



Fox Delta

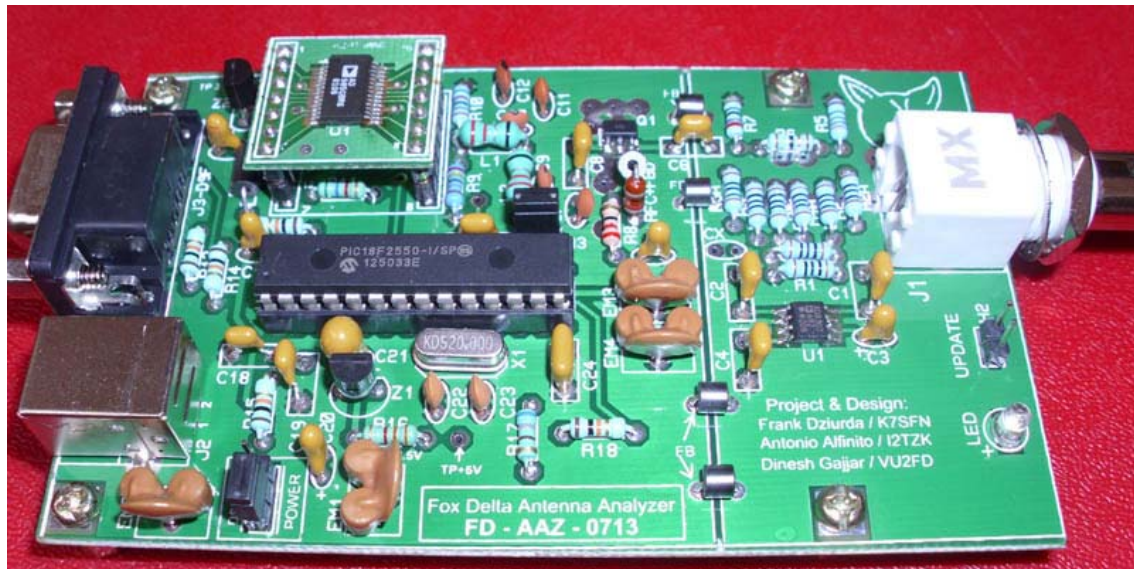
Amateur Radio Projects & Kits

FD- AAZ-0713A

Schematic & Parts list: HF PIC18F4550/4553 USB Antenna Analyzer

AAZ- 0713A KIT: USB Standalone and Graphic CPU 35MHZ Antenna Analyzer

Note: AD9850, AD8307 and ERA-3SM RF Amp are Pre-Soldered on board.



AD9850 DDS Assembly:



Kits are supplied with AD9850 Pre-soldered on a carrier board for easy assembly. This plug-in module is tested for full HF range before dispatch with kits.

Design Change from AAZ-0713: ADA4789 replaced by Mini-Circuit ERA-3SM

AAZ – 0713A KIT Parts List:

Quantity	Part ID	Part Details
1	U2	PIC18F2550 FW V4.00 / V4.03
1	AD9850 Adapter	AD9850 & SMT Caps are Pre-soldered
1	U1#	AD8307 SO8 Pre-Soldered on Board
1	OSC#	125MHZ SMT OSC 3.3V SMT
1	X1	20MHZ Crystal HC49
1	LED	3mm LED
1	Q1#	ERA-3SM
1	IC Socket	28PIN DIP
1	PCB	FD-AAZ-0713 DSPTH PCB
1	Z1	LM385-2.5V
1	Z2	LP2950-3.3V
4	EM1, 2, 3, 4,	DSS9NC
2	L1, 2	HF LPF Inductors
1+1	RFC + Bead	82uH RFC+ 1 Ferrite Bead
1	J2	USB Socket, R/A, PCB Type
1	J3	D9F R/A Socket (To GCPU)
4	FB	4 X Ferrite Beads (Board Isolator)
1	J1	BNC R/A PCB
2	H2***	2PIN Header (for FW Update)
NA	H1*	Jumper (Short for AD9850)
1	H3**	2Pin Header GCPU Enable
1	POWER SELECT	3PIN Header + Shorting PIN
1	FB1	Ferrite bead
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	22 Ohms
1	R9	24 Ohms
1	R10	50 Ohms
5	R12, 13, 14, 15, 18	10K
1	R11	5.6K
1	R16	3.3K
1	R17	680 Ohms
Capacitors		
2	C24	0.47uF
2	C18, 19	.001uf Poly
6	C1, 2, 4, 6, 8, 13,	.1uf Poly
7	C3, 5, 14, 20, 15, 16, 17	1uf Tantalum
2	C23, 22	18pf or 22pf Ceramic
1	C 21	10uF Tantalum
1	C7	82pf Ceramic
2	C10, 9	15pf Ceramic
1	C12	47pf Ceramic
1	C11	100pf Ceramic

