



# TwinCAT3 通过 TF6280 授 权与 AB 1769-L33ERM 建 立 EtherNet IP 通讯

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# 概 述

本文描述了如何使用 TwinCAT3 提供的TF6280 TC3 EtherNet/IP Adapter (Slave)将一台PC或CX控制器配置为具有EtherNet IP通讯的Slave站。

## 文档中包含的文件

文件名称	文件说明
TC3_AB_EtherNetI.sln	CP2291 配置文件
Box 1 (TC EtherNet_IP Slave)_20211113_103225.eds	CP2291 生成的 EDS 文件
TC3_AB_EtherNetIP.ACD	RS Logix 5000 文件

关键字: EtherNet IP TwinCAT3 TF6280

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# 一、说明

本文以 AB 公司的 1769-L33ERM PLC 作为 EtherNet IP 主站, CP2291 面板型触 摸屏作为 EtherNet IP 从站来描述如何通过 TF6280 TC3 EtherNet/IP Adapter (Slave)实现两者的通讯。

## 二、条件准备

# 1.硬件准备

1)、AB 1769-L33ERM: 用作EtherNet IP主站,本身带有以太网口。

2)、CP2291: 自带网口。

3)、以太网交换机一台及网线若干:采用交换机将CP2291、AB PLC和编程用计算机相连。

# 2.软件准备

1)、AB PLC编程软件: RS Logix 5000。

2)、CP2291中已购买了TF6280 TC3 EtherNet/IP Adapter (Slave)授权。

# 三、配置步骤

# 1.倍福 CP2291 从站侧配置

1)、将CP2291网卡IP地址设为固定IP(如下图),本例中设为192.168.1.30。

eneral	
You can get IP settings assig this capability. Otherwise, yo for the appropriate IP setting	ned automatically if your network supports u need to ask your network administrator Is.
💿 Obtain an IP address au	utomatically
o Use the following IP add	lress:
IP address:	192 . 168 . 1 . 30
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	10 II N
Obtain DNS cerver addr	ecc automaticallu
Ose the following DNS s	erver addresses:
Preferred DNS server:	
Alternate DNS server:	R 40 H
Validate settings upon	exit Advanced

#### 2)、连接到CP2291控制器



3)、在设备中添加EtherNet/IP从站,具体步骤:右击Devices后,点击添加新 项。

解决方案资源管理器		<b>▼</b> ₽×
0010.00	- v	
搜索解决方案资源管理器(Ctrl+;)	)	<del>-</del> م
<ul> <li>□ 解决方案"TC3_AB_EtherN</li> <li>▲ □ TC3_AB_EtherNetIP</li> <li>▶ □ SYSTEM</li> <li>□ MOTION</li> <li>□ PLC</li> <li>□ SAFETY</li> <li>□ C++</li> <li>□ ANALYTICS</li> <li>□ I/O</li> </ul>	etIP"(1 个项目)	
Devices	🖬 添加新项(W)	Ins
Inappings	┓ 添加现有项(G)…	Shift+Alt+A
	Add New Folder	
	Export EAP Config F	File
2	🔨 Scan	
de la companya	1 粘贴(P)	Ctrl+V
	Paste with Links	

#### 在Insert Device列表中添加Ether/IP Adpter(Slave)。



4)、在Device Found At设备查找使用的网络中,选择在第1)步中设定IP的网口。

Device Found At	×
(none) Local Area Connection (TwinCAT-Intel PCI Ethernet Adapter (Gigabit)) Local Area Connection 2 (TwinCAT-Intel PCI Ethernet Adapter (Gigabit) #2)	OK Cancel O Unused All
	Help

点击OK后的状态。



4)、设定设备的Adapter,如果在Device Found At设备查找中选择了网口,MAC Address及IP Address处后显示地址。如果没有选择,可以点击Search,搜索到 相应的网口,进行选择。

