MCS9865

Windows XP 32 / 64 bit User Manual

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1. Introduction

This document describes the software driver installation procedure for MosChip MCS9865 PCI to Serial / Parallel device.
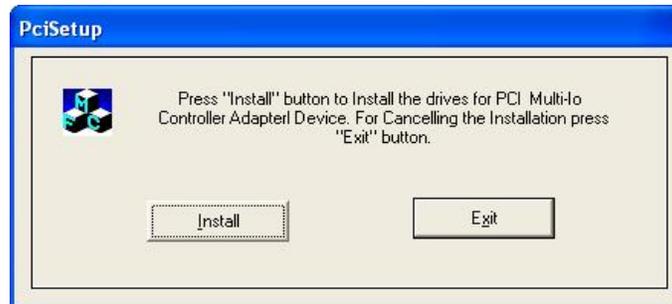
2. Obtaining Driver

MCS9865 software drivers can be downloadable from www.moschip.com. Contact techsupport@moschip.com for details

3. Driver Installation

Installing drivers for the first time:

- Run "**PCIsetup.exe"** file from the driver disk folder.
- **PCISetup** window will be popped up as shown below

Click on "**Install**" button to install the MCS9865 drivers automatically.

While installation is in process, "**Software Installation**" warning message pops up twice for Windows XP compatibility. Ignore the warning message by clicking on "**Continue Anyway**" button. This is required for un-signed driver versions (i.e Driver not logo certified by Microsoft) only.

● On successful driver installation, the utility will display "**Installation Completed**" message, click on "**Exit**" button to complete the driver installation.

● Shutdown the PC and insert the MCS9865 based PCI card into PCI slot and then turn ON the PC.

● After restarting the PC, for the first time windows will bring up the "**Found New Hardware Wizard**" window to guide through the initial configuration process. Select "**No, not this time**" option and click on "**Next**" button to continue driver installation.

- Select "**Install the software automatically (Recommended)"** option and click "**Next**" button.
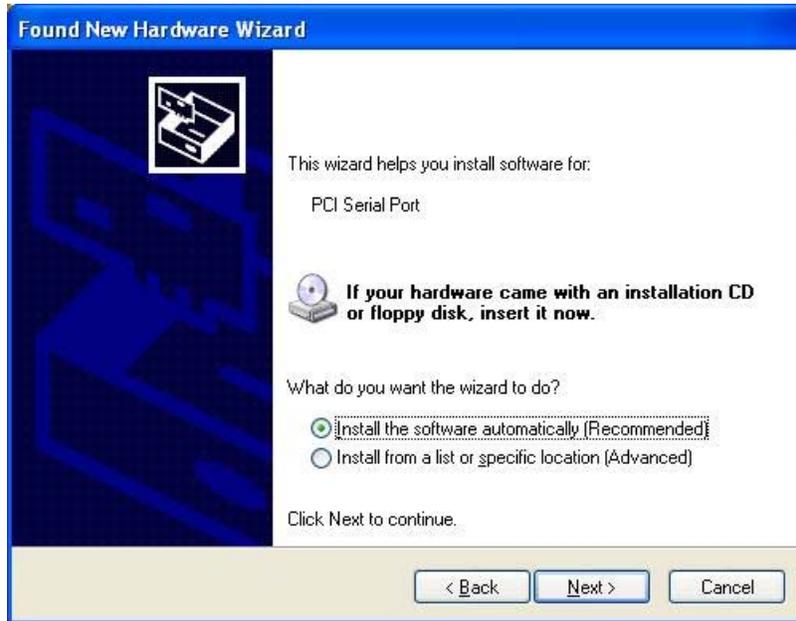
- If the "**Hardware Installation**" wizard pops for Windows XP compatibility, click on "**Continue Anyway**" button to ignore the warning message.

• Click on **"Finish"** button to complete the MosChip MCS9865 Peripheral Port installation.

