

# **MCS9865**

## **Windows Vista 32 / 64 bit Driver User Manual**

### **Table of Contents**

<b>1. Introduction.....</b>	<b>2</b>
<b>2. Obtaining Driver.....</b>	<b>2</b>
<b>3. Driver Installation .....</b>	<b>2</b>
<b>4. Verifying Driver Installation.....</b>	<b>5</b>
<b>5. Serial Port Properties Sheet .....</b>	<b>6</b>
<b>6. Serial Port Features and Mode Changes .....</b>	<b>9</b>
<b>7. Direct Memory Access (DMA) .....</b>	<b>13</b>
<b>8. Parallel Port Features and Mode Changes .....</b>	<b>14</b>
<b>9. Uninstalling Drivers.....</b>	<b>14</b>
<b>10. Technical Support .....</b>	<b>15</b>

## 1. Introduction

This document describes the software driver installation / Un-installation procedure for MosChip MCS9865 PCI to Serial / Parallel Device

## 2. Obtaining Driver

MCS9865 software drivers can be downloadable from [www.moschip.com](http://www.moschip.com). Contact [techsupport@moschip.com](mailto:techsupport@moschip.com) for details

## 3. Driver Installation

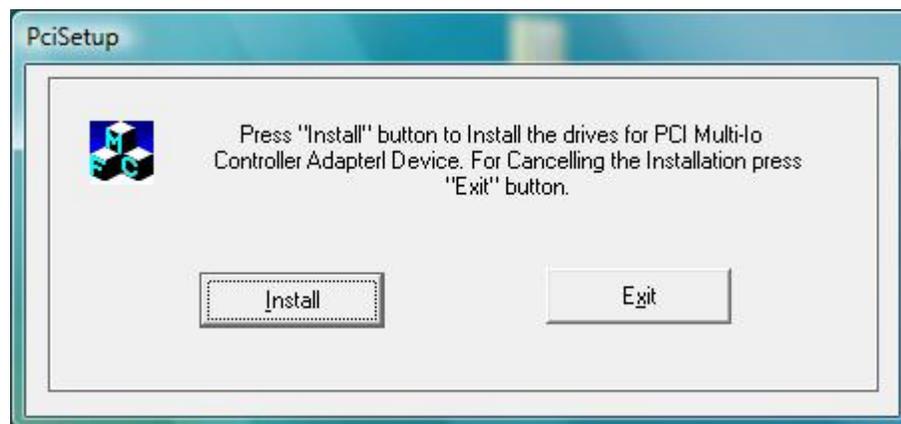
**Attention:** If you are installing MCS9865 Drivers on **Vista 64 Bit**, restart the system and while booting press "F8" Select "**Disable Driver Signature Enforcement**" option and press enter. This procedure is required for in-stalling un-signed drivers (Drivers not certified by Microsoft) only. Same is not applicable when the drivers are signed by Microsoft.

Ignore above note if you are installing MCS9865 drivers on **Vista 32 bit**.

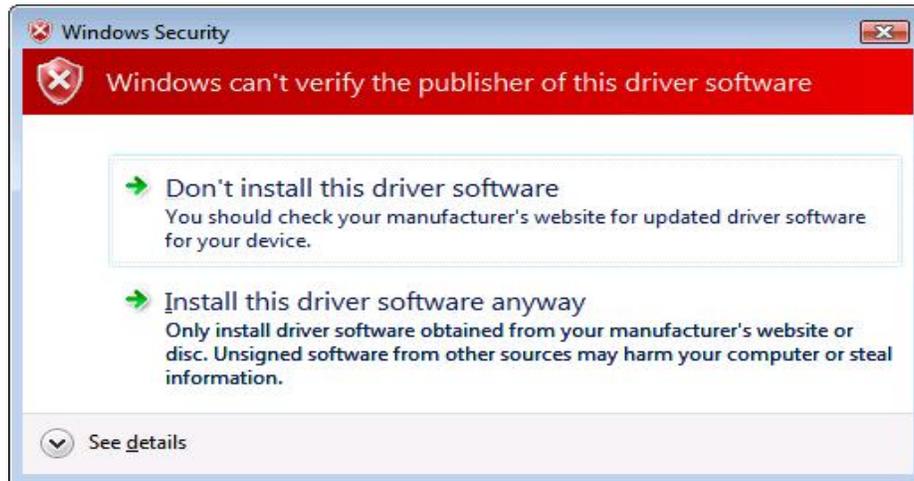
### Installing drivers for the first time

Make sure that you have **not** inserted PCI card into PCI slot.

