MCS9901

Windows Vista 32 / 64 bit User Manual

Revision 0.1

Table of Contents

1. Introduction

This document will present the steps needed to install / Un-install the Software drivers of MosChip PCIe to Serial / Parallel / USB products based on MCS9901.

General Description:

2. Obtaining Driver

You can download the MCS9901Vista Certified drivers from MosChip Website → Downloads → Drivers:

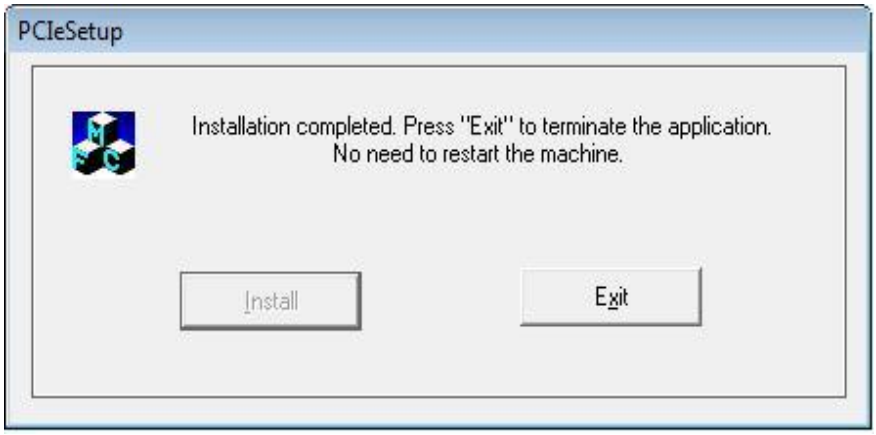
3. Driver Installation

Installing drivers for the first time:
Make sure that you have not inserted PCIe card into PCIe slot.
Run "**PCIesetup.exe"** file from the driver disk folder.
You will see a window as shown below:

Press "Install" to proceed to driver installation.

Select "**Install this driver software anyway**" to install the drivers.

Note: The above warning dialogue box appears when "setup.exe" utility is used to install drivers. As a policy Microsoft certifies only the driver for a device but not "setup.exe" and "uninstall.exe" utilities. Because of uncertified "setup.exe" utility above shown warning dialogue box appears. To avoid this warning install the device drivers by specifying the path of driver instead of running setup utility



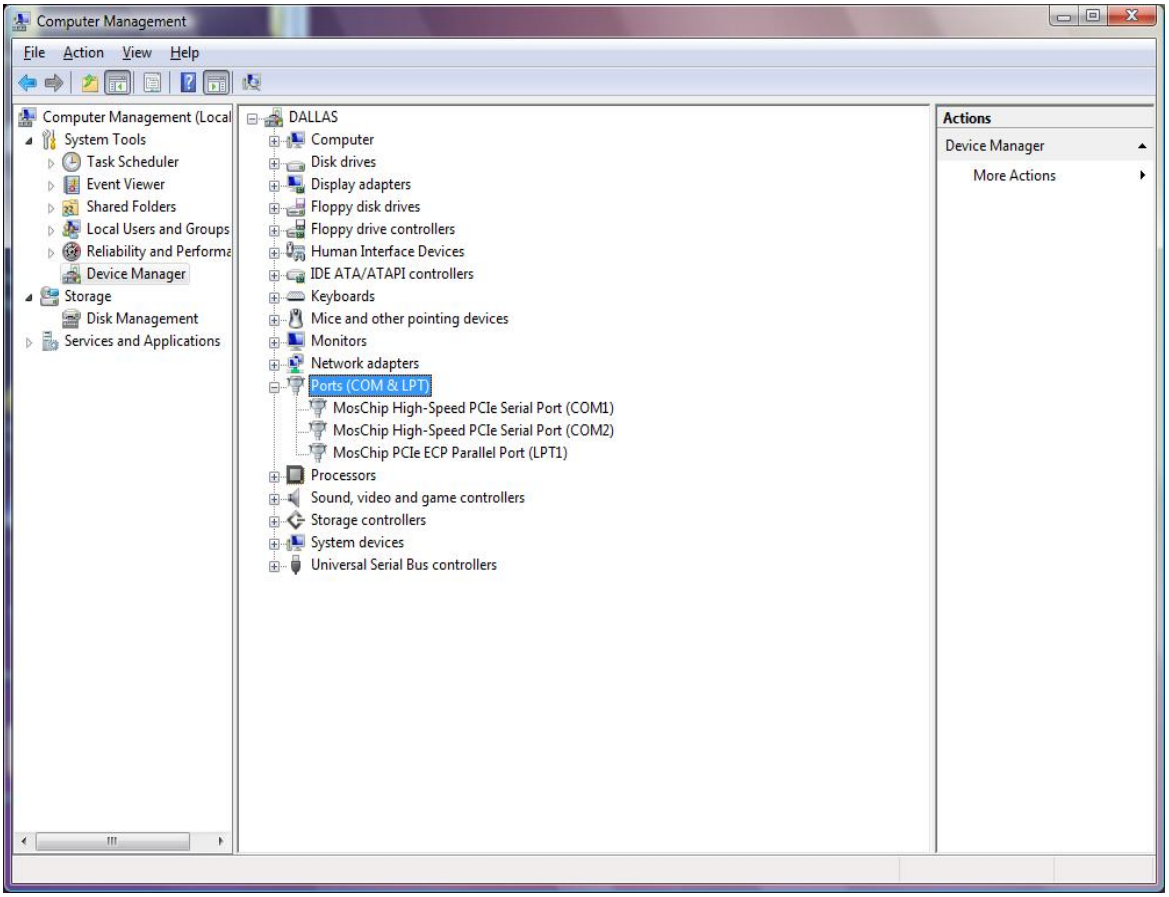
Click on "Exit" and shutdown the PC. Place the PCIe card into PCIe slot and then power on the system. Once the system gets booted we can find the installation of the driver's status.

