode

PMBus command code. For its parameter settings, please refer to PMBus protocol document.

PEC

Enable PEC function. 0 --- not send or receive PEC data and no PEC check; 1 --- send or receive PEC data and check PEC.

Return code:

Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

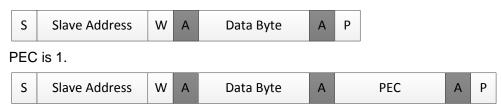
Example:



N/A.

Schematic diagram:

PEC is 0.



3.2.5 PMBus_WriteWord

Description:

Send 2 bytes data in accordance with PMBus protocol.

Prototype:

int32_t WINAPI PMBus_WriteWord(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint8_t SlaveAddr,uint8_t CommandCode,uint16_t Data,uint8_t PEC);

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

SlaveAddr

PMBus slave address. The lowest bit of the slave address is a read&write bit. Adapter judges read or write operation according to the function called. The lowest bit here can be set as 0.

CommandCode

PMBus command code. For its parameter settings, please refer to PMBus protocol document.

Data

Data to be sent.

PEC

Enable PEC function. 0 --- not send or receive PEC data and no PEC check; 1 --- send or receive PEC data and check PEC.

Return code:

Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.



Example:

N/A.

Schematic diagram:

PEC is 0.

S	Slave Address	W	Α	Command Co	de	Α	Data Byte Low	А	•••
	Data Byte High	А	Р						
PEC	C is 1.			I					
S	Slave Address	W	Α	Command Co	de	А	Data Byte Low	А	•••
	Data Byte High	Α		PEC	А	Р			

3.2.6 PMBus_ReadWord

Description:

Read 2 bytes data in accordance with PMBus protocol.

Prototype:

int32_t WINAPI PMBus_ReadWord(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint8_t SlaveAddr,uint8_t CommandCode, uint16_t *pData,uint8_t PEC);

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

SlaveAddr

PMBus slave address. The lowest bit of the slave address is a read&write bit. Adapter judges read or write operation according to the function called. The lowest bit here can be set as 0.

CommandCode

PMBus command code. For its parameter settings, please refer to PMBus protocol document.

pData

Data receiving pointer.

PEC

Enable PEC function. 0 --- not send or receive PEC data and no PEC check; 1 --- send or receive PEC data and check PEC.



Return code:

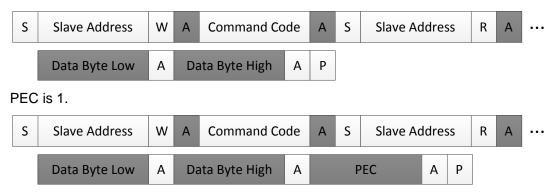
Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

Example:

N/A.

Schematic diagram:

PEC is 0.



3.2.7 PMBus_WriteByteExt

Description:

Send 1 byte data (with extend command code) in accordance with PMBus protocol.

Prototype:

int32_t WINAPI PMBus_WriteByteExt(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint8_t SlaveAddr,uint8_t CommandCodeExt,uint8_t CommandCode,uint8_t Data,uint8_t PEC):

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

SlaveAddr

PMBus slave address. The lowest bit of the slave address is a read&write bit. Adapter judges read or write operation according to the function called. The lowest bit here can be set as 0.

CommandCodeExt

PMBus extend command code. For its parameter settings, please refer to PMBus protocol document.

CommandCode



PMBus command code. For its parameter settings, please refer to PMBus protocol document.

Data

Data to be sent.

PEC

Enable PEC function. 0 --- not send or receive PEC data and no PEC check; 1 --- send or receive PEC data and check PEC.

Return code:

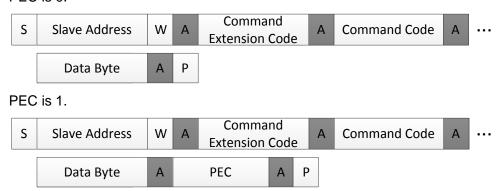
Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

Example:

N/A.

Schematic diagram:

PEC is 0.



3.2.8 PMBus_ReadByteExt

Description:

Read 1 byte data (with extend command code) in accordance with PMBus protocol.

