



Fox Delta

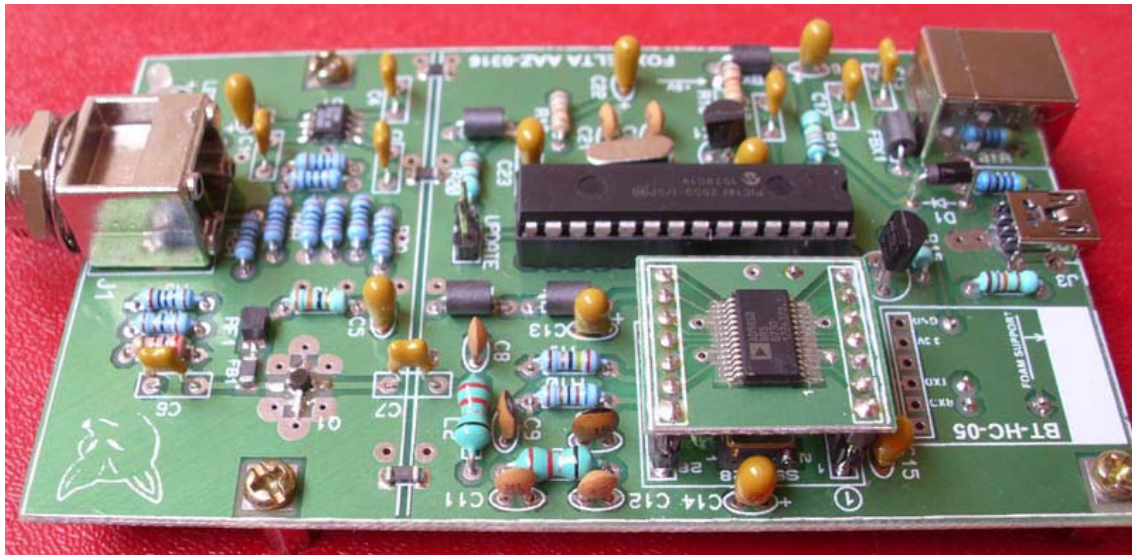
Amateur Radio Projects & Kits

FD- AAZ-0616

Schematic & Parts list: 50MHZ HF PIC18F2550 USB Antenna Analyzer

AAZ- 0616 KIT:

USB 50MHZ Antenna Analyzer with Bluetooth HC05 option



AD9850 DDS Assembly:



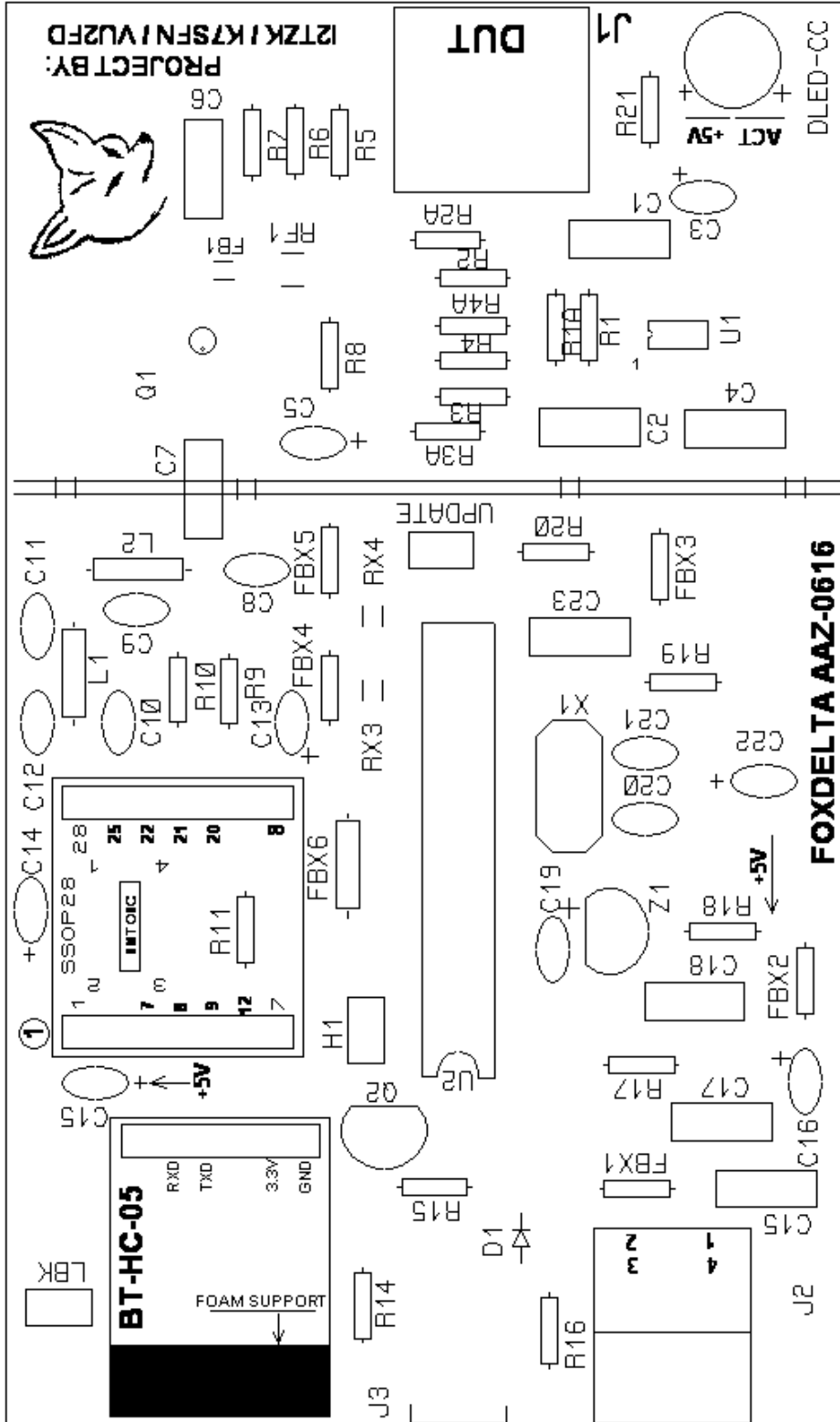
Kits are supplied with AD9850 (or AD9851) Pre-soldered on a carrier board for easy assembly. This plug-in DDS module is tested for full HF range before including with kits.

