(7) When you launch the GT connect application it looks like **Figure 22**. For detailed application description and usage, refer to the release notes on the CD-ROM provided with the package.

Figure 22: GT Connect application

With this application you can easily connect to the internet.

(8) To close GT Connect completely, go with your mouse pointer to the title bar and choose "Exit" from the context menu.

Figure 23: Exit GT Connect

7 HYPERTERMINAL

This section describes briefly how to setup HyperTerminal to communicate with the PCI

Express Mini Card by AT commands.

(1) Go to device manager, and check which port is the Application port.

In this example, the application port is COM6. It also important to know is that GT Connect

takes hold of the Application port. So before going any further, exit GT Connect completely.
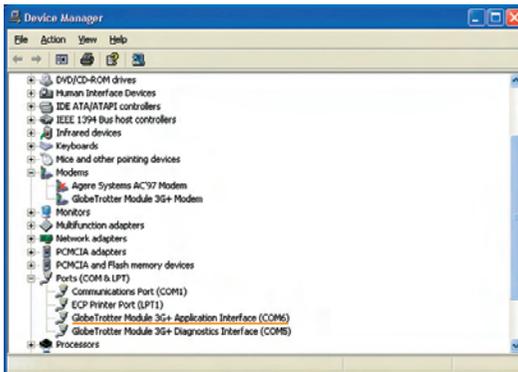
Refer to the previous chapter.

Figure 24: Device manager

To get to device manager go to "Start" menu and select "Run". In the next dialogue type

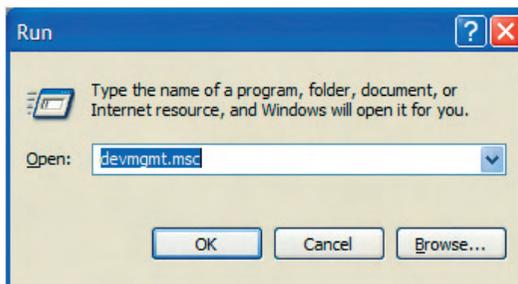"devmgmt.msc" as shown on the next screenshot:

Figure 25: Run to device manager

(2) Open HyperTerminal with the "Start" menu in Windows:

Start > Programs > accessories > Communication > HyperTerminal

(3) Normally, you have to do the following two steps only once. If you already have done so in the past you can skip to step 5. If not, choose a country and an area code. For use with the module, it does not matter, so just enter anything.

Figure 26: Location information

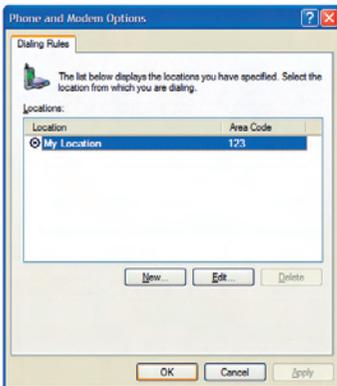(4) Just "OK" the next "Phone and Modem Options" screen.

Figure 27: Phone and Modem Options

(5) Enter a name for your HyperTerminal Connection and press OK.

Figure 28: Location information

(6) In the next window, change the "Connect using:" field to the Application Port

(COM6 in this example). Click OK.

