



AN-77XX-98me

MCS77XX

Windows-98 & Windows-me

Revision 1.2
18th Feb 2004

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Table Of Contents

1. Download The Appropriate Drivers From The Web-Site	4
2. Installing Drivers for Windows 98SE / ME	4
3. Confirm that the New Hardware has been included	6
4. Removing Previously Installed Drivers	6
5. Installation of Printer connected to MCS77XX Printer port	8
6. Installation Of Modems With Moschip Usb Serial Hardware	13
7. Additional Options / Debug support:	17
8. SERIALMP Option for Testing Internal and External Loopback:	20
9. Configuring Printer Automatically:	22
10. Editing Manufacture and Provider Name with Customize Option:	24

1. Download The Appropriate Drivers From The Web-Site

- a. <http://www.moschip.com>
Click the "Products" > "USB1.1" > "Drivers, Release Notes and Installation Guides". Allow the ".zip" file to be downloaded to your local computer.
- b. Unzip the Driver files to a directory on your Hard Disk. (Eg. C:\Moschip\77xx)
Note :- If Installation CD is supplied with Product, copy required files onto Local Computer Hard disk (Eg. C:\Moschip\77xx)
- c. Check the new folder with the Driver files for a "Readme" file that may have additional or special installation instructions. Use those instructions in addition to, or instead of, these instructions if present.

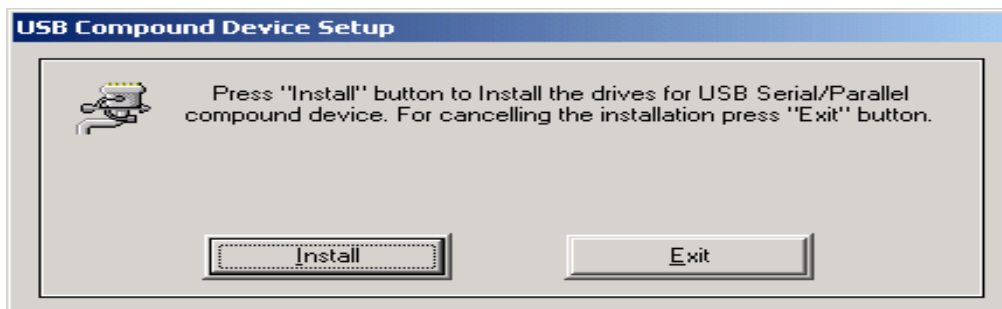
WINDOWS 98SE / ME DRIVER INSTALLATION

This document will present the steps needed to install or update the Drivers for MosChip USB Compound Device products, or another manufacturer's product based on a MosChip USB Compound Devices.

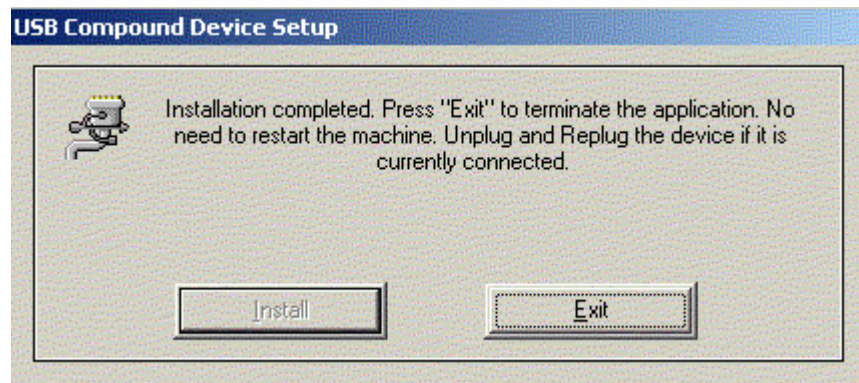
For this example, the MCS7715 was used as the test case. This device offers One Serial Port, and one IEEE-1284 style Parallel Port.

2. Installing Drivers for Windows 98SE / ME

- a. Turn the computer ON.
- b. Run **Mosunst.exe** from the driver folder to remove previously installed drivers for MCS7715. Reboot the system if prompted.
- c. Run **Setup.exe** from MCS7715 driver folder (Eg. **C:/MCS7715**)
- d. Following setup window appears click **Install** button to install the drives. To cancel the installation press Exit.



- e. Now the installer will display a message **Installation is in Progress... Please Wait!**
- f. Then the installer should display Installation Successfully completed! If the device is currently connected, unplug the device and again plug it in! Just remove the device and again connect the device on seeing this message.



- g. Click **Exit** to close the installer.
- h. Plug-in the MCS7715 **Device** to one of the USB port.
- i. Windows should detect the new USB device, and automatically install the drivers.
- j. When Windows desktop is displayed, the Driver installation is complete.

Note:-

- I) If multiple user accounts are used on your system, make sure you use user account with administrator privileges for running the Setup.exe. As per windows OS security policy only users with administrator privileges can run Setup.exe to install different drivers and applications.
- II) In case of Windows XP, Add new hardware window will appear when MCS7715 device is connected to USB port after running Setup.exe, Click next and then Click continue anyway for Windows logo certification popup. Click Finish to complete installation.
- III) Following window appears. During Installation, sometimes there is a need for "Win98 SE CDRom".
- IV) The screenshots shown in this procedure were captured from Windows-98. The same steps and sequences are to be used for Windows-me as well.

3. Confirm that the New Hardware has been included

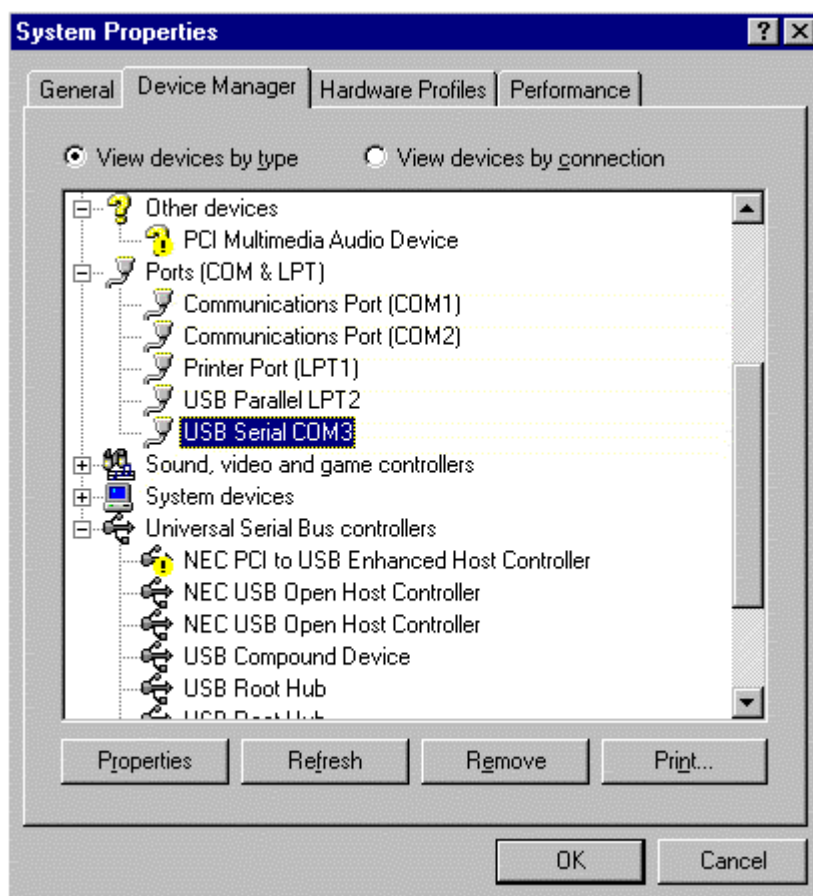
Right-Click on **My Computer** icon of Desktop > **Properties** > **Device Manager** > **Ports / USB controllers**. MCS77XX USB to Serial / Parallel adapter will listed here.

"USB Compound Device" is in the Universal Serial Bus Controllers.

