

# User Manual for MCS7840/7820

## Windows CE .NET 5.0 for MIPS Platform

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### 1. Introduction

This document provides the information about how to install the driver for MOSCHIP MCS7840/7820 High-Speed USB to Multi Serial device on windows CE .NET 5.0 environments using the CAB file and how to add MCS7840/7820 Windows CE drivers to the Platform.

### 2. Resource Requirements

For installation of the driver using .cab file, the following resources are needed:

- CEPC/Windows CE Embedded Device with Windows CE 5.0 OS
- PC having Win 2K/XP with Microsoft ActiveSync
- NULL Modem Cable (internally connected strictly according to RS232 standard)
- MCS7840/7820 USB to Serial device

### 3. Installation of the Driver

The Installation of the MCS7840 Driver using a .cab file can be done through the following steps:

- In WinCE platform built PC, Microsoft ActiveSync should be installed.
- Connect the WinCE Device (CEPC) and the PC through a Null modem cable.
- Run ActiveSync in the PC.
- Open the Command Prompt in WinCE Device and type the command '*repllog*' and press Enter.
- A *New Partnership* window appears in ActiveSync.
- Select *No* and then click on *Next*.

- A connection is established between PC and WinCE device and it will show the connection status as **Connected** on ActiveSync.
- Then click on the Explore button on the ActiveSync window, and copy the *SpecCe50.CAB* file to the Mobile/Target Device folder on your PC.

(**Note:** “SpecCe50.CAB” file can also be transferred to your WinCE Target device using any other file transfer method supported by your WinCE device.)

- Then open “**My Device**” in the WinCE target device (CEPC) and you will find CAB file named “*SpecCe50*” there.
- To install the driver, just double click on the CAB file (SpecCe50).
- An installation window will appear. Click **OK** to install. The driver is now installed.
- Now, plug in the MCS7840/7820 USB Serial device in to the USB port of WinCE Device. The driver will be loaded and the device is ready for connection to other machines.

#### 4. Testing the device with the direct cable connection:

- After plugging in MCS7840/7820 on the USB port of Target device, click on the **Start** button, go to **Settings** and click on the **Network and Dial-up Connections**.
- Double click on the **Make New Connection**.
- Select **Direct Connection** and Press **Next**.
- Select the Device “USB to HSUXSerial COMY”, where X will be 4 for MCS7840 and 2 for MCS7820. Y represents the serial port number of the device.
- Click on “**TCP/IP Settings**”.
- Uncheck “Use server-assigned IP address”, “Use Software Compression” and Use “IP header compression”. Give an IP address (e.g. 192.168.1.1) and click on **OK**.
- Connect the serial port of MCS7840/7820 to Standard serial port of the other machine using the Null Modem cable. Configure the other machine serial port for accepting the incoming connection.
- Double click the “**My Connection**” icon (that was created on WinCE Target Device) to establish a direct cable connection.
- A dialog box appears which tells the connection status/progress.
- Message box displays “Connected” when the communication is established.
- Run the Ping command to test the connection.

## 5. Adding MCS7840/7820 Windows CE drivers to the Platform:

The following steps explain how to add/include the MCS7840/7820 device drivers to Windows CE .NET 5.0 platform.

1. Create and Build a CEPC platform
2. After building the CEPC platform, add the following entries in the *platform.reg* file

```
[HKEY_LOCAL_MACHINE\Drivers\USB\LoadClients\38672_30784\255_0_255\Default\
MosHSUsbSerialClass]
"Dll"="SpecCe50.DLL"
```

```
[HKEY_LOCAL_MACHINE\Drivers\USB\ClientDrivers\ MosHSUsbSerialClass]
"Dll"="SpecCe50.DLL"
```

3. Add the following entries in the *platform.bib* file

```
SpecCe50.dll $( _FLATRELEASEDIR)\SpecCe50.dll          NK
```

4. Copy the *SpecCe50.dll* in to the following folder.

Drive:>\WINCE500\PBWorkspaces\CEPC\_7840\RelDir\CEPC\_x86\_Release

**Note:** In the above path, “CEPC\_7840” is the name of the directory with which the CEPC platform was built in your PC.

5. Now in WinCE Platform Builder, select “*Make Run-Time Image*” from “*Build OS*” menu to effect the above changes.

This platform image contains the MCS7840/7820 device driver and you can connect MCS7840/7820 to the target machine and configure after downloading the platform OS image.