

BlueGiga proto board

Wednesday, June 22, 2016 8:37 AM

This describes testing that the BT module is communicating via blue tooth.

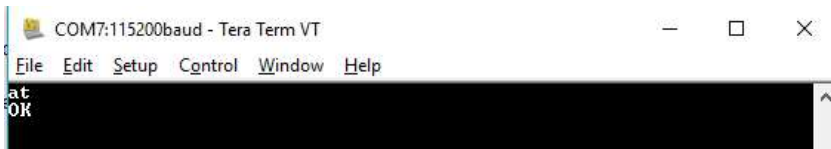
Using the BlueGiga proto board connected to a PC via RS232 and running Tera Term VT on the PC.

Screen clips are from the PC.



```
COM7:115200baud - Tera Term VT
File Edit Setup Control Window Help
WRAP THOR AI <5.5.0 build 952>
Copyright <c> 2003-2014 Bluegiga Technologies Inc.
READY.
```

RS232 response after power on or reset



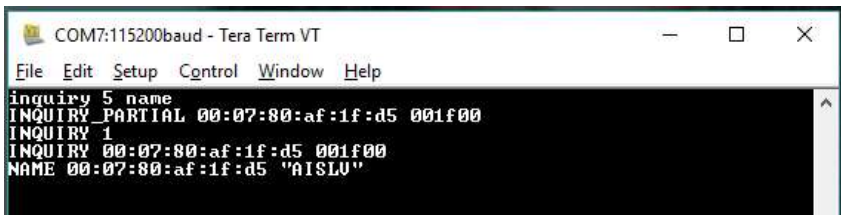
```
COM7:115200baud - Tera Term VT
File Edit Setup Control Window Help
at
OK
```

"at" typed on the PC keyboard.

The response, OK, signals that the BlueGiga module is communicating to the PC.

Note in all the screen clips the lower case is typed on the PC. The response is in caps.

Testing a "Slave" MidiBT module

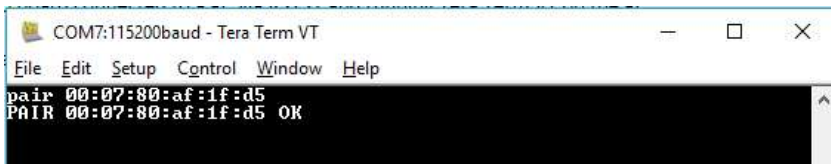


```
COM7:115200baud - Tera Term VT
File Edit Setup Control Window Help
inquiry 5 name
INQUIRY_PARTIAL 00:07:80:af:1f:d5 001f00
INQUIRY 1
INQUIRY 00:07:80:af:1f:d5 001f00
NAME 00:07:80:af:1f:d5 "AISLV"
```

"inquiry 5 name" typed into PC.

Next 4 lines is the response received from the MidiBT module running the SLAVE program. Note AISLV is the name of the module.

If not paired solid red and flashing yellow

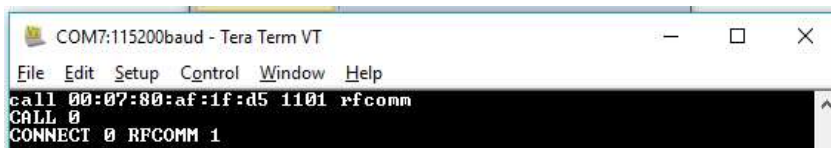


```
COM7:115200baud - Tera Term VT
File Edit Setup Control Window Help
pair 00:07:80:af:1f:d5
PAIR 00:07:80:af:1f:d5 OK
```

"pair 00:07:80:af:1f:d5" is a pair request to the MidiBt module address 00:07:80:af:1f:d5.

:PAIR 00:07:80:af:1f:d5 OK" indicates a successful pairing

Flashing yellow (paired)



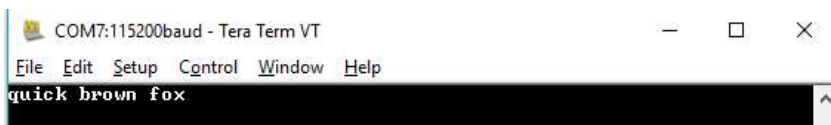
```
COM7:115200baud - Tera Term VT
File Edit Setup Control Window Help
call 00:07:80:af:1f:d5 1101 rfcomm
CALL 0
CONNECT 0 RFCOMM 1
```

"call 00:07:80:af:1f:d5 1101 rfcomm" request a Secure Simple Pairing (SSP) to transfer digital data.

