Advantech AE Technical Share Document

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Category	□ FAQ■ SOP	Related OS	Microsoft Windows 2000 / XP / 7 / 8
Abstract	How to test CAN port quickly with Advantech CAN bus communication card?		
Keyword	CAN Communication cards / CAN2.0 / CAN2.0A / CAN2.0B / PCI CAN Communication cards / PC/104 CAN Communication Modules / PCI/104 CAN Communication Modules / CAN Monitor / CAN Test		
Related Product	PCI-1680U / PCI-1682U / PCL-841 / PCM-3680 / PCM-3680I		

■ **Problem Description**:

This is a SOP document to describe how to test CAN port with Advantech CAN bus communication card. By connecting the proper wires, this two CAN port testing can help user to verify the operation of CAN ports by using Advantech CAN Monitor software tool.

■ **Brief Solution** :

Loop back testing with DB9 connector:

1. **Please check Advantech CAN driver install successful in system Device Manager, as Figure 1.**
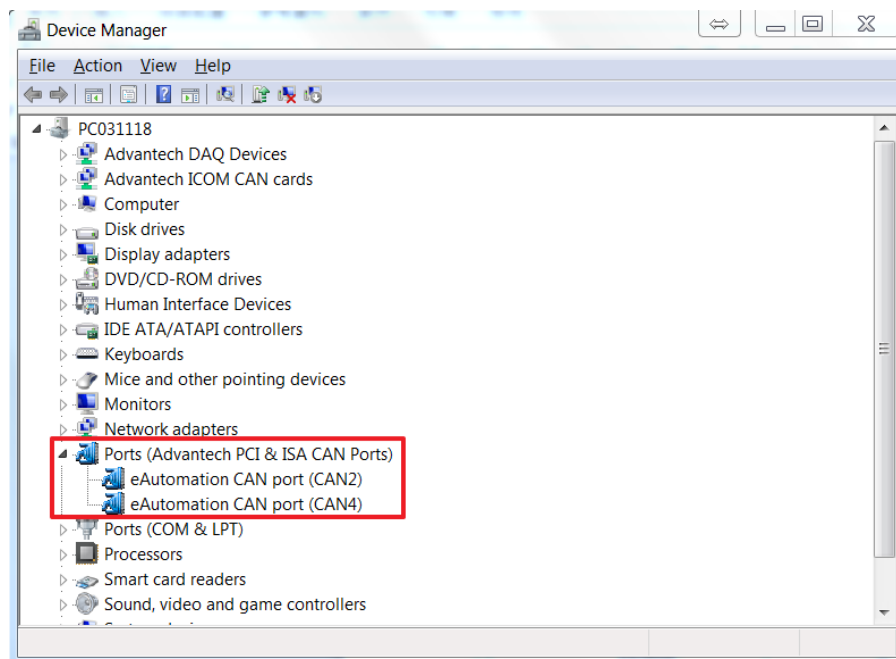

Figure 1. Check Advantech CAN port with Device Manager

2. **Connect with Advantech two com port, then connect with each CAN_L, CAN_H pin, as Figure 2:**
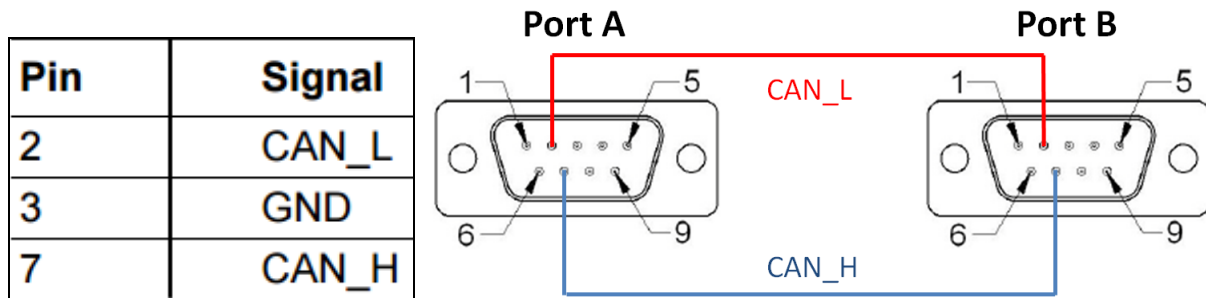   **(Port A's pin2 to Port B's pin2; Port A's pin7 to Port B's pin7)**

Figure 2. Connect with CAN_L & CAN_H of Port A & Port B.