**Note:** Above procedure shall be followed to install the remaining ports of MCS9865 device.

4. Verifying Driver Installation

MCS9865 device detection and driver installation can be confirmed from Device Manager. For Example proper detection of the MCS9865 PCI Card (2 Serial + 1 Parallel) can be confirmed by viewing the Device manager as shown below:
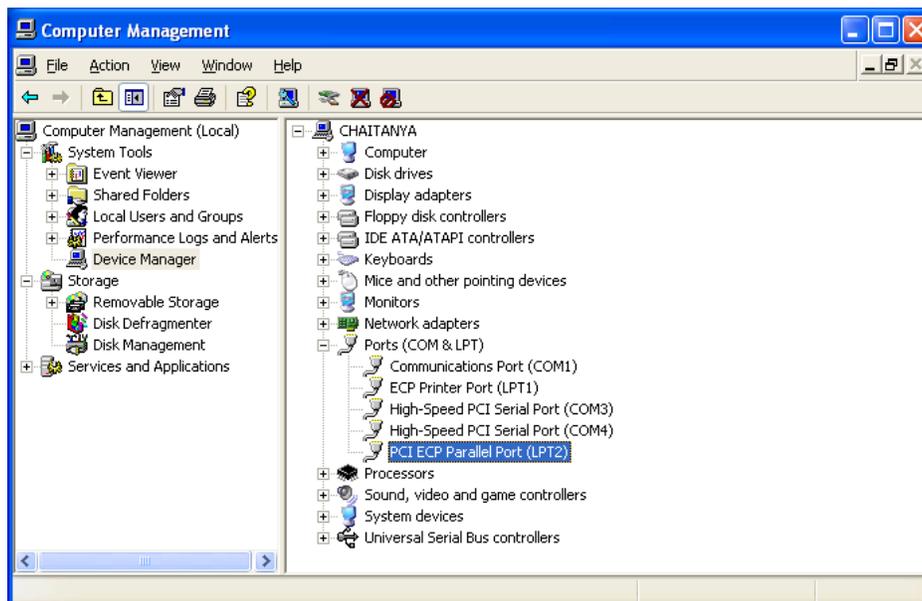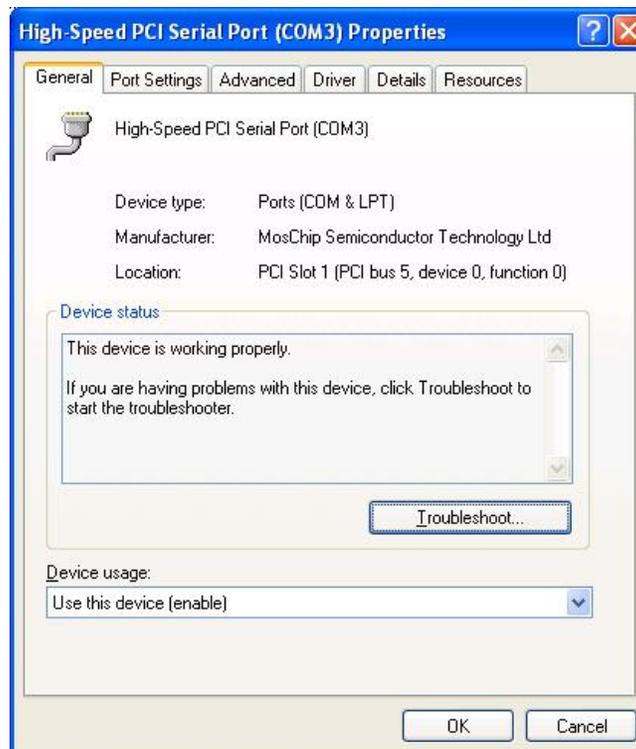
5. Serial Port Properties Sheet