解决方案资源管理器	TC3_AB_EtherNetIP * ×
○ ○ ☆ ☆ · Ìo · ♂ / ⊁ -	General Adapter EtherNet/IP Sync Task Diag History DPRAM (Online)
搜索解决方案资源管理器(Ctrl+;) ・	
<ul> <li>□ 解決方案 TC3_AB_ttherNetIP"(1 个项目)</li> <li>□ TC3_AB_ttherNetIP</li> <li>□ SYSTEM</li> <li>△ MOTION</li> <li>□ PLC</li> </ul>	Network Adapter     O S (NDIS)     PCI     DPRAM  Description:     Local Area Connection 2 (TwinCAT-Intel PCI Ethernet Adapter (G Device Name:     \DEVICE\/9A92A96C-1D0F-42A7-ABAB-5CD4E0002D25)
AFETY ANALYTICS I/O Provices A 2000 Devices A 2000 Device 1 (TC3 EIP Adapter)	PCI Bus/Slot:     Search       MAC Address:     00 01 05 54 eb ad     Compatible Devices       IP Address:     192.168.1.30 (255.255.255.0)
<ul> <li>Inguts</li> <li>Outputs</li> <li>Box 1 (TC EtherNet/IP Slave)</li> </ul>	Promiscuous Mode (use with Wireshark only) Virtual Device Names
<ul> <li>Inputs</li> <li>         Outputs     </li> <li>         Mappings     </li> </ul>	O Adapter Reference Adapter:
	Freerun Cycle (ms): 4

	OC (NIDIC)	ODCI	ODDDANA	
		OPCI	ODPRAIM	
Description:	Local Area Conne	ection 2 (TwinCA	T-Intel PCI Ethernet Adap	oter <mark>(</mark> G
Device Name:	\DEVICE\{9A92A9	6C-1D0F-42A7-	A8AB-5CD4E0002D25}	
PCI Bus/Slot:			Search	
	e 14:			
MAC Add Devic	e Found At			
IP Address	e Found At			
IP Address (none	e Found At )) <del> Area Connection (TwinQ</del> A	T Intel POI Ethermet	<u>/</u>	OK
IP Addres:	e Found At )) Area Connection (TwinGA Area Connection 2 (TwinG	T Intel PCI Ethernet AT-Intel PCI Etherne	Adapter (Gigabit)) et Adapter (Gigabit) #2)	OK Cancel
IP Address (none	e Found At ) <del>Mea Connection (TwinQ</del> Area Connection 2 (TwinC	T Intel POLEthormeth AT-Intel PCI Etherne	Adopter (Gigabit)) et Adapter (Gigabit) #2)	OK Cancel ) Unused
IP Addres: (none Local	e Found At )) I-Area Connection (TwinGA Area Connection 2 (TwinG	T Intel POI Ethernet. AT-Intel POI Etherne	Adapter (Gigabit) et Adapter (Gigabit) #2)	OK Cancel ) Unused ) All
P Address (none Local Adapte	e Found At )) Area Connection (TwinGA Area Connection 2 (TwinG	T Intel PCI Ethernet AT-Intel PCI Etherne	Adapter (Gigabit)) et Adapter (Gigabit) #2)	OK Cancel ) Unused ) All

5)、Sync Task 同步任务设定

Standard (via	Mapping)			
	(mapping)			
) Special Sync T	ask			
			$\sim$	Create new I/O Task
inc Task				
vnc Task				
ync Task Name:				
ync Task Name: Cycle ticks:	0			ms
ync Task Name: Cycle ticks:	0	ljustable by	Protocol	ms



设定完成后状态

Special Sync T	ask			
Task 2		~	Create ne	ew I/O Task
ync Task				
Name:	Task 2			
Cycle ticks:	1	1.00	00	ms
	Adjustabl	e by Protocol		
	1			
Priority:				

