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Firmware User's Manual

for

BT3010 Bluetooth Module

(Preliminary for Sample Evaluation Stage)

About This Manual

This manual provides a comprehensive firmware user's manual for TECOM Bluetooth[™] Module BT3010. It has been organized in such a way to make it easy to follow by users worldwide. In order to ensure optimal comprehension, the following list provides brief descriptions of the formatting styles used throughout this manual.

- <u>Commands</u>: Commands are always referred to by using the word "click" before them. These commands are always shown as bold-faced words. For example, click Next, click OK, or click Cancel.
- Names of Windows (Dialog Boxes): The names of the windows (also referred to as dialog boxes) that appear on the PC screen are always referred to in quotes. For example, the "Setup Complete" window.
- Names of Options in Windows: The names of options to choose from inside the windows that appear on the PC screen are always referred to in italics. For example, choose the Yes, I want to restart my computer now option from the window.
- Notes: In some cases, preparatory or cautionary information is needed before proceeding onto the next step in an installation process. This kind of information is provided in the form of notes, which are always referred to in bold-faced and italicized letters. For example, *Note: To access the TECOM Control Panel, the driver must be running.* Also, make sure the BluetoothTM USB evaluation board is plugged into the notebook.

Preface

The TECOM Bluetooth[™] Module BT3010 Manual

This manual contains information regarding the installation, operation, and configuration of the TECOM Bluetooth[™] Module BT3010. Additionally, it outlines the use of the "Firmware Downloader" and "HCI Test" Application.

The following chapters are included in this manual:

- **Chapter 1:** "Overview" offers a brief description of Bluetooth and the features of the TECOM BluetoothTM Module BT3010.
- Chapter 2: "TECOM Bluetooth[™] Module BT3010 USB Driver and Firmware Installation" describes the steps for installing the USB driver for TECOM Bluetooth[™] Module BT3010 USB Evaluation Board and details of the firmware download procedure.
- **Chapter 3:** "TECOM Bluetooth[™] Module BT3010 UART Evaluation Board Firmware Donwload" describes the steps for downloading the TECOM Bluetooth[™] Module BT3010 UART firmware.
- **Chapter 4:** "Updating the TECOM Bluetooth[™] Module BT3010 Firmware" details the procedure for updating to a new version of the Bluetooth firmware.
- **Chapter 5:** "HCI Testing Procedule" describes how to search for the other Bluetooth devices and create Bluetooth connections between devices.
- **Chapter 6:** "Software Uninstall" provides detailed steps for removing the TECOM Bluetooth[™] Module BT3010 USB driver from the PC.
- **Chapter 7:** "Trouble Shooting" answers some problems that might be encountered in installation and manipulation.

Chapter 1: Overview

About Bluetooth[™]

Bluetooth is a worldwide standard for the wireless communication of data & voice services between two devices. Bluetooth technology eliminates wires and cables between both stationary and mobile devices, provides the possibility of ad hoc networks and delivers the ultimate synchronicity between all your personal devices.

The Bluetooth wireless technology has been adopted not only by all major players in the telecom, computer and home entertainment industry, but also in such many other areas as the automotive industry and health care, automation and toys, etc. - almost all sectors of the economy.

Features

The TECOM BluetoothTM Module BT3010 provides the following features:

- Compliant with Bluetooth Specification V.1.1
- Supports USB, UART, and PCM Interfaces
- Evaluation board is available for USB or UART interface
- Supports 0 to 20dBm Output Power (Support Class 1, 2, 3)
- Operating distance up to 100 meters
- Supports point-to-multipoint connections
- Firmware support up to lower HCI layer
- Supports data rates up to 723 Kbps

Firmware Support

The TECOM Bluetooth[™] Module BT3010 provides the following software for evaluation & software development:

- Including firmware for the host control interfaces (for USB, UART interfaces), HCI, and the link manager, LM. The firmware is provided in the CD-R.
- A firmware donwloader, USB driver (for testing purpose only), and HCI Test program are available. Note: USB Test driver is only provided for test & evaluation purpose, for commercial use, please contact third party software providers for solution.

Chapter 2: TECOM Bluetooth Module BT3010 USB Driver & Firmware Installation

Bluetooth Module Evaluation Board for USB Interface System Requirement

Before installing the TECOM BluetoothTM Module BT3010 USB driver for evaluation, please make sure the PC or Notebook PC meets the following requirements in order to run the software properly:

- 1. Hardware: Pentium Class PC, CPU speed 200MHz or above, with USB port.
- 2. Operating System: Windows 98SE.

Note: For commercialized features requires third party driver & software.

Driver Installation Procedure

Note: Before downloading the firmware to BT3010 Bluetooth Module USB Evaluation Board, the system needs to install the provided USB driver first and followed by downloading the firmware for USB interface, then the user shall follow HCI testing procedure to begin the HCI testing.

- 1. The TECOM Bluetooth Module BT3010 USB Interface Evaluation Board should be plugged into your PC's USB port prior to installing the driver.
- 2. The PC automatically detects the device and a window will be displayed to request the user to install the driver. Please follow the standard hardware driver installation procedure. When the PC request the user to locate the source of driver files, please find the CD-Rom which contains the firmware, then go to the directory "USB Drivers", then select the filename "bcbtusb.inf" and click Next to complete the driver installation process.
- 3. Before using the firmware downloader, the user needs to adjust the device configuration first to allow the firmware downloader program to download the firmware without creating the conflict between the default setting of configuration.
- For changing the device configuration, please go to "Control Panel" and select "System", then go to "Device Manager" and click on "Blutonium Devices"
- The next step is to find "Broadcom Blutonium Composite Device" under the directory of "Blutonium Devices" and click on the "Content". Locate "Blutonium Settings" under the content of "Broadcom Blutonium Composite Device" then deselect "Download Firmware".
- 6. By completing the above process, the firmware download program is ready to download the firmware for further testing and software development.

Firmware Download Procedure

- 1. The TECOM Bluetooth Module BT3010 USB Interface Evaluation Board should be still plugged into your PC's USB port prior to downloading the firmware.
- 2. Please find the directory of CD-Rom which contains the firmware, you will find three files in the directory,
 - BroadcomDownload.exe : firmware download program
 - Broadcom_2_2070(USB Loader).hex : Downloader script for USB interface
 - **BBTFW_2_1_007(USB).hex** : firmware script for USB interface
- 3. Double click on **BroadcomDownload.exe** to start the program. In the "**Mini Driver**" box, select "**USB**" and deselect "**Send Version Information.**" (as Figure 1)

BroadcomDownload-USB0	
Choose Mini Driver File C USB C Serial Port: COM1	Write Buffer
Firmware Choose Firmware File	WHE DUILET
File Type: Memory • ASCII C External C Binary C Flash • On Chip C Auto Select	Execute Download
Status:	

Figure 1: Downloader Configuration for USB Interface

- Then click on "Choose Mini Driver File" to select the appropriate mini-driver. For USB interface, the user shall select "Broadcom_2_2070(USB Loader).hex" in the "Firmware" directory.
- In the "Firmware" box, please select "USB", "ASCII", and "On Chip". Then click on "Choose Firmware File" to select the appropriate firmware. For USB interface, the user shall select "BBTFW_2_1_007(USB).hex" in the "Firmware" directory. (as Figure 2)

Figure 2: Downloader Configuration for USB Interface

- 6. Click on the "**Execute Download**" button. Status messages should appear in "**Status**" window as the download procedure progress.
- 7. When the download is complete, click "**Quit**" to exit the program and the system is ready for further HCI testing or software development.
- 8. For HCI testing procedure, please go directly to "Chapter 5: HCI Testing Procedure"

