

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

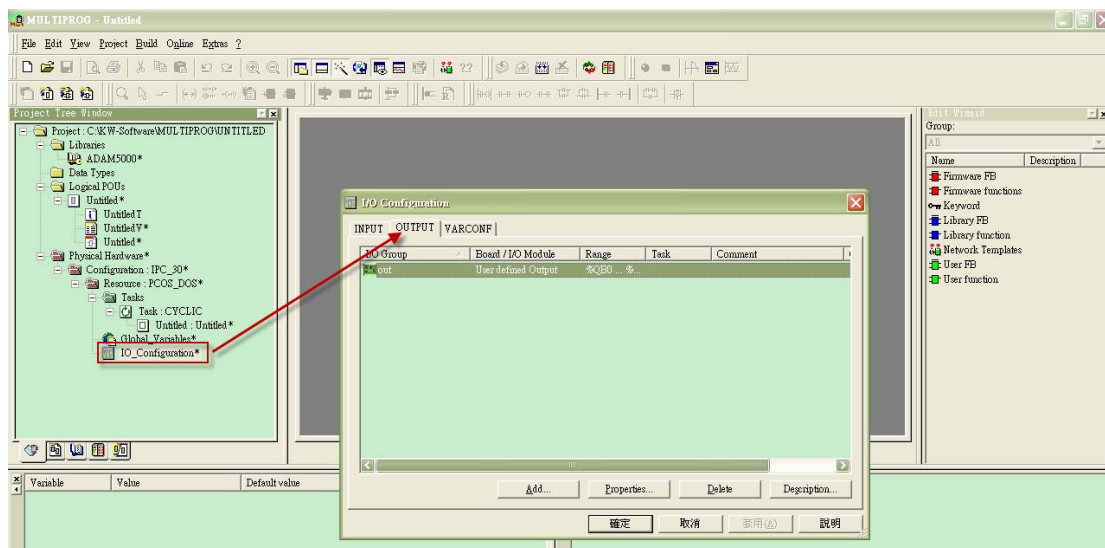
Description:

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



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

Add I/O Group

Name:

Task:

Logical addresses

Start address: %QB

Length:

End address: %QB 15

Data configuration

☐ Retain

Refresh

☒ by task ☐ manual

Device

☒ Driver ☐ Memory

Board / IO Module:

Advantech ADAM5510 MODBUS TCP Output

Advantech ADAM5510KW

Advantech ADAM5510KW Modbus slave Out

Hilscher CIF

INTERBUS G4

SST_DRL

User defined Output

Driver Parameter...

Comment:

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

Advantech Modbus-TCP (Ver 1.010.001)

ADAM5510/KWTP Modbus-tcp client setup

Modbus Read/Write

☒ Modbus Read ☐ Modbus Write

Add

Insert

Delete

Replace

| IP | Node | Start Address | I/O Points |
|----------|------|---------------|------------|
| 10.0.0.1 | 1 | 0X | 1 |

| IP Address | Node | Start Addr | Points |
|------------|------|------------|--------|
|------------|------|------------|--------|

OK Cancel Description...

- Add the MODBUS device configuration

Advantech Modbus-TCP (Ver 1.010.001)

ADAM5510/KWTP Modbus-tcp client setup

Modbus Read/Write
☒ Modbus Read ☐ Modbus Write

Add

Insert

Delete

Replace

IP Node Start Address I/O Points

10.0.0.5 1 4X 1 2

| IP Address | Node | Start Addr | Points |
|------------|------|------------|--------|
| 10.0.0.1 | 1 | 0:1(RD) | 8 |
| 10.0.0.2 | 1 | 0:1(RD) | 8 |
| 10.0.0.3 | 1 | 0:1(RD) | 8 |
| 10.0.0.4 | 1 | 0:1(RD) | 8 |
| 10.0.0.5 | 1 | 4:1(RD) | 2 |

OK Cancel Description...

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.

Advantech Modbus-TCP (Ver 1.010.001)

ADAM5510/KWTP Modbus-tcp client setup

Modbus Read/Write
☒ Modbus Read ☐ Modbus Write

IP: 10.0.0.6 Node: 1 Start Address: 4X 1 I/O Points: 2

Buttons: Add, Insert, Delete, Replace

| IP Address | Node | Start Addr | Points |
|------------|------|------------|--------|
| 10.0.0.1 | 1 | 0:1(RD) | 8 |
| 10.0.0.2 | 1 | 0:1(RD) | 8 |
| 10.0.0.3 | 1 | 0:1(RD) | 8 |
| 10.0.0.4 | 1 | 0:1(RD) | 8 |
| 10.0.0.5 | 1 | 4:1(RD) | 2 |
| 10.0.0.6 | 1 | 4:1(RD) | 2 |

Buttons: OK, Cancel, Description...

Comment:

I/O Configuration

INPUT OUTPUT VARCONF | 10.0.0.1~10.0.0.5


| I/O Group | Board / I/O Module | Range | Task | Comment |
|-----------|----------------------|----------------|------|---------|
| MODTCP1 | Advantech ADAM551... | %QB0 ... %QB7 | Task | |
| MODTCP2 | Advantech ADAM551... | %QB8 ... %QB15 | Task | |

10.0.0.6

Buttons: Add..., Properties..., Delete, Description...

Buttons: 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.
- 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:

Task:

Logical addresses

Start address: %QB

Length:

End address: %QB 14

Data configuration

☐ Retain

Refresh

☒ by task

☐ manual

Device

☒ Driver

☐ Memory

Board / I/O Module:

Advantech ADAM5510 MODBUS TCP Output
Advantech ADAM5510KW
Advantech ADAM5510KW Modbus slave Out
Hilscher CIF
INTERBUS G4
SST_DRL
User defined Outout

Comment: