# RS232 Multi Serial/Parallel PCI Express Card
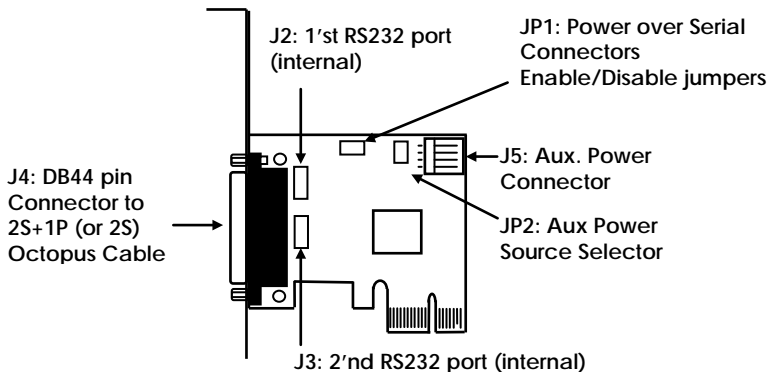## Installation Guide

## 1. Introduction

Congratulation on your purchasing this high performance PCI Express multi-serial/parallel host adapter. The adapter is high speed PCI Express bus based and plug-and-play compliant. Its enhanced serial ports (256-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 1.1
✓ Extended 16C650 UARTs, Fully Compatible with 16C550, Baud Rate up to 921.6Kbps
✓ Available Models: 2S and 2S+1P over one single PCI Express slot.
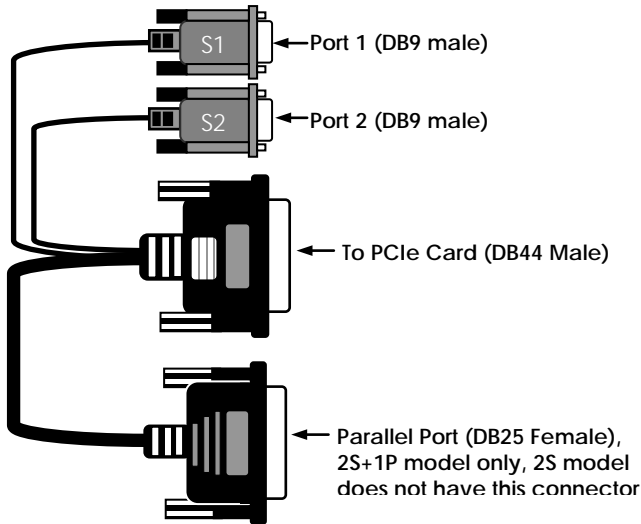✓ Supports Win 2000, 2003, XP-32, XP-64, Vista-32, Vista-64, Windows 7, Mac OS and Linux

## 2. Board Layout



**J2: 1'st RS232 port (internal)**

**JP1: Power over Serial Connectors Enable/Disable jumpers**

**J4: DB44 pin Connector to 2S+1P (or 2S) Octopus Cable**

**J5: Aux. Power Connector**

**JP2: Aux Power Source Selector**

**J3: 2'nd RS232 port (internal)**

**Installed Octopus Cables:**

| Cable | # of DB9s | # of DB25s |
|-------|-----------|------------|
| 2S | 2 | None |
| 2S+1P | 2 | 2 |

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## 2S+1P and 2S Octopus Cable:



S1 — **Port 1 (DB9 male)**

S2 — **Port 2 (DB9 male)**

← **To PCIe Card (DB44 Male)**

← **Parallel Port (DB25 Female),
2S+1P model only, 2S model
does not have this connector**

**JP1- External Power Enabler:** There are 2 jumpers that control the pin-9 signal of the 2 serial port DB9 connectors (S1, S2) respectively. If the jumper(s) is at the "**DIS**" position (**factory default**), the pin-9 was connected with the RI signal as standard RS232 definition. If the jumper is at the "**PWR**" position, the pin-9 was connected with a power either from PCI Express slot or from Aux Power connector (J5). The power source is controlled by JP2 jumper (see the following section).

**JP2- 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 JP2:

- **X5V:** DC5V, from J5, an optional power cable is required.
- **X12V:** DC12V, from J5, an optional power cable is required.
- **I12V (factory default):** DC12V, from PCI Express golden finger, no cable is required.