Chapter 3: TECOM Bluetooth Module BT3010 UART Firmware Download

Firmware Download Procedure

- The TECOM Bluetooth Module BT3010 UART Interface Evaluation Board should be powered up by 5V AC Adapter and plugged into your PC's COM port prior to downloading the firmware.
- 2. Please find the directory of CD-Rom which contains the firmware, you will find three files in the directory,
 - BroadcomDownload.exe : firmware download program
 - BBTMD_2_2_040(UART Loader 115200).hex : Downloader script for UART interface
 - BBTFW_2_1_003(UART).hex : firmware script for UART interface
- 3. Double click on **BroadcomDownload.exe** to start the program; in the "**Mini Driver**" box, select "**Serial**" and select a serial port "**COM1**". (as Figure 3)

BroadcomDownload-UART	×
Mini Driver Choose Mini Driver File Send Version Information Finnware Choose Firmware File Choose Firmware File File Type: Memory File Type: Memory Memory COM1 Port: COM1 Port: COM1 Serial Port: COM1 Port: COM1 Com1 Co	Quit Write Buffer 5000 Execute Download
Status:	

Figure 3: Downloader Configuration for UART Interface

Then click on "Choose Mini Driver File" to select the appropriate mini-driver. For UART interface, the user shall select "BBTMD_2_2_040(UART Loader 115200).hex" in the "Firmware" directory.

 In the "Firmware" box, please select "UART", "ASCII", and "On Chip". Then click on "Choose Firmware File" to select the appropriate firmware. For USB interface, the user shall select "BBTFW_2_1_003(UART).hex" in the "Firmware" directory. (as Figure 4)

BroadcomDownload-UART	×
Mini Driver Choose Mini Driver File BBTMD_2_2_040(UA: Send Version Information C USB C USB C USB C OM1 Version	Quit
Firmware Choose Firmware File BBTFW_2_1_003(UAI File Type: Memory ASCII Binary Choose Firmware File Binary Choose Firmware File Choose	Execute Download
Status:	

Figure 4: Downloader Configuration for UART Interface

6. Click on the "**Execute Download**" button. Status messages should appear in "**Status**" window as the download procedure progress. (as Figure 5)

🏶 BroadcomDownload-UART	×
Mini Driver Choose Mini Driver File BBTMD_2_2_040(UA) Sent Version Information	Quit
Firmware	Write Buffer 5000
Choose Firmware File C USB BBTFW_2_1_003(UAI Port: COM1 File Type: Memory Baud: 115200 C ASCII C External C Binary C Flash C On Chip C Auto Select	Execute Download
Downloading mini driver C.'My Documents'2.4 Status:	IG_DATA_SHEET\Broadcom_2033

Figure 5: Executing firmware download procedure

7. When the download is complete, click "**Quit**" to exit the program and the system is ready for further HCI testing or software development. (as Figure 6)

🍘 BroadcomDownload-UAR T	×
Mini Driver Choose Mini Driver File BBTMD_2_2_040(UA) BBTMD_2_2_040(UA)	Quit
Firmware	Write Buffer 5000
Choose Firmware File BBTFW_2_1_003(UA) File Type: Memory	Execute Download
● ASCII C External C Binary C Flash C On Chip	
The contract of	G_DATA_SHEET\Broadcom_2033' _DATA_SHEET\Broadcom_2033'0'

Figure 6: Firmware download completed

8. For HCI testing procedure, please go to "Chapter 5: HCI Testing Procedure"

Chapter 4: Updating The TECOM Bluetooth Module BT3010 Firmware

The steps to update the firmware and documentation for TECOM Bluetooth[™] Module BT3010 are a simple process as detailed below.

- For the updated version of TECOM's Bluetooth[™] Module BT3010 firmware ; please visit TECOM webside <u>www.tecom.com.tw</u> to find out the updated news; then go to TECOM FTP site, <u>ftp.tecom.com.tw</u> for downloading.
- 2. OEM customers shall have a set of unique username and password for accessing TECOM's FTP server. If the username and password are forgotten, please contact TECOM's sales account manager for the information.