Prototype:

int32_t WINAPI PMBus_ReadByteExt(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint8_t SlaveAddr,uint8_t CommandCodeExt,uint8_t CommandCode, uint8_t *pData,uint8_t PEC);

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

SlaveAddr



PMBus slave address. The lowest bit of the slave address is a read&write bit. Adapter judges read or write operation according to the function called. The lowest bit here can be set as 0.

CommandCodeExt

PMBus extend command code. For its parameter settings, please refer to PMBus protocol document.

CommandCode

PMBus command code. For its parameter settings, please refer to PMBus protocol document.

pData

Data receiving pointer.

PEC

Enable PEC function. 0 --- not send or receive PEC data and no PEC check; 1 --- send or receive PEC data and check PEC.

Return code:

Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

Example:

N/A.

Schematic diagram:

PEC is 0.

S	Slave Address	WA		ress W A Command Extension Code A		A		Command Code	A	
S	Slave Address	R	Α	Data Byte	А	Р				

PEC is 1.

S	Slave Address	W	А	Command Extension Code	А	Command Code	А	
S	Slave Address	R	А	Data Byte	А	PEC	А	Р

3.2.9 PMBus_WriteWordExt

Description:

Send 2 bytes data (with extend command code) in accordance with PMBus protocol.

Prototype:

int32_t WINAPI PMBus_WriteWordExt(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint8_t SlaveAddr,uint8_t CommandCodeExt,uint8_t CommandCode,uint16_t Data,uint8_t PEC);

Parameter:

DevType



Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

SlaveAddr

PMBus slave address. The lowest bit of the slave address is a read&write bit. Adapter judges read or write operation according to the function called. The lowest bit here can be set as 0.

CommandCodeExt

PMBus extend command code. For its parameter settings, please refer to PMBus protocol document.

CommandCode

PMBus command code. For its parameter settings, please refer to PMBus protocol document.

Data

Data to be sent.

PEC

Enable PEC function. 0 --- not send or receive PEC data and no PEC check; 1 --- send or receive PEC data and check PEC.

Return code:

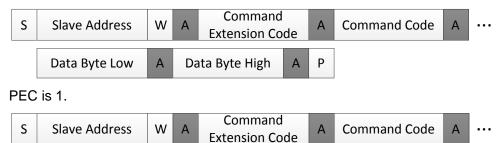
Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

Example:

N/A.

Schematic diagram:

PEC is 0.



PEC

Data Byte High

3.2.10 PMBus_ReadWordExt

Data Byte Low

Description:



Read 2 bytes data (with extend command code) in accordance with PMBus protocol.

Prototype:

int32_t WINAPI PMBus_ReadWordExt(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint8_t SlaveAddr,uint8_t CommandCodeExt,uint8_t CommandCode, uint16_t *pData,uint8_t PEC);

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

SlaveAddr

PMBus slave address. The lowest bit of the slave address is a read&write bit. Adapter judges read or write operation according to the function called. The lowest bit here can be set as 0.

CommandCodeExt

PMBus extend command code. For its parameter settings, please refer to PMBus protocol document.

CommandCode

PMBus command code. For its parameter settings, please refer to PMBus protocol document.

pData

Data receiving pointer.

PEC

Enable PEC function. 0 --- not send or receive PEC data and no PEC check; 1 --- send or receive PEC data and check PEC.

Return code:

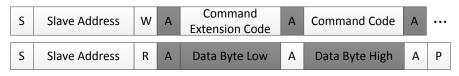
Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

Example:

N/A.

Schematic diagram:

PEC is 0.



PEC is 1.



S	Slave Address	W	А	Command Extension Code	Α	Command Code	Α			
S	Slave Address	R	А	Data Byte Low	А	Data Byte High	А	PEC	А	Р

3.2.11 PMBus BlockWrite

Description:

Send data of multiple bytes in accordance with PMBus protocol.

Prototype:

```
int 32\_t \quad WINAPI \quad PMBus\_BlockWrite (int 32\_t \quad DevType, int 32\_t \quad DevIndex, int 32\_t \\ PMBusIndex, uint 8\_t \quad SlaveAddr, uint 8\_t \quad CommandCode, uint 8\_t \quad *pData, uint 8\_t \\ ByteCount, uint 8\_t \quad PEC);
```

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

SlaveAddr

PMBus slave address. The lowest bit of the slave address is a read&write bit. Adapter judges read or write operation according to the function called. The lowest bit here can be set as 0.

