AD\ANTECH Enabling an Intelligent Planet

Advantech AE Technical Share Document

Date	2015/10/23	SR#	1-2277466558
Category	□FAQ ■SOP	Related OS	N/A
Abstract	ADAM-6100-EI, How to c	onfigure ADAM-6	100EI module in CX-One
Keyword	ADAM, PLC, RemoteIO, E	thernet I/P, CX-Or	ne, EDS, Configuration
Related	ADAM-6117EI, ADAM-61	24EI, ADAM-6150)EI, ADAM-6151EI, ADAM-6156EI,
Product	ADAM-6160EI		

Problem Description:

In this document, we will demonstrate how to connect ADAM-6100EI module to OMRON PLC by CX-One

Brief Solution - Step by Step:

Configure ADAM-6100EI by AdamApax.NET Utility

1. Turn the ADAM-6100 EI to Initial Mode



2. Use AdamApax.NET Utility to configure the IP of ADAM-6100-EI→ turn to Normal Mode→Replug the power





Network Configurator to Setup Network

1. Execute the Network Configurator from start menu



2. Click EDS file \rightarrow Click Install to install the EDS file and icon



AD\ANTECH Enabling an Intelligent Planet

3. Click **Network**→Click **Connect**, and then Omron PLC and ADAM-6150EI are found in the Netowrk→Click **OK**→select the existing Network EtherNet/IP_1

Untitled - Network Configurator		and the second s	
ile Edit View Network Device EDS File Tools	Option Help		
	% @ @ × E	11	
] 🗳 🖄 🖬 🛳	8	
D Natural Confirmation	EtherNet/IP_1		
		Select Connect Network Port	×
Vendor Advantech Corporation		Select a network part that you would like to connect	
Generic Device		Browse	
Advantech - ADAM-6117E1	0		
Generation Generation Generation			
Communications Adapter			
		Durán Information	
		Vendor ID : Product Name :	
	Usage of Device Bandwi	Device Type : Revision :	
	Detail	Refresh	Option
	1.2		
Message Code Date Description	m	OK Cancel	
Select Connected Network	×		
Please select a network where the connected networ	k was supported.		
Target Network			
Create new network.			
Use the existing network.			
EtherNet/IP 1	-		
TREMONT_1	•		
	7		
OK Cancel			
		=0	

AD\ANTECH

4. Click **Network→Upload→**Select Target Devices→Click **OK**

Target Device	×
Address V 192.168.0.2 V 192.168.0.48	
Add Edit	Delete Off-line Device
OK	Cancel

5. OMRON PLC and ADAM-6100El are shown on the Network



AD\ANTECH

Enabling an Intelligent Planet

6. Double click the OMRON PLC item to configure the device \rightarrow select the ADAM-6100EI

device→click	ı		
Option Help	Edit Device Parameters : 192.168.0 Connections Tag Sets Unregister Device List Pr 100.0.72 Ur 192.168.0.48 AI	.2 CJ2M-EIP21 oduct Name known Device DAM-6150EI	
Usage of Device Bandwidth Detail	Connections: 0/32 (O:0, T:0) Register Device List Product Name	192.168.0.2 CJ2M-EIP21 Variable	Target Variable

7. Select device→click **New**

onnections Tag Sets	
Unregister Device List	
1	Product Name
10.0.0.72	Unknown Device
Connections : 0/32 (O Register Device List	:0, T : 0)
Product Name	102 169 0 2 CI2M-FIP21 Variable Target Variable
192.168.0.48 (#04	8) ADAM-51
192.168.0.48 (#04)	8) ADAM-61
192.168.0.48 (#04)	B) ADAM-61

ADVANTECH Enabling an Intelligent Planet

 Configure the variable of the PLC inputs for ADAM-6100El Address 5000, Size: 2 Byte for Dl Address 5100, Size: 2 Byte for DO





