I-7188XBD-CAN/uPAC-7186EXD-CAN FAQ

Q1、Doesn't I-7188XBD-CAN have two CAN ports ? Why the web information says that there is only one CAN port on the I-7188XBD-CAN? (2011/1/5,Bear)

A：The second CAN port on the I-7188XBD-CAN is the bypass of the first CAN port. It is designed for the convenience of connecting I-7188XBD-CAN with other CAN devices. So the I-7188XBD-CAN has only one CAN port.
(2011/1/5,Bear)

Q2、May I have my application program in the I-7188XBD-CAN? If yes, how to download my program into I-7188XBD-CAN? (2011/1/5,Bear)

A：Yes, but only by C/C++ language. Users need create a project by using TC/TCPP/BC/BCPP/MSC environment, and add users program and I-7188XBD-CAN/I-7188XB library into this project. Then, compile their application program and produce a .exe file. Use a RS232 download cable to connect com port of PC with the three pins, TxD1, RxD1, and GND of I-7188XBD-CAN. Short the INIT* pin and GND pin of I-7188XBD-CAN and power on I-7188XBD-CAN. Then, download users' application programs by using MiniOS7 Utility.
(2011/1/5,Bear)

Q3、Are there library and demos of I-7188XBD-CAN ? How to get them? (2011/1/5,Bear)

A：Because I-7188XBD-CAN is compatible with I-7188XB/I-7188XBD, users can use I-7188XB/I-7188XBD demos and library in I-7188XBD-CAN. About the library, demos and other information about I-7188XBD-CAN, please refer to the web or in the product CD.
The path of the web is
  http://www.icpdas.com/products/Remote_IO/can_bus/i-7188can.htm
The path of the CD is ://CAN/PAC/I-7188XBD-CAN/
(2011/1/5,Bear)

Q4、Why my I-7186EXD-CAN can't connect with my PC through Ethernet ? (2011/1/5,Ming)

A: If you sure your Ethernet wire is work, please check the Gateway and the Mask of them are the same and the IP address are in the same group first. If yes, then check that if there is any fire wall or antivirus working and filter the IP address or Ethernet port of the I-7186EXD-CAN.
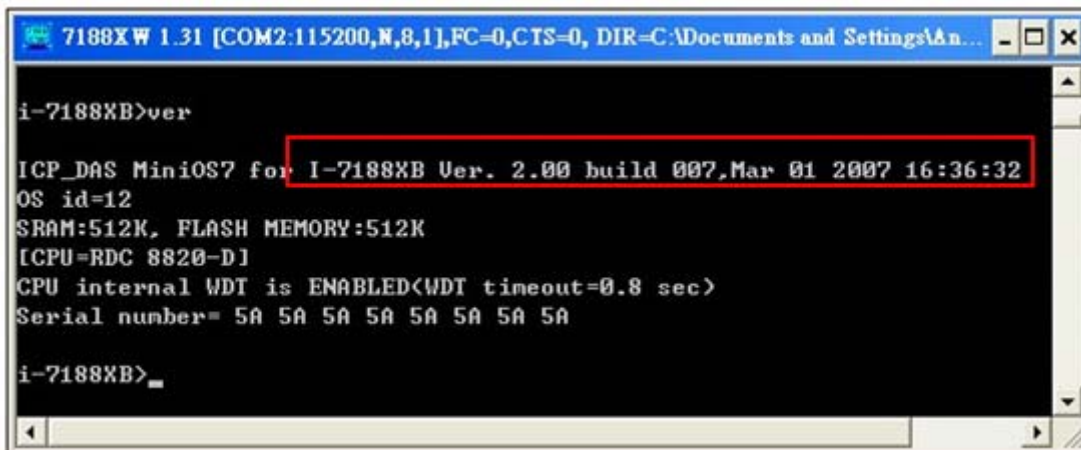(2011/01/05, Ming)

Q5: Why the 5digit display says E.0001 and the autoexec.bat file can not be executed? (2011/02/08, Andy)