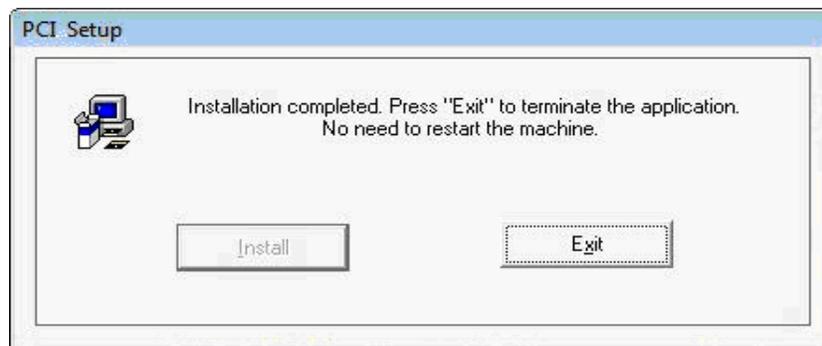
- Run "**PCISetup.exe**" file from the driver disk folder.
- **PCISetup** window will be popped up as shown below



- Click on “**Install**” button to install the drivers automatically. During the installation “**Windows security**” wizard will appear twice saying that Windows can’t verify the publisher.

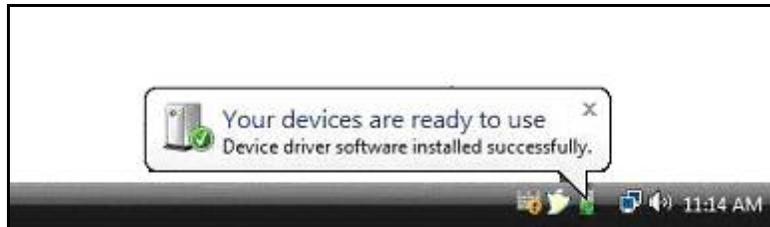


- Select “**Install this driver software anyway**” to install the drivers.

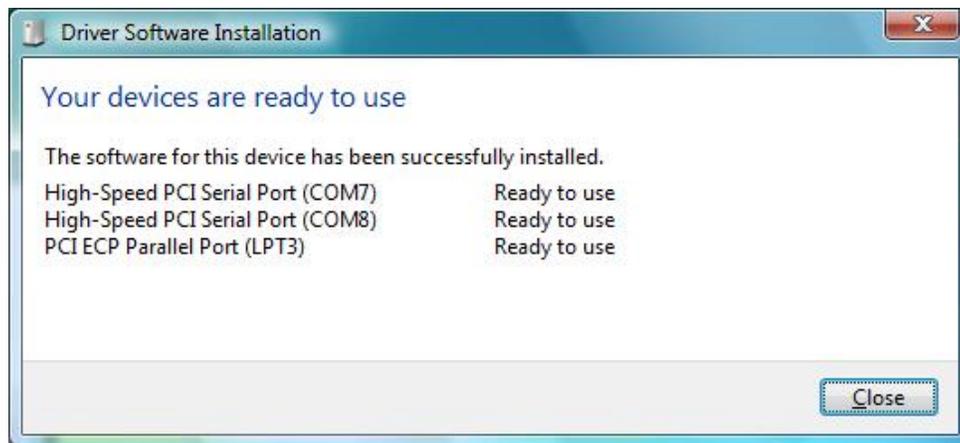


- Click on “**Exit**” and shutdown the PC. Place the MCS9865 based PCI card into PCI slot and then power on the system. After the system boots, the drivers are installed automatically and the status of installation can be viewed in the taskbar.



