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BLE113 AT commands

Answered



Deepanraj Anbarasan

asked this on December 12, 2014, 12:05

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Hi ,

->Can anyone tell me is AT commands available for BLE113-A and if so how what are the AT commands for this module ?

->How do we confirm that the firmware is running in the module?

->Is there any possible way to check the debug prints when the BLEupdate tool is running?

Thank you,

Deepanraj.A

0 people would like this to be answered.

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Comments

Jeff Rowberg
Bluegiga
Technologies

Hello Deepanraj,

Answer

The BLExxx modules do not use or provide an AT command set unless one is specifically custom-built into firmware that you flash onto the device. External host communication with these modules is done using the BGAPI binary protocol, as documented in the BLE API Reference Guide available from the documentation page for each of the BLE modules.

I recommend reading the following Knowledge Base articles for additional helpful information:

- <https://bluegiga.zendesk.com/entries/22412436--REFERENCE-What-is-the-difference-between-BGScript-BGAPI-and-BGLib>
- <https://bluegiga.zendesk.com/entries/25053373--REFERENCE-BLE-master-slave-GATT-client-server-and-data-RX-TX-basics>

The factory default behavior and connections needed to use the modules in this state are documented in this Knowledge Base article:

- <https://bluegiga.zendesk.com/entries/80487657-BLExxx-Factory-default-firmware>

Unless you flash some other firmware onto the module using the debugger interface, new/unmodified modules will boot into an idle state and will not be visible in any BLE scanning app. The modules will however generate a **system_boot()** API event immediately after power-on, which will be sent out the UART1/Alt1 port (P0_2/3/4/5 as CTS/RTS/TXD/RXD). This is the best way to confirm that the module is operating as expected.

Note that the modules that come pre-mounted on the four carrier boards that ship with the DKBLE development kit **do not** have this same firmware, but have a different "dkble" demo project which **will** be visible in BLE scanning apps on power-on/reset.

The BLE Update tool is used only for reflashing, and does not have any kind of debug capability (breakpoint, step, watch, etc.).

December 12, 2014, 16:05

Deepanraj
Anbarasan

Hi Jeff Rowberg

Actually mine is BLE113-A and i flashed the .hex file which is present in example which uses USART channel 1 and Alternate 1 with baudrate of 115200 can you please tell me how to check the module is working and could not see any debug statements in my console.how do i prove it is communicating with the UART of another processor. The wake up is enabled with pin P0_0 pull down in that hardware.xml file.

Thank you,

Deepanraj.A

December 13, 2014, 08:41



Jeff Rowberg

Hi Deepanraj,

If you have a firmware image running on the module which enables UART1/Alt1 for BGAPI control, then you should be able to see the **system_boot** event come out of the TXD pin (**P0_4**) every time you power on or reset the module. This should happen before you send any BGAPI commands to the module. Note however that if the UART has flow control enabled (which is likely and highly recommended), you must be sure to pull or drive the module's CTS pin (**P0_2**) to ground before it will send out any data from the UART. If it is left floating, the data will simply be buffered internally until it is full.

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