Click on the popup to check the installed driver's status.

4. Verifying Driver Installation

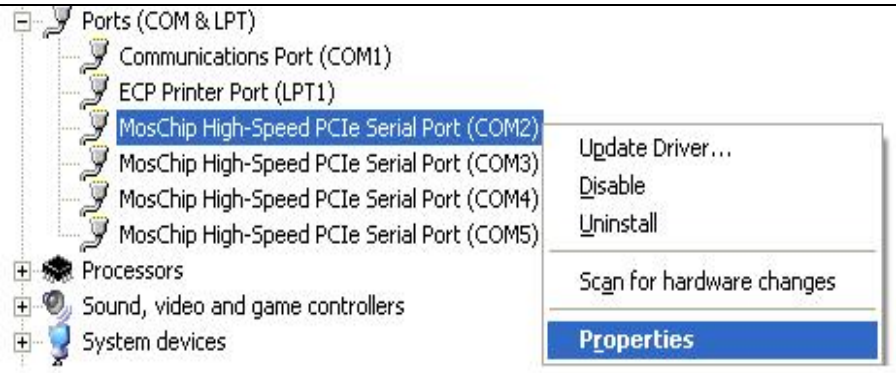
Please check the required configuration from Device Manager to confirm the proper installation.

For Example proper detection of the MCS9901 PCIe Card (2 Serial + 1 Parallel) can be confirmed by viewing the Device manager as shown below:



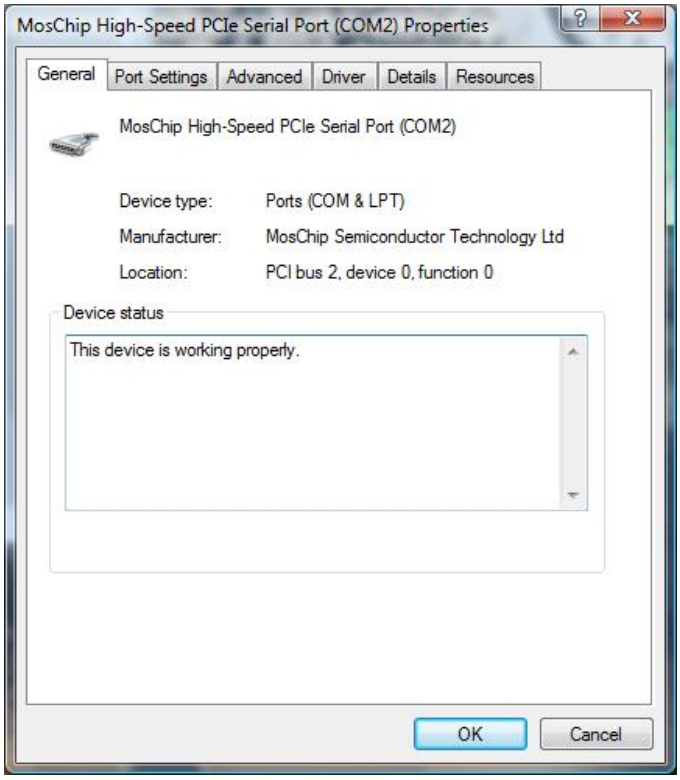
5. Serial Port Properties Sheet

In the Device Manager Right Click on required Port and click on "**Properties**" Option to open the Properties page.



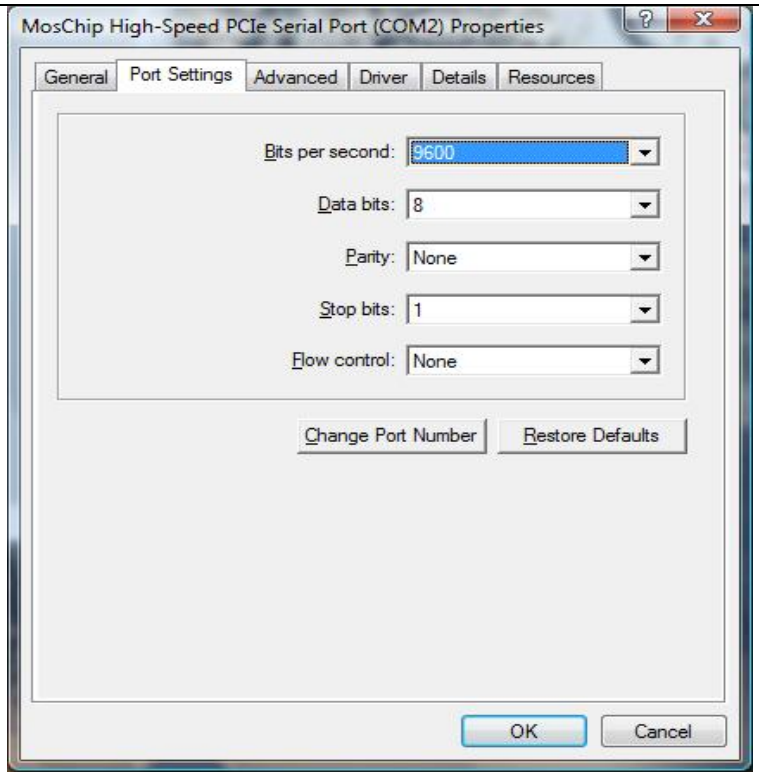
General TAB :

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



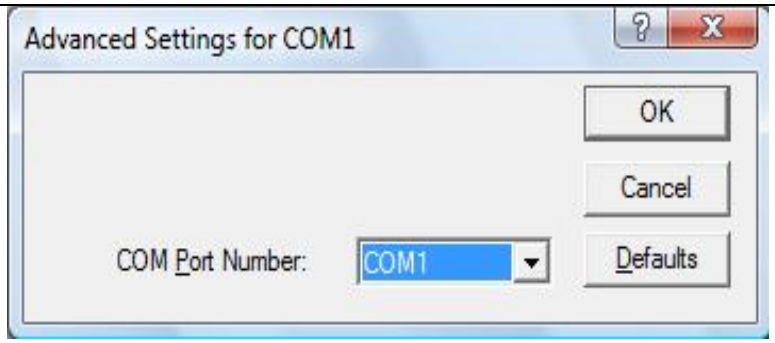
Port Settings TAB:

The "**Port Settings"** TAB is used to configure parameters of the Serial Port.