AD\ANTECH

Enabling an Intelligent Planet

9. Click Network→ Download



10. Network setup is completed



CX-programmer to Test the Configuration

1. Open CX-programmer \rightarrow click **New** button \rightarrow click **setting** to choose the CPU type of PLC

■CX-Programmer File Edit View Insert PLC Program Simulation Tools V □ C C Q Q A A A A A A A A A A A A A A A A	Mindow Help 認為 ① ? ? 』』 ▲ 読 * 3 5 5 1 1 1 2 2 リママ I	2 2
Change PLC 3 Device Name NewPLC1 Device Type CJ2M Settings EtherNet/IP EtherNet/IP Settings Show all Comment OK Cancel Help	Device Type Settings [CJ2M] General CPU Type CPU31 Total Program Area Size 5K [Step] Read Only Expension Memory 32K W [1 Bonks] File Memory None Read Only Timer / Clock Image Installed Make Default	

2. Click View→Windows→Click Watch to open the Watch Window

File Edit View Insert PLC Program Simulation Tools	Window Help
Symbols Symbols Symbols Diagram Alt+D Mnemonics Alt+M Source Source Memory View	2011 ① ? N ▲ 2 ▲ ● ● ● ● ● ● ● ● ●
To Lower Layer Shift+F To Upper Layer Shift+F	n1.Section1 [Diagram] NevProgram1]
Check usage including unused Show Rung Annotation Lists Alt+A Show Symbol Comments Alt+Y Show Program/Section Comments Alt+O Show in BungWrap Multi-Interlock Map	ection[]
Monitoring Data Type Toolbars Windows Status Bar Function Key Guidance Information Window Ctrl+Shift+F	Workspace Alt+1 Output Alt+2 Watch Alt+3 Alt+3 Alt+4

ADVANTECH

Enabling an Intelligent Planet

3. Right click on watch window \rightarrow click **Edit**

NewPLC1.NewProgram1.Section1 [Diagram]	
0 [Program Name : NewProgram1] [Section Name : Section1]	Set <u>V</u> alue Set Value (<u>B</u> inary)
	Edit Register F <u>B</u> variables ☆ Cut © Copy © Paste Delete Insert row Force Set ↓ Differential Monitor
Name:	Watch Sheet
🛱 Watch Window	View
PLC N Name Address Data T FB Usa Value	 ✓ Allow Docking Hide ✓ Float In Main Window

4. Enter 5000 (PLC address of the inputs) in the Name or address column Enter 5100 (PLC address of the outputs) in the Name or address column The variables are listed in Watch Window

Edit dialog		×
PLC:	NewPLC1	v
Name or address:	5000	Browse
Data Type / Format:	CHANNEL (Hex,Channel)	•
		OK Cancel
	-	
Name:		Address or Value:
🛤 Watch Window		
PLC N Name A	ddress Data T FB Usa V	/alue Value(Comm

PLC N	Name	Address	Data T	FB Usa	Value	Value(Comm
NewPLC1		5000	CHAN				
NewPLC1		5100	CHAN				

Enabling an Intelligent Planet

5. Click **PLC**→ Work online

AD\ANTECH

<u>F</u> ile	<u>E</u> dit	<u>V</u> iew	Insert	(PL <u>C</u>)	<u>P</u> rogram	Simulation	<u>T</u> ools	<u>W</u> indow
	🖻 🖬	1 🗗		<u>&</u> <u>w</u>	<u>/</u> ork Online		C	trl+W
	or o		<u>ි</u> සු ල	A	uto O <u>n</u> line			►
	<i>2</i> 0			0	perating M	ode		F
		ਸ ਸ਼ਾਮ ਮ	J (197					

6. Bit values will display status of ADAM-6100EI series in watch window

.C N	Name	Address	Data T	FB Usa	Value	Value(Binary)	Comm
ewPLC1		5000	CHAN		0004 Hex	0000 0000 0000 0100	
ewPLC1		5100	CHAN		0001 Hex	0000 0000 0000 0001	
			~				
			1				
			1				
			1	P			
				P			