"USB Serial COMn" in Ports (LPT & COM) category

"USB Parallel LPTn" in Ports (LPT & COM) category

In case of MCS7715, one Serial Port and one Parallel Ports were added.



4. Removing Previously Installed Drivers

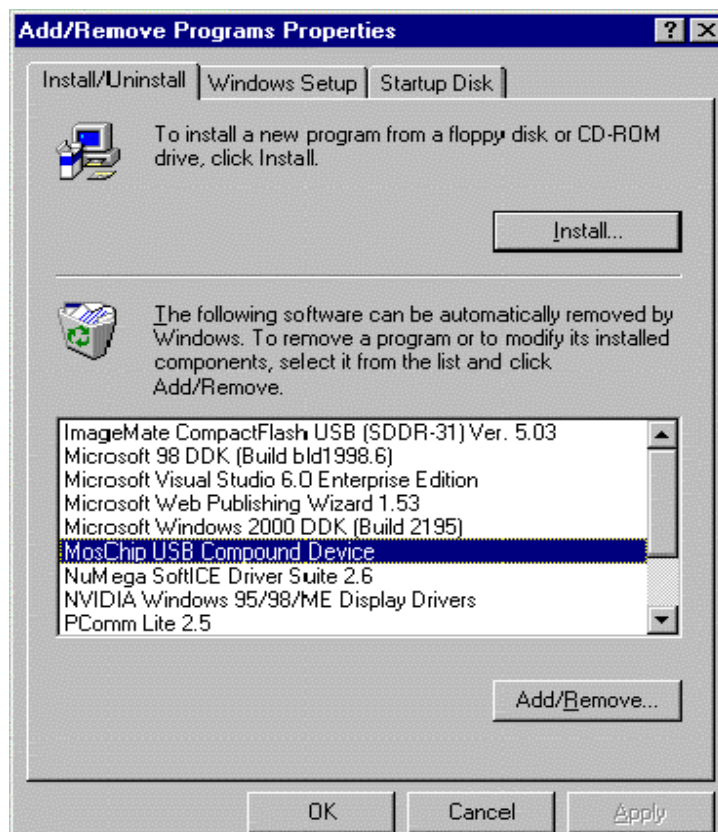
Sometimes it will be desirable or even necessary to remove the previously installed drivers, so that a new, clean installation can be performed. Drivers can get corrupted when being written to their installation medium (CD-ROM etc.). If this happens, the drivers may not install properly. Even if the installation proceeds without errors, the drivers may not work.

Sometimes older outdated drivers are shipped with a product. Newer machines may require newer updated drivers, but the older drivers prevent them from being installed. The easiest way to remove old drivers is to use the MosUnst.EXE program (Driver Folder i.e C:\ Moschip).

Use MosUnst.EXE to remove old Drivers (System needs to be re-booted with this)



Alternately you can Uninstall through Control Panel. Unplug the USB Compound device. Open >StartSettings->ControlPanel->Add/Remove Programs.



Select "USB Compound Device" click Add/remove. At the next dialog, Click "OK" button.

The Program to uninstall will appear click OK to remove the components.

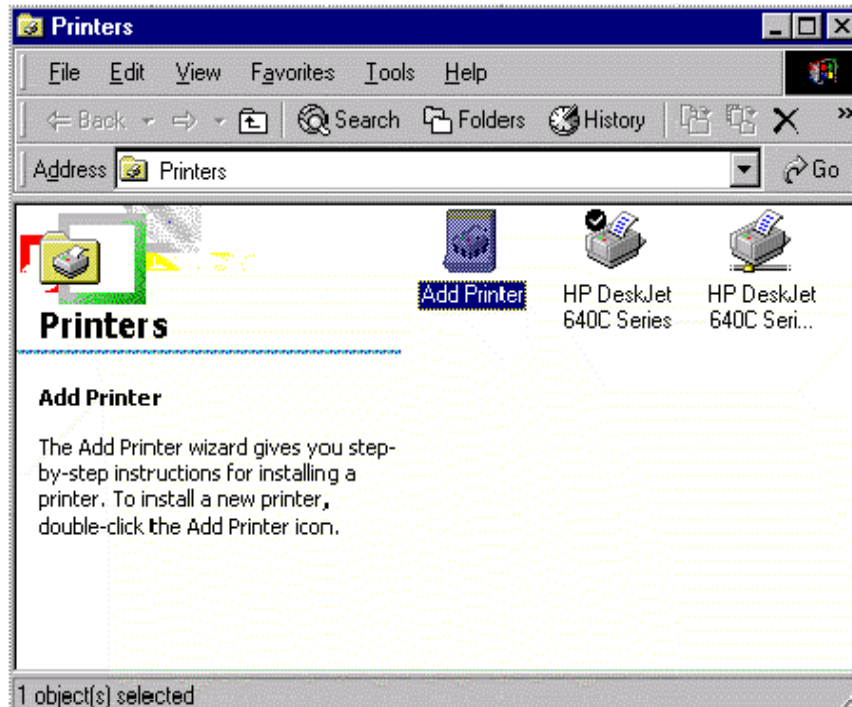
Then click "RebootNow" button to reboot the system.



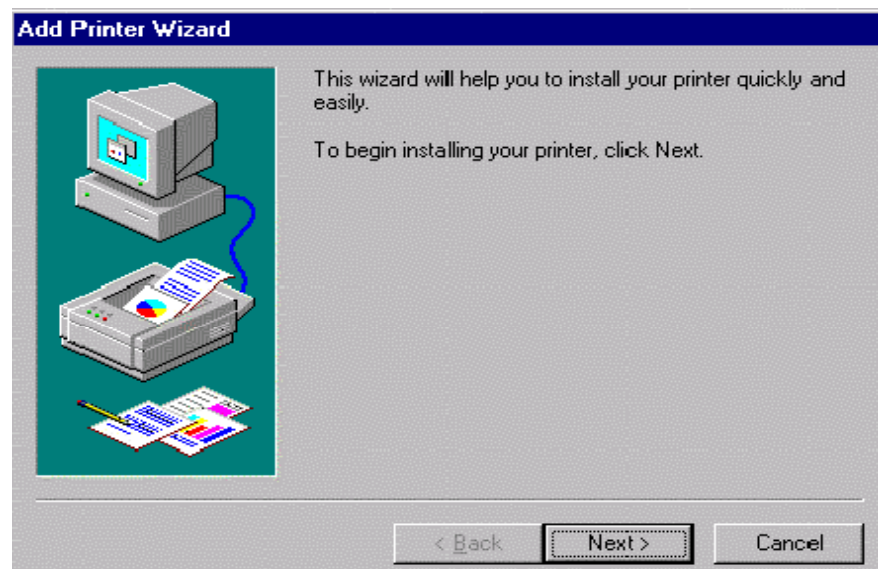
5. Instructions to Use Printer Connected To MCS7715.

- a. Plug the M Plug the MCS7715 in the Host Computer, a new parallel port will be installed in your system. You can see that under Device Manager Ports.
- b. Connect the Printer to USB Parallel Port. The Printer is not a Plug and Play device, hence You will have to manually install the printer. Go to Start > Settings > Printers.