In the Device Manager window, right click on required Port and then click on "**Properties**" to open the Properties page of the serial port.
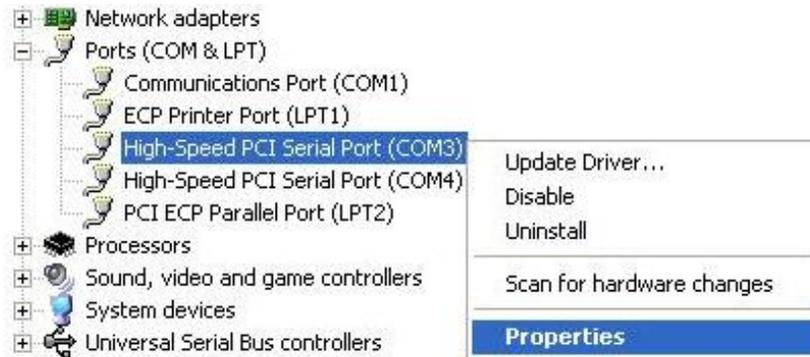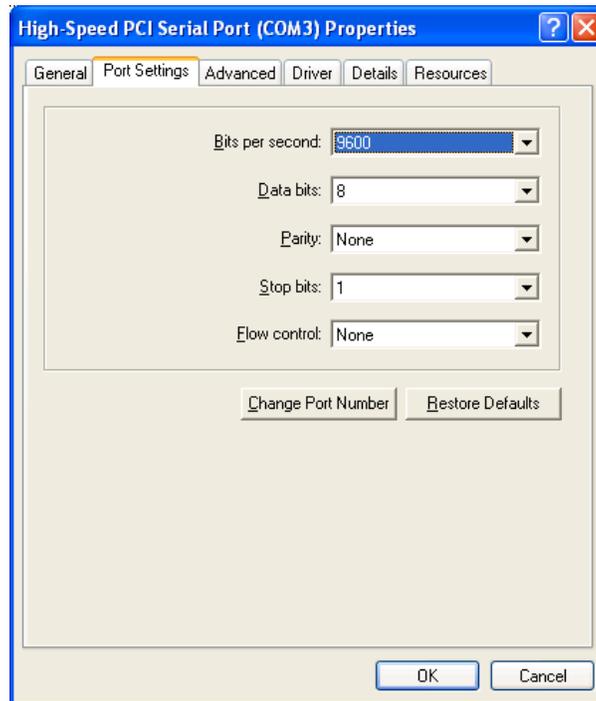

General Tab

The **"General"** Tab provides you details about "Device Type", "Manufacturer" and "Device Status".

Port Settings Tab

The "**Port Settings"** Tab is used to configure parameters of the Serial Port. These settings will be overridden by the settings configured in the serial port application.

**Bits per Second** selection is used to set the default Baud rate settings.

Data bits selection will have options 4,5,6,7 and 8 data bits.

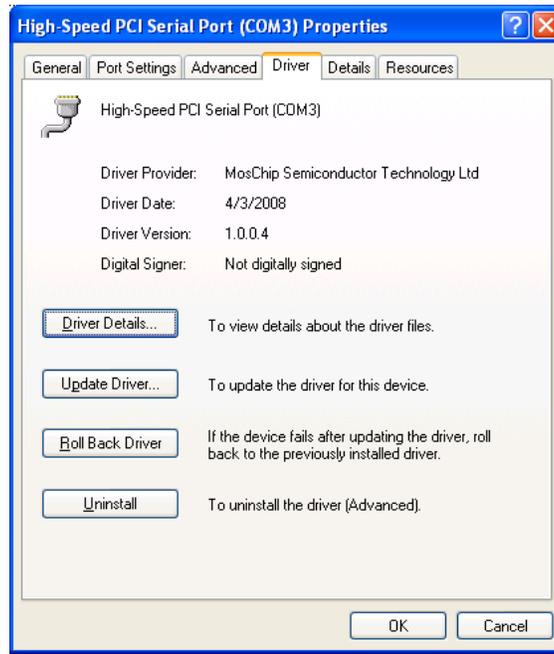**Parity** selection will have Even, Odd, None, Mark and Space parity settings.

Stop bits selection will have 1, 1.5 and 2 selections.

Flow Control selection will have Xon/Xoff, Hardware and None settings.

