I-7540D-MTCP FAQ

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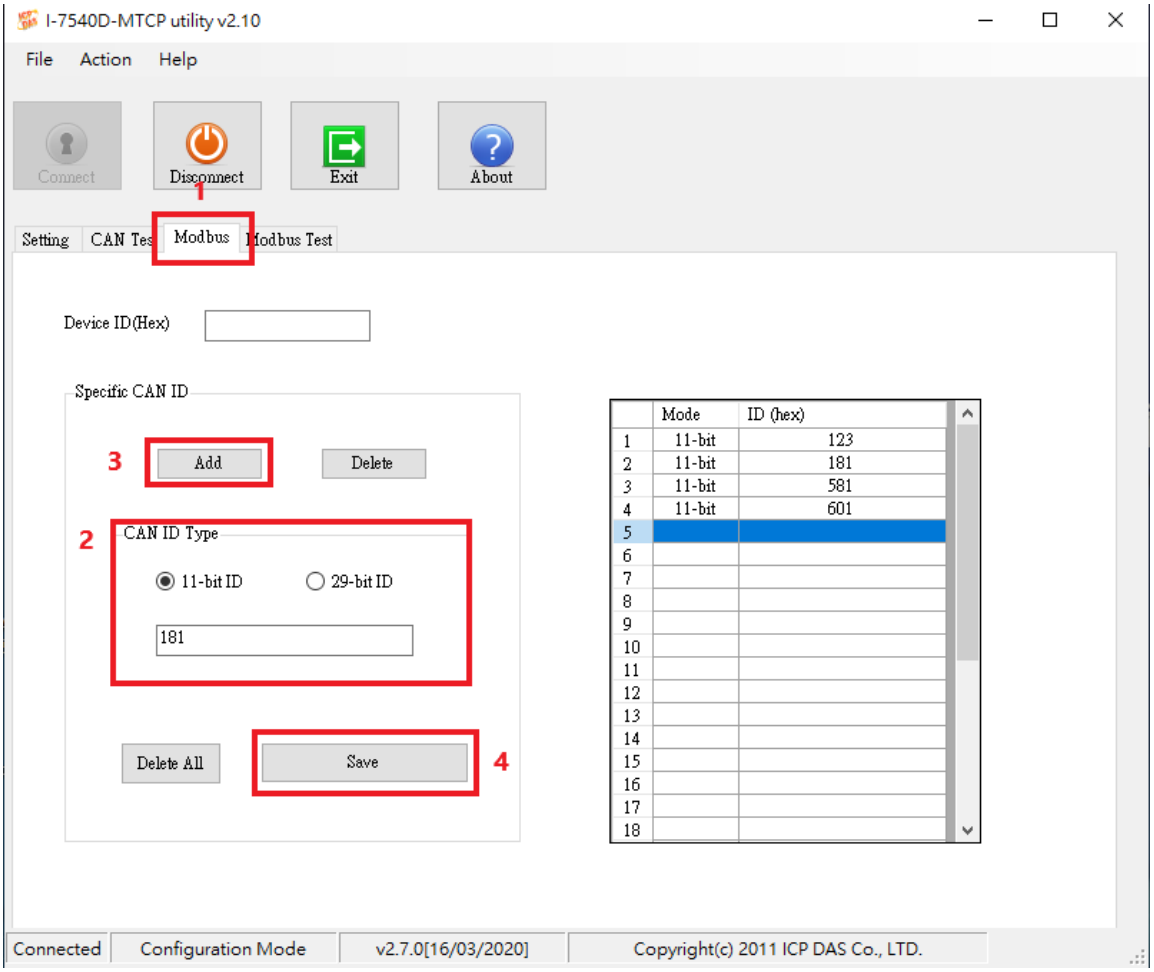
Q1、How do I get CAN message from Normal CAN field of I-7540D-MTCP through Modbus TCP? (2020/12/02,Evan)

A：First, connect to port 502 of I-7540D-MTCP. Then use function code 0x04 to read 7 or 9 words of the input register with address 0. If there are CAN messages in the buffer of Normal CAN field, I-7540D-MTCP will return the message. Or it will return error code. (2020/12/02,Evan)

Q2、How do I get CAN message from Specific CAN field of I-7540D-MTCP through Modbus TCP? (2020/12/02,Evan)

A：

1. First, configure those CAN ID which you want to get in the Modbus page of the utility. Run utility and turn to Modbus page. Then input CAN ID to the text box and press the ‘Add’ button to add the ID to the right list. Finally, press ‘Save’ button to save the CAN ID of the list to I-7540D-MTCP.