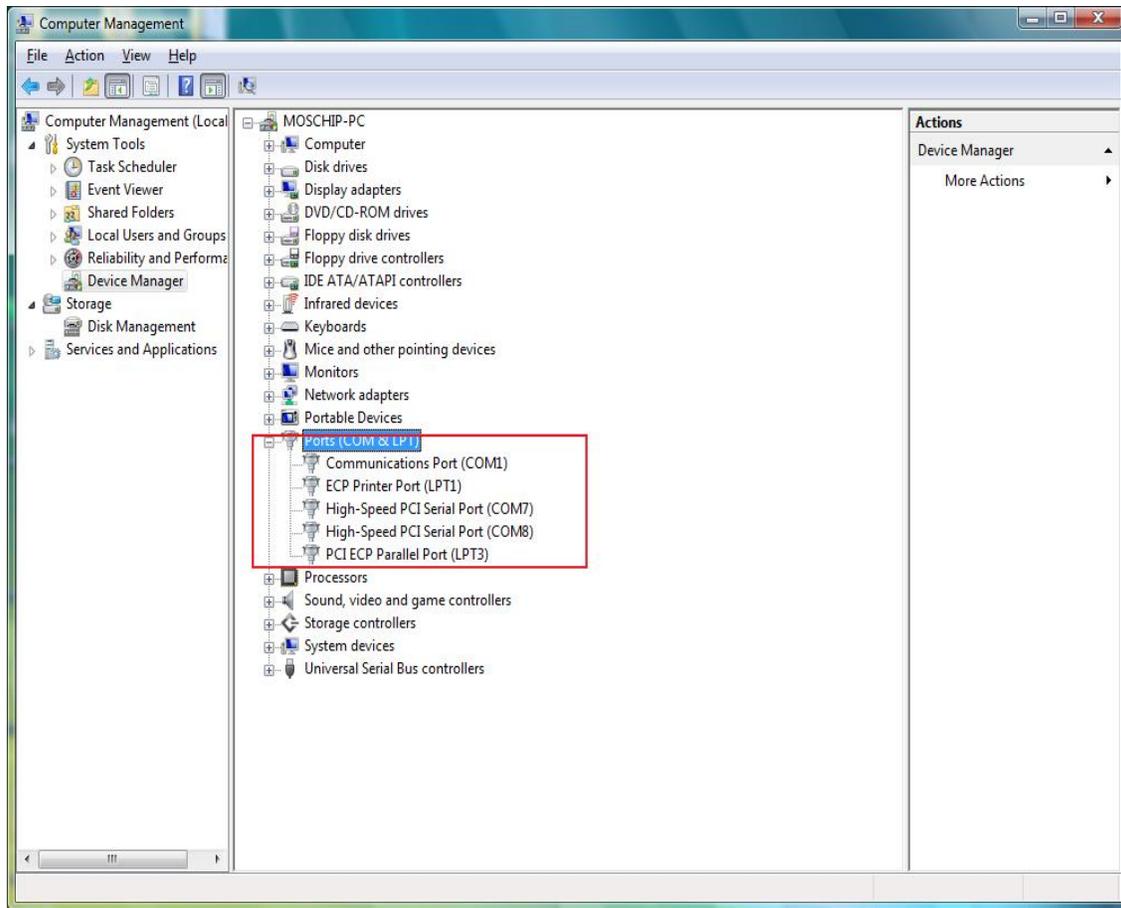


- To check the installed driver's status, click on the popup.



