

# 16-Port RS-232 Multi Serial PCI Express Card

## Installation Guide

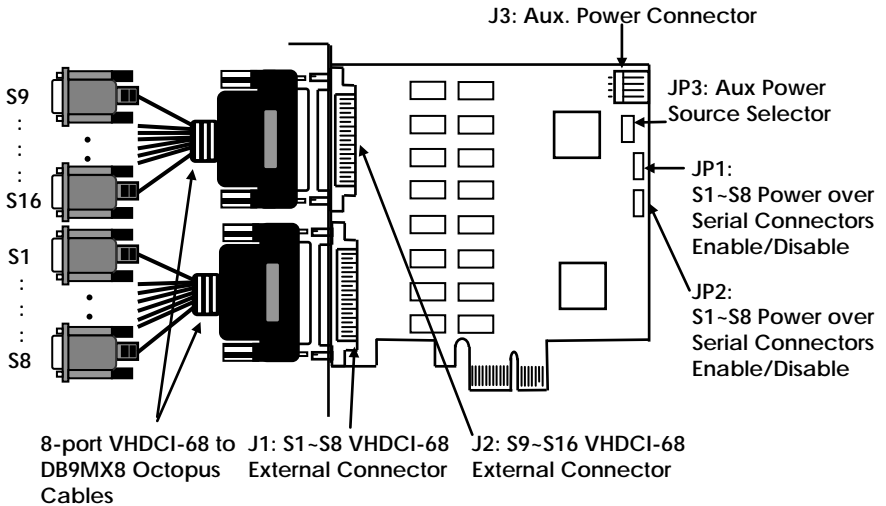
### 1. Introduction

Congratulations on purchasing the high performance PCI Express multi-serial host adapter. The adapter is high speed PCI Express bus based and plug-and-play compliant. Its 16C950 UART based serial ports (128-byte deep FIFO) are fully 16C550 UART compatible with most of the RS232C devices available from the market.

#### Features:



- ✓ Full x1 PCI Express Throughput, 250Mbytes/sec
- ✓ Fully Compliant with PCI Express Base Specifications, Revision 1.0a
- ✓ Extended 16C950 UARTs, Fully Compatible with 16C550, Baud Rate up to 921.6Kbps
- ✓ Supports Power Option over pin 9 of the all DB9-Male Connectors
- ✓ Supports 16-port DB9M connectors by 2 VHDCI-68 Octopus Cables
- ✓ Supports Win 2000, 2003, XP-32, XP-64, Vista-32, Vista-64, and Linux

### 2. Board Layout

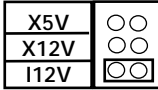
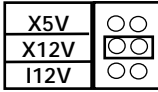
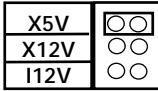


### 3. Jumper Settings

1. **JP1, JP2- External Power Enabler:** These 2 jumpers are used to Enable or Disable the option of supplying power over pin 9 of the eight DB9 connectors of S1-S8 and S9-S16.

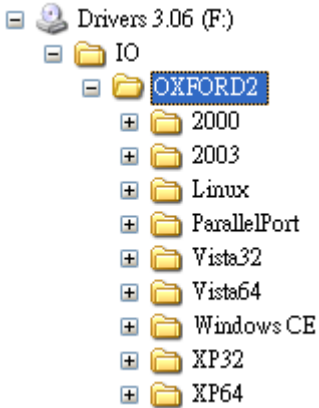
| JP1, JP2: External Power Enabler         | Settings  |
|--|---|
| Disable Power on DB9M pin 9<br>(Default) |  |
| Enable Power on DB9M pin 9               |  |

2. **JP3- External Power Selector:** The pin-9 of the serial port connector(s) will be supplied with DC5V or DC12V. There are 3 sources depend on the jumper's position of the JP3:

| JP3: External Power Selector   | Settings  |
|--|---|
| <b>Internal 12V:</b> Power source is +12VDC, from PCI Express golden finger (motherboard's PCI Express slot) |  (default) |
| <b>External 12V:</b> Power source is +12VDC, from J3 AUX power connector.                                    |          |
| <b>External 5V:</b> Power source is +5VDC, from J3 AUX power connector.                                      |          |

## 4. Software Installation

The drivers of the PCIe card for each Operating System were shipped in the following different folders on the driver CD:



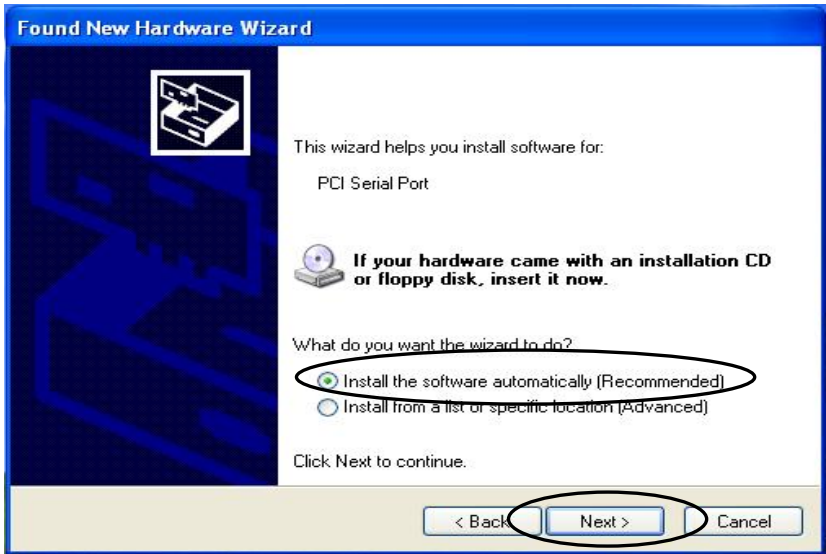
Drivers are in each corresponding folder