If you want to change the Port Number click on "**Change Port Number"** and select the required Port Number as shown below:
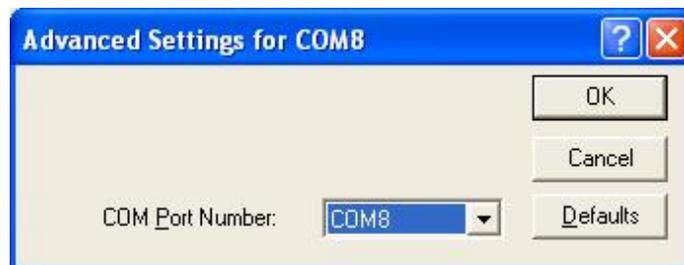
Driver Tab

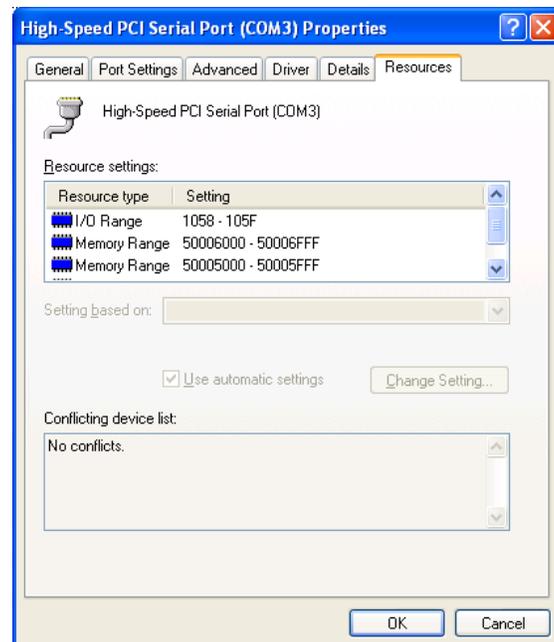The **Driver Tab** shows the details of Driver Provider, Driver Release Date, Driver version installed on your PC and Digital Signer details as shown above.

Resource Tab

The **Resource Tab** gives the details of IRQ, IO Ranges and Memory ranges that are assigned to a particular Serial Port.

Advanced Tab allows the user to configure Serial Port Features and Mode changes as explained below.
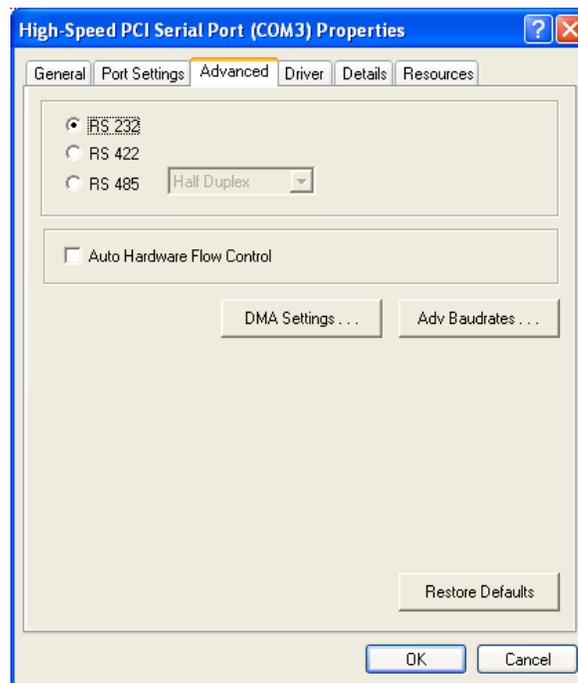
6. Serial Port Features and Mode Changes

By default every serial Port will be in RS 232 Mode.