#### 6)、从站参数设定

#### IP地址设定



IP地址设定完成后状态

Name Slave Settings (Box 1) Slave Number Product Name Device Type	Flags M RO M RO M RW	Value > 43 < 0x0001 (1)
Slave Settings (Box 1) Slave Number Product Name Device Type	M RO M RO M RW	> 43 < 0x0001 (1)
Slave Number Product Name Device Type	M RO	0x0001 (1)
Product Name Device Type	MRW	D A (TO FIL NI + /ID
Device Type	MDO	Box I (IC EtherNet/IP
VandanID	IN RO	0x000C (12)
vendoriD	M RO	0x006C (108)
Product Code	M RO	0x1888 (6280)
Revision	M RO	3.1
Serial Number	M RO	0x0000000 (0)
MAC Address	M RO	02 00 01 54 EB AD
IP Address	M RW	192.168.1.33
Network Mask	M RW	0.0.0.0
Gateway Address	M RW	0.0.0.0
DHCP Max Retries	M RW	0
TCP/IP TTL	M RW	128
TCP/IP UDP Checksum	M RW	TRUE
TCP/IP TCP Timeout	M RW	30 Seconds
MultiCast TTL	M RW	1
MultiCast UDP Checksum	M RW	FALSE
Forward Class3 to AmsP	M RW	DISABLED
Advanced Slave Options	MRW	0x0000 (0)
	RevisionSerial NumberMAC AddressIP AddressNetwork MaskGateway AddressDHCP Max RetriesTCP/IP TTLTCP/IP UDP ChecksumTCP/IP TCP TimeoutMultiCast TTLMultiCast UDP ChecksumForward Class3 to AmsPAdvanced Slave OptionsSlave Info (Box 1)	RevisionM ROSerial NumberM ROMAC AddressM ROIP AddressM RWIP AddressM RWGateway AddressM RWGateway AddressM RWDHCP Max RetriesM RWTCP/IP TTLM RWTCP/IP UDP ChecksumM RWTCP/IP TCP TimeoutM RWMultiCast TTLM RWMultiCast UDP ChecksumM RWForward Class3 to AmsPM RWAdvanced Slave OptionsM RWSlave Info (Box 1)RO

# Network Mask设定

ive Settings			
ndex	Name	Flags	Value
8000:0	Slave Settings (Box 1)	M RO	> 43 <
8000:01	Slave Number	M RO	0x0001 (1)
8000:03	Product Name	M RW	Box 1 (TC EtherNet/IP
8000:04	Device Type	M RO	0x000C (12)
8000:05	Vendor ID	M RO	0x006C (108)
8000:06	Product Code	M RO	0x1888 (6280)
8000:07	Revision	M RO	3.1
8000:08	Serial Number	M RO	0x00000000 (0)
8000:20	MAC Address	M RO	02 00 01 54 EB AD
8000:21	IP Address	M RW	192.168.1.33
8000:22	Network Mask	M RW	0.0.0.0
8000:22 CH	nange Network Mask		
	Network Mask: 255 , 25	55 . 255 .	OK Cancel
8000:29	MultiCast UDP Checksum	MRW	FALSE
-8000:2A	Forward Class3 to AmsP.	MRW	DISABLED
8000:2B	Advanced Slave Options	M RW	0x0000 (0)

Network Mask设定完成后状态

Index	Name	Flags	Value
8000:0	Slave Settings (Box 1)	M RO	> 43 <
8000:01	Slave Number	M RO	0x0001 (1)
8000:03	Product Name	M RW	Box 1 (TC EtherNet/IP
8000:04	Device Type	M RO	0x000C (12)
8000:05	Vendor ID	M RO	0x006C (108)
8000:06	Product Code	M RO	0x1888 (6280)
8000:07	Revision	M RO	3.1
8000:08	Serial Number	M RO	0x0000000 (0)
8000:20	MAC Address	M RO	02 00 01 54 EB AD
8000:21	IP Address	M RW	192.168.1.33
8000:22	Network Mask	M RW	255.255.255.0
8000:23	Gateway Address	M RW	0.0.00
8000:24	DHCP Max Retries	M RW	0
8000:25	TCP/IP TTL	M RW	128
8000:26	TCP/IP UDP Checksum	M RW	TRUE
8000:27	TCP/IP TCP Timeout	M RW	30 Seconds
8000:28	MultiCast TTL	M RW	1
8000:29	MultiCast UDP Checksum	M RW	FALSE
8000:2A	Forward Class3 to AmsP	M RW	DISABLED
8000:2B	Advanced Slave Options	MRW	0x0000 (0)
A CONTRACT OF	Claure Info (David)	00	12

