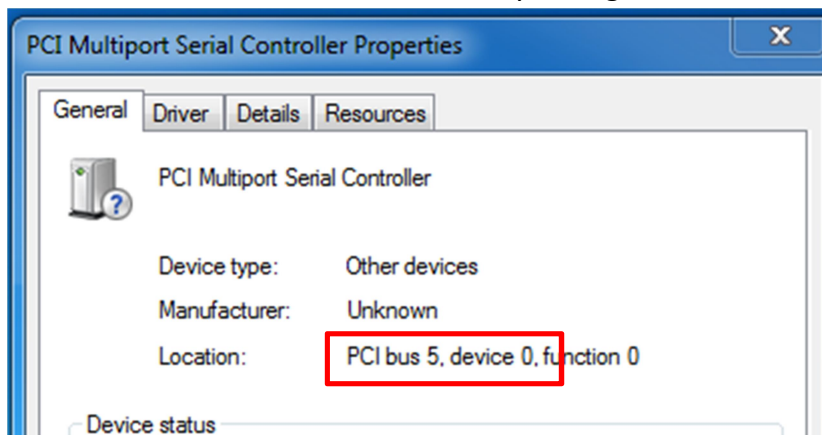


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Date	2018 / 08 / 08	Release Note	<input type="checkbox"/> Internal <input checked="" type="checkbox"/> External
Category	<input checked="" type="checkbox"/> FAQ <input type="checkbox"/> SOP	Related OS	
Abstract	How PCIe/PCI Bus resource assignment		
Keyword	PCIe, PCI, COM		
Related Product	PCI series COM cards		

■ **Problem Description:**

When PCI COM cards plug in different PCI slots on motherboard, the cards are always getting the same PCI bus number and the device number is always being 0.

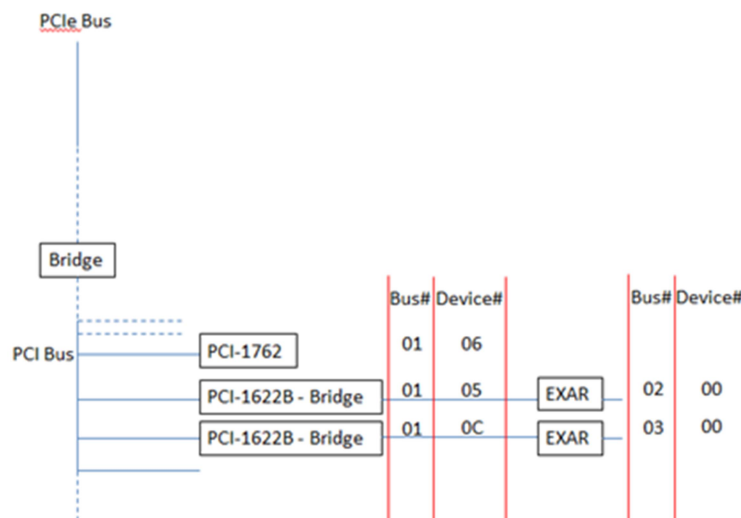


Picture1: Information on the Device manager

■ **Root Cause:**

PCI bus number will change if this bus is allocated from different bridge, so when PCI devices plug in the PCI slots which allocated from the same bridge then the PCI bus number is the same but the device number will be different.

There is a bridge on PCI COM cards since the communication chip (EXAR) is a PCIe chip means that the EXAR chip is the only one device on the bus allocated from the bridge on board, so the PCI bus is always the same and device number is always 0.



Picture2: PCIe to PCI resource assignment tree diagram

This doesn't affect COM card's function since it's a system rule. And PCI COM cards with EXAR chip is list below.

	Description
PCI-1602 B-CE	2 port RS232/422/485 Surge
PCI-1602 C-AE	2 port RS232/422/485 Surge & Isolation
PCI-1604 C-AE	2 port RS232 Surge & Isolation
PCI-1610 B-DE	4 port RS232 Surge
PCI-1610 C-CE	4 port RS232 Surge & Isolation
PCI-1612 B-DE	4 port RS232/422/485 Surge
PCI-1612 C-CE	4 port RS232/422/485 Surge & Isolation
PCI-1620A-DE	8 port RS232
PCI-1622 B-DE	8 port RS232/422/485 Surge
PCI-1622 C-DE	8 port RS232/422/485 Surge & Isolation