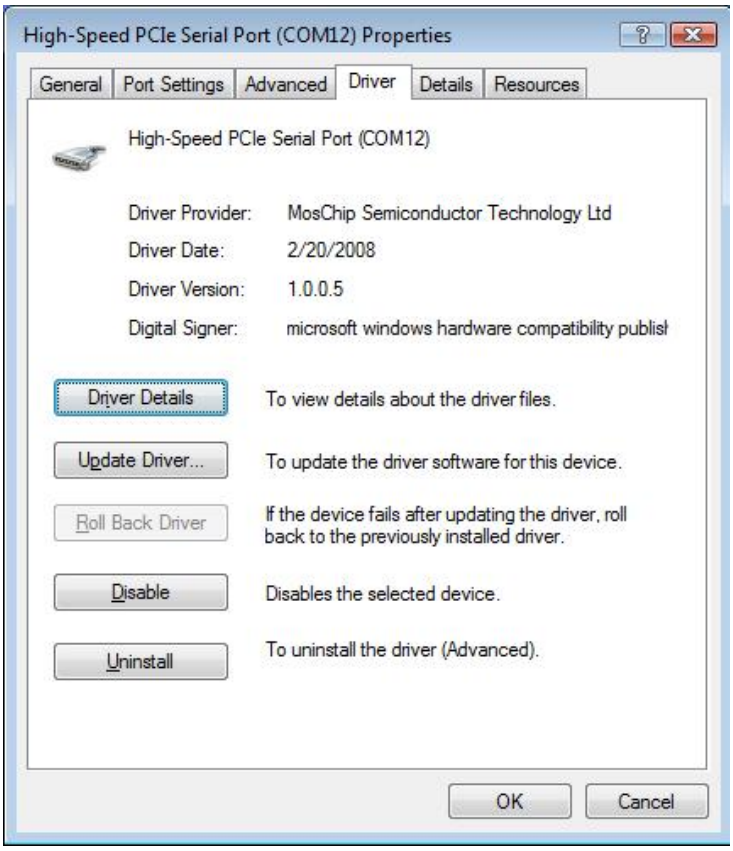


Bits per Second selection is used to set the default Baud rate settings.
Data bits selection will have options 4,5,6,7 and 8 data bits.
Parity selection will have Even,Odd, None, Mark and Space parity settings.
Stop bits selection will have 1,1.5 and 2 selections.
Flow Control selection will have Xon_Xoff, 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:

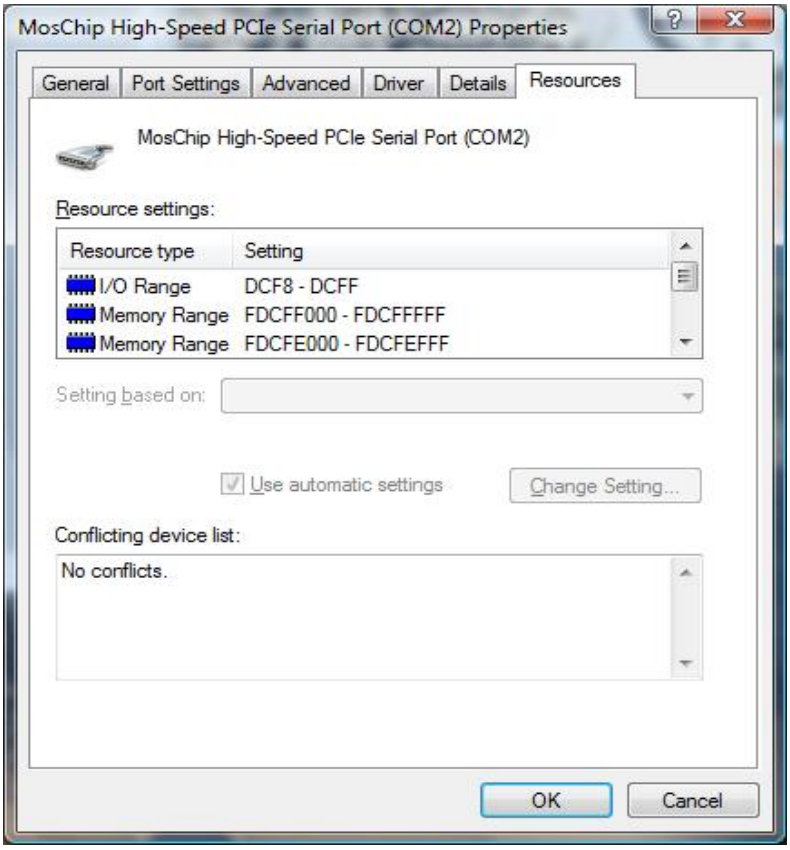


Driver TAB:



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:

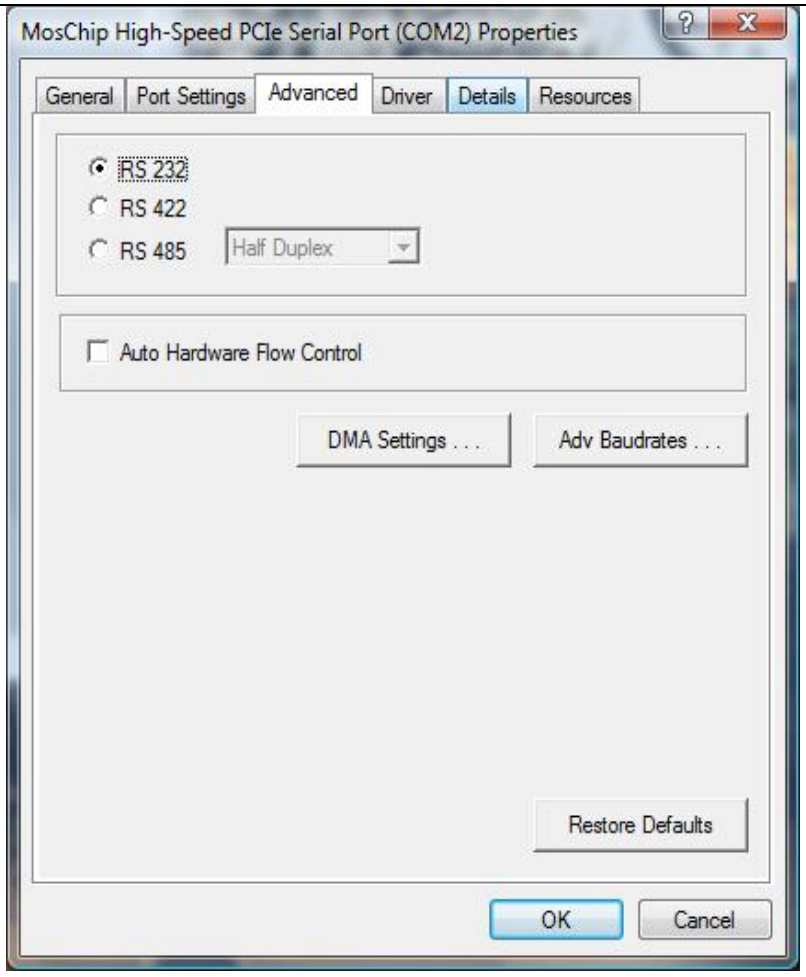


The ***RESOURCE TAB*** gives the details of IRQ, IO Ranges and Memory ranges that are assigned to a particular Serial Port.

ADVANCED TAB *allows the user to configure* Serial Port Features and Mode changes as explained below.

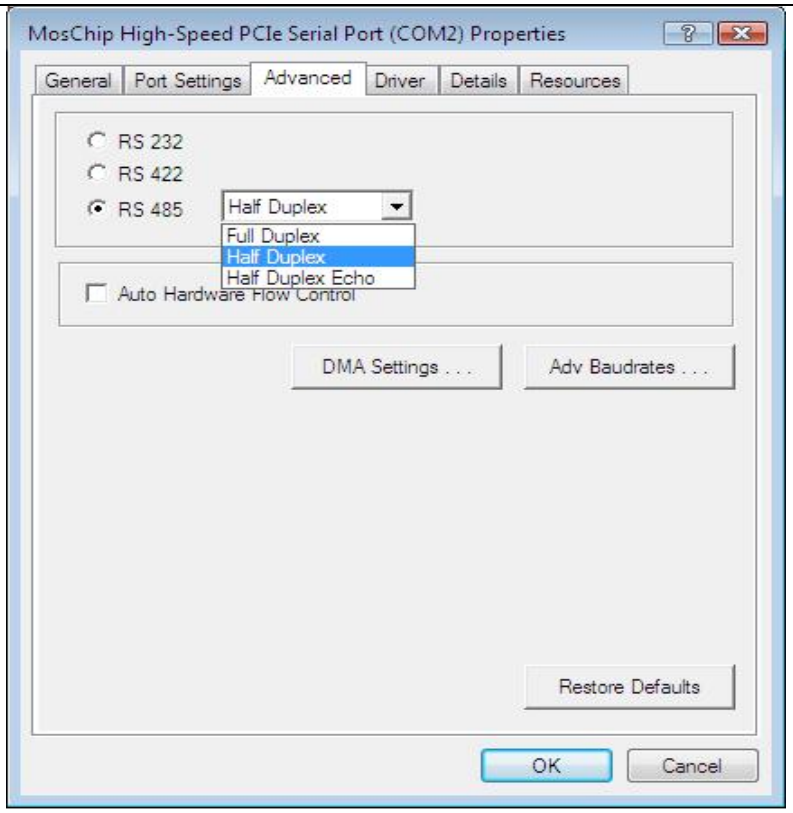
6. Serial Port Features and Mode Changes