7)、添加IO点通讯组 右击BOX1(TC EtherNet/IP Slave),点击Append IO Assembly。

解決方案资源管理器 🔹	џ×	TC	3_AB	Eth	erNetlP 👎	×		
000 1 1 - 0 - 1 1 -		G	Sene	ral S	S <mark>ettings</mark>			
搜索解决方案资源管理器(Ctrl+;)	P	•	cl					
┓」解决方案"TC3_AB_EtherNetIP"(1 个项目)			Sia	ave s	ettings	Name		<b>F</b> lower
TC3_AB_EtherNetIP				inde	K 100-0	Name Slave Cotti	ngs (Poy 1)	Flags
			Ê		8000.01	Slave Settin	her	MRO
PLC					8000:03	Product Na	ame	MRW
💼 SAFETY					8000:04	Device Typ	e	M RO
9 C++					8000:05	Vendor ID		M RO
ANALYTICS					8000:06	Product Co	ode	M RO
▲ 🔁 I/O					8000:07	Revision		M RO
					8000:08	Serial Num	ber	M RO
<ul> <li>Device 1 (TC3 EIP Adapter)</li> </ul>					8000:20	MAC Addr	ess	M RO
b loouts					8000:21	IP Address		M RW
Outputs					8000:22	Network N	lask	MRW
🖌 🧱 Box 1 (TC EtherNet/IP Slave)					8000:23	Gateway A	ddress	MRW
🖌 🛄 Inputs	Ap	pend I	IO As	ssem	bly			RW
🔁 State	Exp	port ED	OS Fi	le				RVV PW
Outputs	Sa	ve Box	1 (T	C Eth	nerNet/IP S	lave) As		RW
Mappings to	添	hn现右ī	<b>页(G</b> )				Shift+Alt+	A RW
	Inc	ort Evi	ctine	 1 Itor	n		Stinesynesi	RW
~	1/71		sung	Jiter			Del	RW
	1351	示(V)					Dei	RW
	复	制(Y)					Ctrl+C	D
Å	剪	切(T)					Ctrl+X	
- Diale - Contract - C	粘	贴(P)					Ctrl+V	
	Pa	ste wit	h Lin	ks				
l la	Inc	depend	dent	Proje	ect F <mark>ile</mark>			
•	Dis	sable						
	Ch	ange lo	d					
記:11-1		<b>###</b> ;	早方に	± **	хш		AL-Y I I I I I I I I I	

点击Append IO Assembly后的状态。

解决方案资源管理器 🔹 🖡	× TC3_AB_EtherNe	tiP +⊨ ×	
	General		
搜索解决力案资源管理器(Ctrl+;)			
■ 解决方案"TC3_AB_EtherNetIP"(1 个项目)	Name:	Assembly I (input/Output)	Id: 1
TC3_AB_EtherNetIP			
SYSTEM			
MOTION	Type:	IO Assembly	
PLC PLC			
SAFETY SAFETY	Comment:		^
9000 C++			
ANALYTICS			
<ul> <li>Device 1 (TC3 EIP Adapter)</li> </ul>			~
inage		Disabled	Create symbols
P outputs			stoute symbols
Box 1 (TC EtherNet/IP Slave)			
• State			
Outputs			
Assembly 1 (Input/Output)			
a Mappings			

8)、添加Inputs和Outputs

#### 添加Inputs输入



#### 点击添加新项后的状态。

Insert Variable				
General Name: Var 7 Start Address: Byte: 6	Multiple: Bit	1 🜩		OK Cancel ]Show All
Data Type	>S	ize	Name Spac	e ^
BIT	0.1			
BIT8	1			
BOOL	1			
BYTE	1			
E_AX5000_P_0275_ActiveFeedbackAndMemory	1		AX5000	
EPIcPersistentStatus	1		PLC	
SINT	1			
TclotMqttQos	1			
USINT	1			
DPV2_TIMESTAMPSTATUS	2		10	
E AX5000 P 0150 Connector	2		AX5000	~
Search Type:	Create Arra	ау Туре	Create	String Type

具体设定根据需求设定输入数量。例子中设定了8个INT类型的输入。

General		数量		ОК
Name:	Var 7	Multiple:	8 🚖	Count
Start Address:	Byte: 6	Bit	0 🗘	Cancer
				Show All
使用默认	人起始地址即可	1 L		
Data Type	2	Size Name Sp	ace	
SINT	1			
JSINT	1			
E_AX5000_P_0150_F	<sup>&gt;</sup> arameterInterface 2	AX5000		
E_AX5000_P_0150_F	ProcessInterface 2	AX5000		
NT	2.			
TMIC	2			
JINT_8_16	2			
DINT	4			
NTERELOF THE	4			
NTERFACE_TYPE	4			
JDINT	4			