"CONNECT 0 RFCOMM 1" indicates connection

Flashing green (in SSP mode)

Install a Midi cable on the MidiBT module looping it by connecting the Midi Out to the Midi In



```
COM7:115200baud - Tera Term VT
File Edit Setup Control Window Help
quick brown fox
quick brown fox
```

Anything typed on the PC will loop back and be displayed on the PC.

```
COM7:115200baud - Tera Term VT
File Edit Setup Control Window Help

set
SET BT BDADDR 00:07:80:68:8a:0c
SET BT NAME AISLV
SET BT CLASS 001f00
SET BT IDENT BT:47 f000 5.5.0 Bluegiga iWRAP
SET BT LAP 9e8b33
SET BT PAGEMODE 4 2000 1
SET BT PAIR 00:07:80:af:1f:d5 a8998c62cdea27aa7f9dc207d35f5970
SET BT POWER 19 19 19
SET BT ROLE 0 f 2580
SET BT SNIFF 0 20 1 8
SET BT SSP 3 0
SET BT MTU 667
SET CONTROL BAUD 115200,8n1
SET CONTROL CD 00 0
SET CONTROL CONFIG 0000 0000 0000 1100
SET CONTROL ECHO 7
SET CONTROL ESCAPE 43 00 1
SET CONTROL GAIN 0 5
SET CONTROL MSC DTE 00 00 00 00 00 00
SET CONTROL PIO 00 00 00
SET CONTROL READY 00
SET PROFILE SPP Bluetooth Serial Port
SET
```

"set" requests the settings of the Bluegiga BT module

Note

1. that this module has been renamed to AISLV. This will let a MidiBT Master module pair with it.
2. This module is paired with a MidiBT Master address 00:07:80:af:1f:d5

```
COM7:115200baud - Tera Term VT
File Edit Setup Control Window Help

set bt name WT41
set
SET BT BDADDR 00:07:80:68:8a:0c
SET BT NAME WT41
SET BT CLASS 001f00
SET BT IDENT BT:47 f000 5.5.0 Bluegiga iWRAP
SET BT LAP 9e8b33
SET BT PAGEMODE 4 2000 1
SET BT PAIR 00:07:80:af:1f:d5 a8998c62cdea27aa7f9dc207d35f5970
SET BT POWER 19 19 19
SET BT ROLE 0 f 2580
SET BT SNIFF 0 20 1 8
SET BT SSP 3 0
SET BT MTU 667
SET CONTROL BAUD 115200,8n1
SET CONTROL CD 00 0
SET CONTROL CONFIG 0000 0000 0000 1100
SET CONTROL ECHO 7
SET CONTROL ESCAPE 43 00 1
SET CONTROL GAIN 0 5
SET CONTROL MSC DTE 00 00 00 00 00 00
SET CONTROL PIO 00 00 00
SET CONTROL READY 00
SET PROFILE SPP Bluetooth Serial Port
SET
```

"set bt name WT41" command renames the module to "WT41"

"set" (2nd line) command requests current settings

```
COM7:115200baud - Tera Term VT
File Edit Setup Control Window Help

set bt pair 00:07:80:af:1f:d5
set
SET BT BDADDR 00:07:80:68:8a:0c
SET BT NAME WT41
SET BT CLASS 001f00
SET BT IDENT BT:47 f000 5.5.0 Bluegiga iWRAP
SET BT LAP 9e8b33
SET BT PAGEMODE 4 2000 1
SET BT POWER 19 19 19
SET BT ROLE 0 f 2580
SET BT SNIFF 0 20 1 8
SET BT SSP 3 0
SET BT MTU 667
SET CONTROL BAUD 115200,8n1
SET CONTROL CD 00 0
SET CONTROL CONFIG 0000 0000 0000 1100
SET CONTROL ECHO 7
SET CONTROL ESCAPE 43 00 1
SET CONTROL GAIN 0 5
SET CONTROL MSC DTE 00 00 00 00 00 00
SET CONTROL PIO 00 00 00
SET CONTROL READY 00
SET PROFILE SPP Bluetooth Serial Port
SET
```

"set bt pair 00:07:80:af:1f:d5" command remove the pair

Testing a "Master" MidiBT module

```
COM7:115200baud - Tera Term VT
File Edit Setup Control Window Help
set bt name AISLV

set
SET BT BDADDR 00:07:80:68:8a:0c
SET BT NAME AISLV
SET BT CLASS 001f00
SET BT IDENT BT:47 f000 5.5.0 Bluegiga iWRAP
SET BT LAP 9e8b33
SET BT PAGEMODE 4 2000 1
SET BT POWER 19 19 19
SET BT ROLE 0 f 2580
SET BT SNIFF 0 20 1 8
SET BT SSP 3 0
SET BT MTU 667
SET CONTROL BAUD 115200,8n1
SET CONTROL CD 00 0
SET CONTROL CONFIG 0000 0000 0000 1100
SET CONTROL ECHO 7
SET CONTROL ESCAPE 43 00 1
SET CONTROL GAIN 0 5
SET CONTROL MSC DIE 00 00 00 00 00 00
SET CONTROL PIO 00 00 00
SET CONTROL READY 00
SET PROFILE SPP Bluetooth Serial Port
SET
```

```
COM7:115200baud - Tera Term VT
File Edit Setup Control Window Help
RING 0 00:07:80:af:1f:d5 1 RFCOMM
```

Start with both modules off (MidiBT & BlueGiga Proto)

On BlueGiga Proto

1. BlueGiga Proto power on and connect to PC
2. Type: "at" - expected response: "OK" (see above)
3. Rename the module to AISLV and verify (set command shows that the module has been named to AISLV)

On MidiBT module

4. Power on the MidiBT module.
5. If the red LED is on solid - go to step 4
6. If yellow LED is flashing, push the reset pairing push button.

MidiBT module now should automatically find, pair and start SSP

No feedback available during finding and pairing

Response when starting SSP