



# Fox Delta

Amateur Radio Projects & Kits

FD- UPP

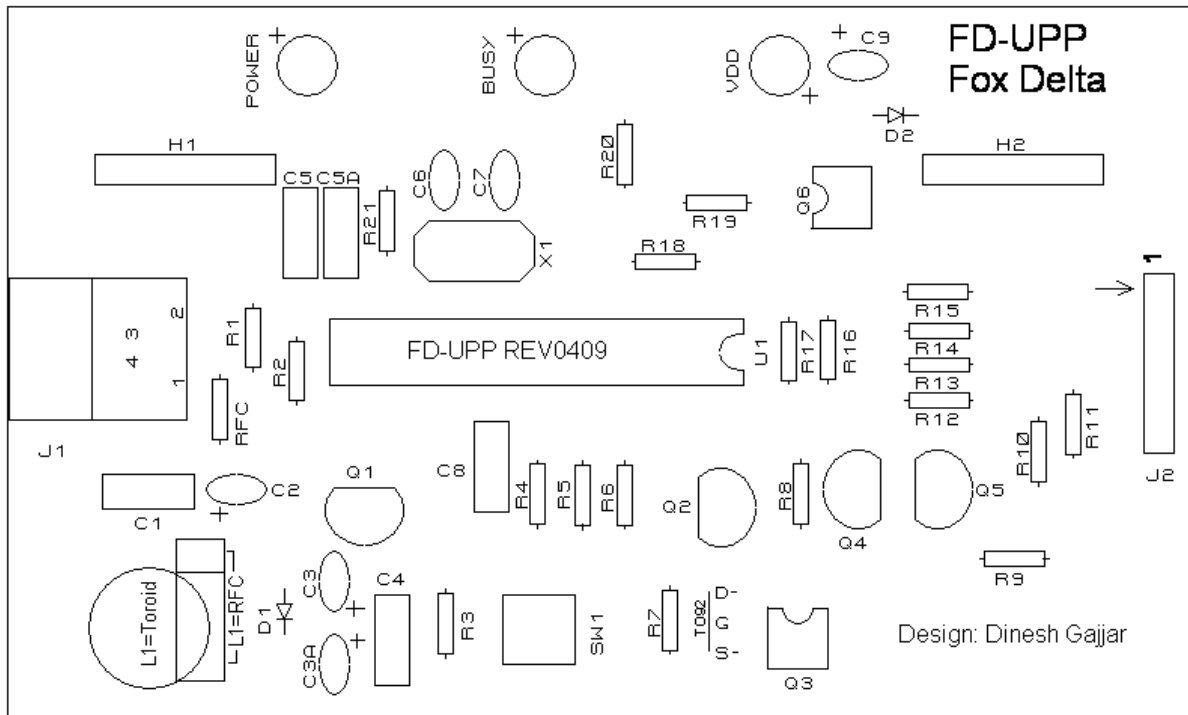
## FD-UPP KIT Parts List: USB PIC Programmer using 18F2550

### FD-UPP: USB PIC Programmer KIT Parts List:

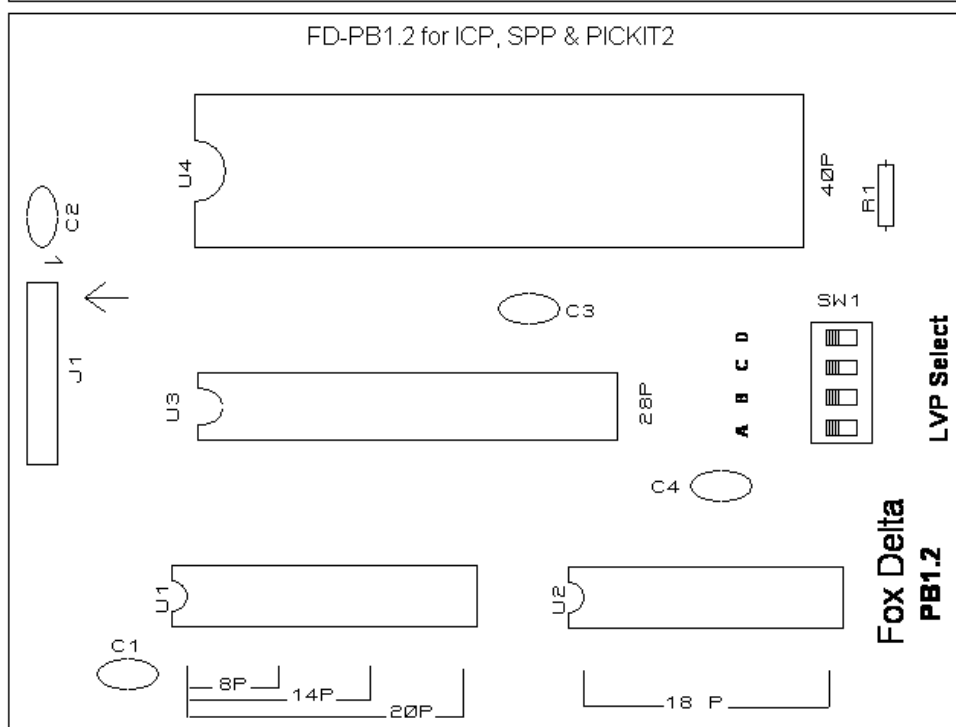
Quantity	Part ID	Description
1	FD-UPP	PTH PCB
1	J1	USB Connector Type B
1	J2	6 Pin R/A Female
1	X1	20MHZ Crystal HC49U/S
1	L1	Toroid+Copper Wire (24 Turns @28AWG, 680uh)
1	U1	PIC18F2550 Pre-Programmed
1	SW1	4mm Push button
3	LED	Red/Green/Yellow
2	Q3, Q6	IRFD9120
4	Q1, 2, 4, 5	2N7000
1	IC Socket	28PIN (14+14)
1	RFC	10uh
<b>Other Parts:</b>		
3	R1, 17, 21	680 ohms
4	R2, 5, 16, 18	220 ohms
4	R6, 12, 13, 14,	33 ohms
1	R9	82 ohms (Alternative 100 ohms)
4	R3, 10,11, 19	4.7K
2	R4, 20	2.7K
1	R15	1K
2	R7, 8	12K
3	C1, 4, 8	0.1uf
2	C5/5A	0.22uf
2	C2, 9	10uf Tan
1	C3	47uf Electro 40V
2	C6, 7	22pf Ceramic
2	D1, 2	BAT85
<b>Programming Board:</b>		
1	PB1	With 40, 14+14, 20 & 18 PIN Standard IC Sockets, 1x10K, 4x0.1uf, 1x4way DIP, 6PIN Male R/A Header

(C3A not used)

**Silk Snap:**



**PB1 Programming Board:**



I hope this project would be useful to many

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For more information, please visit: <http://www.foxdelta.com>