3. **Open Advantech CAN Monitor software tool with two windows as Figure 3.**
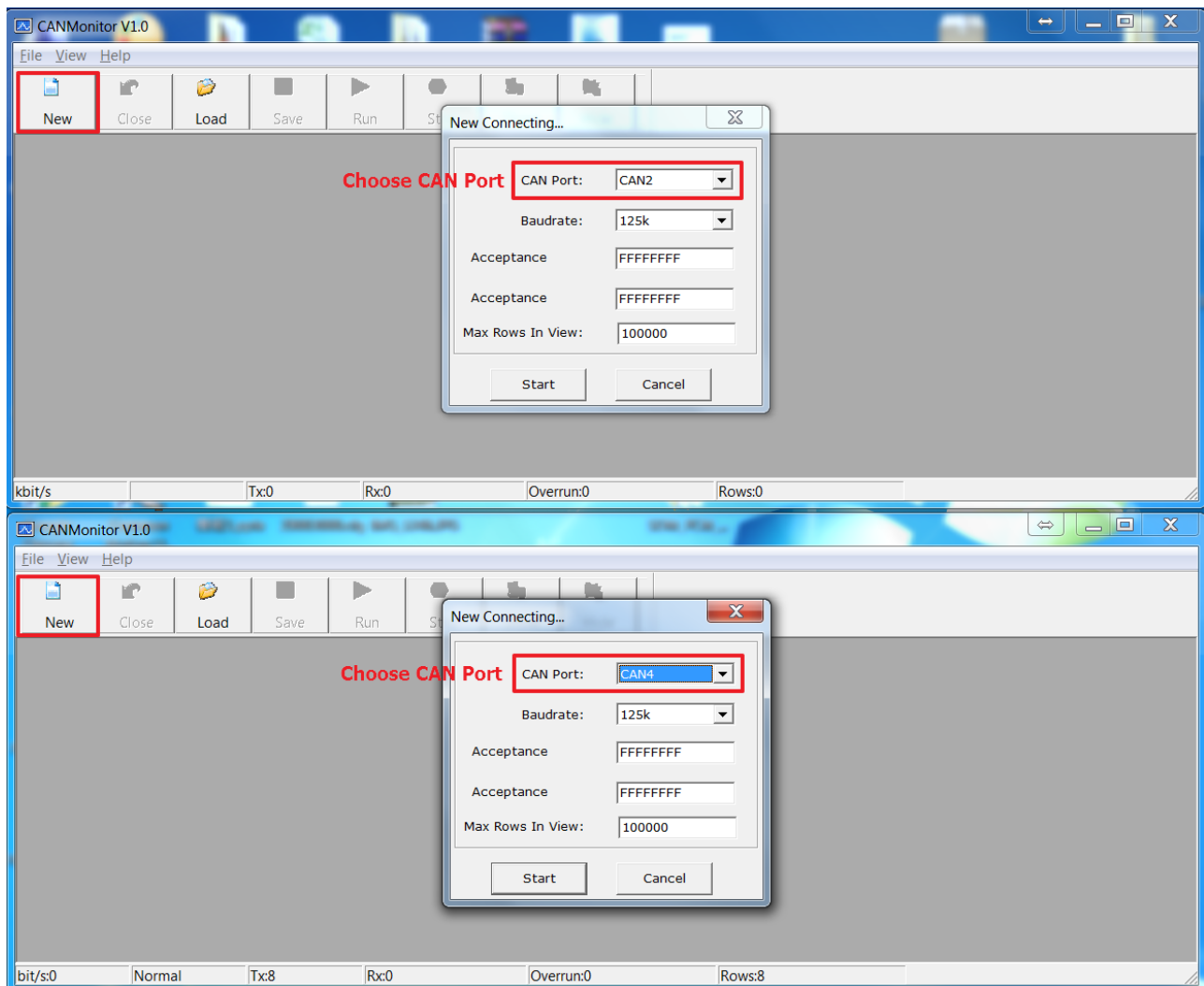   **(Port A : CAN2, Port B : CAN4)**