Chapter 5: HCI Testing Procedure

The HCI Testing procedure provides instructions for creating point-to-point ACL links between two Bluetooth Module Evaluation Boards.

System Requirement for Bluetooth Module HCI Test Program

Before using HCI Test Program for testing, please make sure the PC or Notebook PC meets the following requirements in order to run the software properly:

- 1. To create connection, it requires two units of PCs to perform the testing procedure
- 2. Hardware: Pentium Class PC, CPU speed 200MHz or above, with RS-232 (for UART interface testing) and USB port (for USB interface testing).
- 3. Operating System: Windows 98SE.

Note: For commercialized features requires third party USB driver & software.

Create the ACL Link

Once the device driver & firmware for TECOM BluetoothTM Module BT3010 for USB or UART interfaces has been installed into two PC with Windows 98SE installed, one for **Master**, the other one for **Slave**, the steps for the use of "**HCI Test**" program are a simple process as detailed below.

- 1. HCI Test program filed called "hcitest_1.exe" can be found in CD-Rom, click on the file to launch the program.
- Once the program is launched, a "Communications Interface" window will be displayed, please select the interface options "Serial Interface" or "USB Interface", if it is an UART interface device, please select Serial Interface and set the "Serial Port" and "Baud Rate " in the Serial Parameters box, then click OK. The configuration of both Master and Slave shall be the same. (as Figure 7)

Communications Interface	×
Serial Parameters	☑ Serial Interface
Serial Port: COM1 v	☑ USB Interface
Baud Rate: 115200 v	☑ OK

Figure 7: Configure Communications Interface

3. Two windows will be displayed, "**HCI Test**" is for configuration (as Figure 8) and the "**Results**" is for test result (as Figure 9).

HciTest-UA	ART	×
4.2 4.9 State 4.5 I	7 Host Controller and Baseband-2 us Parameters 4.10 Testing Comms .ink Control 4.6 Link Policy	4.8 Informational Parameters nds Vendor Specific Commands Macros 4.7 Host Controller and Baseband
	Inquiry *	PIN Code Request Reply -
	Inquiry Cancel *	PIN Code Request Negative Reply -
	Periodic Inquiry Mode	Change Connection Packet Type
	Exit Periodic Inquiry Mode	Remote Name Request
	Create Connection *	Read Remote Supported Features
	Disconnect *	Read Remote Version Information
	Add SCO Connection +	Read Clock Offset
	Accept Connection Request *	Authentication Requested -
	Reject Connection Request *	Set Connection Encryption -
	Link Key Request Reply -	Master Link Key -
	Link Key Request Negative Reply -	Change Connection Link Key -
	Quit	About Record

Figure 8: Configure HCI Test Program

Results-HART				
				<u>C</u> lear Results
Detailed view: <u>Clea</u>	r 🦵 Hex Dump Detail	Save Entries s		
Chat Mode HCI L2CAP	Broadcast Flag Point-to-Point Active Broadcast Piconet Broadcast		Abort Macro Character Count	: 0
Chat				

Figure 9: Result of Execution of HCI Test Program

 On both computers, select "4.7 Host Controller and Baseband-2" box, then click on the Reset button. (as Figure 10), The user can see result from the "Result" Window (as Figure 11)

HciTest-UAR T	X
4.9 Status Parameters 4.10 Testing Comma 4.5 Link Control 4.6 Link Policy 4.7 Host Controller and Baseband-2	nds Vendor Specific Commands Macros 4.7 Host Controller and Baseband 4.8 Informational Parameters
Set Host Controller to Host Flow Control	Read Stored Link Key
Set Event Mask	Write Stored Link Key
Host Buffer Size	Delete Stored Link Key
Host Number Of Completed Packets	Reset
Set Event Filter	Read Link Supervision Timeout
Flush	Write Link Supervision Timeout
Read Number Of Supported IAC	Read Current IAC LAP
Create New Unit Key	Write Current IAC LAP
Read Local Name	Read Page Scan Period Mode
Change Local Name	Write Page Scan Period Mode
Read Pin Type	Read Page Scan Mode
Write Pin Type	Write Page Scan Mode
Read Transmit Power Level	Read SCO Flow Control Enable
	Write SCO Flow Control Enable
Quit	About Record