Figure 29: Phone and Modem Options

(7) Now the next window will appear. Modify the Bit per second field to 115200 and click OK.
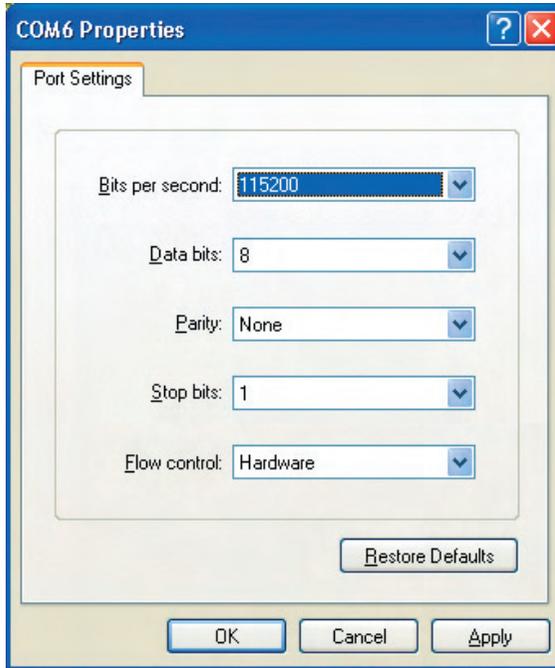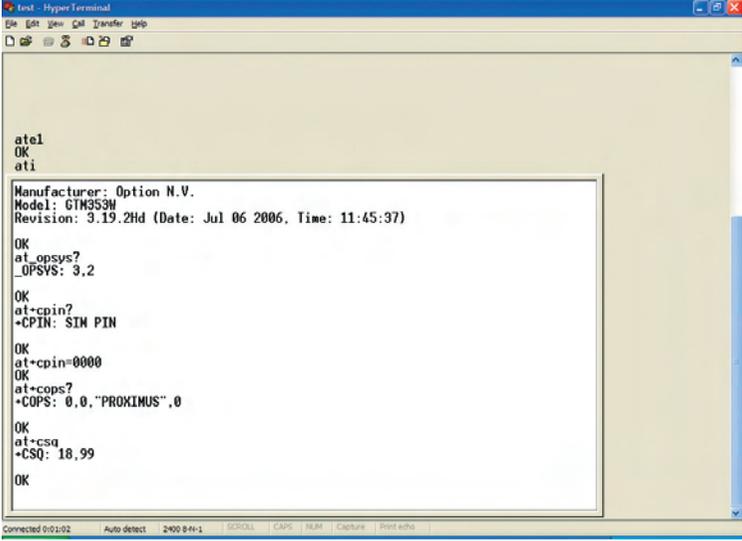

Figure 30: Connection Properties

HyperTerminal is configured and you are now ready issue AT commands to the PCI Express Mini Card module. **Figure 31** shows a typical HyperTerminal session. If you don't have visual feedback of what you are typing, you need to turn echo on by typing ATE1 followed by enter first as shown in below example.

Figure 31: Typical HyperTerminal session

When you close HyperTerminal, you have the opportunity to save your HyperTerminal profile.

Saved profiles can be found under Start > Programs > accessories > Communication

> HyperTerminal

8   SET UP A DATA CALL

Besides using dashboard applications, it is also possible to set up a data call using windows dial-up networking.

This section explains how to set up a dial-up connection.

(1) Go to Start > Control Panel > Network Connections and click on the icon "New Connection Wizard". The next screen will appear:

Figure 32: Network connections

(2) Click 'Next' and **Figure 33** will appear. Select "Connect to the Internet" and click "Next" again. Now **Figure 34** will appear.

Figure 33: New network connection

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OPTION
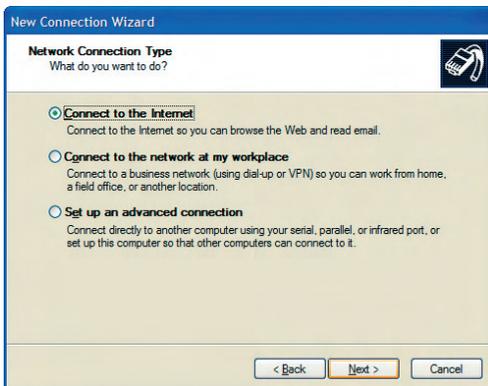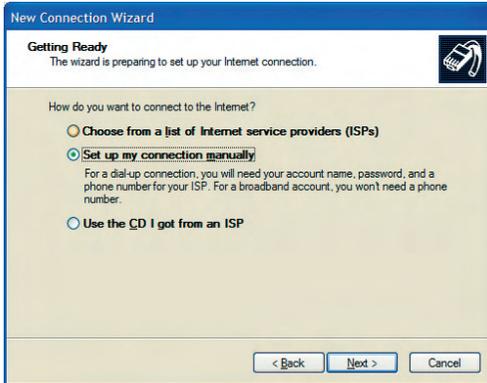WIRELESS TECHNOLOGY

Figure 34: Manual connection setup

(3) Select "Set up the connection manually", and click the "Next" button.