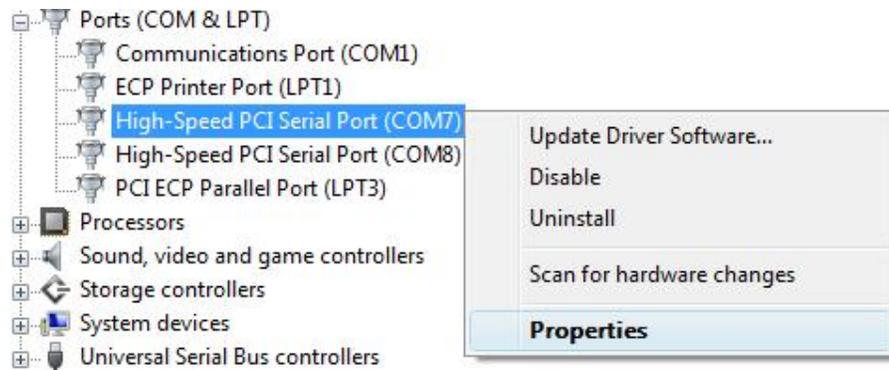
## 4. Verifying Driver Installation

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:



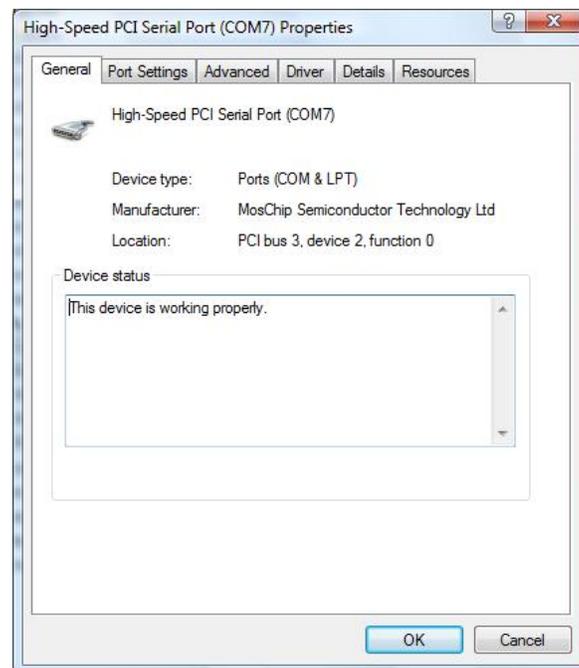
## 5. Serial Port Properties Sheet

In the Device Manager Right Click on required Port and then click on “**Properties**” Option to open the Properties page of the serial port.



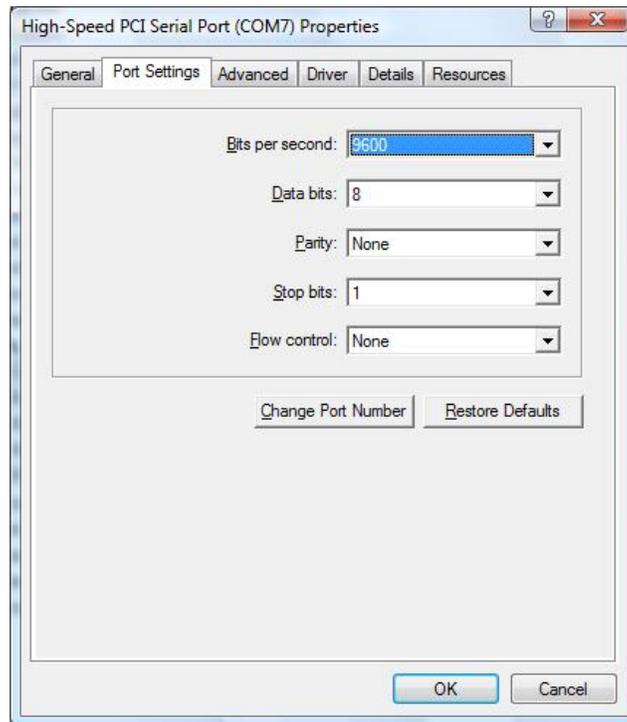
### General Tab

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.



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

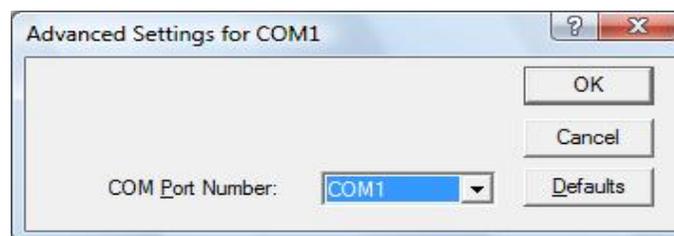
**Data bits** selection will have options 4,5,6,7 and 8 data bits.