Figure 10: Click on Reset

Results-UART
Clear Results
HeiReset Command
HeiCommandCompleteEvent
Save Entries
Detailed view: Clear Hex Dump Details
HCI COMMAND
HCI_OPCODE_RESET
HCI_EVENT
HCI_OPCODE_RESET
number of command packets = 1
Chat Mode Broadcast Flag Abort Macro
HCI Point-to-Point Character Count:
C L2CAP C Active Broadcast 0
C. Piconet Broadcast
Chat

Figure 11: Show test result

5. On both computers, select "**4.8 Information Parameters**" box, then click on the "**Read Buffer Size**" button. (as Figure 12).

HciTest-UAR T	X
4.9 Status Parameters 4.10 Testing Comm 4.5 Link Control 4.6 Link Policy 4.7 Host Controller and Baseband-2	ands Vendor Specific Commands Macros y 4.7 Host Controller and Baseband 4.8 Informational Parameters
Read Local Version Information	
Read Buffer Size	
Read Local Supported Features	
Read Country Code	
Read BD ADDR	
Quit	About Record

Figure 12: Show test result

On both computers, select "Vender Specific Command" box, then click on the "Write BD_ADDR" button. (as Figure 13). A "Write Bluetooth Device Address" window will appear on both sides of the PC, please input any 12 hex digits on each side (as Figure 14 (Master), Figure 15 (Slave)). The digits on both sides shall be different.

4.5 Link Control 4.6 Link Polic	y 4.7 Host Controller and Baseband
4.9 Status Parameters 4.10 Testing Comma	ands Vendor Specific Commands Macros
Read Inquiry Response Timeout	Read Park Parameters
Write Inquiry Response Timeout	Write Park Parameters
Read Page Response Timeout	Write BD_ADDR
Write Page Response Timeout	Write Local Supported Features
Read Page Scan Repetition Mode	Write Quality of Service
Write Page Scan Repetition Mode	Hold Command
Read New Connection Timeout	Unpark using BDADDR
Write New Connection Timeout	Enable Sleep Forever Mode
Write Hopping Pattern	Set Encryption Key Size
Write Hopping Channels	Invalidate Flash and Reboot
Read Auto Page Scan Enable	Change Baud rate
Write Auto Page Scan Enable	Write GPIO 2 LED
Write GPIO 1-4 as output	Test Mode Selection
Quit	About Record

Figure 13: Write Bluetooth Device Address

Write Bluetooth De	vice Address
	R
Local Blueto	oth Device Address (in hex w/o 0x)
a9cb876500	00
	OK Cancel

Figure 14: Write Bluetooth Device (Master Device) Address

Write	Bluetooth Device Address
	Local Bluetooth Device Address (in hex w/o 0x)
	123456789012
	ß
	OK Cancel

Figure 15: Write Bluetooth Device (Slave Device) Address

 On the Slave computer, select "4.7 Host Controller and Baseband" box, then click on the "Write Scan Enable" button. (as Figure 16). A "Write Scan Enable" window will appear (as Figure 17), please deselect *Inquiry Scan Enable* (as Figure 18).

HciTest-UAR T	×
 4.7 Host Controller and Baseband-2 4.9 Status Parameters 4.10 Testing Comma 4.5 Link Control 4.6 Link Policy 	4.8 Informational Parameters nds Vendor Specific Commands Macros 4.7 Host Controller and Baseband
Read Connection Accept Timeout	Read Encryption Mode
Write Connection Accept Timeout	Write Encryption Mode
Read Page Timeout	Read Class of Device
Write Page Timeout	Write Class of Device
Read Scan Enable	Read Voice Settings
Write Scan Enable	Write Voice Settings
Read Page Scan Activity	Read Automatic Flush Timeout
Write Page Scan Activity	Write Automatic Flush Timeout
Read Inquiry Scan Activity	Read Num Broadcast Retransmissions
Write Inquiry Scan Activity	Write Num Broadcast Retransmissions
Read Authentication Enable	Read Hold Mode Activity
Write Authentication Enable	Write Hold Mode Activity
Quit	About Record