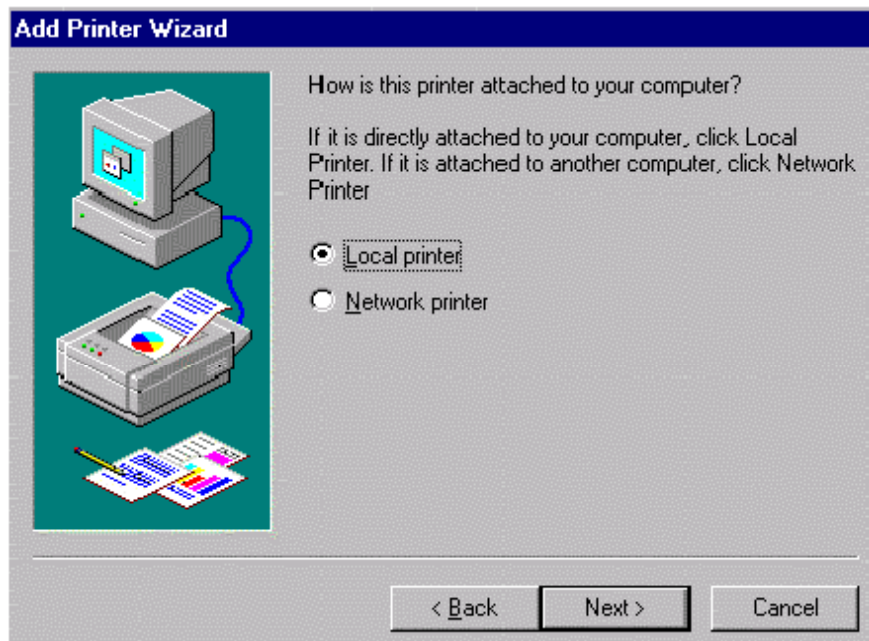
- c. Printers Window will be displayed Click Add Printer. If the Printer is already present select the printer as default printer



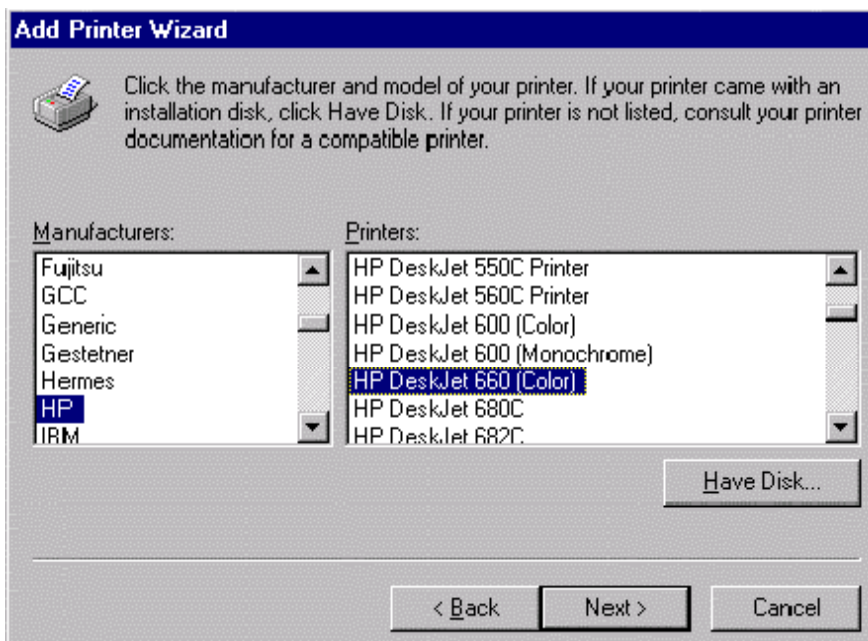
- d. Click Next to begin Printer installation



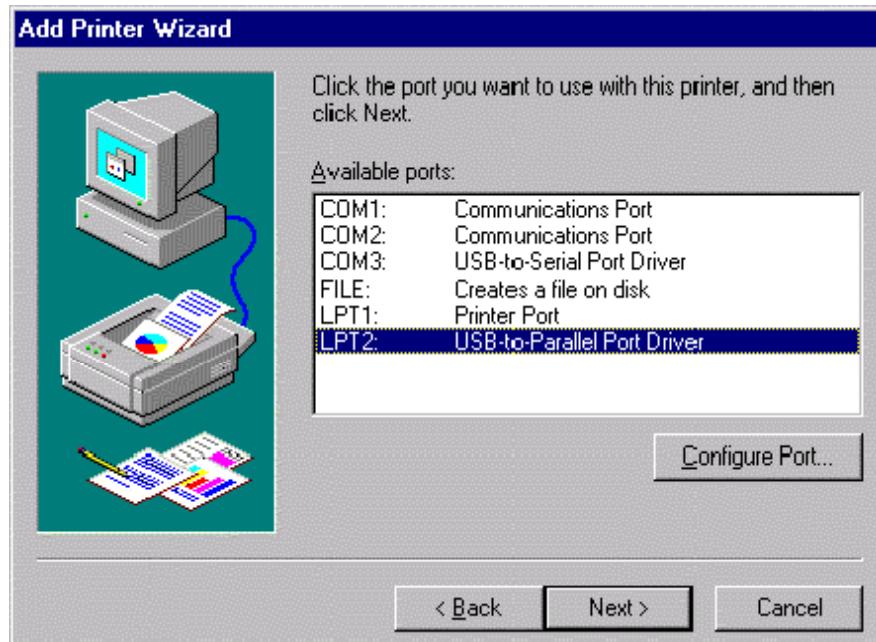
- e. Select the Local Printer. If you are in Network Connectivity select Network printer > Click Next.



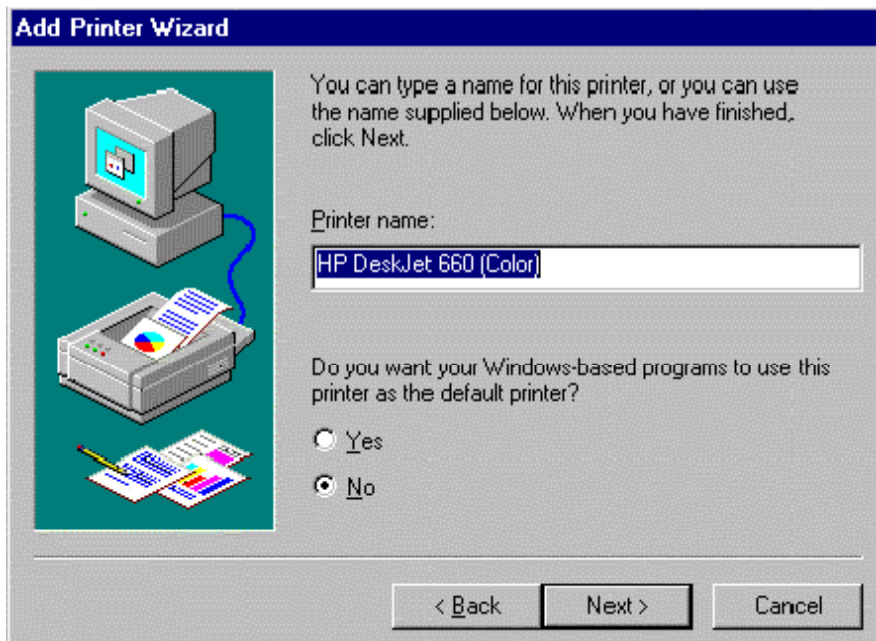
- f. Then select the Printer model and driver or enter the CD which contains your printer drivers.



- g. Select the Printer Port, e.g if LPT2 is assigned to MosChip USB Parallel Port, then select LPT2. You can find out the LPTx Number through Device Manager



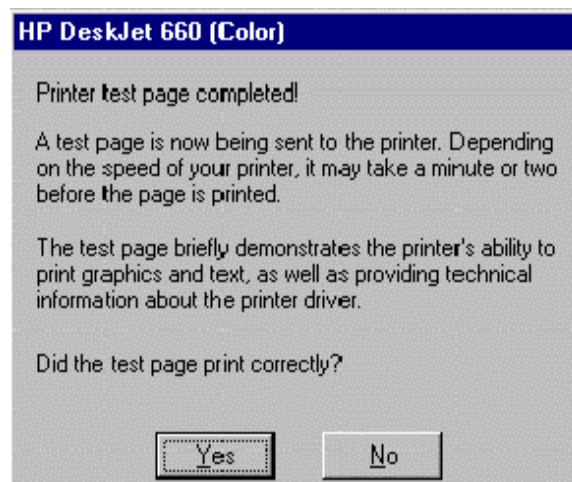
- h. Select “Yes” if you want the Printer to be a default printer for all Windows - based – programs. > Click Next Printer Name is displayed in Text Box.