设定完成后的状态。



#### 添加Outputs输出

右击Outputs,点击添加新项。



#### 点击添加新项后的状态。

Insert Variable				
General			0	K
Name: Var 15	Multiple:	1	Car	ncel
Start Address: Byte: 6 🚔	Bit:	0		
			Show	/ All
Data Tima		NCine.	News Space	•
E AVERSO D SIES MARTING		>Size	Name Space	-
E_AX5000_P_0150_McdType		2	AX5000	
E_AX5000_P_0150_Parameterinterface		2	AX5000	
E_AX5000_P_0150_ProcessInterface		2	AX5000	
E_AX5000_P_0150_SensorModeDataDescription		2	AX5000	
E_AX5000_P_2000_SafetyOption		2	AX5000	
E_AX5000_S_0032_OperationMode		2	AX5000	
E_BACnetObjType		2	BACnet	
E_BACnetPropIdentifier		2	BACnet	
ETcWatchdogAccumulationType		2		
INT		2		
RTIME STATEFLAGS		2		~
Search Type:	Create	Array Typ	create String	Туре

具体设定根据需求设定输出数量。例子中设定了8个INT类型的输出。

General	数量		ov.
Name: Var15	Multiple: 8		UK
		Ca	ancel
Start Address: Byte: 6	Bit. U		
使用野汁おが	http://www.com		WAII
Data Type	Size	Name Space	1
E_AX5000_P_0150_McdType	2	AX5000	
E_AX5000_P_0150_ParameterInterface	2	AX5000	
E_AX5000_P_0150_ProcessInterface	2	AX5000	
E_AX5000_P_0150_SensorModeDataD	escription 2	AX5000	
E_AX5000_P_2000_SafetyOption	2	AX5000	
E_AX5000_S_0032_OperationMode	2	AX5000	
E_BACnetObjType	2	BACnet	
E_BACnetPropIdentifier	2	BACnet	
ETcWatchdogAccumulationType	2		_
INT	2		
	2		~

设定完成后的状态。



9)、Reload Devices重新加载设备

将以上参数设定后,Reload Devices重新加载设备。

Build 4024.17 (Loaded 🝷 🚽 🔝 🧧	🛐 🎯 🛼 🔏 🛛 TC3_AB_EtherNetIF	-	CP-54EBAC	•	Ŧ
解決方案资源管理器	Reload Devices TC3_AB_EtherNetIP 👎 🗙				
					_

Reload Devices重新加载设备完成后的状态。

Index	Name	Flags	Value
+ 8000:0	Slave Settings (Box 1)	M RO	> 43 <
± 8001:0	IO Assembly 1 Settings	M RO	> 12 <
9000:0	Slave Info (Box 1)	RO	> 43 <
90	Slave Number	RO	0x0001 (1)
90	Product Name	RO	Box 1 (TC EtherNet/IP
90	Device Type	RO	0x000C (12)
90	Vendor ID	RO	0x006C (108)
90	Product Code	RO	0x1888 (6280)
90	Revision	RO	3.1
90	Serial Number	RO	0xADEB5401 (-13770
90	MAC Address	RO	02 00 01 54 EB AD
90	IP Address	RO	192.168.1.33
90	Network Mask	RO	255.255.255.0
90	Gateway Address	RO	0.0.0
90	DHCP Max Retries	RO	0
90	TCP/IP TTL	RO	128
90	TCP/IP UDP Checksum	RO	TRUE
90	TCP/IP TCP Timeout	RO	30 Seconds
90	MultiCast TTL	RO	1
90	MultiCast UDP Checksum	RO	FALSE
90	Forward Class3 to AmsP	RO	DISABLED
90	Advanced Slave Options	RO	0x0000 (0)

#### 9)、制作EDS文件

右击BOX1(EtherNet/IP Slave),点击Export EDS File。

I/O		90 Vendor ID	RO
Device 1 (TC3 EIP Adapter)		90 Revision	RO
image		90 Serial Number	RO
P inputs		90 MAC Address	RO
Outputs		90 IP Address	RO
✓ ■ box r (re curerney) is size;		Append IO Assembly	
🔁 State		Export EDS File	
<ul> <li>Outputs</li> <li>Assembly 1 (Input/Output)</li> </ul>	-	Save Box 1 (TC EtherNet/IP Slave) As	
<ul> <li>Inputs</li> </ul>	*0	添加现有项(G)	Shift+Alt+A
4 🖷 Outputs		Insert Existing Item	
ConnCtrl	×	移除(V)	Del
<b>F</b> Var 15	ŋ	复制(Y)	Ctrl+C
Var 17	Ж	剪切(T)	Ctrl+X
🖙 Var 18	வி	米占见占(P)	Ctrl+V
Var 19		Paste with Links	
Var 20		Independent Project File	
Var 22		Disable	
🖌 📸 Mappings		Change Id	

