

Product:

ADAM-5510KW/TCP, ADAM-5510EKW/TP

Abstract:

How to use MODBUS TCP slave function in ADAM-5510KW/TP (ADAM-5510EKW/TP) through Multiprog KW

Description:

This document will guide you how to use MODBUS TCP slave function in ADAM-5510KW/TP (ADAM-5510EKW/TP) through Multiprog KW.

Solution:

In order to let the customers more clear about using MODBUS TCP in Multiprog KW, here will be the steps and description below.

1. Open a new ADAM-5510 project and go to IO configuration

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Y Variable Value Default value Add Properties Delete Description	

2. Select output, add a new I/O group and select "Advantech ADAM-5510 MODBUS TCP Output".

Add I/O Grou	D			X
<u>N</u> ame:	MODTCP1		I	OK
<u>T</u> ask:	<default></default>	-]	Cancel
Logical addre Start address:	esses	%OB 8		Description
– <u>L</u> ength:		8		
End address:		%QB 15		
−Data configu <u> R</u> etain	ration —			
-Refresh		Device	1	
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🔵 man <u>u</u> al		<u>M</u> emory		
Board / IO Mod	lule:			
Advantech AD	AM5510 MOI	DBUS TCP Output 🔽	1	Driver <u>P</u> arameter
Advantech AD Hilscher CIF IN TERBUS G SST_DRL User defined C	AM5510KW AM5510KW 4 Jutput	Modbus slave Out		
<u>C</u> omment:				

3. Click "Driver Parameter" button and select read or write function.

🖳 Advantech Mod	bus-TC	P (Ver 1.010.0	01)	×
ADAM5510/KWT	P Modbu	s-top olient setup –		
- Modbus Read/V	Vrite 1s Read	C Modbus	Write	<u>A</u> dd
IP 10.0.0.1	Node 1	Start Address	I/O Points	
IP Address	Node	Start Addr	Points	<u>Vebrace</u>
		TIT		
		Cancel	Description	

4. Add the MODBUS device configuration

🕎 Advanisch Mod	bus-IC	P (Ver 1.010.0)	01)		X
ADAM5510/KWTH	Modbus	≻tcp client setup –			
- Modbus Read/V Modbu	Vrite —— s Read	Modbus	Write	(Ádd	
IP	Node	Start Address	I/O Points	Insert	
10.0.0.5	1	4X 🕶 1	2	<u>De</u> lete	
IP Address	Node	Start Addr	Points	<u>R</u> eplace	
10.0.0.1 10.0.0.2	1	0:1(RD) 0:1(RD) 0:1(RD)	8		
10.0.0.4 10.0.0.5	1	0:1(RD) 4:1(RD)	8		
<		IIII	>		
OK		Cancel	Description	n	

- 5. The length of each I/O Group is fixed to 64 bits (ex: %IB0~%IB7) so the assigned addresses of these IP addresses will be
 - -10.0.0.1: %IB0 (8bits)
 - -10.0.0.2: %IB1 (8bits)
 - -10.0.0.3: %IB2 (8bits)
 - -10.0.0.4: %IB3 (8bits)
 - -10.0.0.5: %IB4~%IB7 (32bits)
- 6. Since IP address 10.0.0.1 to IP address 10.0.0.5 have occupied 64 bits, if you assign 10.0.0.6 as below configuration, you need to add another I/O group to map to IP address 10.0.0.6, MODBUS address 4X0001 to 4X0002. For example, you can add "MODTCP2" and %IB8 to %IB11 will be assigned to IP address 10.0.0.6, MODBUS address 4X0001 to 4X0002.

🖳 Advantsch Modi	ous-TC	P (Ver 1.010.00)1)		×
ADAM5510/KWTP	Modbu	s-top olient setup –			
Modbus Read/W	rite —			Add	
Modbus	Read	Modbus	Write	Insert	
IP	Node	Start Address	I/O Points	<u>Insert</u>	
10.0.0.6	1	4X 🕶 1	2	Delete	
IP úddress	Node	Start ûddr	Pointe	<u>R</u> eplace	
10.0.0.1	1	0:1(RD)	8		
10.0.0.2 10.0.0.3	1 1	0:1(RD) 0:1(RD)	8		
10.0.0.4	1	0:1(RD) 4:1(RD)	8		
10.0.0.6	1	4:1 (RD)	2		
<u> </u>	-				
OK		Cancel	Description	ı	
Comment:					_

I/O Configuratio	<u>n</u>				×	
INPUT OUTPUT	INPUT OUTPUT VARCONF 10.0.0.1~10.0.0.5					
I/O Group	Board / I/O Module	Range	Task	Comment		
MODTCP1	Advantech ADAM551 Advantech ADAM551	%QB0 %QB7 %QB8 %QB15	Task Task			
		10.0	0.6			
		10.0				
	107					
Add Properties Delete Description						
		確定	取消	套用(A)	說明	

- For the rest of addresses (%IB12~%IB15), it will be occupied for MODBUS TCP use only.
- 8. If you don't want to assign many I/O Groups, you also could modify the length of local addresses.

Add I/O Group		
Name: MODTCP1		OK
<u>T</u> ask: Task	•	Cancel
Logical addresses <u>S</u> tart address: Length:	%QB 0	D <u>e</u> scription
End address:	%QB 14	
Data configuration		
Refresh © by tas <u>k</u> © man <u>u</u> al	Device © Drįver © <u>M</u> emory	
Board / I <u>O</u> Module:		
Advantech ADAM5510 MC Advantech ADAM5510K W Advantech ADAM5510K W Hilscher CIF INTERBUS G4 SST_DRL User defined Output	DBUS TCP Output	Driver <u>P</u> arameter
<u>C</u> omment:		