## 4. Installing the PCI Express I/O Card

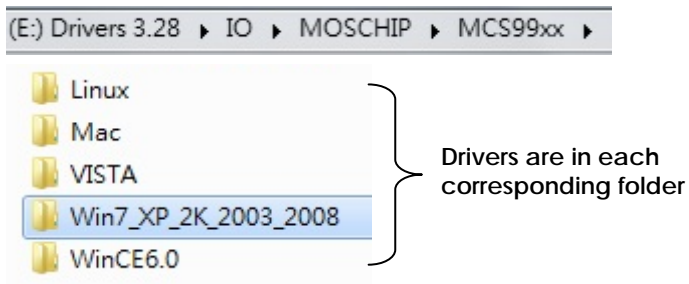1.   Turn the system power OFF before installation!

2.  Remove the chassis cover from your computer

3.  Locate an unused PCI Express slot (typically white and smaller) and remove the corresponding slot cover from computer chassis.

4.  Plug the PCI Express I/O card to the unused PCI Express expansion slot and attached the I/O card bracket to the computer chassis screw.

5.  Install the DB44 octopus cable, there are 2 types of cables depends on it is 2S+1P or 2S model, the 2S+1P cable provides 2 DB9 male and 1 DB25 female connectors. However, the 2S cable only provides 2 DB9 connectors.

6.  Installing the serial or parallel cables to your devices.

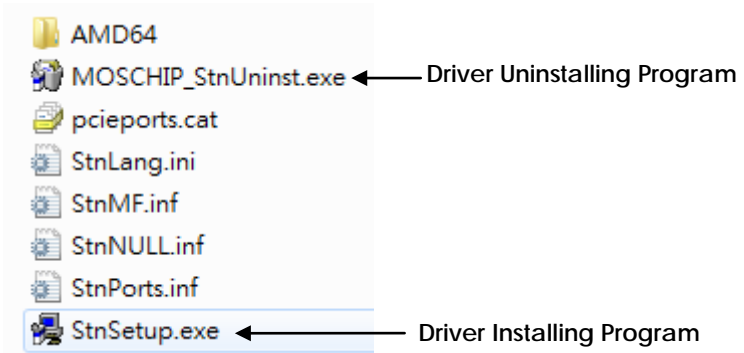7.  Put the chassis cover back on the computer.

## 5. Software Installation

1.  To install the Windows drivers, there are two methods, one is to run the setup utility (**StnSetup.exe**) in each corresponding folder. The other one is by the Windows' driver installation Wizard. We recommend you run the setup utility. It will be simpler. However, **PLEASE REFRESH HARDWARE OR REBOOT THE SYSTEM IN CASE YOUR DRIVER DID NOT TAKE EFFECT AFTER RUNNING THE SETUP UTILITY.**

    The drivers are shipped in the following folders on the driver CD:

    E:\IO\MOSCHIP\MCS99xx

    (E:) Drivers 3.28 ▸ IO ▸ MOSCHIP ▸ MCS99xx ▸

    - Linux
    - Mac
    - VISTA
    - Win7_XP_2K_2003_2008
    - WinCE6.0

    **Drivers are in each corresponding folder**

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AMD64
MOSCHIP_StnUninst.exe ← **Driver Uninstalling Program**
pcieports.cat
StnLang.ini
StnMF.inf
StnNULL.inf
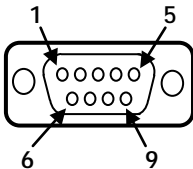StnPorts.inf
StnSetup.exe ← **Driver Installing Program**

## 6. Uninstalling the Software Drivers

In some cases, you may want to uninstall the drivers. To remove the drivers that already installed for Windows, there are two methods:

1.  **Run (double click) the uninstall program (for example MOSCHIP_StnUninst.exe)** in each Windows' folder on the supplied driver CD, it is usually in the same folder as the StnSetup.exe utility:

2.  **Go to Windows' Control Panel's Add/Remove Program** to remove the drivers.

## 7. Connector Pin Assignments

● **DB9(Male) on the 9-pin Flat Cable:**

| Pin# | Signal | Pin# | Signal |
|------|--------|------|--------|
| 1 | DCD | 6 | DSR |
| 2 | RXD | 7 | RTS |
| 3 | TXD | 8 | CTS |
| 4 | DTR | 9 | RI |
| 5 | GND | | |

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