Serial port can also be set to **RS 422** or **RS 485** Mode. Select the appropriate Radio button as shown below:

Selecting RS 422 Mode:

Select the **RS 422** Radio button to select the **RS 422** Mode.
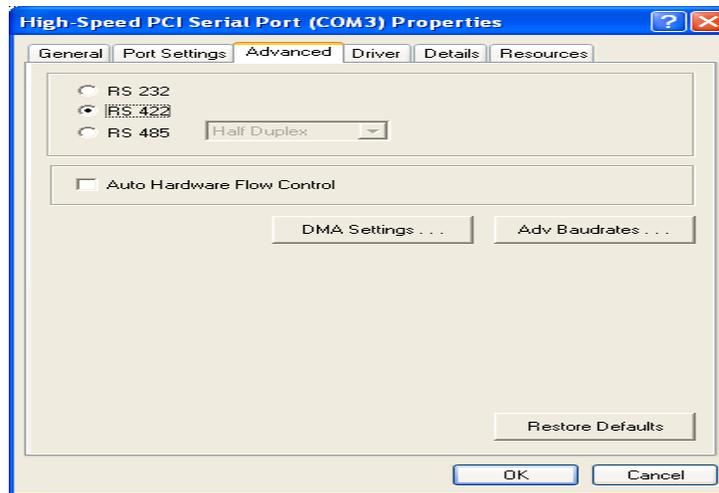
Selecting RS 485 Mode

After selecting **RS 485** Radio button you will have different Mode settings like Full Duplex, Half Duplex and Half Duplex Echo. You can select as per your requirement.
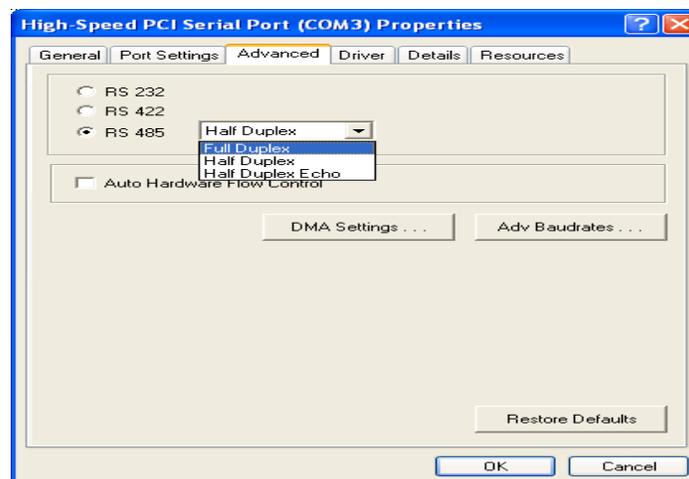
Selecting Hardware Flow Control

To enable Hardware flow control, select the "**Auto Hardware Flow Control".** This enables **RTS / CTS** Hardware Flow control for the selected serial port. This setting is applicable only for **RS 232** Mode only.
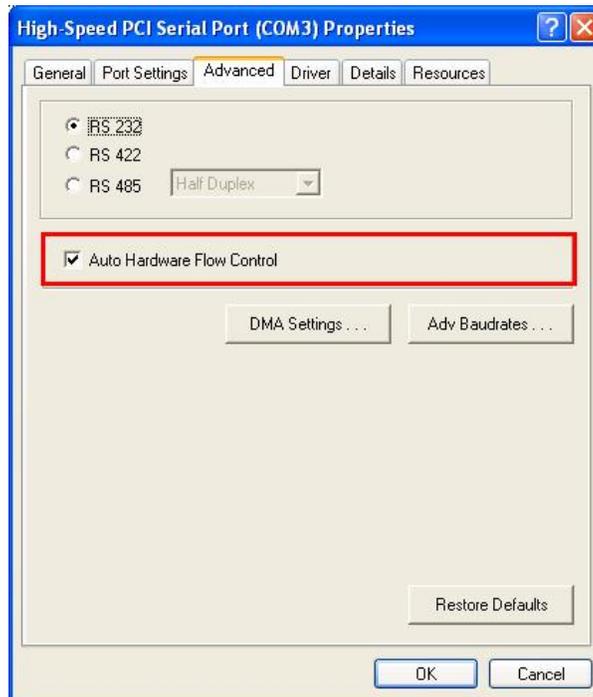
Configuring Advanced Baud rates