- i. Select “Yes” to print a test page > Click Next.



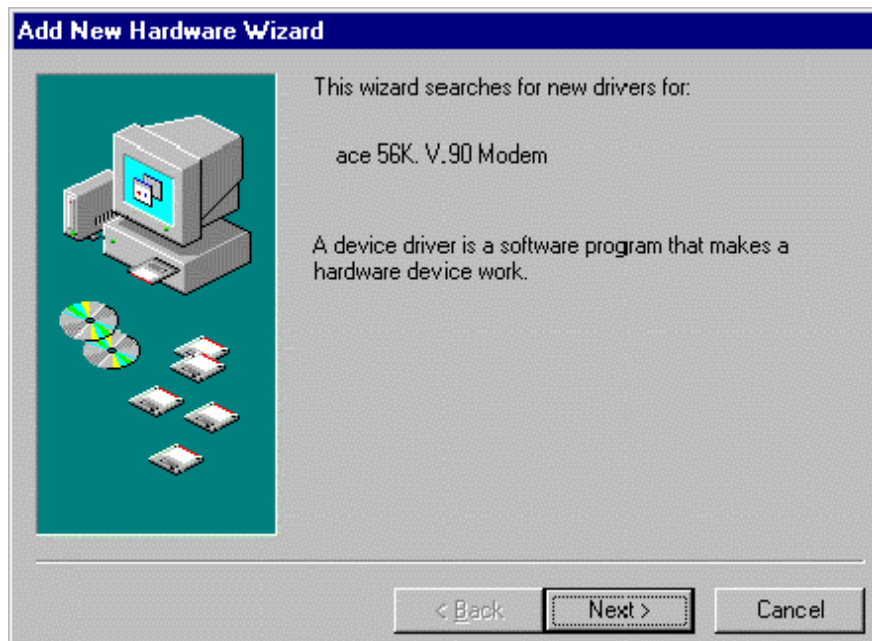
- j. After printing the test page it will show this Dialog Box > Click “Yes” > If the test page is print.



- k. Windows will install the Printer drivers and your Printer should be ready to use.

6. Installation Of Modems With Moschip Usb Serial Hardware

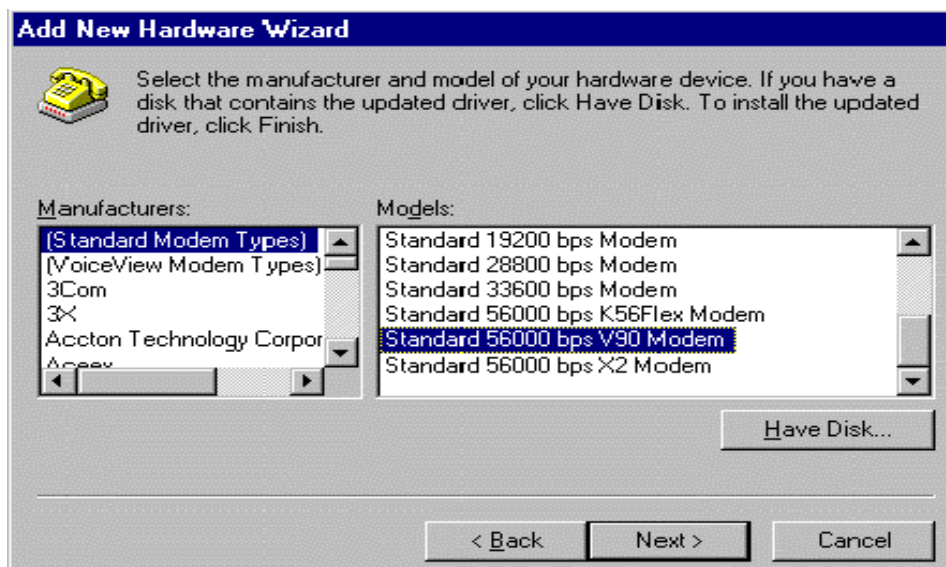
- a. Procedure for installing Modems with Moschip USB-Serial Port MCS7710/MCS7715/MCS7717/MCS7720):
 - b. Connect the modem to the Moschip USB Serial port and turn ON the power supply to the Modem.
 - c. Plug in the **MOSCHIP USB Serial hardware** in the Host Computer.
 - d. Follow the setup instructions mentioned in the "**Installation.notes**" to install the drivers required for the Moschip USB Serial Hardware.
 - e. After installing the drivers, Windows should detect the Modem connected and automatically display a "Add New Hardware Wizard".
- v "Add New Hardware Wizard". Click "Next" to continue.



- v Select "Display a list of all the drivers in a specific location ..." option (radio button) and click "Next" to continue



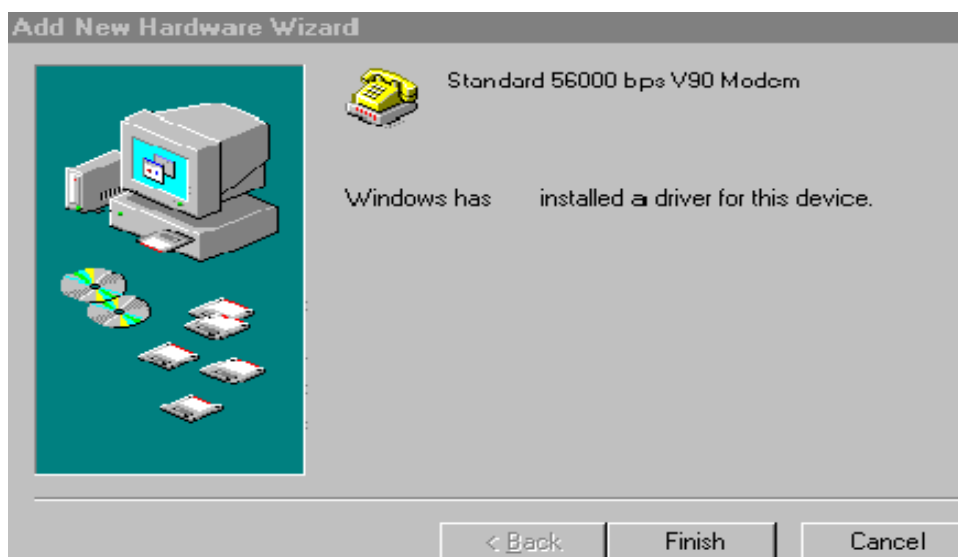
- v Wizard displays a list of appropriate Manufacturer and Model of different modems. Select an appropriate option if it is present in the list. If it is not in the list, click "Have Disk" button on the Wizard and select the location where appropriate drivers for Modem are located. Click Next to continue.



- At the next dialog, Windows should display an additional dialog box, saying "Windows is now ready to install the selected driver for this device. Click Back to select a different driver or Click Next to continue".



- Windows searches and installs the selected drivers and displays a dialog saying it has finished installing the Drivers. Click "Finish" to complete the installation.



- ✓ To Check Modem Installation. Open the Windows Device Manager > Right-Click the "My Computer" icon on the Desktop > Select "Properties" from the drop-down menu > Click the "Device Manager" button to show the current Hardware list. Click on "Modem".
- ✓ Confirm that the Modem has been installed Modem Category newly connected Modem should be displayed.

