



Fox Delta

Amateur Radio Projects & Kits

FD- FC 2A

Kit Parts List: 40/400MHZ (1.1GHZ) LCD PIC16F84A Frequency Counter

Rev: 290909

FC2A: 40/400MHZ Frequency Counter Parts List:

Quantity	Part ID / Details
1	PIC16F84A with Firmware Fc2A
1**	MC12080 Pre-scale IC 8 SOIC
1	FC2A Double Sided PTH PCB
1	2N3904 TO92 (Q3)
2	J309 TO92 (Q1, Q2)
2	1N4148 (D2, 3)
1	7805 (U3)
1	1N4007 D1
1	20pf Air Trimmer
1	BNC connector for RF IN: J2
1	16X1 LCD Display with BL
1	3Pin Header + shorting pin
1	Push Switch SW-1
4	Push Buttons S1-4
1	4.000MHZ Crystal
2	4 Position DIP Switch SW1-4, LCD-BL
1	10K preset (LCD Contrast): P1

** Only Included on 400MHZ Kits
Note: MC12080/SOIC8 is pre-soldered on PCB: Kit and Assembled.

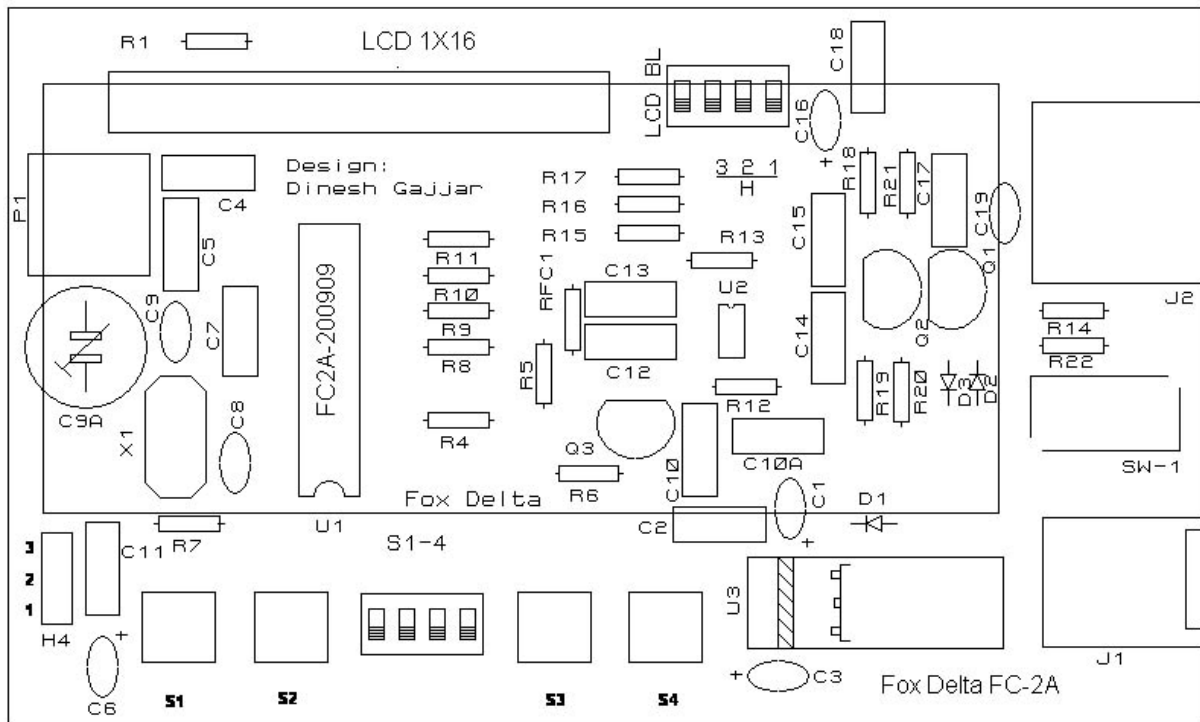
5	1K	R8, 9, 10, 11, 20
1	47k	R6
1	3.3k	R7
1	820 ohms	R12
1	100 ohms	R13
3	220 ohms	R19, 18, 21
1	100k	R22
1	47 ohms	R14
2	470 ohms	R4, R5
1	22 ohms	R1
1	RFC 10uh	RFC1
3	10k**	R17, 16, 15

5	1uf Tantalum	C1, 3, 6, 16
8	0.1uf Ploy	All other Capacitors
1	0.01uf Poly	C12
2	22-27pf	C8, 9
1	47pf Ceramic	C19
3	1000pf Poly	C10, (10A) 14, 15
1Set	LCD Header Male/Female & 4X LCD Supports	