A:
The error code means that the OS that you used is old version. Please make sure the OS version is 2007/03/01 or later.
Please use the 7188xw.exe and keyin the word "ver" to read the version of the OS.

```
7188XW 1.31 [COM2:115200,N,8,1],FC=0,CTS=0, DIR=C:\Documents and Settings\An...

i-7188XB>ver

ICP_DAS MiniOS7 for I-7188XB Ver. 2.00 build 007,Mar 01 2007 16:36:32
OS id=12
SRAM:512K, FLASH MEMORY:512K
[CPU=RDC 8820-D]
CPU internal WDT is ENABLED(WDT timeout=0.8 sec)
Serial number= 5A 5A 5A 5A 5A 5A 5A 5A

i-7188XB>_
```

You can download the OS from the following location.
ftp://ftp.icpdas.com/pub/cd/fieldbus_cd/can/pac/i-7188xbd-can/osimage/

And please do the following steps to update OS:
1. Execute the 7188xw.exe
2. Press "F4" buttom to start to update OS
3. After update the OS, you can type "ver" to review it again.
(2011/02/08, Andy)

Q6: How can I set the CAN bus baud rate to communicate with the NI USB-CAN device (62.5Kbps, BTR0=0x07 and BTR=0x1C))?? (2011/02/08, Andy)

A: There support XC100Init function, please set the BT0 parameter to 0x07 and BT1 parameter to 0x1C.

Refer to following description for sample code:
ret=XC100Init(0,0,0,0x07,0x1C,0x00000000UL,0xffffffffUL);
/* XCANInit function Parameter descriptions

    0   : for 7188XB(D) model number (7186EX(D) model number is 1)
    3   : for Receive and transmission interrupt
    125000UL   : for CAN baud
    0   : for BT0 of user defined baud
    0   : for BT1 of user defined baud
    0x00000000UL : for AccCode of CAN message filter
    0xffffffffUL : for AccMask of CAN message filter
*/
(2011/02/08, Andy)

Q7: How can I use this device to accomplish Modbus RTU/ASCII slave function?? (2011/02/08, Andy)

A: There support Modbus RTU/ASCII demo code for this device.
Please refer to following web site.
ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/modbus/7188xb/demo/bc/
(2011/02/08, Andy)

Q8: Can the by-pass CAN ports of the µPAC-7186EXD-CAN be used as a redundant CAN bus? (2012/12/25, Alan)

A: We do not suggest this method. According to the customer's case, the CAN bus topology will become a ring structure. Some unexpected CAN bus error may be happened.
(2012/12/25, Alan)

Q9: How can I use this device to accomplish Modbus TCP client to CAN function (2013/12/05, Andy)

A: About Modbus TCP function, user can refer to fw_demo23.

ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/7186e/demo/framework/

About CAN bus Tx/Rx funciton, user can refer to all_demo.

ftp://ftp.icpdas.com/pub/cd/fieldbus_cd/can/pac/upac-7186exd-can/demo/bcpp31/

(2013/12/05, Andy)

Q10: How to use software buffers for transmitting or receiving CAN messages in XC-100 library (2014/12/16, Alan)?

A: (1) Enable transmission or reception interrupt function when you call API XC100Init ().

(2) Call API CAN_CreateBuffer() function and allocate a software buffer size.

(3) Call API CAN_InstallIrq() function.

After finishing the three steps, you can transmit or receive CAN messages with software buffer.

(4) Before you terminate your program, please call API CAN_Restore() to release resource.

About more information, please refer to the user's manual chapter 3.

ftp://ftp.icpdas.com/pub/cd/fieldbus_cd/can/pac/upac-7186exd-can/document/

(2014/12/16, Alan)

Q11: How to recover CAN Bus Off status via Calling API (2014/12/16, Alan)?

A: (1) Call API CAN_BusOff_Recovery() to recover status after CAN Bus Off happened.

(2) Use API SendCANMsg_Recovery() to send CAN message. After CAN Bus Off happened, the CAN Bus Off status will be recovered automatically.

(2014/12/16, Alan)