Figure 3. Open CAN Monitor and set CAN port for further testing

4. Select "Function" -> "CAN" -> "Send CAN Message" at CAN2 window, and set CAN ID, data…etc. Then "Start" to send CAN data from CAN2 to CAN4. Please check both side worked correctly. **CAN2 should be Tx mode, CAN4 should be Rx mode,** as figure 4.
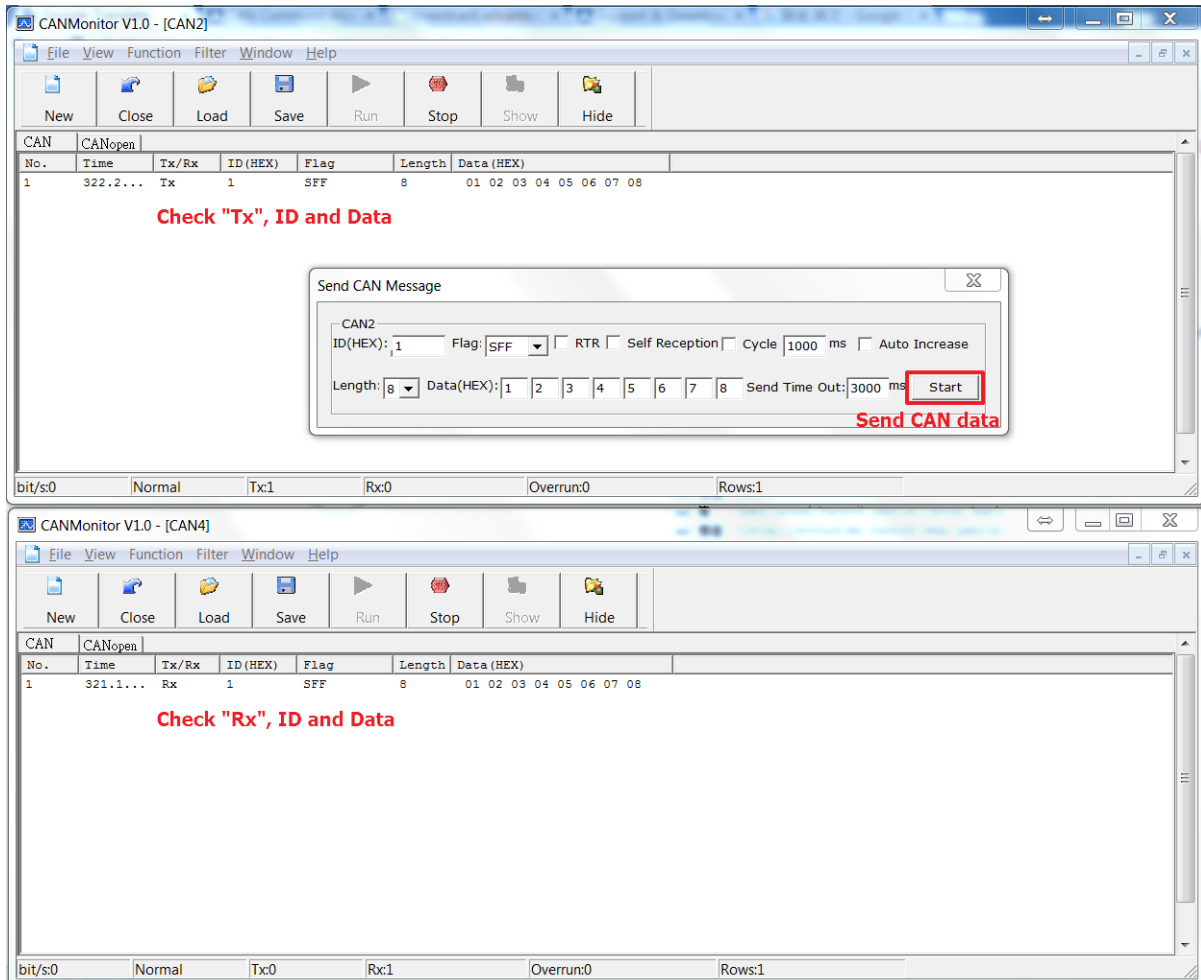