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

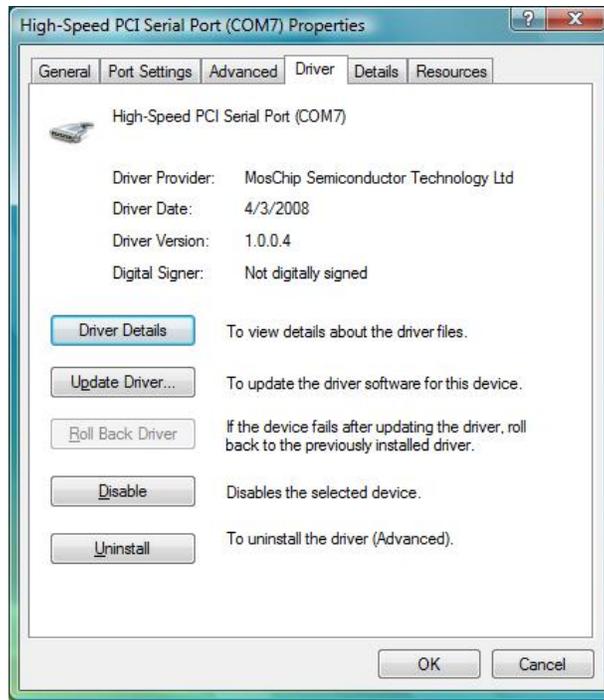
**Stop bits** selection will have 1, 1.5 and 2 selections.

**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:

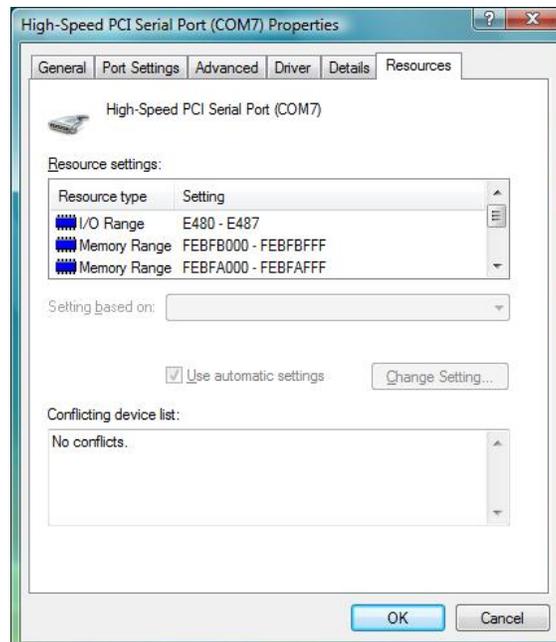


### Driver Tab



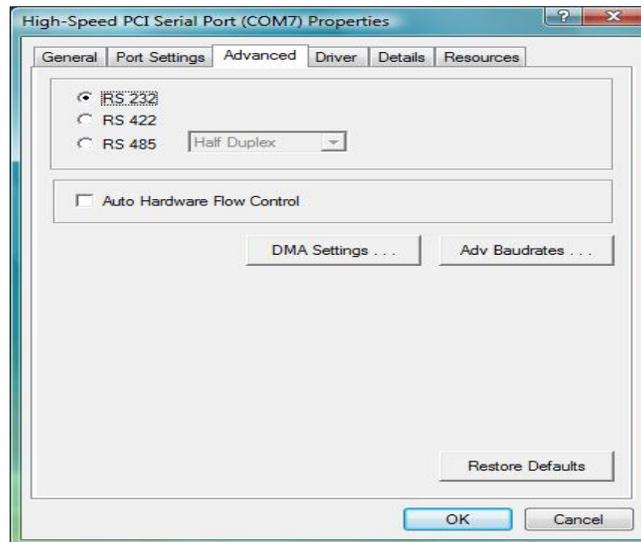
The **Driver Tab** shows the details of Driver Provider, Driver Release Date, Driver version is installed on your PC and Digital Signer details as shown above.