# 点击Export EDS File后的状态。

TcXaeSh	ell	×
?	Create detailed Electronic Device Description?	
	Click 'YES' for detailed EDS-File (only valid for current config!) Click 'NO' for generic EDS-File (valid for any config!)	
	是(Y) 否(N) 取消	

点击"否"后,选择EDS的保存路径。

🦉 另存为					×
· 1 📕	《 桌面	> TwinCAT3通过TF6280授权与AB	1769-L33E 〜 ひ	搜索"TwinCAT3〕	通过TF6280 ,P
组织▼ 新建文件	夹				
此电脑	^	名称 ^	修改日期	类型	大小
<ul> <li>&gt;&gt; 坚果云</li> <li>⇒&gt; 3D 对象</li> <li>■&gt; 视频</li> <li>■&gt; 國片</li> <li>□&gt; 文档</li> <li>➡&gt; 下载</li> <li>→&gt; 音乐</li> </ul>	ļ	TC3_AB_EtherNetlP	2021/11/13 8:48	文件夹	
桌面	~ *				
文件名(N): 保存类型(T):	Box 1 ( TwinC/	TC EtherNet_IP Slave)_20211113_10 AT Electronic Data Sheet - EDS File (	)3225.eds *.eds)		
▲ 隐藏文件夹				保存(S)	取消

#### 点击保存后的状态。

TcXaeSł	nell	×
	EDS File: Box 1 (TC EtherNet_IP Slave)_20211113_103225.eds successful created!	
	确定	

#### 10)、激活系统配置

点击Activate Configuration按钮,激活系统配置。



Restart TwinCAT System in Run Mode

74 -	DOM:
------	------

点击确定后的状态。

Build 4024.17 (Loaded 🔹 🚽 🔝 🔯 🖉 🚫 💿 闷 🍢 🌠 🛛 TC3\_AB\_EtherNetIP 🔹 CP-54EBAC 🔹

Restart TwinCAT System指示被点亮。

倍福CP2291侧的设定就全部完成了。

# 2.AB 1769-L33ERM 主站侧配置

1)、安装倍福配置完成后生成的EDS文件。



选择Tools,点击EDS Hardware Installation Tool。

点击 EDS Hardware Installation Tool 后的状态。



#### 点击 Next



选择第一项,点击 Next



选择生成的EDS文件。

Rockwell Automation's EDS Wizard 🗾	3
Registration Electronic Data Sheet file(s) will be added to your system for use in Rockwell Automation applications.	
Register a single file	
C Register a directory of EDS files 🛛 Look in subfolders	
Named:	
C:\Users\Administrator\Desktop\Box 1 (TC EtherNet_IP Slave)_2021111 Browse	
* If there is an icon file (.ico) with the same name as the file(s) you are registering then this image will be associated with the device. To perform an installation test on the file(s), click Next	
< Back Next > Cancel	

#### 点击Next

Rockwell Automation's EDS Wizard		
EDS File Installation Test Results This test evaluates each EDS file for erro guarantee EDS file validity.	rs in the EDS file. This test does not	
Installation Test Results Installation Test Results Installation Test Results Installation Test Results	x1 (to ethemet_ip slave)_20211113_103225.eds	
View file	< Back Next > Cancel	_
View file	< Back Next > Cancel	

点击Next, 到达选择图标界面

Changes in an	Product T	ypes						
			mmunica Box	tions Adap 1 (TC Eth	oter erNet/IP	Slave)	]	
	Change Id	on Ro	ckwell A	utomation	lcon Libr	ary	X	
	00	1						
	••				I	i I		
				]]	8	-		
	TODDE			, j <b>j</b>		1		

# 点击OK

Rockwell Automation	's EDS Wizard	×
Change Graphic You can chang	Image the graphic image that is associated with a device.	
	Product Types	
Change icon	Communications Adapter Box 1 (TC EtherNet/IP Slave)	
	< Back Next > Canc	cel

点击Next

Rockwell Automation's EDS Wizard		×
Final Task Summary This is a review of the task you want to co	omplete.	
You would like to register the follow Box 1 (TC EtherNet/IP Slave)	ing device.	
	< Back Next >	Cancel