Figure 16: Write Scan Enable

,,

Write Scan Enable	
_Scan Enable	
🔽 Inquiry Scan Enable	🔽 Page Scan Enable
<u>.</u>	
(OK	Cancel

Figure 17: Write Scan Enable Window Appear

Write Scan Enable	
Scan Enable	🔽 Para Saan Frahla
I♥ Indon's scan Fusible	V rage Scan Enable
(OK)	Cancel

Figure 18: Deselect Inquiry Scan Enable

8. On the Master computer, click on "**4.5 Link Control**" box, and then click on the "**Create Connection**" button. (as Figure 19). A "**Create Connection**" window will appear, clicks on **OK** (as Figure 20).

HciTest-UART	X
4.7 Host Controller and Baseband-2 4.9 Status Parameters 4.10 Testing Comma 4.5 Link Control 4.6 Link Policy	4.8 Informational Parameters ands Vendor Specific Commands Macros 4.7 Host Controller and Baseband
[Inquiry *	PIN Code Request Reply -
Inquiry Cancel *	PIN Code Request Negative Reply -
Periodic Inquiry Mode	Change Connection Packet Type
Exit Periodic Inquiry Mode	Remote Name Request
Create Connection *	Read Remote Supported Features
Disconnect *	Read Remote Version Information
Add SCO Connection +	Read Clock Offset
Accept Connection Request *	Authentication Requested -
Reject Connection Request *	Set Connection Encryption -
Link Key Request Reply -	Master Link Key -
Link Key Request Negative Reply -	Change Connection Link Key -
Quit	About Record

Figure 19: Create Connection

Create Connection
Remote Bluetooth Device Address (in hex w/o 0x)
25ef962a0000
Packet Types Allowed
DM1 DH1 DM3 DH3 DM5 DH5
Page Scan Repetition Mode (SR)
© R0 © R1 © R2
Page Scan Mode
⊙ Mandatory ○ Mode 1 ○ Mode 2 ○ Mode 3
Clock Offset
0x00
Local Role
Always Master C Allow Switch to Slave
Cancel

Figure 20: Create Connection

9. On the Slave computer, a "Accept Connection Request" window will appear, click on the "Write Scan Enable" button immediately before timeout. (as Figure 21). Please see the "Result" window for detailed information. (as Figure 22)

Accept Connection Request
Bluetooth Device Address (in hex w/o 0x)
a9cb87650000
Role
🔿 Master 💿 Slave
Cancel

Figure 21: Accept Connection Request from Master Device

Results-UART	
	<u>C</u> lear Results
HciCommandCompleteEvent HciReadBufferSize Command HciCommandCompleteEvent HciWriteBdAddr Command HciCommandCompleteEvent HciCreateConnection Command HciCommandStatusEvent HciCommectionCompleteEvent	▲ ■
Save Entries	
Detailed view: Clear F Hex Dump Details	
HCI_EVENT HCI_EVENT_CODE_COMMAND_STATUS HCI_SUCCESS numCommandPackets = 1 opcode = HCI_OPCODE_CREATE_CONNECTION	-
HCI_EVENT HCI_EVENT_CODE_CONNECTION_COMPLETE HCI_SUCCESS connection handle = 4 bluetooth address = 123456789012 link type = HCI_ACL_LINK_TYPE entryption mode=HCI_ENCRYPTION_DISABLED	
Chat Mode	0
Chat	

Figure 22: Successful Connection Result on Master Device

10. On the Master computer, input "**Hello Slave!**" into "**Chat**" dialogue box and click "**Enter**" button on the keyboard. (as Figure 23).

