20171114：数据大小端问题

#region Modbus 的?数簓据Y格?式?处鋦理え?

private void btnSend\_Click\_1(object sender, EventArgs e)

{

string str1 = this.tbxSendText.Text.Trim().ToString();

float x = circles[0].Center.X;

System.Console.WriteLine("222", circles[0].Center.X);

float y = circle.Center.Y;

float m = 11.1F;

byte[] a = BitConverter.GetBytes(x);

a=LittleEncodingFloat(a);

byte[] b = BitConverter.GetBytes(y);

b = LittleEncodingFloat(b);

byte[] c = BitConverter.GetBytes(m);

c = LittleEncodingFloat(c);

byte[] z = new byte[a.Length + b.Length+c.Length];

a.CopyTo(z, 0);

b.CopyTo(z, a.Length);

c.CopyTo(z, a.Length+b.Length);

System.Console.WriteLine( x);

System.Console.WriteLine( y);

this.Wrapper.Send(z);

#endregion

public static void ReverseBytes(byte[] bytes, int start, int len)

{

int end = start + len - 1;

byte tmp;

int i = 0;

for (int index = start; index < start + len / 2; index++, i++)

{

tmp = bytes[end - i];

bytes[end - i] = bytes[index];

bytes[index] = tmp;

}

}

public static byte[] LittleEncodingFloat(byte[] bytes)

{

ReverseBytes(bytes, 0, 2);

ReverseBytes(bytes, 2, 2);

return bytes;

}

20171113：Modbus的Ip等设置

一.在app.config文件中:

<!--Modbus配?置?-->

<add key="IP" value="192.168.1.1"/>

<add key="Port" value="502"/>

<add key="SocketTimeOut" value="10000"/>

<add key="StartingAddress" value="4096"/>

1. 在ModBusTCPIPWrapper.cs文件中：

public override void Send(byte[] data)

{

//[0]:填?充?0，?清?掉?剩骸?余?的?寄?存?器÷

if (data.Length < 4)

{

var input = data;

data = new Byte[4];

Array.Copy(input, data, input.Length);

}

this.Connect();

List<byte> values = new List<byte>(255);

//[1].Write Header：阰MODBUS Application Protocol header

values.AddRange(ValueHelper.Instance.GetBytes(this.NextDataIndex()));

//1~2.(Transaction Identifier)

values.AddRange(new Byte[] { 0, 0 });

//3~4:Protocol Identifier,0 = MODBUS protocol

values.AddRange(ValueHelper.Instance.GetBytes((byte)(data.Length +7)));

//5~6:后ó续?的?Byte数簓量?

values.Add(02);

//7:Unit Identifier:This field is used for intra-system routing purpose

values.Add((byte)FunctionCode.Write);

//8.Function Code : 16 (Write Multiple Register

values.AddRange(ValueHelper.Instance.GetBytes(StartingAddress));

//9~10.起e始?地?址·

values.AddRange(ValueHelper.Instance.GetBytes((short)(6)));

//11~12.寄?存?器÷数簓量

values.Add((byte)data.Length);

//13.数簓据Y的?Byte数簓量?

//[2].增?加ó数簓据Y

values.AddRange(data);

//14~End:需è要癮发ぁ?送í的?数簓据Y

//[3].写′数簓据Y

this.socketWrapper.Write(values.ToArray());

//[4].防え?止1连?续?读á写′引皔起e前°台I线?程ì阻哩?塞?

Application.DoEvents();

//[5].读á取?Response: 写′完?后ó会á返う?回?12个?byte的?结á果?

byte[] responseHeader = this.socketWrapper.Read(12);

}

1. 在Form1.c中：

private void btnSend\_Click\_1(object sender, EventArgs e)

{

string str1 = this.tbxSendText.Text.Trim().ToString();

string[] f1 = str1.Split(',');

int x, y,m;

x = int.Parse(f1[0]);

y = int.Parse(f1[1]);

m = int.Parse(f1[2]);

byte[] a = BitConverter.GetBytes(x);

byte[] b = BitConverter.GetBytes(y);

byte[] c = BitConverter.GetBytes(m);

byte[] z = new byte[a.Length + b.Length+c.Length];

a.CopyTo(z, 0);

b.CopyTo(z, a.Length);

c.CopyTo(z, a.Length+b.Length);

System.Console.WriteLine("{0:###.000000}", x);

System.Console.WriteLine("{0:###.000000}", y);

this.Wrapper.Send(z);

//this.Wrapper.Send(BitConverter.GetBytes(y));

#endregion