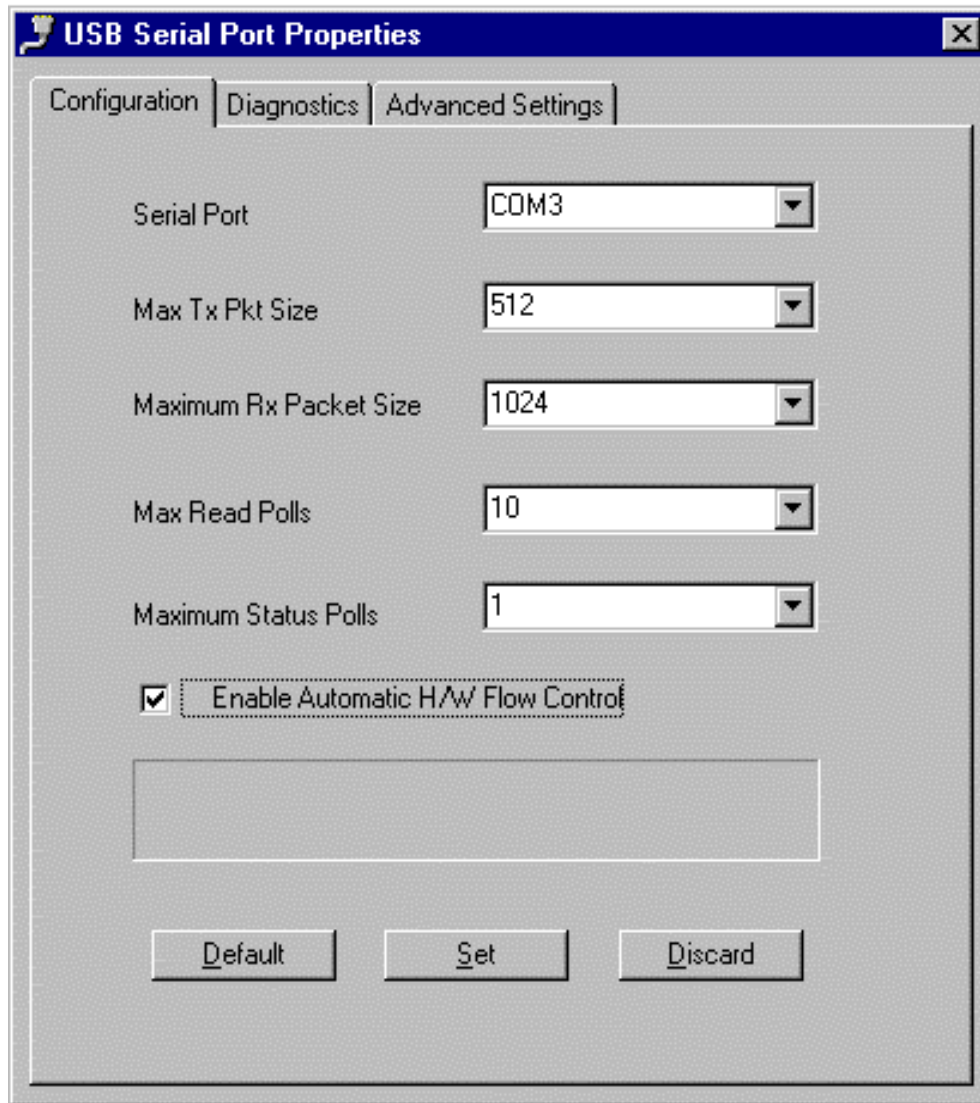
What if the MOSCHIP USB Serial device is already installed and Modem is connected to the MOSCHIP USB serial port later?

- ☐ Open the Windows Device Manager. Right-Click the "My Computer" icon on the Desktop. Select "Properties" from the drop-down menu. Click the "Device Manager" > Modem .
- ☐ Click "Refresh" for the newly connected Modem to be detected.
- ☐ Windows should detect the new Modem and automatically display a "Add New Hardware Wizard"
- ☐ Repeat the Installations steps as covered under Section 6 to Install Modem.

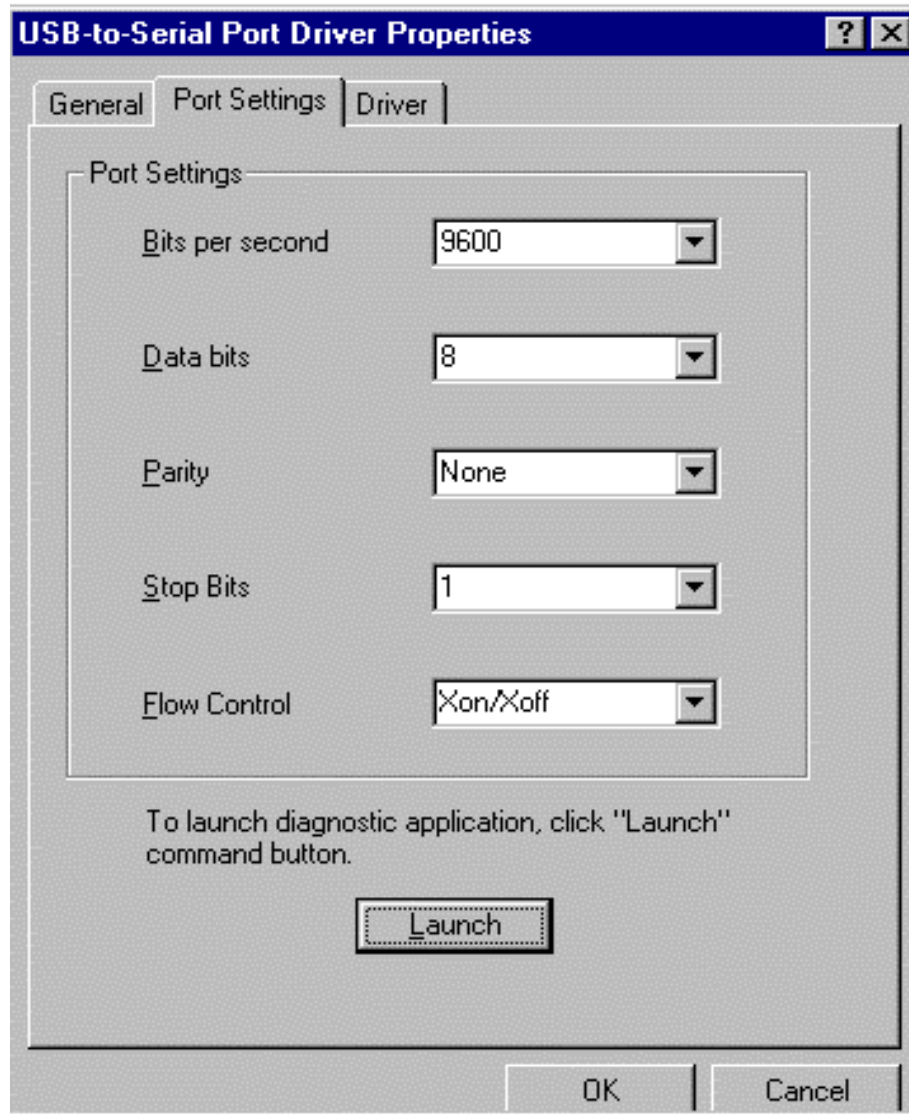
Note: When Modem is connected and the "Refresh" button is pressed, If windows does not display a "Add New Hardware Wizard" press "Refresh" again. With Windows-ME operating system, On system reboot Operating system doesn't enumerate the MODEM(s) which connected to the MosChip Serial Port(s) and Device Manager shows the "MosChip USB Serial Port " with the "disabled" icon. Press "Refresh" button, so that operating system will enumerate the MODEM(s) and Device Manager shows the "MosChip USB Serial Port" with the proper icon.