To Configure Advanced Baud rates click on "**Adv Baudrates**" button.
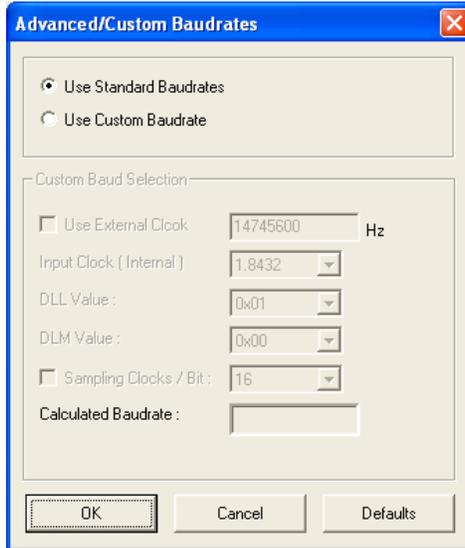
By default "**Use Standard Baudrates**" option is enabled.

To configure custom Baud rate select "**Use Custom Baudrate**".

Note: When "**Use Custom Baudrate"** is selected, Serial Port baudrate is independent of the value set in the Application

Input clock:

When an external clock option is selected, the value of the external clock must be entered in the text box provided against "Use External Clock column".

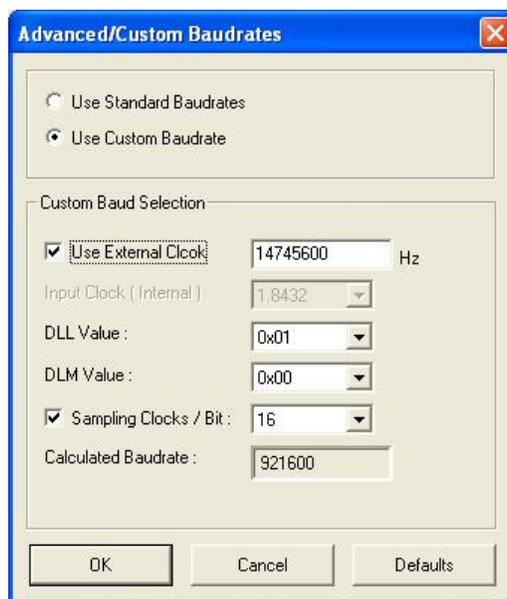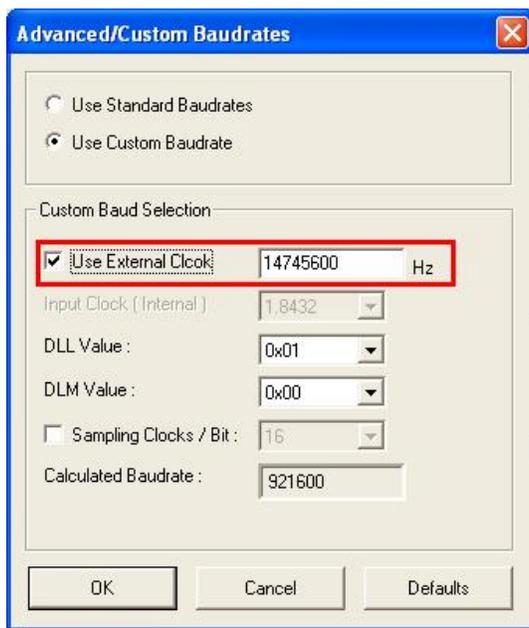Custom baud rates can be obtained by selecting required **Input clock, DLL DLM** and sampling clock Values. The calculated baud rate will be shown in the Text Box provided for it.

To calculate the custom bauds please refer **Custom Baud Application Note** or contact

techsupport@moschip.com

7. Direct Memory Access (DMA)

Selecting DMA mode.