### 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.

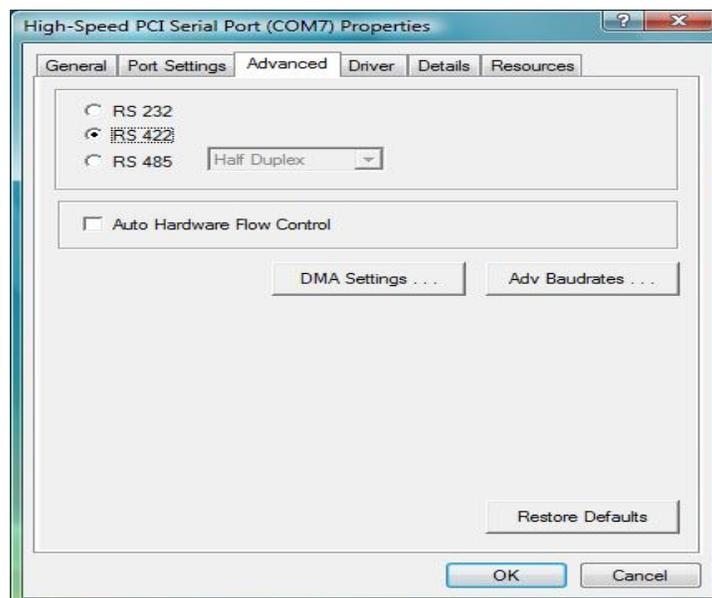


## 6. Serial Port Features and Mode Changes

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:

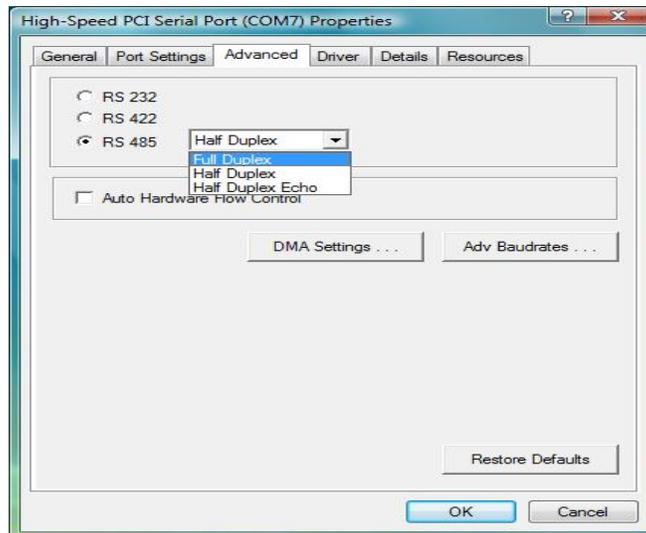
### Selecting RS 422 Mode

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



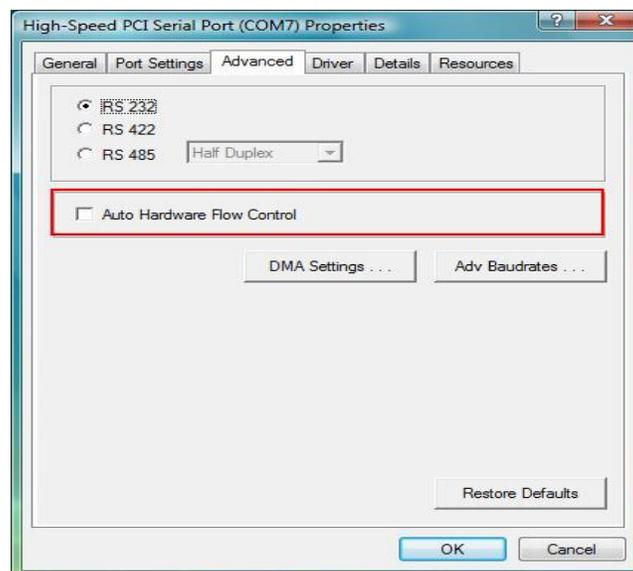
### Selecting RS 485 Mode

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.