Choose the "Connect using a dial-up modem" option, and click the "Next" button.

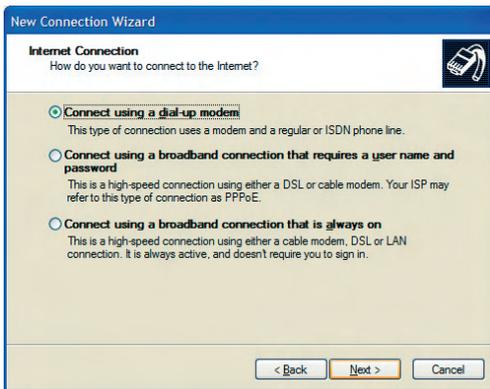Figure 35: Connection with dial-up modem

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OPTION WIRELESS TECHNOLOGY

(4) Select the correct modem (Modem - Globetrotter 3G+ modem interface), and click the 'Next' button.

Figure 36: Select modem

(5) Type a name for the connection, which you will select the next time you need this dial-up connection, and click the 'Next' button.
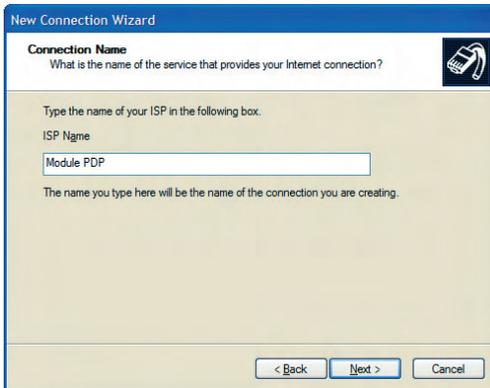
Figure 37: Connection Name

(6) Type in the Phone number to dial, which is *99#, and click the 'Next' button.
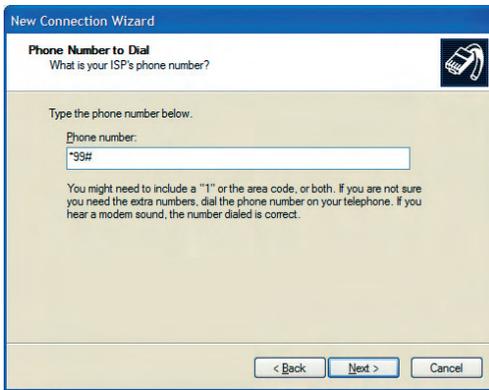
Figure 38: Number to dial

(7) Choose the option you like, and then click the 'Next' button.

Figure 39: Connection availability

(8) If your service provider requests to enter username and password for setting up a PS data call connection, please enter it using the screen below.

Figure 40: Internet Account Information

(9) The connection is set up and ready to use. Click the 'Finish' button to close the wizard.

Figure 41: Connection complete

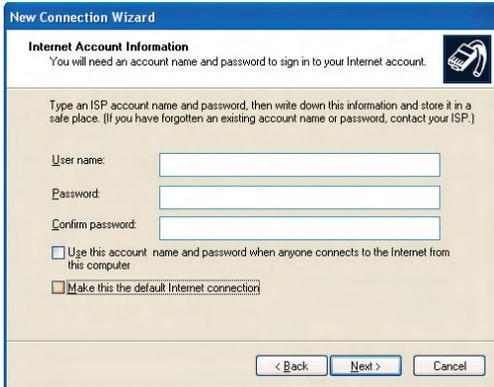(10) Before attempting to make the dial-up connection, make sure you are registered to the network. Observe that the Registration LED in **Figure 1** is on. Also, the APN for your operator should be set correctly in the module. This can be done with the following AT command:

AT+CGDCONT=1,,"your APN here"

You have to set this command only once for each module as this setting is stored in non-volatile memory of the module. Use the explanation from the previous chapter on how to use HyperTerminal to send AT commands.

