

AAZ-0914A-BT2

AAZ-0914A-BT2 Tech Info Doc: Blue Tooth Adapter for AAZ-0914A

## AAZ- 0914A-BT2 KIT:

**Completed Bluetooth add-on Board:** 



This adapter plugs into FRC16 connector of AAZ-0914A.

- 1. Bluetooth Module is Powered from AAZ-0914A
- 2. Auto activation of Blue Tooth adapter by AAZ-0914A Firmware
- 3. Battery may be Connected to this module to Power AAZ-0914A

Firmware auto detects Blue Tooth Function when BT module is plugged into the FRC socket.

Purpose to make this Plug-in module is for easy replacement (of BT Module) and using same module with various Foxdelta Antenna analyzer Projects. Also, it provides ability to power AAZ-0914A by external power when not connected to USB/PC at remote area.

While using Bluetooth function, its assumed that USB power is not available and external power will be required to power AAZ-0914A and BT module. This is achieved by providing Battery Connection on this board. DC 6 to 12V may be applied to power AAZ and BT module. Set USB/GCPU Power header on AAZ-0914A to "GCPU". Regulator used is AMS1117-5V 1A. **Blue Tooth Module: HC05** 

Ready-made HC05 type of BT module is used in this project. Module is 3.3V device. Firmware is configured to handle 3.3V logic level of BT module. Power for this module is derived from AAZ-0914A 3.3V supply.



## AAZ – 0914A – BT2 KIT Parts List:

| Quantity | Part ID   | Part Details           |
|----------|-----------|------------------------|
| 1        | PCB       | AAZ-0914A-BT1          |
| 1        | BT Module | HC-05                  |
| 1        | Header    | 2PIN FOR LOOP BACK     |
| 3        | C1, 2, 3  | 1uf Tantalum Capacitor |
| 1        | R1        | 5.6K                   |
| 1        | R2        | 10K                    |
| 1        | U1        | AMS1117-5V             |
| 1        | FRC16     | Female 18PIN Connector |

## AAZ-0914A-BT2 Schematic:



Note:

- 1. U1 is Pre-Soldered on PCB
- 2. LB Header: Loop-back test header
- 3. "BAT": Connect external DC Source to power AAZ-0914A
- 4. 3.3V for Bluetooth module is supplied from AAZ Board.
- 5. No external DC supply is required if USB cable is connected. (AAZ-0914A powered from USB connector)

AAZ-0914A USB/GCPU Header setting:

- 1. Shorting pin at "GCPU" if external power is applied
- 2. Shorting pin at "USB" if USB is connected.

73s Dinesh Gajjar 14<sup>th</sup> December 2014

For more details, please visit Project Page: http://www.foxdelta.com