CommandCode

PMBus command code. For its parameter settings, please refer to PMBus protocol document.

pData

Send data buffer base address.

ByteCount

The byte number of sent data.

PEC

Enable PEC function. 0 --- not send or receive PEC data and no PEC check; 1 --- send or receive PEC data and check PEC.

Return code:

Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

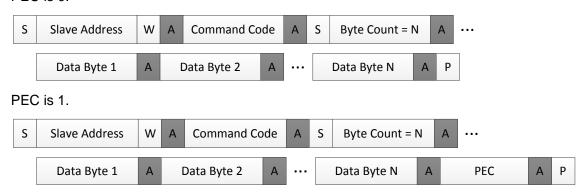
Example:

N/A.



Schematic diagram:

PEC is 0.



3.2.12 PMBus_BlockRead

Description:

Read data of multiple bytes in accordance with PMBus protocol.

Prototype:

```
int32_t WINAPI PMBus_BlockRead(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint8_t SlaveAddr,uint8_t CommandCode,uint8_t *pData,uint8_t *pByteCount,uint8_t PEC);
```

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

SlaveAddr

PMBus slave address. The lowest bit of the slave address is a read&write bit. Adapter judges read or write operation according to the function called. The lowest bit here can be set as 0.

CommandCode

PMBus command code. For its parameter settings, please refer to PMBus protocol document.

pData

Read data buffer base address.

pByteCount

Data bytes count pointer that read.

PEC



Enable PEC function. 0 --- not send or receive PEC data and no PEC check; 1 --- send or receive PEC data and check PEC.

Return code:

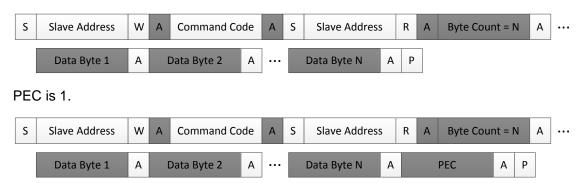
Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

Example:

N/A.

Schematic diagram:

PEC is 0.



3.2.13 PMBus BlockProcessCall

Description:

Send and receive data of multiple bytes in accordance with PMBus protocol.

Prototype:

int32_t WINAPI PMBus_BlockProcessCall(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint8_t SlaveAddr,uint8_t CommandCode,uint8_t *pWriteData,uint8_t WriteByteCount,uint8_t *pReadData,uint8_t *pReadByteCount,uint8_t PEC);

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

SlaveAddr

PMBus slave address. The lowest bit of the slave address is a read&write bit. Adapter judges read or write operation according to the function called. The lowest bit here can be set as 0.

CommandCode



PMBus command code. For its parameter settings, please refer to PMBus protocol document.

pWriteData

Send data buffer base address.

WriteByteCount

The byte number of sent data.

pReadData

Read data buffer base address.

pReadByteCount

Read data bytes count pointer.

PEC

Enable PEC function. 0 --- not send or receive PEC data and no PEC check; 1 --- send or receive PEC data and check PEC.

Return code:

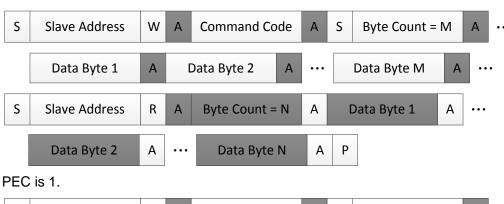
Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

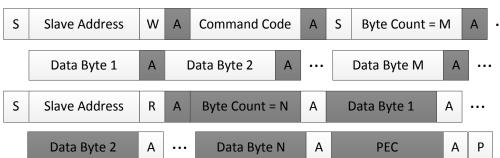
Example:

N/A.

Schematic diagram:

PEC is 0.





3.2.14 PMBus_GroupCmd

Description:

Send data to multiple slaves in accordance with PMBus protocol.