To verify the APN setting just type: AT+CGDCONT?

 (11) Then, if your module is registered on the network, you can use the above configured dial-up connection to activate a PDP context and make an internet connection.
Go to Start > Connect to > "Module PDP" and select it.

Figure 42: Connect Module PDP

(12) Click the Dial button. After a while, a connection to the internet is made.
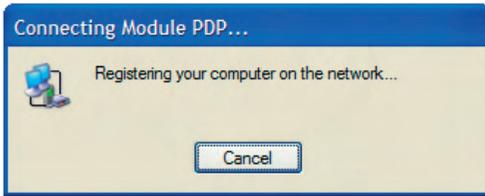

Figure 43: Connecting Module PDP

Figure 44: Module PDP is now connected

To disconnect, go to the appropriate network systray icon and select "Disconnect" from the context menu (right mouse button).
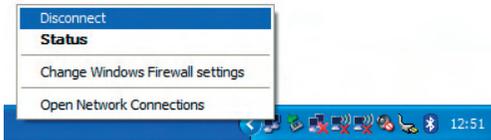

Figure 45: Disconnect Module PDP

9 SET UP A VOICE CALL

Remark! This section is only applicable for GTM378 and GTM353 (Hardware version 3.1 or later).

Verify below AT commands in order to set-up the module for voice calls. Refer to Chapter 7 on how to send AT commands to the module using HyperTerminal.

First of all make sure your PIN code is entered and that you are registered to the network. Observe the Registration LED on **Figure 1**.

- **AT_ODO=0**
  With this AT command circuit switched data transfer, which is needed for voice calls, is enabled. This setting is stored in non-volatile memory on the module.
  The response on this AT command should be: OK

- **AT_OPCMENABLE=1**
  Per default, the voice part of the firmware is disabled. To enable digital voice, the command above must be set. This setting is stored in non-volatile memory on the module.
  The response on this AT command should be: OK

- **AT_OPCMCONFIG=102,3,0,256,0,1,4**
  This AT command configures the PCM codec for 16bit linear with volume padding, maximum volume (Short Synch 8kHz, 2MHz CLK). This is also the default configuration. NOTE: In this configuration the jumper in the upper right corner should be set to the two most right pins (see **Figure 1**). This setting is stored in non-volatile memory on the module.
  The response on this AT command should be: OK

  OR

- **AT_OPCMCONFIG=0,0,0,256,0,1,4**
  This AT command configures the PCM codec for 8bit Ulaw, maximum volume (Short Synch 8kHz, 2MHz CLK). NOTE: In this configuration the jumper in the upper right corner should be set to the two most left pins (see **Figure 1**). This setting is stored in non-volatile memory on the module.
  The response on this AT command should be: OK

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OPTION
WIRELESS TECHNOLOGY

- **ATD<phone number>;**

  To set-up the call, the ATD command followed by a phone number must be used.
  NOTE: Do not forget the semicolon (;) at the end of the AT command!!!
  The response on this AT command should be: OK

  Now the phone on the other side should answer the paging and a voice conversation can be made. To stop the conversation to other side can simply hang-up the phone and a "NO CARRIER" string is displayed in HyperTerminal. If you want to end the call from your side you can type ATH, followed by an OK. The next figure shows an example voice call set-up and termination.

Figure 46: Voice call set-up

REFERENCES

Ref	Document
	Integration Manual