ADVANTECH Enabling an Intelligent Planet

PLC Configuration

1. This driver bases on Siemens MPI protocal. It should use MPI serial cable to communicate.





- 2. Configure the MPI address and baud rate.
 - a. Add MPI subnet in CPU setting. The example baud rate is 19200, address is 2 by default.
 - b. After adding MPI subnet, there will be a red line connection between the MPI interface and the MPI Network in NetPro.

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厧	【性 - CPU	315-2 DP	- (R0/S2)		×		
	常规	新 启动	诊断/时钟 周期/时钟存储器 保	保护 持存储器 中断	通讯 日时间中断		
	简短描述: General		CPU 315-2 DP Work memory 128KB; 0.1ms/1000 instructions; MPI+ DP connection (DP master or DP slave); multi-tier configuration up to 32 modules; Send and receive capability for direct data exchange, constant bus cycle				
	订货号 /	固件	6ES7 315-2AG10-0AB0 / V2.	6			
	名称(N):		CPU 315-2 DP				
1	 接口 类型: 地址: 己联网: 	MPI 2 : 否	Setting 属性 (R)	设备标识(<u>P</u>): 位置标识(<u>L</u>):			
	注释(<u>C</u>):						
					*		
	确定			取沪	育 帮助		

	~			
属性 - MPT				×
常规 网络设置 Network	< Setting			1
最高的 MPI 地址(出):	31	▼ □ 改变(C)		
传输率(I):	19.2 Kbps 187.5 Kbps		-	
	3 Mbps 6 Mbps 12 Mbps		-	
确定			取消	帮助

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躍 NetPro - [TestProj (网络) D:\Siemens\Step7\s7proj\315] 習 网络(N) 编辑(E) 插入(I) PLC 视图(V) 选项(P) 窗口(W) 帮助(H)	_ □ × _ ₽ ×
Image: Simaric 300(1) Image: Simaric 300(1)	查找(E) 查找(E) M络对象的选择 ● 響 PROF IBUS DP 一響 PROF IBUS-PA ● 響 PROF IBUS-PA ● 電 PROF IBUS 10 ● コ Subnets
本地ID 伙伴 类型 激活的连接伙伴 ▲	

Edgelink Configuration

- 1) Make sure the COM jumper is RS-232
- 2) Add COM port.

C Cophia					
			/ >		
Type:	Serial (Built-in)	-	Scan Time(ms):	1000	
Description:	Uart 2 support RS4	85 or RS232 🔺	Time Out(ms):	3000	
			Retry Count:	3	
			Auto Recover Ti	me(s): 10	
				10	
				10	
Serial Port Se	etting			10	
Serial Port Se Port:	com2			10	
Serial Port Se Port: Baud Rate:	COM2 19200		Parity:	Odd	
Serial Port Se Port: Baud Rate: Data Bit:	COM2 19200 8	▼ ▼ ▼	Parity: RTS:	Odd False	

3) Add Device

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🚰 General Information								
☑ Enable								
	Name:	NewDevice						
	Device Type:	Siemens S7-300/1200/1500 PLC (S7Co						
	Device Model	Double Click to Select Device Template						
ſ	Unit Number:	2						
1	Tag Write Type:	Single Write 🔻						
	Description:	A						
		· ·						
	Add device name as pre	efix to IO tags 📃 Bulk Copy						
Ð	Extention Properties							
ſ	TSAP in Hex:							
	03.02							

Device Type: Siemens S7-300

Unit Number: 2 (MPI address in PLC configuration) TSAP: 03.02 by default.

4) Add Tags

New Tag		~	
Basic		Advanced	
Name:	NewTag	ScalingType:	No Scale 🔻
Data Type:	Analog 🔹	Formula:	
Conversion	Unsigned Integer 🔹		
Address:		Scale:	0
Start Bit:	0	Offset:	0
Length(bit):	16	Clamp:	Clamp to span low
Span High:	1000		Clamp to zero
Span Low:	0		
Initial Value:	0.0		
Scan Rate:	1		
Read Write:	Read/Write 👻		
Description:	A		

The format of address is "DB block,Offset" Below is the details: **AD\ANTECH**

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1) Analog Configuration

Parameter	Address	Description	Conversion	Length		
	Template		Code			
参数	地址模板	描述	转換代码 (默认)	长度 (bits)	最高量程 (默认)	显示格式
DB	DB5,10	DB	Unsigned Integer	16	65535	5.0
DBB	DBB1,0	DB Byte Data		8	256	3.0
DBD	DBD1,0	DB DWord Data		32	4,294,967,296	10.0
DBW	DBW1,0	DB Word Data		16	65535	5.0
IB	IB000	Input Byte		8	256	3.0
ID	ID000	Input Dword		32	4,294,967,296	10.0
IW	IW000	Input Word		16	65535	5.0
MB	MB001	Internal Byte		8	256	3.0
MD	MD001	Internal Word		24	1,048,576	7.0
MW	MW001	Internal Dword		16	65535	5.0
PIB	PIB000	Extend Input Byte		8	256	3.0
PID	PID000	Extend Input Dword		32	4,294,967,296	10.0
PIW	PIW000	Extend Input Word		16	65535	5.0
QB	QB000	Output Byte		8	256	3.0
QD	QD000	Output Dword		32	4,294,967,296	10.0
QW	QW000	Output Word		16	65535	5.0

Example: There is a variable "abc" in DB1 which is int and the offset is 8. So the address should be DBW1,8.

Analog Example Table:

S7 PLC Address	Edgelink IO Configuration				
Register Address	Address	Start bit	Length	Conversion Code	
DB28.DBW2	DBW28,2	0	16	Unsigned Integer	
DB12.DBD86	DBD12,86	0	32	Unsigned Integer	
DB2.DBB1	DBB2,1	0	8	Unsigned Integer	
DB2.DBW64 (Float)	DBW2,64	0	32	Real	

2) Discrete Configuration



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Description Conversion Length Parameter Address Template

Code

参数	地址模板	描述	转換代码 (默认)	长度 (bits)	
DBX	DBX1,0	DB Bit	Unsigned Integer	1	
IX	IX000	Input		1	
MX	MX000	Internal Bit		1	
QX	QX000	Output		1	

Discrete Example Table:

S7 PLC Address	Edgelink IO Configuration				
Register Address	Address	Start bit	Length	Conversion Code	
10001.2	IX0001	2	1	Unsigned Integer	
10003.5	IX0003	5	1	Unsigned Integer	
Q1003.2	QX1003	2	1	Unsigned Integer	