#### 点击Next



点击Finish完成。

- 2)、添加EtherNetIP网络中添加从站模块。
- 右击Ethernet后,点击New Module



找到EDS文件,点击Create

Select Module Type			
Catalog Module Discovery Favorites			
BOX	Clear Filters		Show Filters 📚
Catalog Number	Description	Vendor	Category
0066_0006_1888	Box 1 (TC EtherNet/IP Slave)	Beckholf Automation GmbH	Communications Adapte
•		1	•
1 of 219 Module Types Found			Add to Favorites
Close on Create			Create Close Help

#### 点击Create

ieneral"   Connei	ction Module Info Internet Protocol Port	Configuration
Туре:	Box 1 (TC EtherNet/IP Slave)	
Vendor:	Beckhoff Automation GmbH	
Parent:	Local	
Name:	TC3AB	Ethernet Address
Description:		O Private Network: 192.168.1.
		P Address:     192 . 168 . 1 . 33
		C HastMana
		Tost Name.
		-
- Module Definiti	on	
Revision:	31	
Electronic Kev	ing: Compatible Module	
Connections:	Assembly 1: Inputs and Outputs (Evo	clusiv
	reservery r. inputs and outputs (Exc	
	Char	nga
	Criar	

取个名字,名字可以任意设定。设定IP地址,该IP地址为在倍福CP2291 Slave设定中的IP地址。

			1
Index	Name	Flags	Value
8000:0	Slave Settings (Box 1)	M RO	> 43 <
8000:01	Slave Number	M RO	0x0001 (1)
8000:03	Product Name	M RW	Box 1 (TC EtherNet/IP
8000:04	Device Type	M RO	0x000C (12)
8000:05	Vendor ID	M RO	0x006C (108)
8000:06	Product Code	M RO	0x1888 (6280)
8000:07	Revision	M RO	3.1
8000:08	Serial Number	M RO	0x00000000 (0)
8000:20	MAC Address	M RO	02 00 01 54 EB AD
8000:21	IP Address	M RW	192.168.1.33
8000:22	Network Mask	M RW	0.0.0.0
8000:23	Gateway Address	M RW	0.0.00
8000:24	DHCP Max Retries	M RW	0
8000:25	TCP/IP TTL	M RW	128
8000:26	TCP/IP UDP Checksum	M RW	TRUE
8000:27	TCP/IP TCP Timeout	M RW	30 Seconds
8000:28	MultiCast TTL	M RW	1
8000:29	MultiCast UDP Checksum	M RW	FALSE
8000:2A	Forward Class3 to AmsP	M RW	DISABLED
8000:2B	Advanced Slave Options	M RW	0x0000 (0)

设定完成后的状态。







点击Go Online

Options         General         Date/Time         Major Faults         Minor Faults         File         Nonvolatile Memory           Condition:         The open project doesn't match the project in the controller.         .         .         .           Connected Controller:         Controller Name:         AFWK         .         .         .           Controller Type:         1769-L33ERM/A CompactLogix5333ERM Controller         .         .         .           Comm Path:         AB_ETHIP-1\192.168.1.10         .         .         .         .           Serial Number:         6048461B         .         .         .         .           Security:         No Protection         .         .         .         .           Offline Project:         .         .         .         .         .         .           Controller Name:         TC3_AB_EtherNetIP         .         .         .         .         .           Controller Type:         1769-L33ERM CompactLogix5333ERM Controller         .         .         .         .         .           Controller Type:         1769-L33ERM CompactLogix5333ERM Controller         .         .         .         .         .         .         .         .         .	Connecte	d To Go O	nline							×
Condition: The open project doesn't match the project in the controller. Connected Controller: Controller Name: AFWK Controller Type: 1763-L33ERM/A CompactLogix5333ERM Controller Comm Path: AB_ETHIP:1\192.168.1.10 Serial Number: 6048461B Security: No Protection Offline Project: Controller Name: TC3_AB_EtherNetIP Controller Name: TC3_AB_EtherNetIP Controller Type: 1763-L33ERM CompactLogix5333ERM Controller File:ministrator\Desktop\ABPR0GRAM\TC3_AB_EtherNetIP.ACD Serial Number: <none> Security: No Protection</none>	Options	General	Date/Time	Major Faults	Minor Faults	File	Nonv	volatile Memory		
Connected Controller: Controller Name: AFWK Controller Type: 1769-L33ERM/A CompactLogix5333ERM Controller Comm Path: AB_ETHIP-1\192.168.1.10 Serial Number: 6048461B Security: No Protection Offline Project: Controller Name: TC3_AB_EtherNetIP Controller Type: 1769-L33ERM CompactLogix5333ERM Controller File:ministrator\Desktop\ABPR0GRAM\TC3_AB_EtherNetIP.ACD Serial Number: <none> Security: No Protection</none>	Conditi	on: The op	ien project d	loesn't match th	e project in the	e control	ler.			
	Conner	cted Control Control Comm I Serial N Securit Project: Control Control File: Serial N Securit	ler: ler Name: / Path: / Number: / y: / ler Name: / ler Type: / Number: / y: /	AFWK 1769-L33ERM/ AB_ETHIP-1\11 5048461B No Protection TC3_AB_Ether 1769-L33ERM ( ministrator\De (none> No Protection	A CompactLog 32.168.1.10 NetIP CompactLogixt Sktop\ABPRO	ix5333E 5333ERI GRAM\	RM Co M Contr TC3_AI	ntroller oller 3_EtherNetIP:AC	œ	
						Daum		Colord File	Caucil	