For Selecting DMA Mode click on **DMA Settings** on Advanced TAB as shown below:
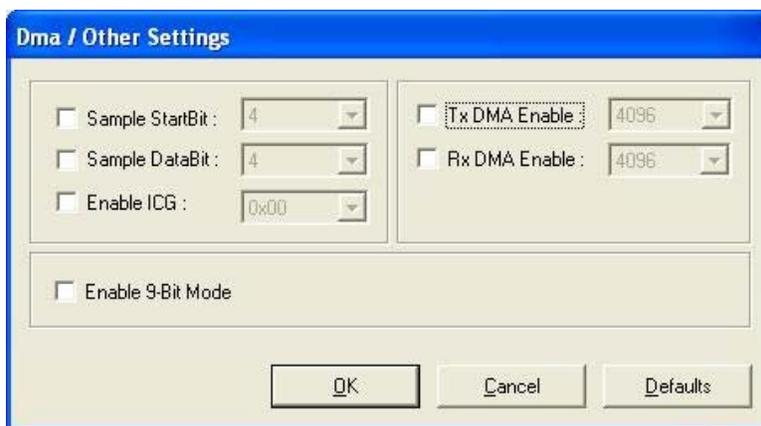
→To enable DMA Mode selects "**TX DMA Enable**" and "**Rx DMA Enable**" check box options.

→Suitable value for **Inter Character Gap (ICG)** has to be set for special application like RAID controller devices.

→To enable 9bit Mode support, Select "**Enable 9-Bit Mode"**

8. Parallel Port Features and Mode Changes

Parallel Port Features
Parallel port will support SPP/CBFIFO/ECP/EPP modes. Parallel port mode will be automatically configured to the required mode after handshaking with the connected device.

9. Uninstalling Drivers

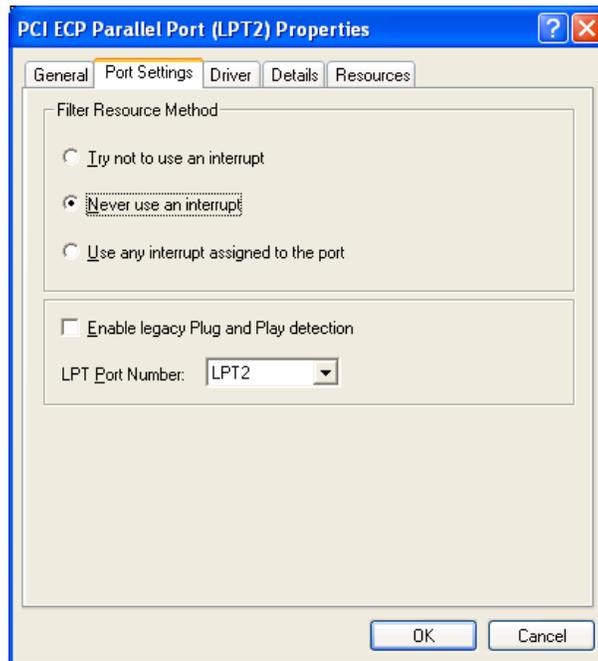**Using Uninstall Utility**

To Uninstall MCS9865 drivers, run "**MOSCHIP_PCIUninst.exe**" available in the driver disk. PCI Multi-I/O Drivers Uninstall window will be displayed as shown below. Click on OK button.

Click on Exit button to complete un-installation process. No need to restart the PC, unless prompted by the OS.

From Add/Remove Programs

The MCS9865 drivers can also be un-installed/removed from PC through Control Panel → Add/Remove Programs. In Add/Remove programs, select "PCI-Multi I/O Controller" and click on Remove button.

From Device Manager

The MCS9865 drivers can be un-installed through device manager. In Device Manager, under Ports (COM & LPT) category, select the "High-Speed PCI Serial Port (COM X)", right click on it and select "Uninstall". OS will prompt for confirm device removal, click on "OK" to uninstall the drivers. In this method each and every port has to be uninstalled separately.

10. Installation / Detection / Un-Installation of MCS9865 on Win 2000, Win 2003 server

MCS9865 drivers of XP hold good for Win 2000, Win 2003 server – 32/64 bit also. The installation, Detection and Un-installation procedures are same as explained for Win XP.

11. Technical Support

For queries and support contact techsupport@moschip.com.

Revision History

Date	Reason for change	Version
12th April 2008	First cut document	0.1
15th April 2008	Document update per internal review	0.2

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