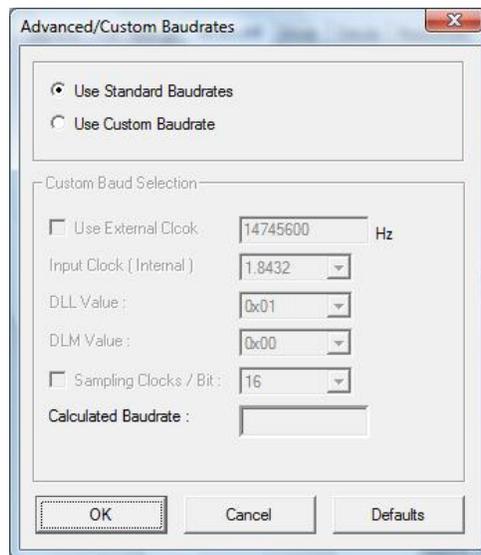
### Selecting Hardware Flow Control

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

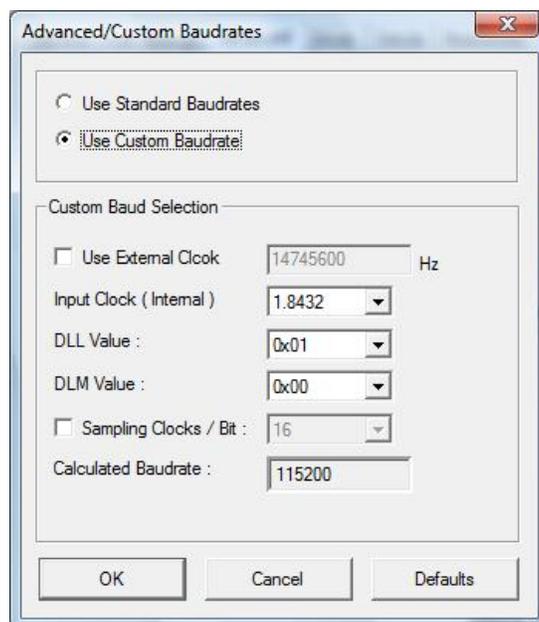
To Configure Advanced Baud rates click on “**Adv Baudrates**” button.



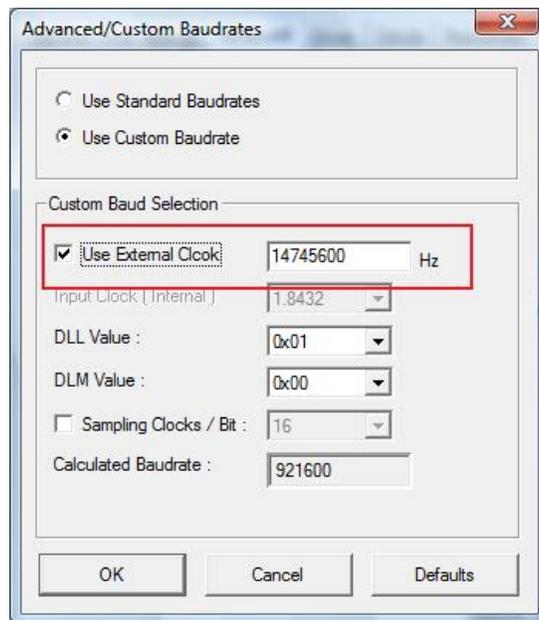
By default “**Use Standard Baudrates**” option is enabled.

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



When an external clock option is selected then the value of the external clock must be entered in the text box provided against “**Use External Clock column**”.



