QNX 6.0 built-in driver installation guide for PCIPORT card

1. To use PCIPORT card in QNX system we will use the built-in driver in QNX
   system.

2. The built-in driver for serial port in QNX system is "devc-ser8250". Please
   check the manual of "devc-ser8250" for more information about usage.

3. Because our PCIPORT card is PCI card and "devc-ser8250" driver need to know
   the I/O address and IRQ vector in each serial port. So we need to know such
   information in PCIPORT card. And "pci" command in QNX system will offer
   such information. Please check the manual of "pci" for more information
   about usage.

4. Following is the procedure to install driver for PCIPORT card in QNX.
   a) Please run "pci" command to get information of PCI device in your
      system.

           pci -v > pci.inf

   b) From above "pci.inf" file we can get information for our PCIPORT card.
      We have two vendor ID for PCIPORT card. In P584/P588/P584U/P588U card
      we have vendor ID "10B5". In P514/P518 card we have vendor ID "144A".
      Please serach vendor ID "10B5 or 144A" in "pci.inf" file to find
      our PCIPORT card's information. You may have similar information as
      following structure.

           Class   = Communication (Serial Controller)
           Vendor ID   = 10B5h or 144Ah
           Device ID   = 9050h
           PCI index   = 0h
           Class Codes   = 070080h
           Revision ID   = 1h
           Bus number   = 0
           Device number   = 7
           Function num   = 0
           PCI IO Address = C800h length 128 enabled
           PCI IO Address = C400h length 64 enabled <=====I/O base for PCIPORT
           PCI IO Address = C000h length 8 enabled
           Max Lat   = 0ns
           Min Gnt   = 0ns
           PCI Int Pin   = INT A
           Interrupt line = 10   <=========IRQ value for PCIPORT

   c) From above example we can know the I/O base address for PCIPORT card is
      "c400" and IRQ value for PCIPORT card is "10".

   d) So we can use such information to install serial port driver in following
      I/O address
          c400, c408, c410, c418, c420, c428, c430, c430 for 8 serial port in
          P588 card. Each serial port need 8 byte I/O map.

   e) We need to run following command line under QNX to install driver:
          devc-ser8250 -u3 c400,10 -u4 c408,10 -u5 c410,10 -u6 c418,10
                       -u7 c420,10 -u8 c428,10 -u9 c430,10 -u10 c438,10

   f) So you have PCIPORT card with device name as /dev/ser3----/dev/ser10

5. For more information you can check manual for "pci and devc-8250" command
   to know more option about QNX standard device driver usage.