By default every serial Port will be in RS 232 Mode. If you want to change it into **RS 422** OR **RS 485** Mode select the appropriate Radio button as shown below:



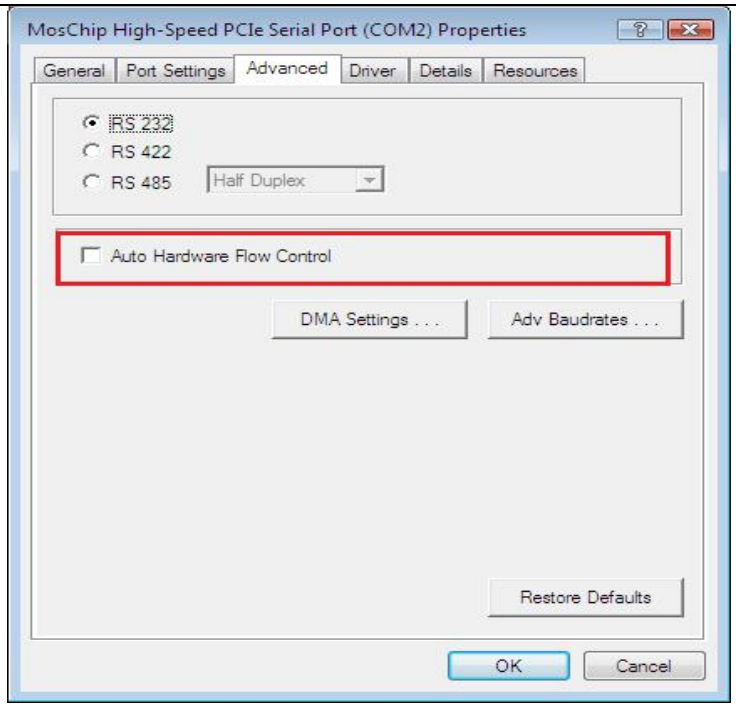
Selecting RS 422 Mode:
Select the **RS 422** Radio button to select the **RS 422** Mode.

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.



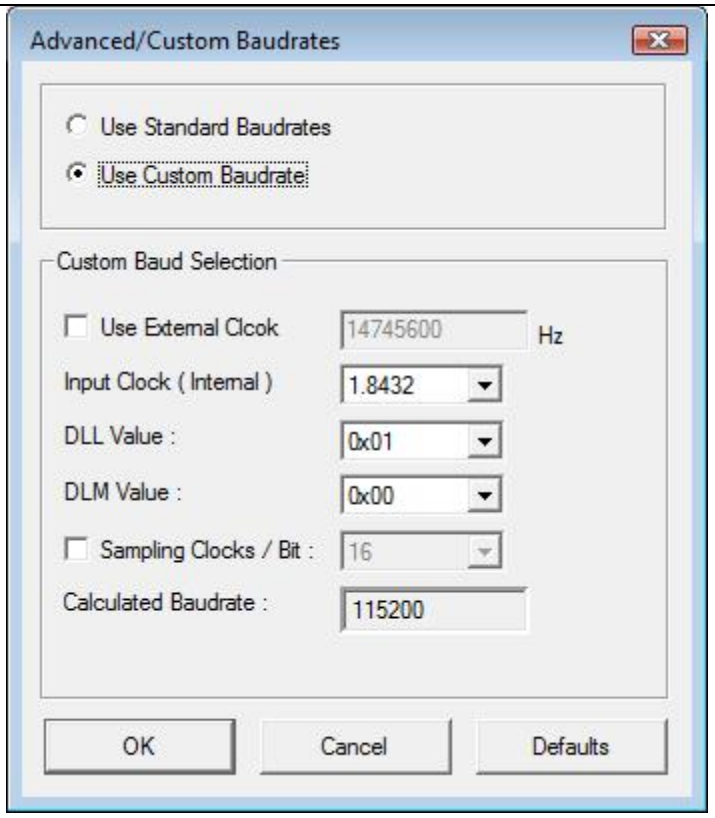
Selecting Hardware Flow Control:

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.



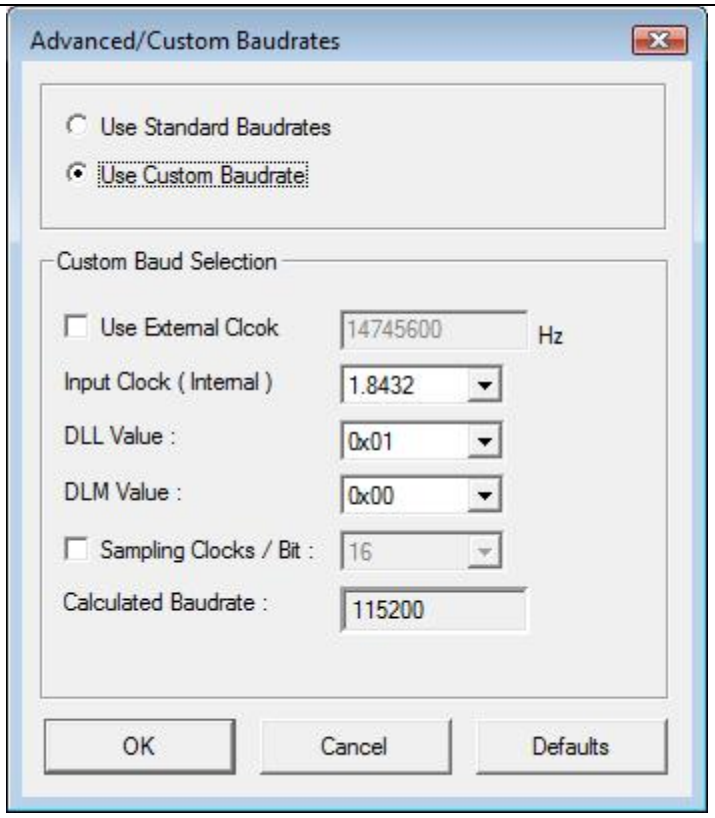
Configuring Advanced Baud rates:

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 and "**Use External Clock**" check box should be enabled if you are using External Clock on the board.

Input clock:



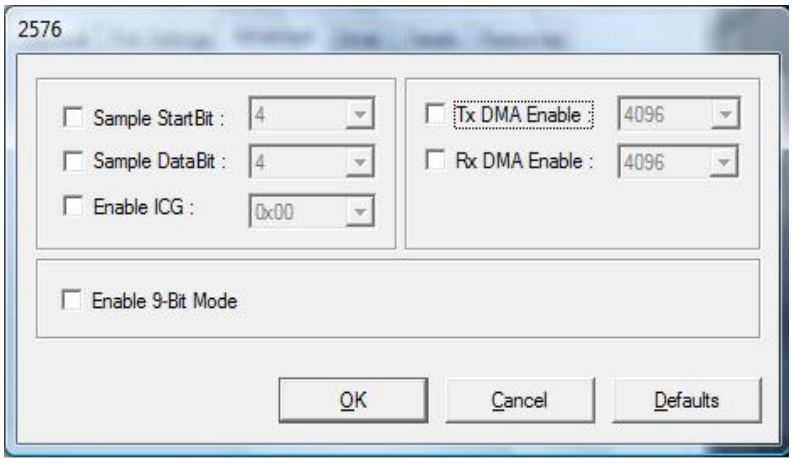
Custom baud rates can be obtained by selecting required **Input clock, DLL DLM** and sampling clock Values. The calculated baud rate will be shown in the Text Box provided for it.