Figure 4. Send data from CAN2 to CAN4 with CAN Monitor

5. **The same step at CAN4 window, and send data from CAN4 to CAN2.**
    Please check both side worked correctly too, and <mark>**CAN2 should be Rx mode, CAN4 should be Tx mode**</mark>**, as figure 5.**
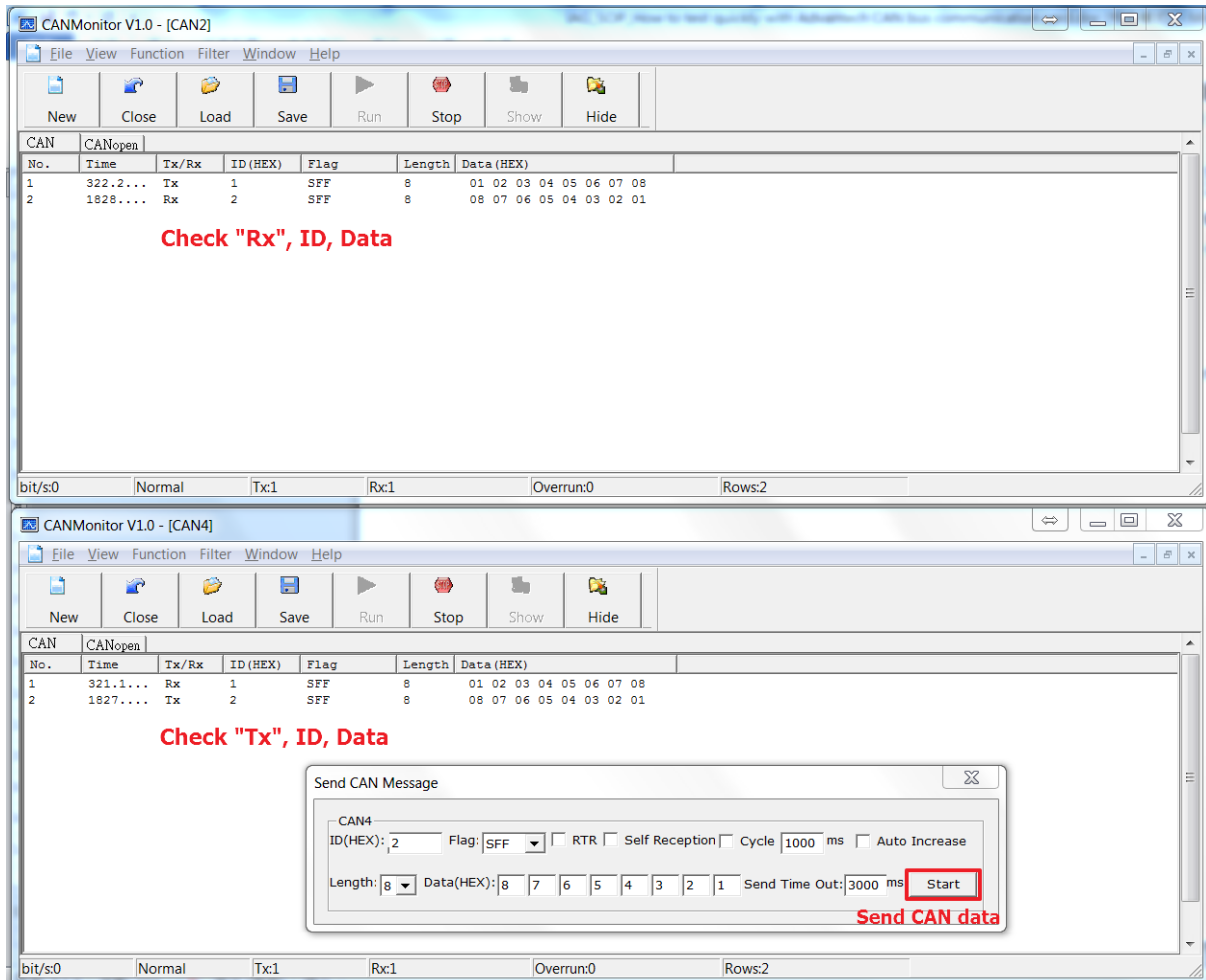

Figure 5. Send data from CAN2 to CAN4 with CAN Monitor

6. **After this SOP test way with Advantech CAN Monitor software, it can verify those two CAN port work fine in your system.**