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2. Connect to port 502 of I-7540D-MTCP. Then use function code 0x04 to read 7 or 9 words of the input register with the address in the following table. I-7540D-MTCP will return the latest message with the CAN ID which is configured by utility.

Modbus address	Words	Description
0x0E10 ~ 0x0E21	18	Specific CAN message #01
0x0E22 ~ 0x0E33	18	Specific CAN message #02
0x0E34 ~ 0x0E45	18	Specific CAN message #03
…	…	…
0x101A ~ 0x102C	18	Specific CAN message #30

Acceptance Code and Acceptance Mask are the functions of CAN hardware filter of I-7540D. Users can use these two parameters to filter those unnecessary CAN messages. By setting Acceptance Code, users can set the CAN ID they wan to get. Setting Acceptance Mask can filter the unnecessary CAN ID. Please refer to the section 3.1.3 of the I-7540D user manual for more information.
(2020/12/02,Evan)

Q3、How to mapping the Modbus data to CAN? (2022/11/29,Alina)

A:
About mapping Modbus data, please refer to the table below

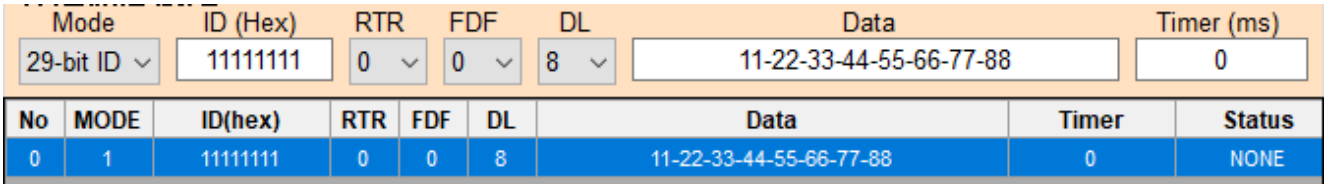
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The format of each received CAN Message is described below:

Word number	Description
1	Bit 15: 0➔valid data, 1➔invalid data Bit 6~14: Reserved Bit 5: CAN Specification, 0➔2.0A, 1➔2.0B Bit 4: RTR, 0➔No, 1➔Yes Bit 0~3: Data length, value=0~8
2	Most significant two bytes of CAN identifier. (Big-endian)
3	Least significant two bytes of CAN identifier. (Big-endian)
4	The data 1 and data 2 of CAN data field.
5	The data 3 and data 4 of CAN data field.
6	The data 5 and data 6 of CAN data field.
7	The data 7 and data 8 of CAN data field.
8	Most significant two bytes of the RX timestamp message. (Big-endian)
9	Least significant two bytes of the RX timestamp message. (Big-endian)

For example:

Send CAN message as below:



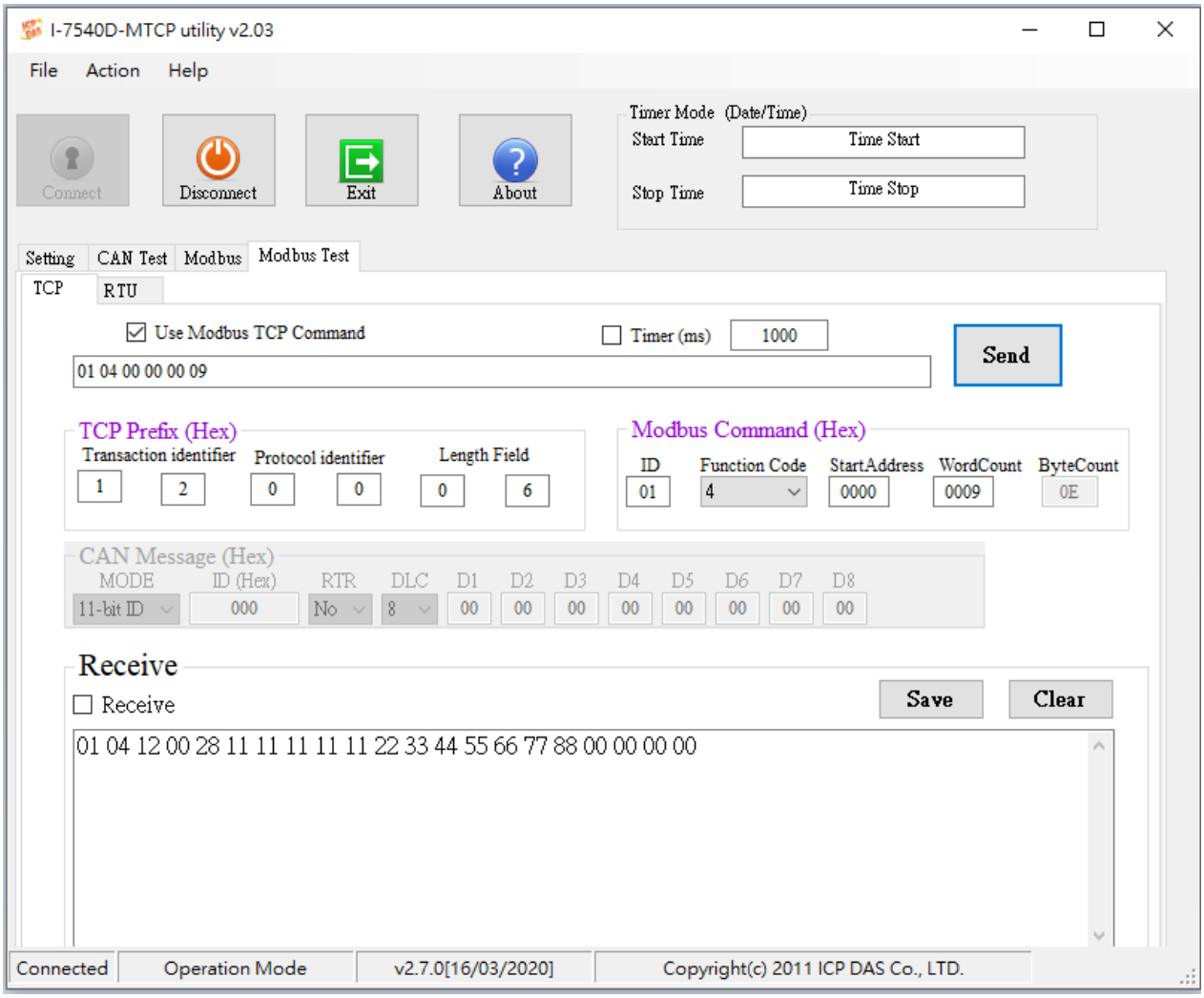
CAN Specification 2.0B RTR: 0 DataLength: 8

ID : 0x11111111

Data: 11-22-33-44-55-66-77-88

You will receive as below(Hex):

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01 : Modbus ID 04:Modbus Function 12:Modbus data length(byte)

00 28 : Word1 of table (bit0~3 is 8 = CAN data length ; bit5 is 1 = CAN specification 2.0B)

11 11 11 11 :Word2 & Word3 of table(CAN ID)

11 22: Word4 of table (CAN data1 & data2)

33 44: Word5 of table (CAN data3 & data4)

55 66: Word6 of table (CAN data5 & data6)

77 88: Word7 of table (CAN data7 & data8)

00 00 00 00: Word8 & Word9 of table(Time stamp)