To calculate the custom bauds please refer **Custom Baud Application Note** OR contact **techsupport@moschip.com.**

7. Direct Memory Access (DMA)

Selecting DMA mode.

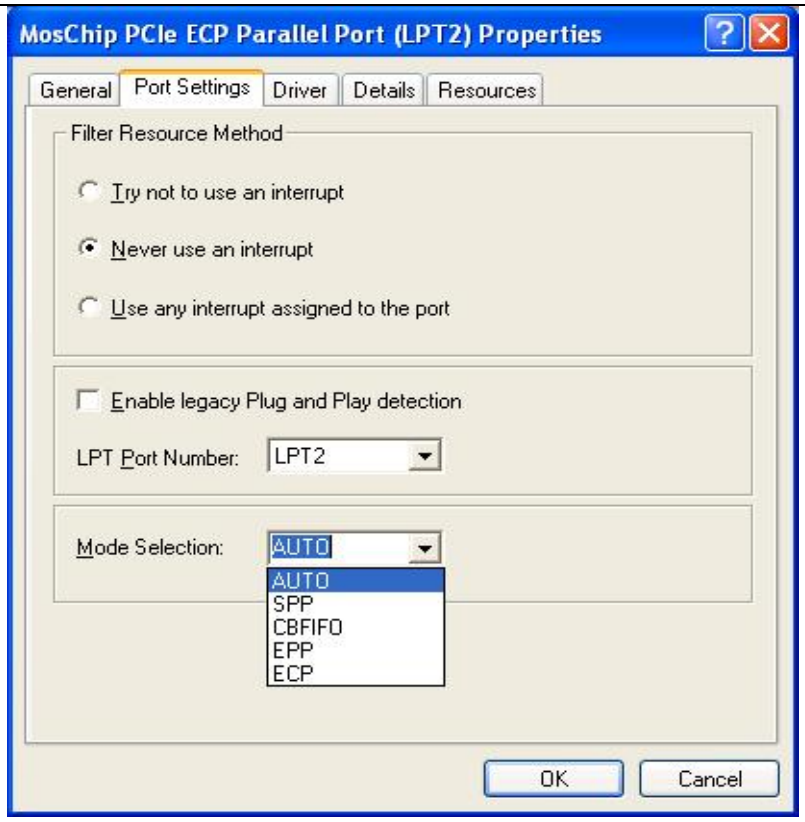
For Selecting DMA Mode click on **DMA Settings** on Advanced TAB as shown below:



→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. By default Parallel Port will be in **AUTO** mode. In this mode, Parallel port mode will be automatically configured to the required mode after handshaking with the connected device. User can also force the Parallel Port into any required Mode.

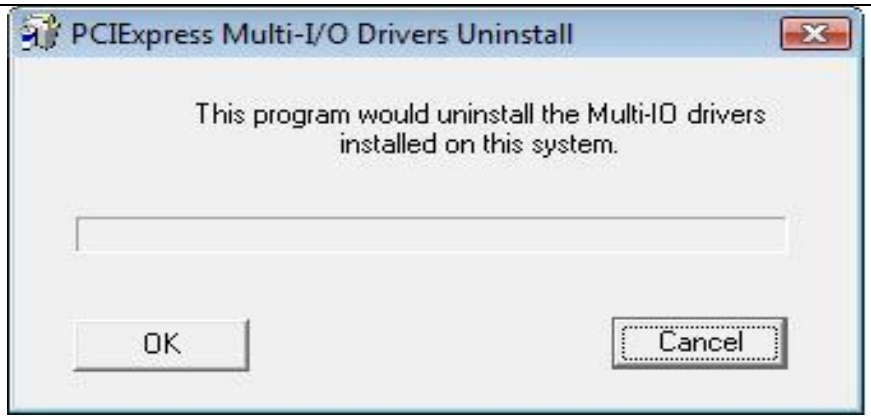


9. USB Features

USB interface of MCS9901 works with standard Microsoft drivers.

10. Uninstalling Drivers

To Uninstall MCS9901 drivers, run "**MOSCHIP_PCIeUninst.exe"** file available in the driver disk.



Note: Make sure that you should uninstall any previous driver before installing updated drivers.

11. Support

Write to techsupport@moschip.com for technical queries

Revision history

Date	Reason for change	Version
21st Mar 2008	First cut document	0.1

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