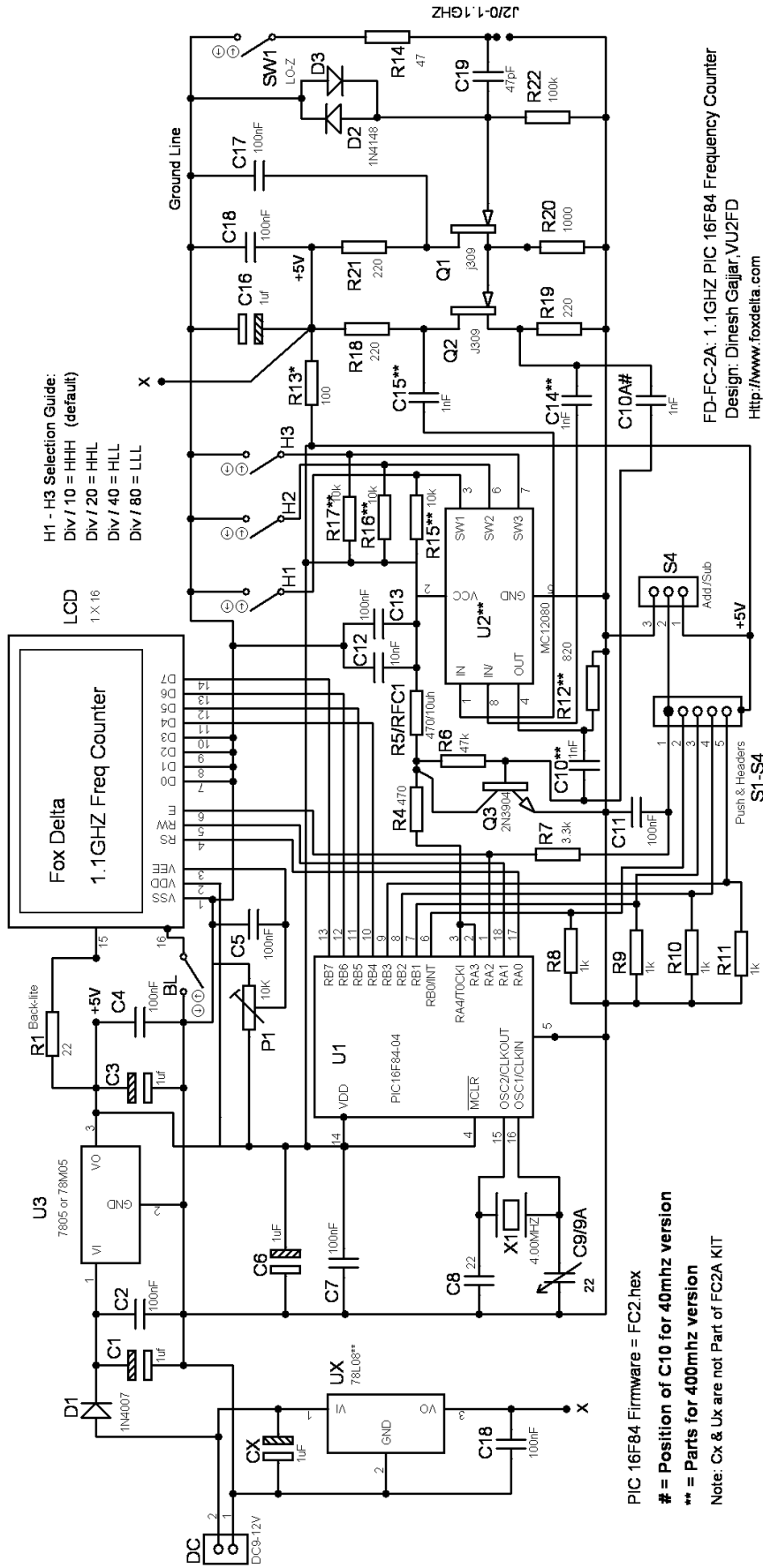
Notes:

Install 1000pf capacitor at C10 for 400MHZ or at C10A for 40MHZ. **Not at both places**

Silk Snap FC2A: 40/400MHZ Frequency Counter: (PCB Revised on 290909)



Schematic:



H1 - H3 Selection Guide:
 DIV / 10 = HHH (default)
 DIV / 20 = HHL
 DIV / 40 = HLL
 DIV / 80 = LLL

LCD
 1 X 16

Fox Delta
 1.1GHz Freq Counter

PIC 16F84 Firmware = FC2.hex
 # = Position of C10 for 40mhz version
 ** = Parts for 400mhz version
 Note: Cx & Ux are not Part of FC2A KIT

FD-FC-2A: 1.1GHz PIC 16F84 Frequency Counter
 Design: Dinesh Gajjar, VU2FD
 Http://www.foxdelta.com