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## BLE-113 UART Pins

Answered



adeel habib  
asked this on May 11, 15:19

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Hi All,

I recently started developing a prototype, which includes UART communication between Atmega32 and BLE113, in my hardware i have Rx of AVR is connected to P0\_2, and Tx of Avr to P0\_3.

can anyone confirm please, if rx and tx pins on BLE113 are P0\_2, P0\_3....

Thanks In Advance

0 people would like this to be answered.

Be the first!

## Comments



Jeff Rowberg  
Bluegiga  
Technologies

Hello Adeel,

Answer

This is not correct, unless you have reflashed new firmware onto the BLE113 which uses UART0/Alt1, but even in that case the pins are backwards. The factory default firmware on the BLE113 module at this time is the "uartdemo" project, which uses UART1/Alt1 at 57600,8/N/1 with flow control, and an active-high wake-up pin on P0\_0 (see the Bluetooth Smart Module Configuration Guide). All pins are labeled from the perspective of the BLE module, so connections must be made accordingly:

- BLE P0\_2 = CTS, connect to MCU RTS
- BLE P0\_3 = RTS, connect to MCU CTS
- BLE P0\_4 = TXD, connect to MCU RXD
- BLE P0\_5 = RXD, connect to MCU TXD

See this Knowledge Base article for details on the factory default state:

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

May 11, 2015, 16:30



adeel habib

Hi,

Hi Jeff,

Thanks for your quick response, please see the attached schematic of the pcb i designed... i looked on BLE113 data sheet and it says...

```
<usart channel="0" mode="uart" alternate="1" >
```

can i not use it with above config ?

Shc\_1.png (quick view)

May 11, 2015, 17:13

Support



Jeff Rowberg  
Bluegiga  
Technologies

Hi Adeel,

You can use it this way, but this is not the factory default configuration as noted above. You have to reflash your own firmware with differently-configured hardware peripherals in order to use those connection.

May 11, 2015, 17:25



adeel habib

Hi Jeff,

sorry to ask u a stupid question, when you say flash my own firmware, u meant just changing the hardware.xml ??

or i have to load a new bootloader ?

May 11, 2015, 17:48



Jeff Rowberg  
Bluegiga  
Technologies

Hello Adeel,

You will need to modify hardware.xml and then recompile and reflash using the CC debugger interface and BLE Update software tool, as described here:

- <https://bluegiga.zendesk.com/entries/22442106--HOW-TO-Using-the-BLE-Update-utility-to-program-a-BLE-module>

May 11, 2015, 19:42

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