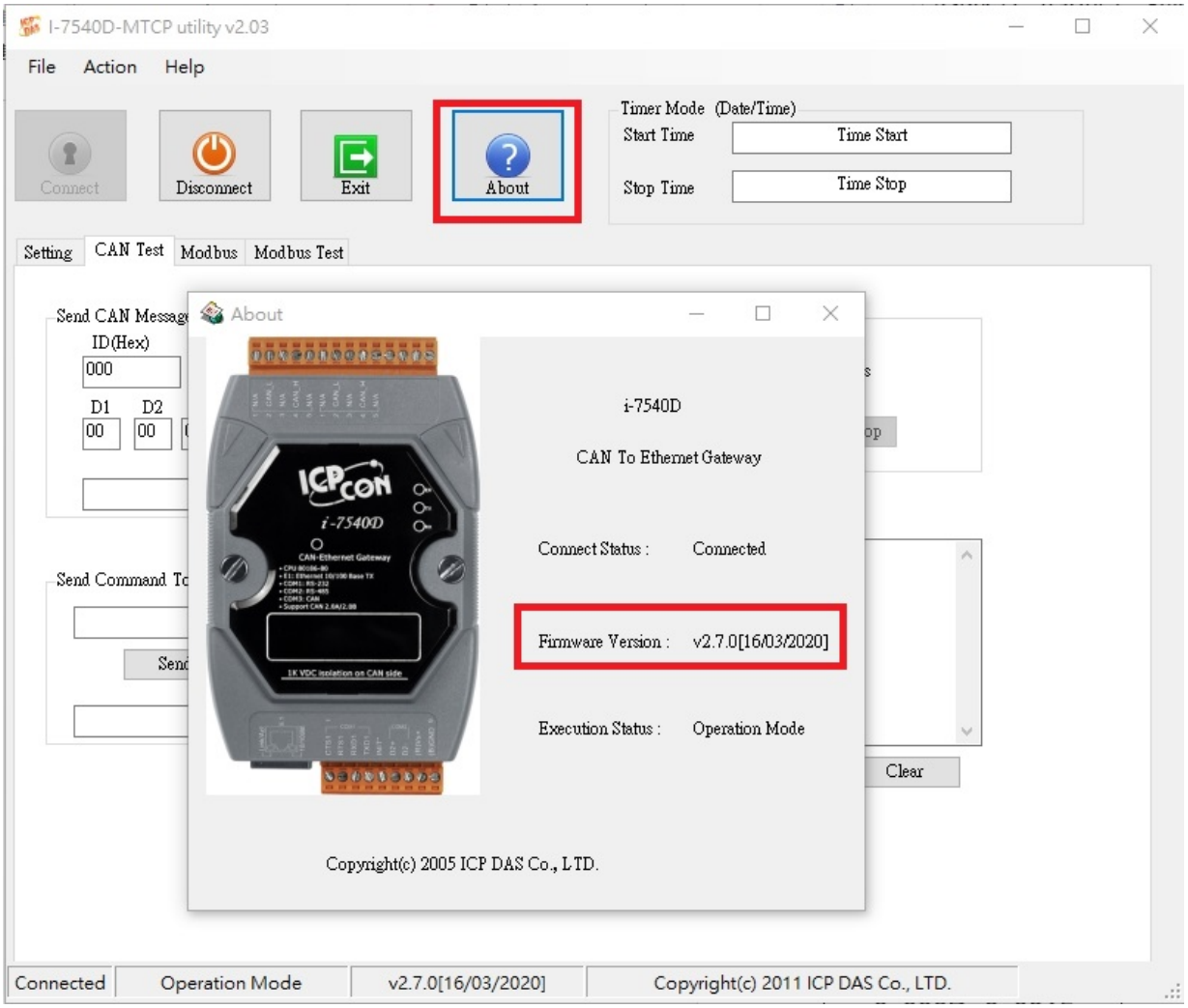
(2022/11/29, Alina)

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Q4、What is the Modbus address for reading specific CAN messages? (2022/11/29,Alina)

A:

Please confirm the firmware version through Utility



Before Firmware Version V2.7:

Modbus Address	Word Count	Description
0x0E10~0x0F21	9	Specific RX CAN Message #01
…	…	…
0x0FFF~0x1010	9	Specific RX CAN Message #29
0x101A~0x102B	9	Specific RX CAN Message #30

After Firmware Version V2.7:

Modbus Address	Word Count	Description
0x0708~0x0710	9	Specific RX CAN Message #01

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…	…	…
0x0804~0x080C	9	Specific RX CAN Message #29
0x080D~0x0815	9	Specific RX CAN Message #30

(2022/11/29, Alina)

Q5、What to do when the I-7540D-MTCP keeps showing 6ff01 and the error led is on? (2022/11/29,Alina)