AAZ – 0616 KIT Parts List:

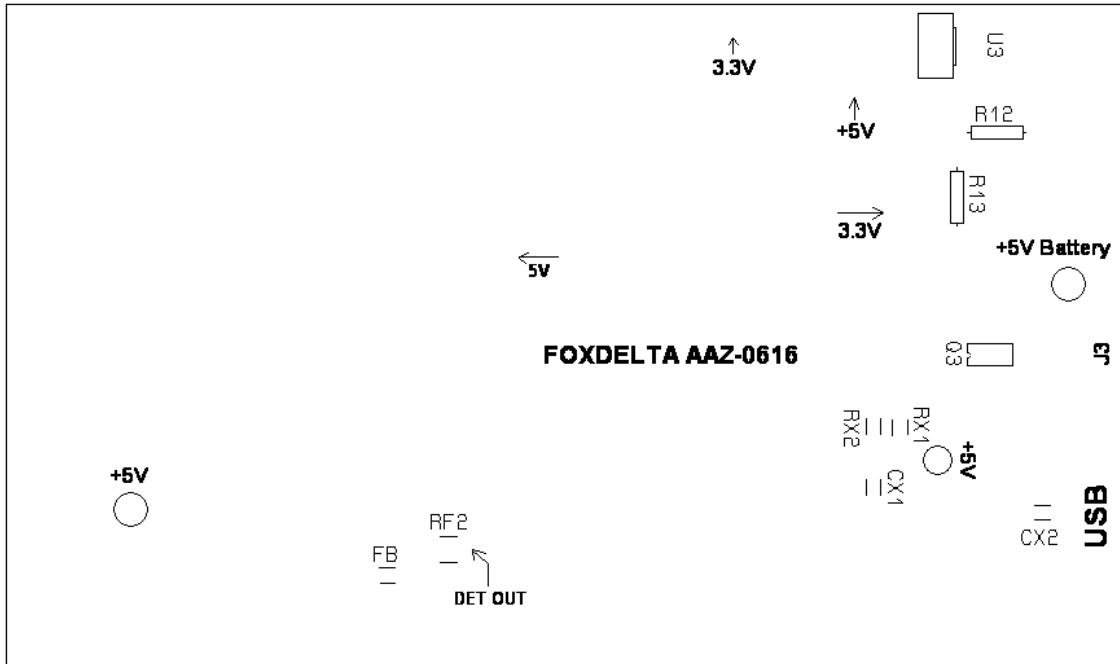
| Quantity | Part ID | Part Details |
|----------|------------------------|-------------------------------------|
| 1 | U2 | PIC18F2550 FW V6.02 |
| 1 | AD9850 Adapter | AD9850 & SMT Caps |
| 1 | U1# | AD8307 SO8 Pre-Soldered on Board |
| 1 | OSC# | 125MHZ SMT OSC 3.3V SMT |
| 1 | X1 | 20MHZ Crystal HC49 |
| 1 | Dual LED | Dual LED CC |
| 1 | Q1# | ERA3SM |
| 1 | Q2 | 2N7000 |
| | Q3# | AO4405 (PNP Switch) |
| 1 | IC Socket | 28PIN DIP |
| 1 | PCB | FD-AAZ-0616 DSPTH PCB |
| 1 | Z1 | LM385-2.5V |
| 1 | U3# | AMS1117 – 3.3V |
| 2 | L1, 2 | HF LPF Inductors 0.22uH |
| 6 | FBX1, 2, 3, 4, 5, 6 | Ferrite Bead Inductors |
| 2 | RF1, RF2# | 100uH RFC (SMT) |
| 1 | J2 | USB Socket, R/A, PCB Type |
| 1 | J3 | Mini USB R/A (Power bank INPUT) |
| 5 | SMT Ferrite beads # | Ferrite Beads 1206 SMT Pre-Soldered |
| 1 | J1 | BNC R/A PCB |
| 2 | 2PIN Headers | Update, Loopback |
| 1 | D1 | 1N5817 Diode |
| | All Resistors ¼ W 5% | |
| 1 | R5 | 300 Ohms |
| 1 | R6 | 18 Ohms |
| 1 | R7 | 270 Ohms |
| 8 | R1/A, R2/A, R3/A, R4/A | 100 Ohms |
| 1 | R8 | 33 Ohms |
| 1 | R9 | 24 Ohms |
| 1 | R10 | 51 Ohms |
| 4 | R12, 14, 17, 20 | 10K |
| 2 | R11, 13 | 5.6K |
| 1 | R18 | 3.3K |
| 1 | R19 | 680 Ohms |
| 1 | R21 | 1K |
| 1 | R15 | 100K |
| 1 | R16 | 4.7K |
| 2 | Rx1, RX2# | 1206 18 to 22 ohms |
| 0 | RX3, RX4 | 1206 15K (not used) |
| | Capacitors | |
| 1 | C23 | 0.47uF |
| 2 | C17, 18 | .001uf Poly |
| 6 | C15, 4, 2, 1, 6, 7, | .1uf Poly |
| 6 | C16, 22, 3, 5, 13, 15 | 1uf Tantalum |
| 2 | C20, 21 | 22pf |
| 2 | C 14, 19 | 10uF Tantalum |
| 1 | C8 | 82pf Ceramic |
| 2 | C9, 10 | 15pf Ceramic |
| 1 | C12 | 47pf Ceramic |
| 1 | C11 | 100pf Ceramic |
| 2 | CX1, CX2# | 10 to 15pf 1206 |