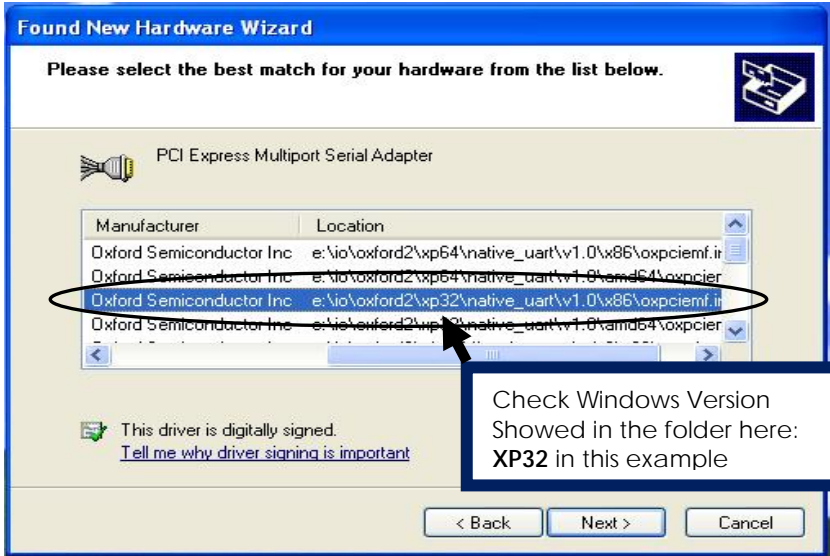
When the Windows detect the PCIe card, it will invoke its Installation Wizard:



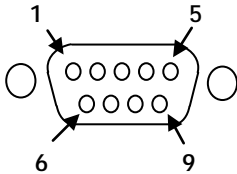


Note: For Windows 2000 installation, we recommend you to choose **“Install from a list or specific location (Advanced)”** from the following menu, then browse to the correct driver location (\\IO\OXFORD2\2000\...) for Windows 2000. It will prevent from the Windows 2000 searching wrong drivers.





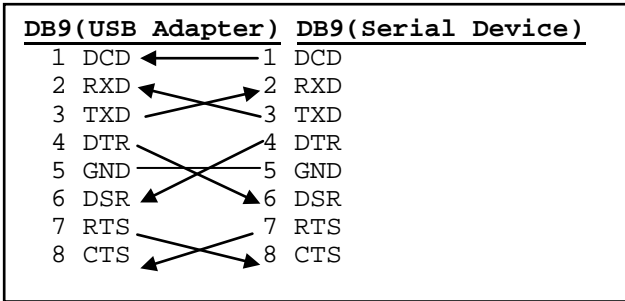
## 5. Male DB9 Pin Assignments and Cable Wiring



| <u>9 Pins</u> | <u>Signal</u> |
|---------------|---------------|
| 1             | DCD           |
| 2             | RXD           |
| 3             | TXD           |
| 4             | DTR           |
| 5             | GND           |
| 6             | DSR           |
| 7             | RTS           |
| 8             | CTS           |
| 9             | (Power) *     |

- \*Note: The pin 9 of the DB9 male connector supports DC5V or DC12V depends on the settings of the JP1 and JP2, please refer to the above sections for more detail information

DB9(Male) to DB9(Male) Wiring



## 6. Specification

| Type            | Specification                          |
|-----------------|--|
| Connectors      | VHDCI-68                               |
| Cable           | VHDCI-68-to-DB9MX16 Octopus type       |
| Bus Interface   | 1-lane PCI Express                     |
| Number of Ports | 16                                     |
| RS-232 Signals  | TXD, RXD, RTS, CTS, DTR, DSR, DCD, GND |
| Baud Rate       | 110 bps to 921.6Kbps                   |
| Data Bits       | 5,6,7,8,9                              |
| Stop Bits       | 1, 1.5, 2                              |
| I/O address/IRQ | Plug-and-Play (various)                |
| Parity          | None, Even, Odd, 1, 0                  |

|                       |                           |
|-----------------------|---------------------------|
| Flow Control          | RTS/CTS, XON/XOFF         |
| Power Requirement     | 3.3V/500mA                |
| Operating Temperature | 0 to 55°C(32 to 132°F)    |
| Operating Humidity    | 5 to 95% RH               |
| Storage Temperature   | -20 to 85°C (-4 to 185°F) |