Results-UAR T
<u>C</u> lear Results
HciCommandCompleteEvent HciReadBufferSize Command HciCommandCompleteEvent HciWriteBdAddr Command HciCommandCompleteEvent HciCreateConnection Command HciCommandStatusEvent HciConnectionCompleteEvent
🔽 Save Entries
Detailed view: Clear 🕞 Hex Dump Details
HCI_EVENT HCI_EVENT_CODE_COMMAND_STATUS HCI_SUCCESS numCommandPackets = 1 opcode = HCI_OPCODE_CREATE_CONNECTION
HCI_EVENT HCI_EVENT_CODE_CONNECTION_COMPLETE HCI_SUCCESS connection handle = 4 bluetooth address = 123456789012 link type = HCI_ACL_LINK_TYPE entryption mode=HCI_ENCRYPTION_DISABLED
Chat Mode Broadcast Flag Image: Chat Mode Image: Character Count Image: Character Count Image: Character Count Image: Character
Chat Hello Slave!

Figure 23: Type in "Hello Slave!" in Master Device Side

11. On the Slave computer, the screen show "*Hello Slave!*" message from Master computer. Then on the Slave side input "*Hello Master!*" message into "Chat" dialogue box and click "Enter" button on the keyboard to send the massage back to Master computer. (as Figure 24).

Results-UART
<u>C</u> lear Results
HciCommandCompleteEvent HciConnectionRequestEvent HciAcceptConnection Command HciCommandStatusEvent
HciConnectionCompleteEvent HciMaxSlotsChangeEvent remote: Hello Slave!
Save Entries
Detailed view: Clear F Hex Dump Details
HCI_EVENT HCI_EVENT_CODE_CONNECTION_COMPLETE HCI_SUCCESS connection handle = 4 bluetooth address = a9cb87650000 link type = HCI_ACL_LINK_TYPE entryption mode=HCI_ENCRYPTION_DISABLED
HCI_EVENT HCI_EVENT_CODE_MAX_SLOTS_CHANGE connection handle = 4
Chat Mode Broadcast Flag • HCI • Point-to-Point ▲bort Macro • L2CAP • Active Broadcast • Character Count: • Piconet Broadcast • O
Chat

Figure 24: Receive "Hello Slave!" and Type in "Hello Master!" in Slave Device Side

12. On the Slave computer, the screen show "*Hello Master!*" message from Slave computer.. (as Figure 25).

Results-UAR T
<u>C</u> lear Results
HciCommandCompleteEvent
HciCommandCompleteEvent
HeiCommodStatusEvent
local: Hello Slave!
remote: Hello Master!
Detailed view: Clear T Hay Duran Dataile
HCL EVENT
HCI_EVENT_CODE_COMMAND_STATUS
numCommandPackets = 1
opcode = HCI_OPCODE_CREATE_CONNECTION
HCI_EVENT HCI_EVENT_CODE_CONNECTION_COMPLETE
HCI_SUCCESS
bluetooth address = 123456789012
entryption mode=HCI_ENCRYPTION_DISABLED
► Broadcast Elag
Chat Mode Abort Macro
C L2CAP C Active Broadcast 0 Character Count: 25
C Piconet Broadcast
Chat

Figure 25: Receive "Hello Master!" Message from Slave Device

13. For further testing on the data transmission, the user could use Telnet terminal program to send message or file between these two devices.

Chapter 6: Software Uninstall

Remove the TECOM Bluetooth Module BT3010 firmware by performing the following steps.

- 1. To uninstall the USB test driver, please go to CD-Rom and find "**BCBTRMV_1.5.exe**" file inside the directory of "**USB Driver**", then click on it to remove the device driver.
- Once the driver is removed, please find "regedit" program and open it, find the path " \
 HKEY_LOCAL_MACHINE\Enum\USB\VID_0A5C&PID_2033" in the directory of "My
 Computer" and delete it.

Chapter 7: Trouble Shooting

- 1. If there is any problem encountered during installation process:
 - Please email to TECOM, sales@ tecom.com.tw