## 点击Download

Intions Gener	Download			
	A. D	ownload offline proj	ect 'TC3_AB_EtherNetIP' to the controller.	
Condition: The Connected Co Co Co Se Se Offline Project: Co File Se Se		ownload offline proj onnected Controller Name: Type: Path: Security: The controller is ir Remote Program DANGER: All act DANGER: This co synchronized con turned off.	ect 'TC3_AB_EtherNetIP' to the controller. AFWK 1769-L33ERM/A CompactLogix5333ERM Controller AB_ETHIP-1\192.168.1.10 6048461B No Protection In Remote Run mode. The mode will be changed to prior to download. ive motion axes will be turned off prior to download. potroller is the system time master. Servo axes in trollers, in this chassis or other chassis, may be	
		DANGER: Unexp Some devices ma not loaded to the Verify these devic have been proper Failure to load pro unexpected equip	ected hazardous motion of machinery may occur. intain independent configuration settings that are device during the download of the controller. tes (drives, network devices, 3rd party products) (y loaded before placing the controller into run mode. per configuration could result in misaligned data and iment operation. Cancel Help	

点击Download



点击YES,将PLC状态转变为Run状态。

-								
неп	Run De Cantraller OK							
No F								
No E								
	Controller Organizer							
4	Controller TC3 AB EtherNetID							
art	Controller Tags							
Pag	Controller Fault Handler							
	Power-In Handler							
	- MainTask							
	🛱 🕞 MainProgram							
	Unscheduled Programs / Phases							
	Ungrouped Axes							
	🖕 📇 Data Types							
	🖶 🙀 Strings							
	🦛 Add-On-Defined							
	🖶 🔙 Predefined							
	🚠 🔙 Module-Defined							
	Trends							
	in the second se							
	I [0] 1/69-L33ERM TC3_AB_EtherNetIP							
	日一古古 Ethernet 同 1760 LODERNATCO AD EtherNietTD							
	California Definical Terre							
	TC3AB:O							
	Description							
	Status Running							
	Module Fault							
L								

如果上面的Status中为Running状态,这说明倍福与AB已经通过EthernetIP通讯成功。

在控制器标签中可以看到添加的变量。

Controller 管理器 🗸 中 🗙		范围(P): DTC3_AB_EtherN - 显示(0): 所有 Tag			▼ 〒, 蜀人名称过滤器	
Ę	一 控制器 TC3_AB_EtherNetIP	名称 二副 4	别名	基本 Tag	Data Type	说明
Li	→ 控制器标签	- TC3AB:I			_006C:000C_1888_03FEBAA8:1:0	
	一 控制器改模处理器	TC3AB:1.ConnectionFaulted			BOOL	
H	── 加电处理器	🛨 TC3AB:I.Data			SINT[20]	
ġ		TC3AB:0			_006C:000C_1888_22652431:0:0	
	🖶 🔁 MainTask	+ TC3AB:0.Data			SINT[20]	
	🗄 🕞 MainProgram	<u>&gt;</u>				-
H						
d	- 🔄 运动组					
	── → 未归美轴					
	- Add-on 自定义指令					
d	🕒 数据类型					
	- 偏 用户定义					
	● □ 字符串					
	- Add-On-Defined					