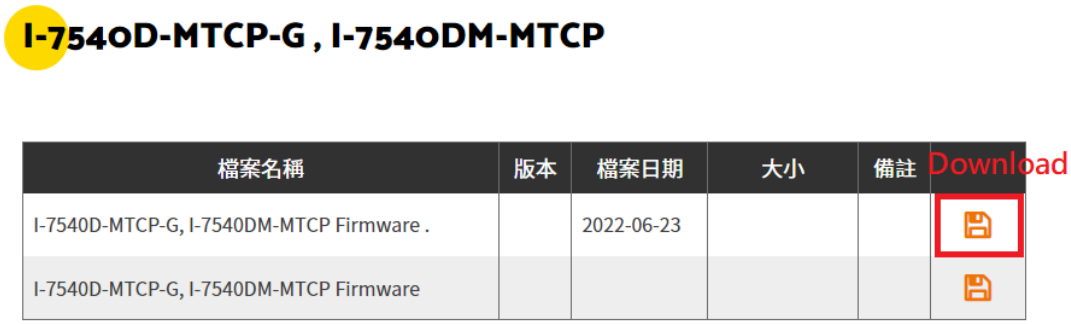
A:

If the display “keeps showing 6FF01”, it means the I-7540D has not entered the firmware Here are a few methods that may solve the problem.