7. Additional Options / Debug support:

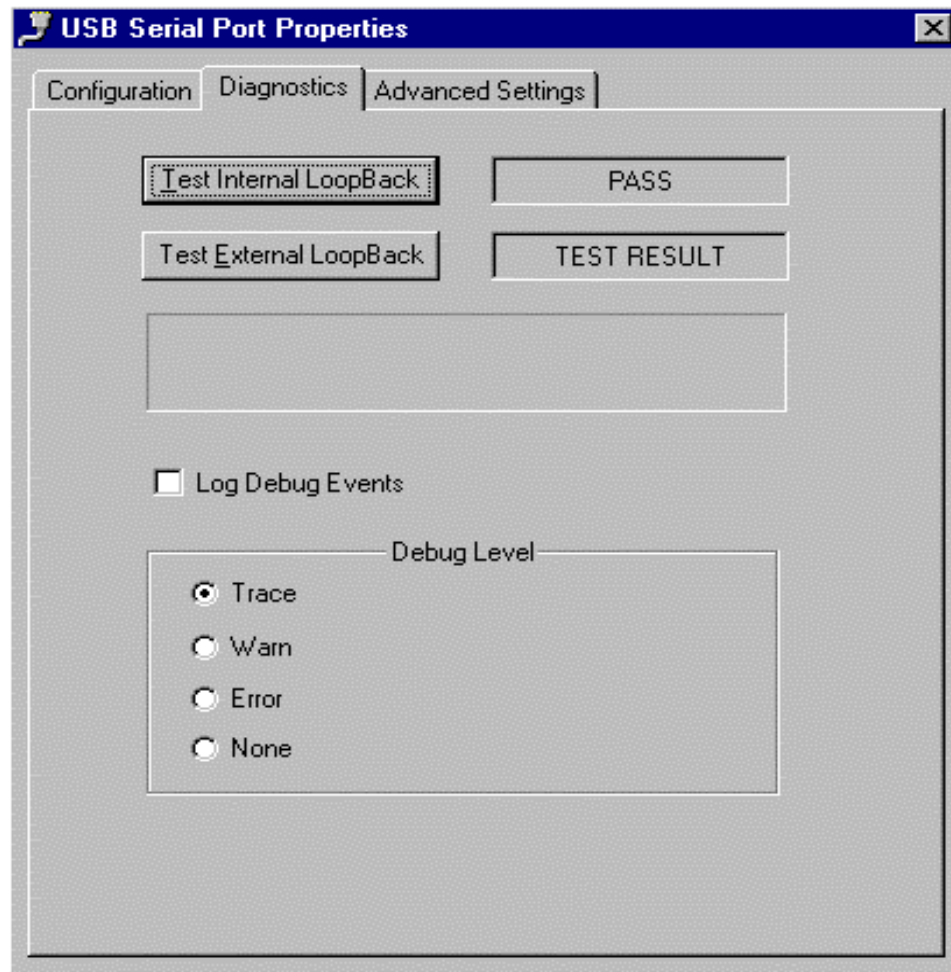
- a. Configuration settings of Moschip USB serial port. Right click on the USB Serial port in Ports (under Device Manager) > Properties.



- b. Configure Serial port : The clip below shows the Serial port properties settings .
Default button can be clicked for default settings.

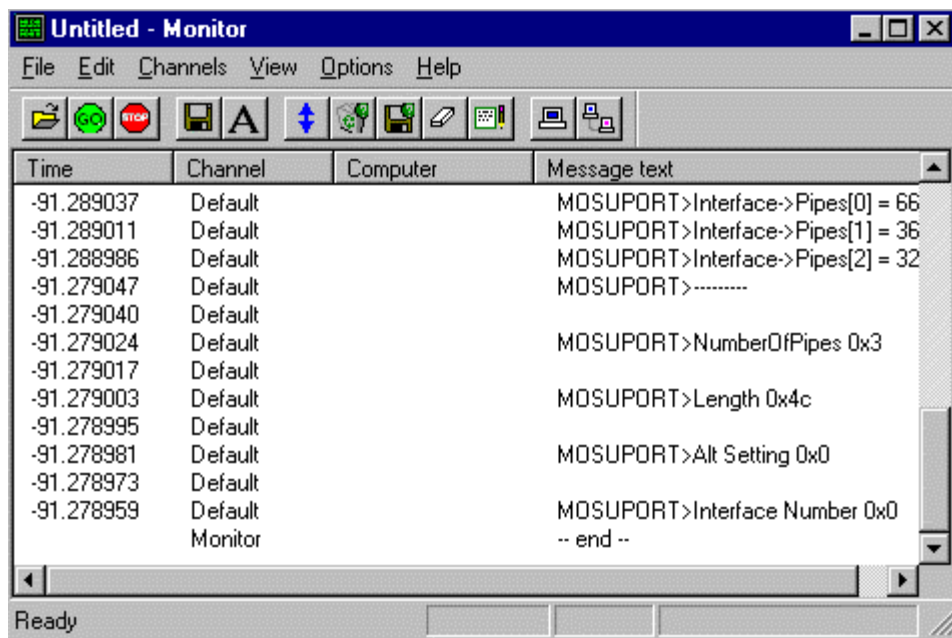


- c. Internal Loop back test: Click Launch Tab for Internal loopback test. Click on Test Internal Loopback button to execute serial port test of specific port for default settings. It's a Go / Nogo test.



- d. Select Trace & check Log Debug Events in 7 (c) to capture the debug messages of MCS77XX driver. Following Debug utility opens as you select above options, capture of a specific activity like detection while MCS77XX plugged into usb port or when unplugged etc can be captured through this utility. The captured messages can be saved as text files & sent across for debugging.

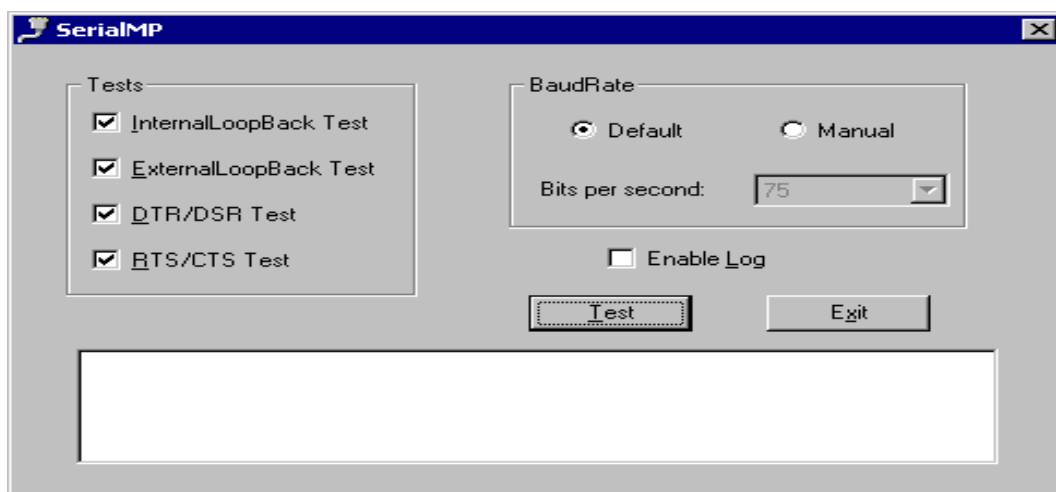
Debug Utility



Similarly options i.e 7(a) to (d) are supported through USB parallel port also.

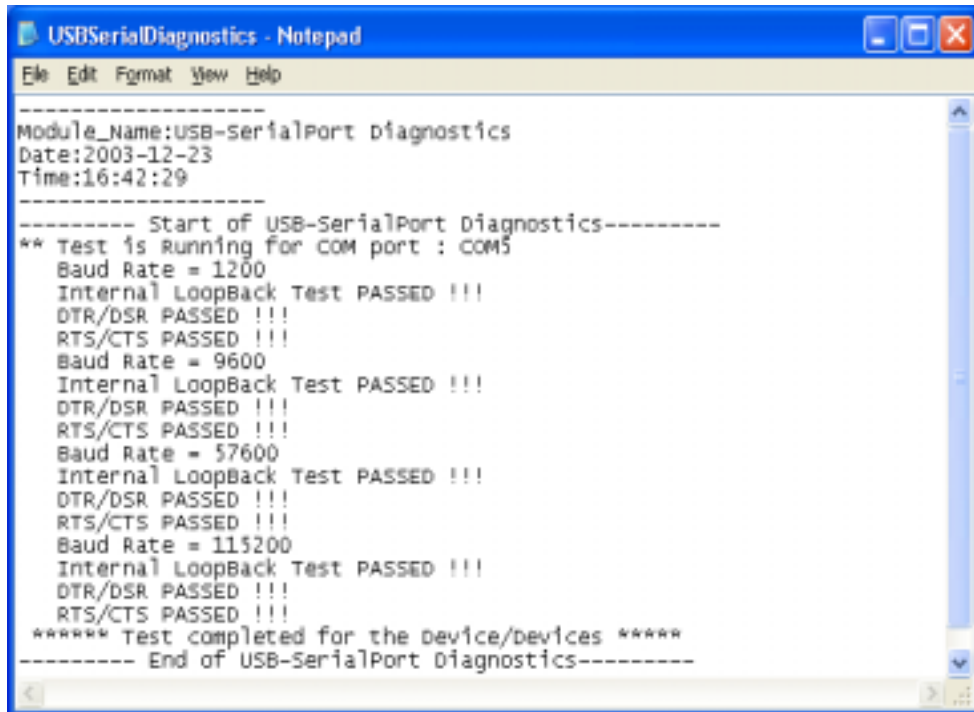
8. SERIALMP Option for Testing Internal and External Loopback:

A Shotcut of SERIALMP Icon and Config file is present on the Desktop as the device gets Installed after installation procedures performed earlier. Double click the Icon to get the following Window.



- a. Window Displays Four Tests:
 - 1. Internal Loop Back Test 2. External LoopBack Test
 - 3. DTR /DSR Test 4. RTS / CTS Test
- b. The required Tests can be checked in the 'check box ' to be performed.
- c. There are Two Radio buttons Default and Manual which specify the baud rates selectivity. When Default option is selected Four baud rates are choosen 1200, 9600, 57600 & 115200. These BaudRate Options can be edited in the Config file found on Desk Top.

Note: User should Close the SERIALMP application and re-open it if any changes are made to the config file.
- d. When Manual option is selected, Bits per Second List Box is highlighted for the selection of required baud rate. Here the Test cases are performed only for one single baud rate.
- e. Allowed baud rates are : (75, 110, 134, 150, 300, 600, 1200, 1800, 2400, 4800, 7200, 9600, 14400, 19200, 38400, 57600, 115200, 230400, 403200, 460800, 806400 & 921600).
- f. Selection of Enable Log Check box Option traces the Test results in a Log file and is placed on the desktop as the required Test completes . The file USBSerialDiagnostics can be seen on the desktop , this file will be modified for every new Run of the Test (i.e Result of the New test might differ from the previous test depending upon the test cases choosen). The file will be over written. Open the file using Notepad application.



```
-----
Module_Name:USB-SerialPort diagnostics
Date:2003-12-23
Time:16:42:29
-----
----- Start of USB-SerialPort Diagnostics-----
** Test is Running for COM port : COM5
  Baud Rate = 1200
  Internal LoopBack Test PASSED !!!
  DTR/DSR PASSED !!!
  RTS/CTS PASSED !!!
  Baud Rate = 9600
  Internal LoopBack Test PASSED !!!
  DTR/DSR PASSED !!!
  RTS/CTS PASSED !!!
  Baud Rate = 57600
  Internal LoopBack Test PASSED !!!
  DTR/DSR PASSED !!!
  RTS/CTS PASSED !!!
  Baud Rate = 115200
  Internal LoopBack Test PASSED !!!
  DTR/DSR PASSED !!!
  RTS/CTS PASSED !!!
***** Test completed for the device/devices *****
----- End of USB-SerialPort Diagnostics-----
```

9. Configuring Printer Automatically:

Printer configuration:- If the 77xx Device has Printer Port adapter terminal then the necessary driver will be automatically installed during installation setup. Check for the installed Port (i.e Lpt Port) in the device manager. Connect the printer cable to Moschip Parallel printer port, power the printer.

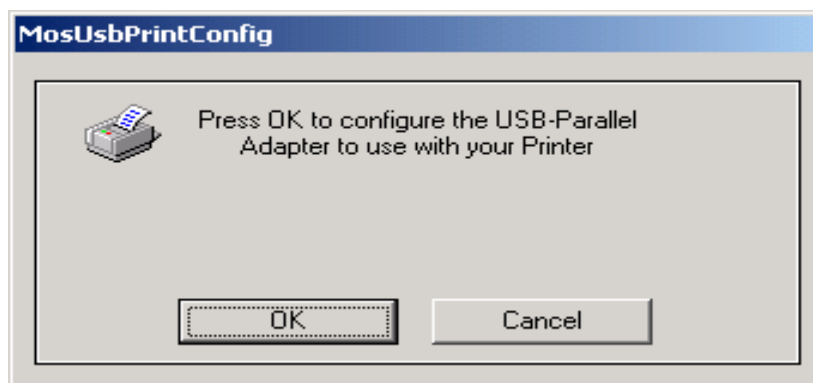
Go to printer properties (Start > Settings > Printers > right click on required printer Icon > Properties > Details) and set the correct port number. Port numbers assigned to Moschip USB to Serial Parallel adapter can be seen under Sec. 3

Now give a test page print from Printer properties to confirm correct printing.

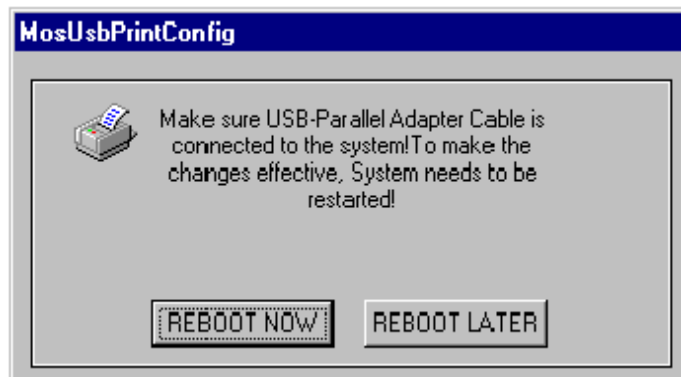
Incase of any printing related issue from any printer through Moschip USB to Parallel port adapter, run **MOSUSBPRINTCONFIG** application (Double click the icon on your desktop) to configure Moschip USB to Parallel adapter to work with your Printer.



Click OK to Configure the printer to Moschip USB Printer adapter



Make sure Moschip USB to Parallel adapters USB cable is connected to USB port of your system & Click **Reboot now button**.



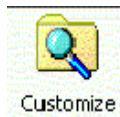
After restart try the test page printing from the printer properties. This ensures smooth printing through Moschip USB adapter every time / any time you print through this printer.

In case of printing issues with any other printer (as and when added to your Computer) run the **MOSUSBPRINT CONFIG** application again to configure the Moschip USB to Parallel adapter with that specific printer.

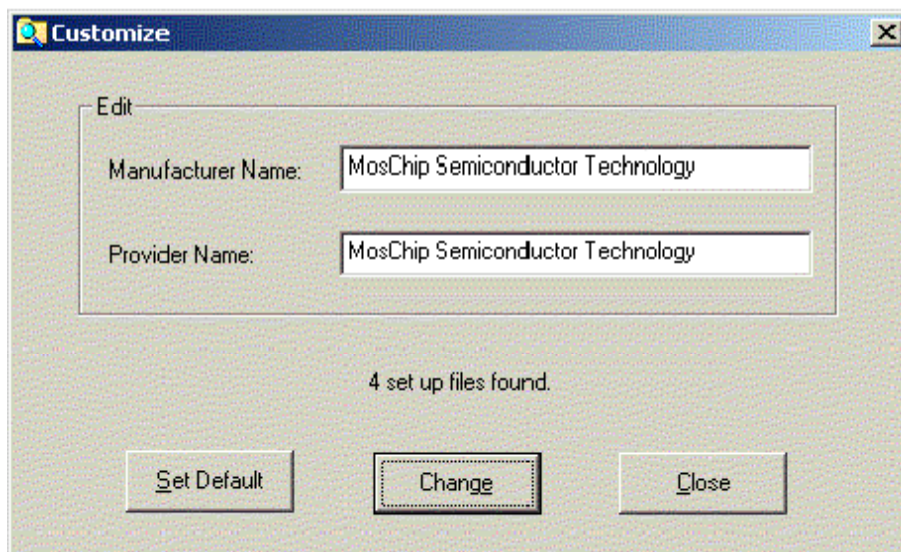
10. Editing Manufacture and Provider Name with Customize Option:

Customize Program Folder is provided with Driver CD. This Option helps in Modifying the Manufacturer and Provider Name.