Prototype:

int32_t WINAPI PMBus_GroupCmd(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint8_t *pGroupCmdData,uint8_t CmdNum,uint8_t PEC);

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

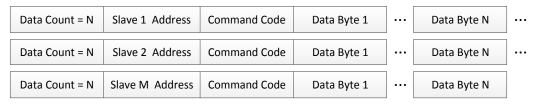
Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

pGroupCmdData

Base address of command group storage. Command group is formed in the forms listed below.



CmdNum

Command group numbers.

PEC

Enable PEC function. 0 --- not send or receive PEC data and no PEC check; 1 --- send or receive PEC data and check PEC.

Return code:

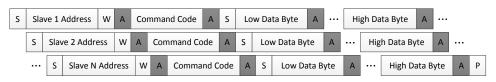
Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

Example:

N/A.

Schematic diagram:

PEC is 0.



PEC is 1.





3.2.15 PMBus_GetAlert

Description:

Get Alert signal wire event of PMBus bus. Such kind of event takes place when Alert signal wire generates a negertive edge. After calling this function, event state sign cleaned.

Prototype:

 $int 32_t \quad WINAPI \quad PMBus_GetAlert(int 32_t \quad DevType, int 32_t \quad DevIndex, int 32_t \\ PMBusIndex, uint 8_t *pAlertFlag);$

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex

PMBusIndex channel which is required to send data. Set as 0 or 1.

pAlertFlag

Alert state storage pointer.

Return code:

Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

Example:

N/A.

3.2.16 PMBus_SetControl

Description:

Control Control pin to output high level or low level.

Prototype:

int32_t WINAPI PMBus_SetControl(int32_t DevType,int32_t DevIndex,int32_t PMBusIndex,uint8_t Value);

Parameter:

DevType

Device type code. For detail, please refer to Device Type Definition Table.

DevIndex

Device index number. Index number 0 indicates only one device is connected with computer. In case multiple devices are connected, set index number corresponding to the devices required to be open.

PMBusIndex



PMBusIndex channel which is required to send data. Set as 0 or 1.

Value

The state of the level output by **Control** pin. 0 --- output low level; 1 --- output high level.

Return code:

Program execution state. Parameter 0 indicates related function executes successfully. For other return codes' definition, please refer to Error Code Definition Table.

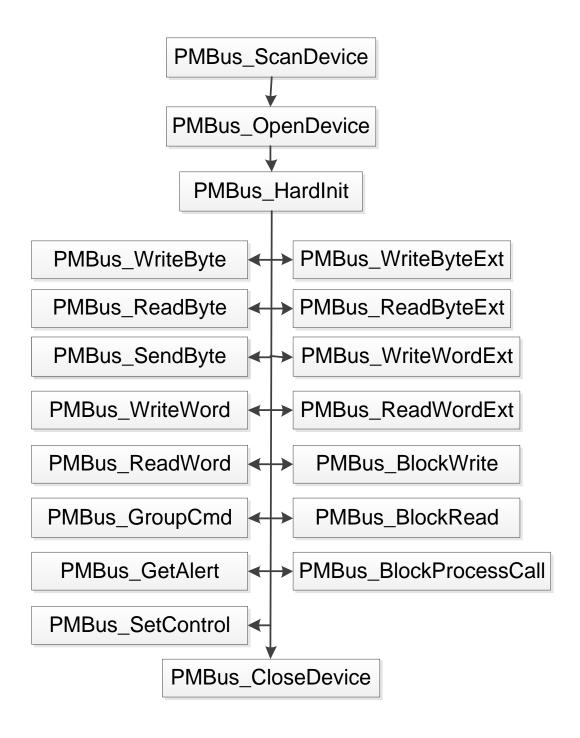
Example:

N/A.



4 Interface Function Appliation Process

4.1 USB-PWBus Function Appliation Process





Technical Support & Service

- Lifetime technical support, free services and maintenance within one year.
- Down load diver, software, User's Manual and application routine source code at www.viewtool.com.
- Technical exchange forum: www.viewtool.com/bbs
- Technical support Email: <u>FAE@viewtool.com</u>
- Sales Email: <u>sales@viewtool.com</u>