(1)update firmware

The update steps are as follows

1. Download the firmware from the I-7540D website

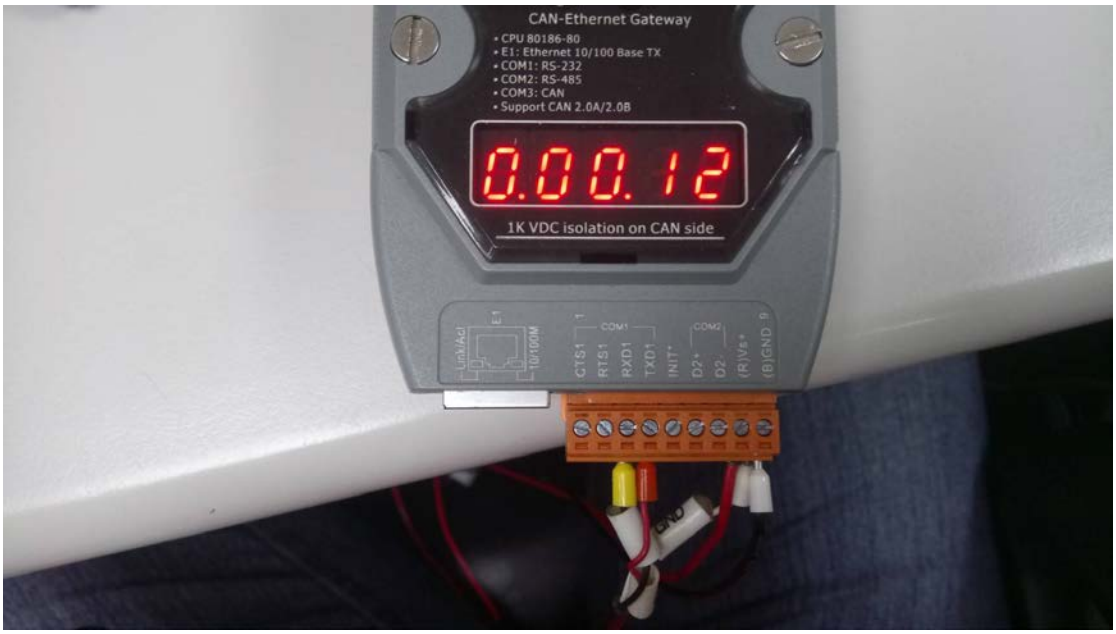


2. Turn the switch on the back of I-7540D-MTCP to “Init” amd power on I-7540D-MTCP.

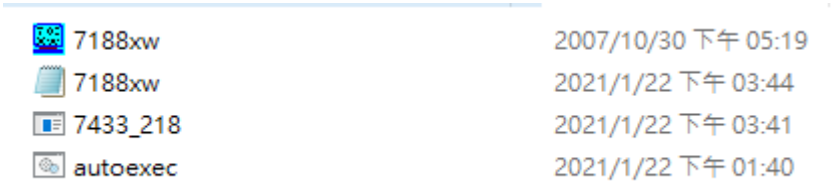


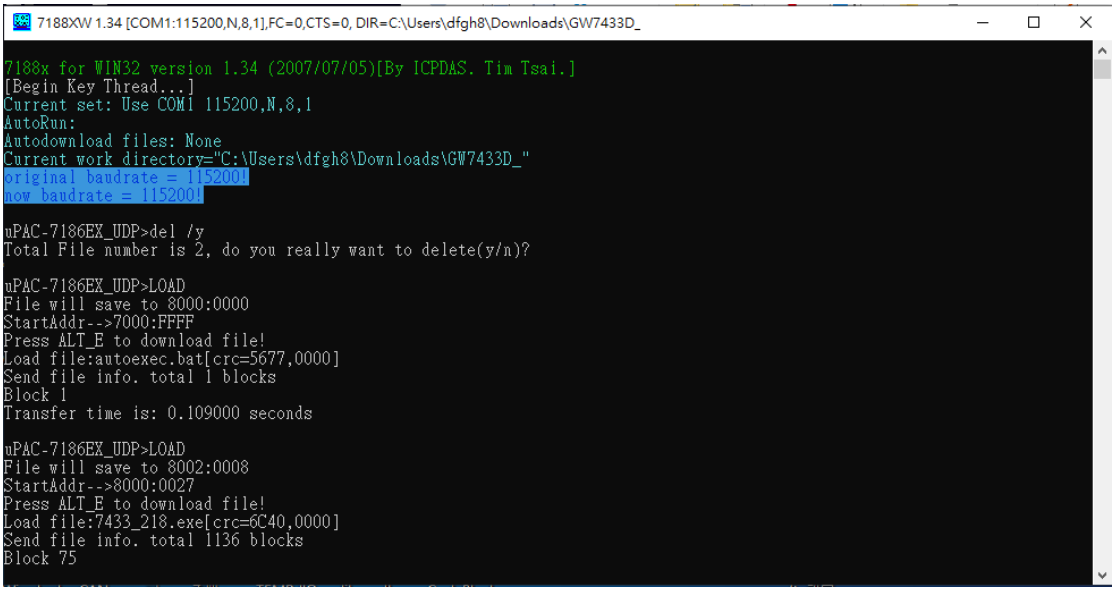
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3. Connect COM1 of I-7540D-MTCP to COM1 of PC.



4. Open 7188xw.exe and press “F4”. It will upload firmware to I-7540D-MTCP.





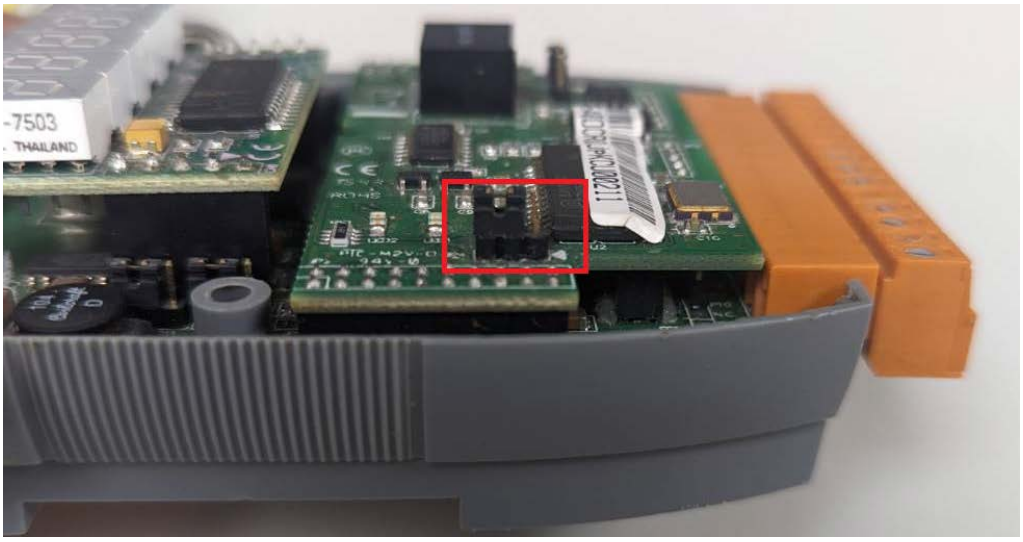
5. After uploading firmware, turn the switch on the back of I-7540D-MTCP to “Normal” and reboot.

(2) Confirm hardware contact

Open the casing of the I7540D

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1. Confirm the jumper connection is as follows



2. Confirm that the following two external modules are not in poor contact, It is recommended to re-plug.



If the above does not solve your problem, you could send us for repairing
(2022/11/29, Alina)

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