2.45G active RFID reader/writer

API Manual

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1 Reader Management Functions

1.1 Open Comport: OpenCommPort

Functions Description	int OpenCommPort(String port,int br)
Function	Open PC COMM port
Parameter	Port: Com port name; br : Baud rate (fixed to 115200)
Return Value	Success return 0, fail return not 0

Example	Open COMM Port 1
	If(0 == OpenCommPort("COM1",115200))
	{
	.....
	}

1.2 Close Comport: CommClose

Functions Description	Void CloseCommPort(String port,int br)
Function	Close PC COMM Port
Parameter	Port: Com port name; br : Baud rate (fixed to 115200)
Return Value	Success return 0, fail return not 0
Example	Api.CloseCommPort();

1.3 Clear Receive Buffer

Functions Description	Void ClearReceiveBuf()
Function	Clear Receive Buffer
Parameter	
Return Value	Success return 0, fail return not 0
Example	Api.ClearReceiveBuf();

1.4 Open TCP/IP Connection

Functions Description	Int TcpConnectReader(String ip,int port)
Function	Open TCP/IP Connection
Parameter	Ip: Reader IP Address; port: port number
Return Value	Success return 0, fail return not 0

Example	If(0 == Api.TcpConnectReader("192.168.2.200",4001))
	{ .....
	}

1.5 Close TCP/IP Connection

Functions Description	Int TcpCloseConnect ()
Function	Close TCP/IP Connection
Parameter	
Return Value	Success return 0, fail return not 0

Example	If(0 == Api.TcpCloseConnect)
	{ ……
	}

2 Active Tag Operation Functions

2.1 Read Multiple Tag ID

Functions Description	Int ActiveTagIdStart ()
Function	Reader start reading tag
Parameter	
Return Value	Success return 0, fail return not 0, Automatically start read tag and store in R&W data Buffer

Example	If(0 == Api.ActiveTagIdStart())
	{
	String str = String.Format("The R&W identify tag operate is start!);
	}

2.2 Get Tag Data

Functions Description	Int GetTagData (ref byte[,] tag_data,ref tag_cnt)
Function	Retrieve tag data from reader buffer
Parameter	Tag data: Get Tag data, first parameter length, second parameter indicates 1 byte of each tag's ID. tag_cnt: get tag quantity;
Return Value	Success return 0, fail return not 0

Example	Api.GetTagData(ref TagData,ref TagCnt);
	If(0 < tag_cnt)
	{
	……
	}

2.3 Calling Specified Active Tag

Functions Description	Int ActiveTagCallStart(ref byte[] id)
Function	Calling Specified Tag
Parameter	Id: Call Tag ID
Return Value	Success return 0, fail return not 0

Example	If(0 == Api.ActiveTagCallStart(ref id))
	{
	System.console.write("Tag Calling Start!");
	}

2.4 Start Reading Active Tag

Functions Description	Int ActiveTagReadStart(ref byte[] id，byte addr)
Function	Read tag data from tag with specified ID. Read 4 bytes of data after the specified starting address on each reading.
Parameter	Id: 4 byte UID; Addr: starting address to be read on tag
Return Value	Success return 0, fail return not 0, Return 4 bytes of data can get from R&W buffer via parameter: GetData()

Example	Byte addr;
	Byte[] id = new Byte[8];
	If(0 == Api.ActiveTagReadStart(ref id,addr))
	{
	System.console.write("Tag Calling Start!");
	}

2.5 Start Writing Active Tag

Functions Description	Int ActiveTagWriteStart(ref byte[] id，byte addr,ref byte[] value)
Function	Write the data at the specified starting address of tag with specified ID.
Parameter	Id: 4 byte UID; addr: starting address to be written data; value: data to be written to tag
Return Value	Success return 0, fail return not 0, Return 4 bytes of data can get from R&W buffer via parameter: GetData()

Example	Byte addr;
	Byte[] id = new Byte[8];
	Byte[] value = new Byte[8];
	If(0 == Api.ActiveTagWriteStart(ref id,addr,ref value))
	{
	System.console.write("Tag Write Start!");
	}

2.6 Stop Identify Active Tag

Functions Description	Int ActiveTagIdStop()
Function	Stop Identify Active Tag.
Parameter	
Return Value	Success return 0, fail return not 0

Example	If(0 == Api.ActiveTagIdStop())
	{
	System.console.write("Tag Identify Stop success!");
	}

2.7 Stop All Tag Operation

Functions Description	Int ActiveTagOperationStop ()
Function	Stop All Tag Operation
Parameter	
Return Value	Success return 0, fail return not 0

Example	If(0 == Api.ActiveTagOperationStop())
	{
	System.console.write("Tag Operation Stop success!");
	}

3 Active Reader Operation Functions

3.1 Get Firmware Version

Functions Description	Int GetFirmwareVersion (ref byte v1,ref byte v2)
Function	Read the reader's firmware version number
Parameter	V1: major version information pointer V2: minor version information pointer
Return Value	Success return 0, fail return not 0

Example	To read and output firmware version number
	If(0 == Api.GetFirmwareVersion(ref v1,ref v2))
	{
	String str = String.Format("The R&W Version is:{0:D2}{1:D2}",v1,v2);
	}

3.2 Get Locator ID

Functions Description	Int GetLocatorAddr (ref byte addr)
Function	Get Locator ID
Input parameter	Addr: Locator ID
Return Value	Success return 0, fail return not 0

Example	If(0 == Api.GetLocatorAddr(ref addr))
	{
	String str = String.Format("The LocatorAddr is:{0:D2}",addr);
	}

3.3 Set Locator ID

Functions Description	Int SetLocatorAddr (byte addr)
Function	Set Locator ID
Input parameter	Addr: Locator ID
Return Value	Success return 0, fail return not 0

Example	If(0 == Api.SetLocatorAddr(addr))
	{
	System.Console.WriteLine("The Locator Address Set success!");
	}

3.4 Set Reader's RF Power

Functions Description	Int SetRfPower (byte pwr)
Function	Set reader's RF power parameter
Input parameter	pwr: Power value pointer
Return Value	Success return 0, fail return not 0

Example	If(0 == Api.SetRfPower(ref byte pwr))
	{
	System.Console.WriteLine("The R&W RF Power Set success!");
	}

3.5 Get Reader's RF Power

Functions Description	Int GetRfPower (ref byte pwr)
Function	Get reader's power parameter
Input parameter	pwr: Power value pointer
Return Value	Success return 0, fail return not 0

Example	If(0 == Api.GetRfPower(ref pwr))
	{
	System.Console.WriteLine("The R&W RF Power Get success!");
	}