Rx3/4 may or may not be included in kit or assembled. If required, they will be pre-soldered on PCB.
 # indicate SMT Parts and are supplied pre-soldered.

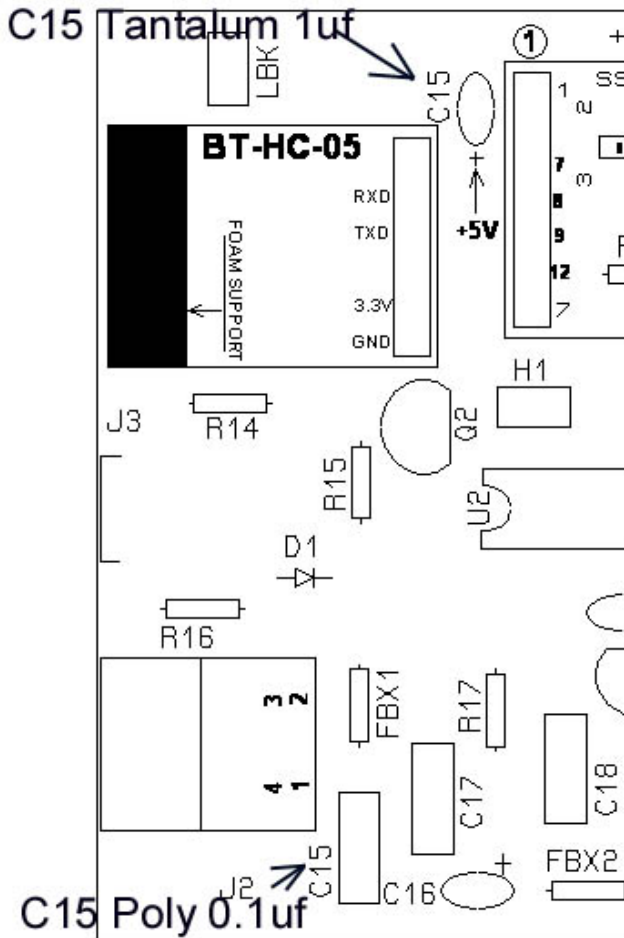
AAZ-0616 SILK: TOP SIDE



COMPONENT SIDE SILK:



Silk Error details:

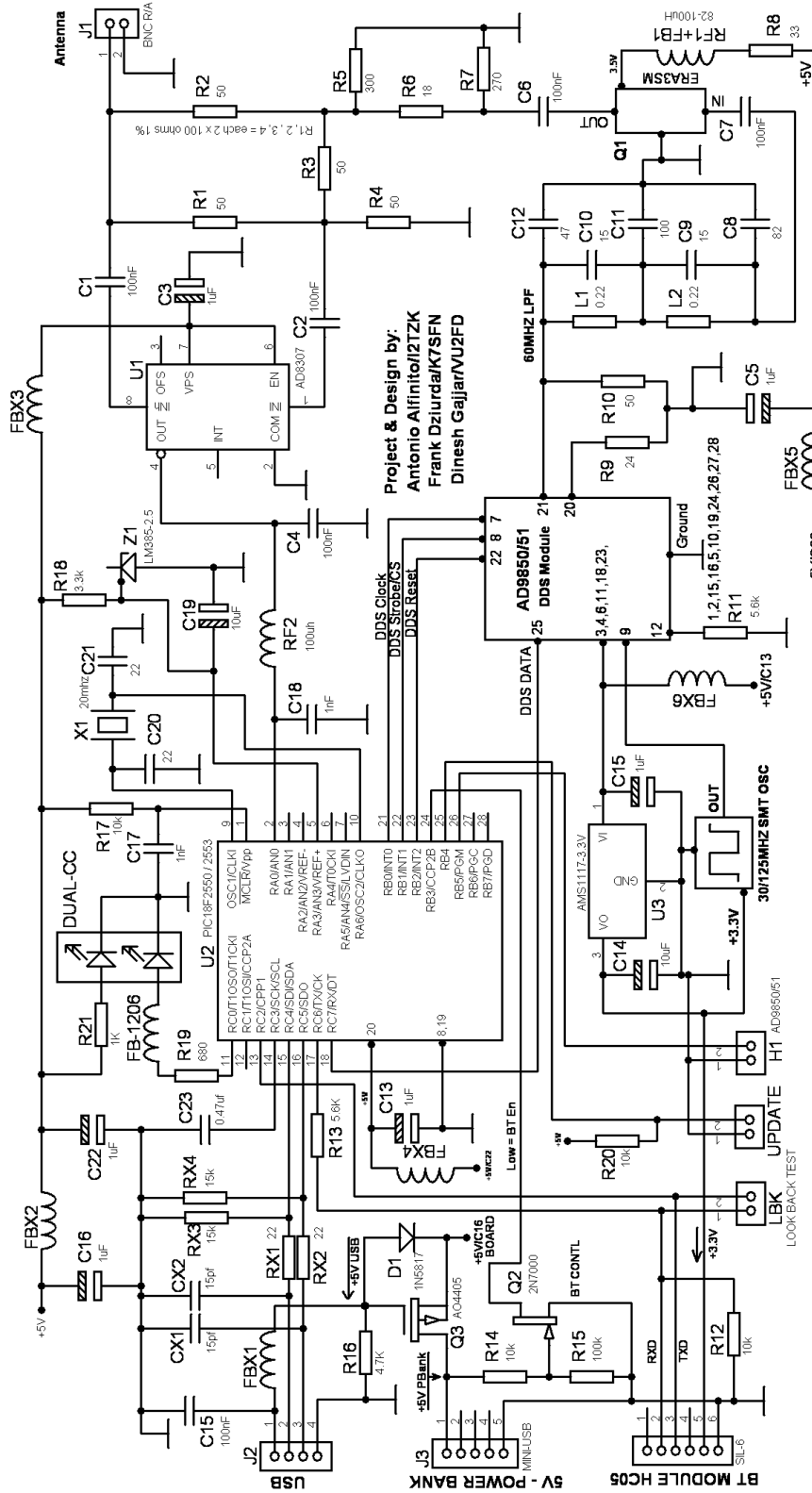


C15 is listed twice:

C15 near DDS with polarity mark is 1uf Tantalum

C15 rectangle near J2 is a 0.1uf Poly capacitor

AAZ-0616 Schematic:



Fox Delta FD-AAZ-0616 <http://www.foxdelta.com>

73s / Dinesh Gajjar
15th July 2016

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