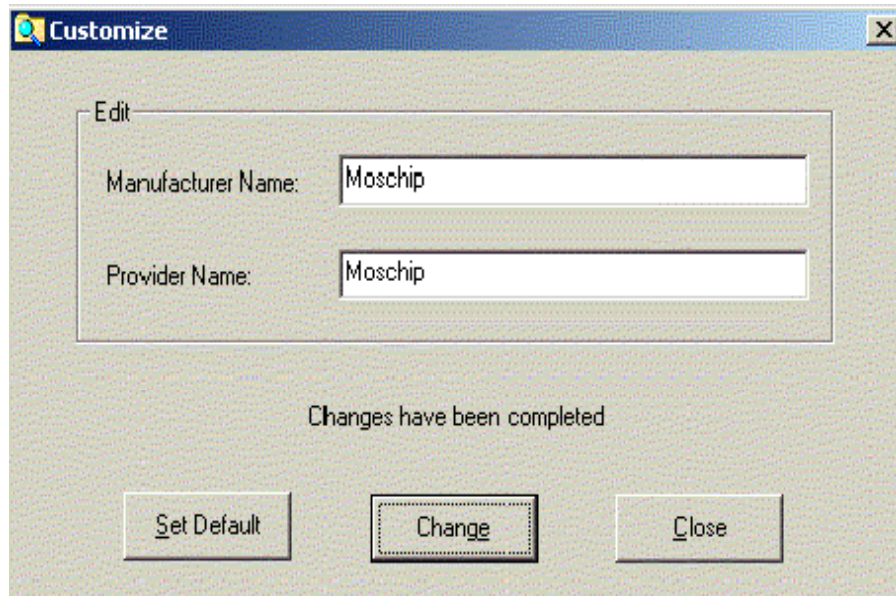
- a. Open the Driver CD the following Folder is found in the Driver path.



- b. Double Click the Folder Option , following window will appear.
- c. Modify the Contents in the Text Box to the Required Manufacturer and Provide

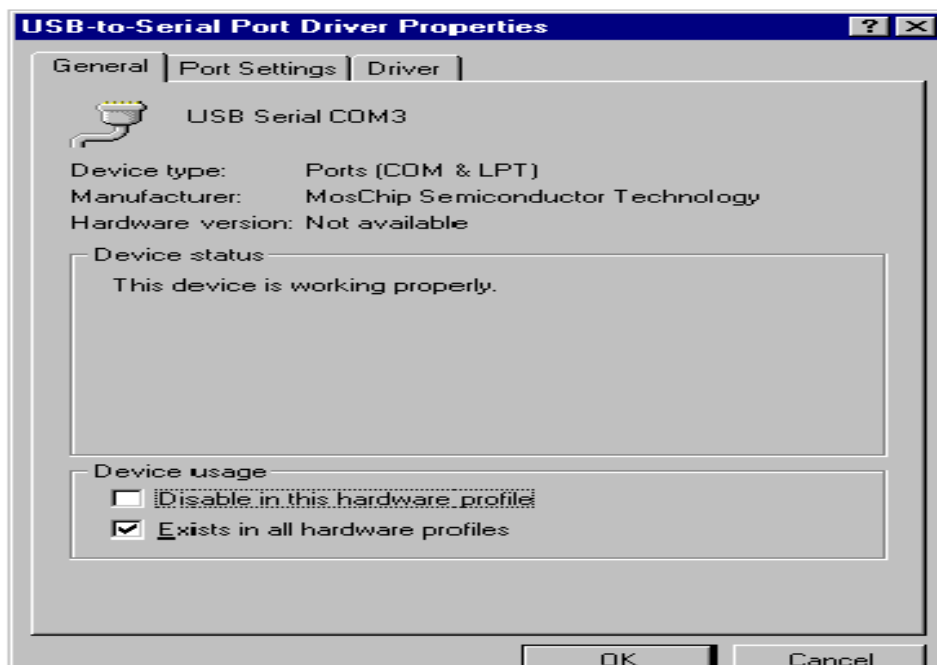


- Choice. Then click Change Button for the Modified contents to be applied.
(Set Default will bring back the very first Manufacturer and Provider Name)
- d. Uninstall and Reinstall the Drivers for the changes to be made effective.
 - e. The following Window shows the Modified contents of Manufacture and Provider Name.

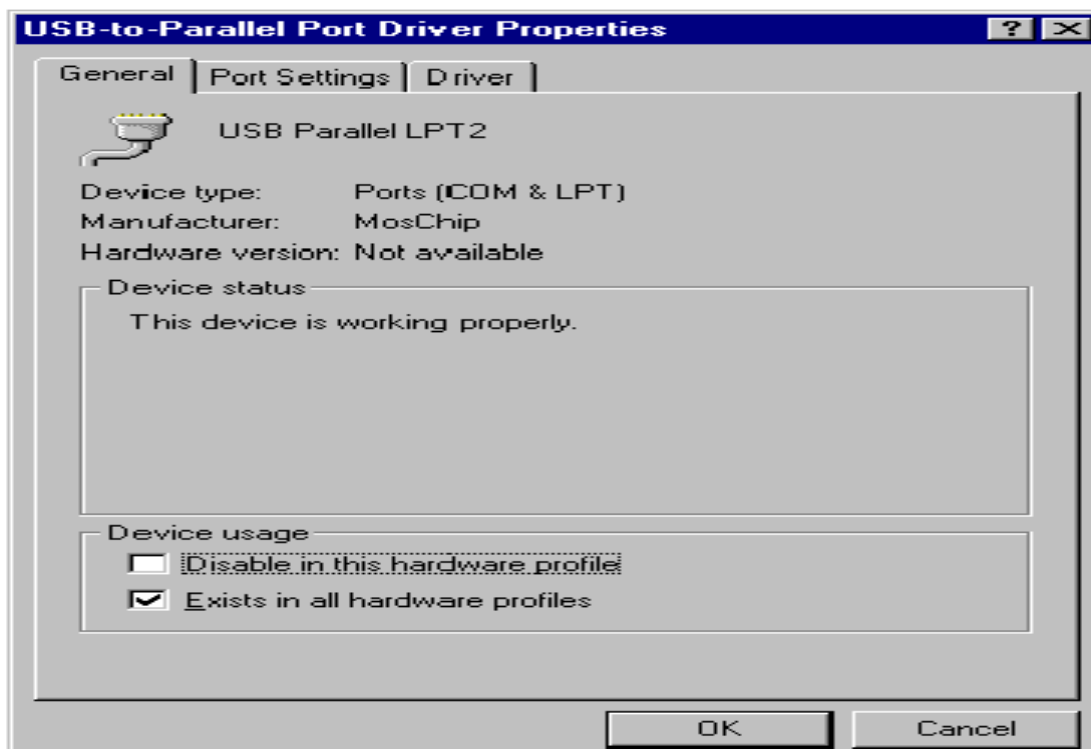


- f. Similarly the Check the Properties of Serial Port>General from Device Manager .
The Modified contents for Manufacture and Provider will be seen.

1.1 Before Modification of Manufacture and Provider Name.



1.2 After Modification of Manufacturer and Provider Names.



Technical support:

If you encounter any technical problem, please contact us through: www.moschip.com

Change Log

- 1.0 AJN Initial Release 19th July 2003
- 1.1 AJN Updated with Ver 1.0.0.17 driver features 3rd Nov 2003
- 1.2 AJN Updated with Ver 1.2.0.0. driver on 18th Feb 2004