Note:

H1*= Short for AD9850. Open for AD9851

H3= Open for USB operation. Place short to enable GCPU function.**

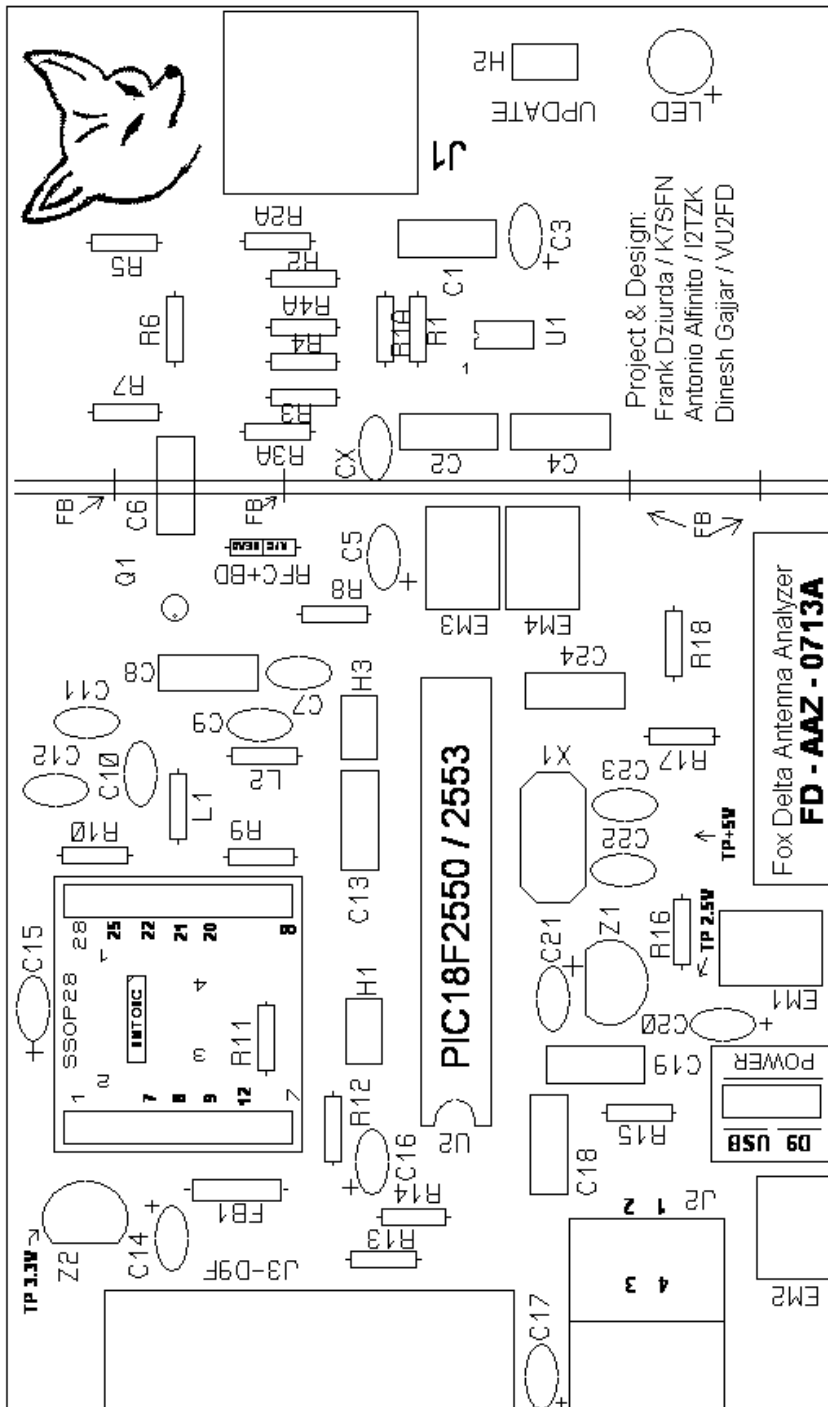
H2*= Firmware Update Header**

= ERA3SM, AD8307 and AD9850 are Pre-Soldered for Kits

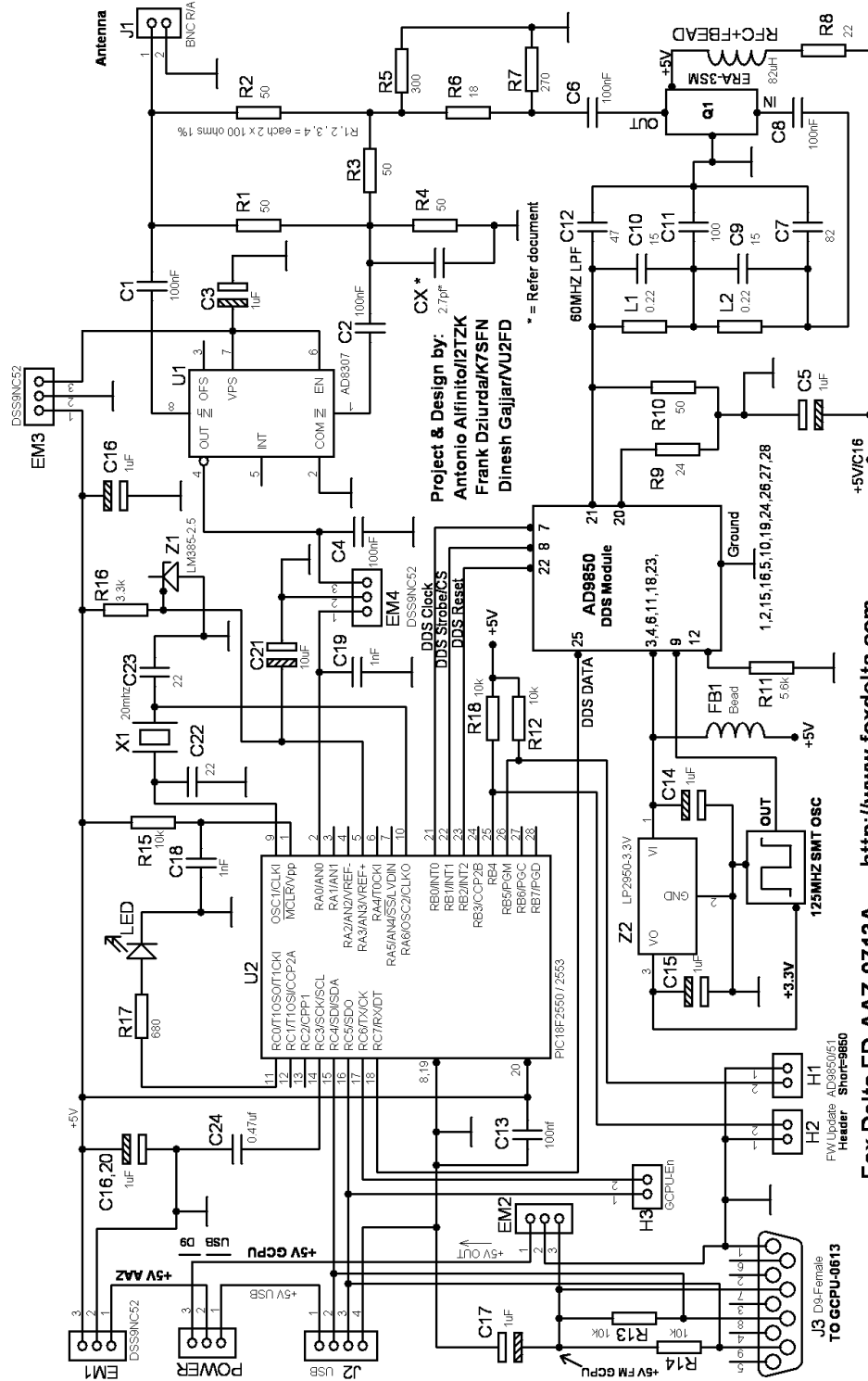
C22 and C23 may be either 18pf or 22pf

Free Metal case usually supplied with kits/Assembled

AAZ-0713A COMPONENT SIDE SILK:



AAZ-0713A Schematic:



Fox Delta FD-AAZ-0713A <http://www.foxdelta.com>

73s
Dinesh Gajjar
 26th September 2013

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