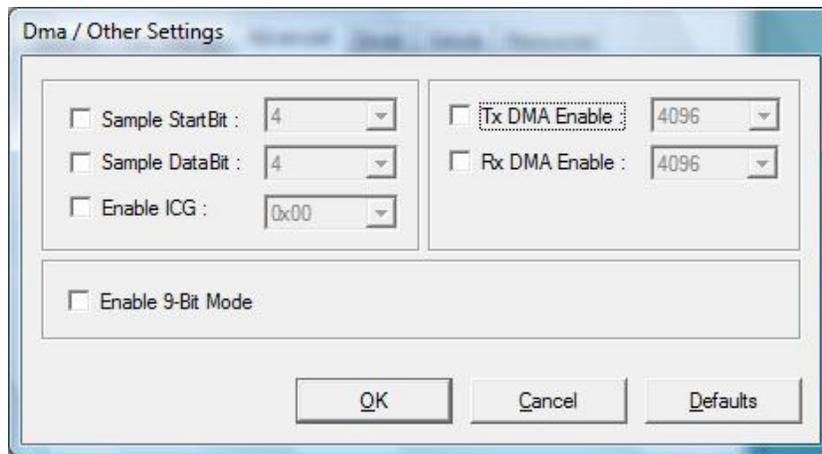
Custom baud rates can be obtained by selecting required **Input clock, DLL DLM** and sampling clock Values. The calculated baud rate will be shown in the Text Box provided for it.

To calculate the custom bauds please refer **Custom Baud Application Note** or contact [techsupport@moschip.com](mailto: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.

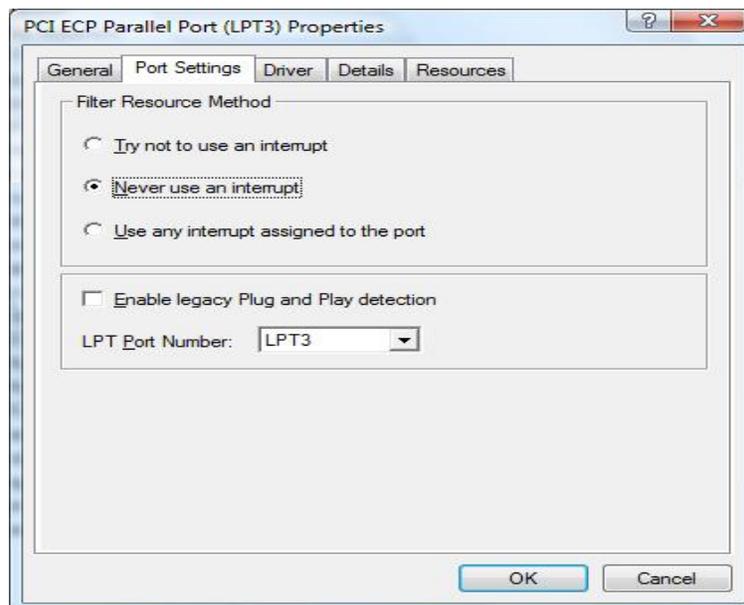
→Suitable value for **Inter Character Gap (ICG)** has to be set for special application like RAID controller devices.

→To enable 9bit Mode support, Select “**Enable 9-Bit Mode**”.

## 8. Parallel Port Features and Mode Changes

### Parallel Port Features

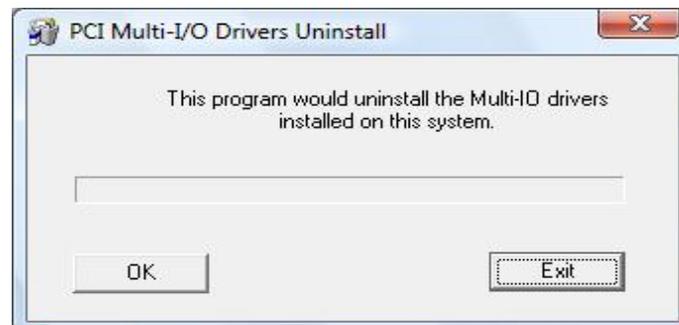
Parallel port will support SPP / CBFIFO / EPP / ECP modes. Parallel port mode will be automatically configured to the required mode after handshaking with the connected device.



## 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 selects “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. Technical Support

For queries and support contact [techsupport@moschip.com](mailto:techsupport@moschip.com).

### Revision History

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

### **IMPORTANT NOTICE**

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