



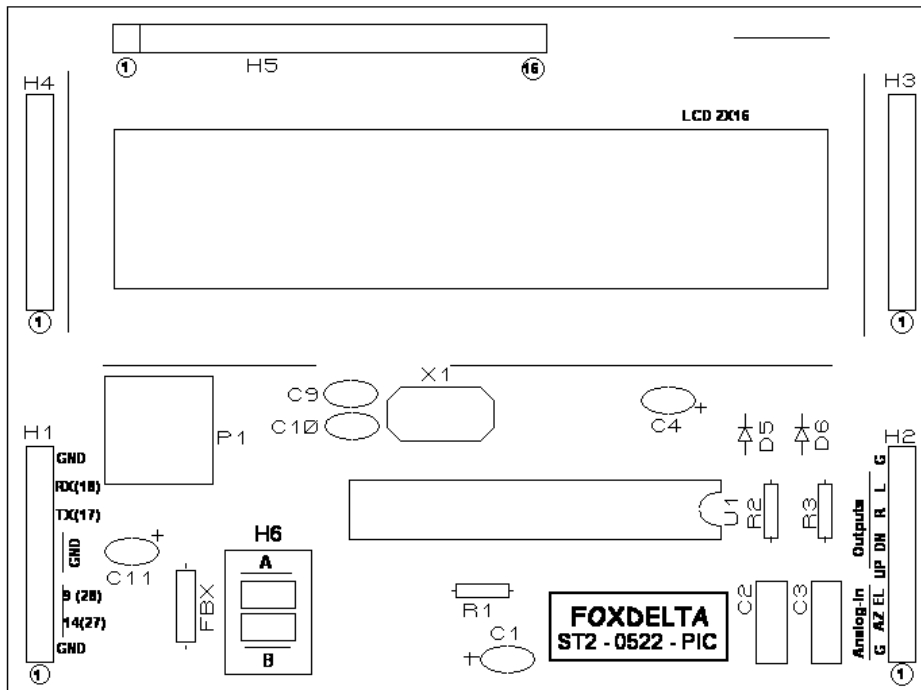
# Fox Delta

Amateur Radio Projects & Kits

FD- ST2- 0522-USB/TTL

## Kit parts list & Schematic: PIC16F876A Rotor Controller for USB or TTL

### PIC BOARD SILK:

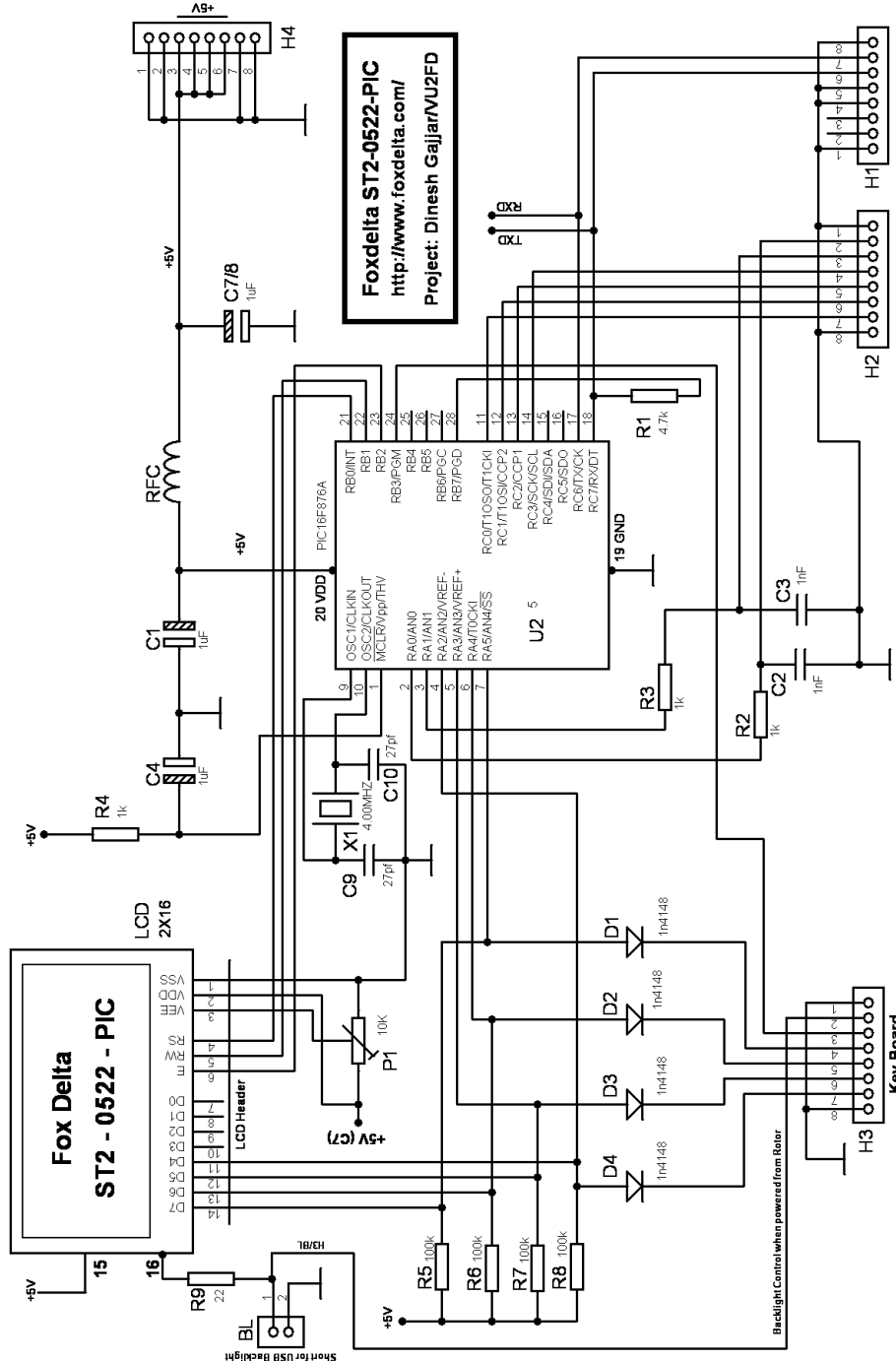


### ST2 – 0522- USB/TTL – PIC Board Parts List:

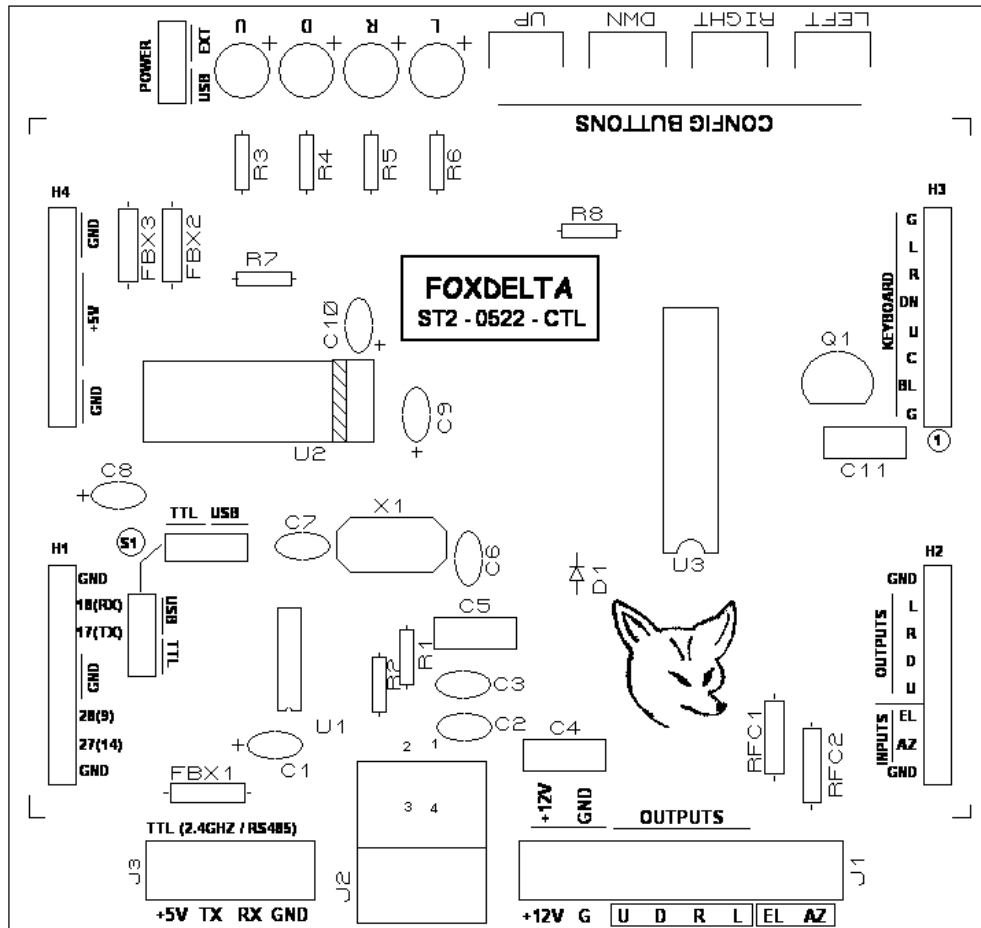
Quantity	Part ID	Details
1	U1	PIC16F876A DIP28
2	H6: Headers	Handshake control - Optional
2	PCB	ST2-0522-PIC DSPTH PCB
1	LCD	2x16 LCD with BL
1 Set	H5 - LCD Headers	16PIN SIL male Headers
4	Board Headers	8Pin Male headers for Inter-connect
6	D1, 2, 3, 4, 5, 6	1N4148
1	BL Header	2PIN Male + shorting pin
1	X1	4MHZ HC49US Crystal
1	FBX	RFC 10uH
1	P1	LCD Contrast Preset 10K

Quantity	Part ID	Details
3	R 2, 3, 4	1K 1/4w
1	R1	4.7K
1	R9	22 Ohms
4	R5, 6, 7, 8,	100K
7	C1, 4, 5, 6, 7, 8, 11	1uf Tantalum
4	C8, 9	27 – 33pf Ceramic
2	C2, 3	0.001uf Poly

**PIC Board Schematic:**



## CONTROL BOARD SILK:

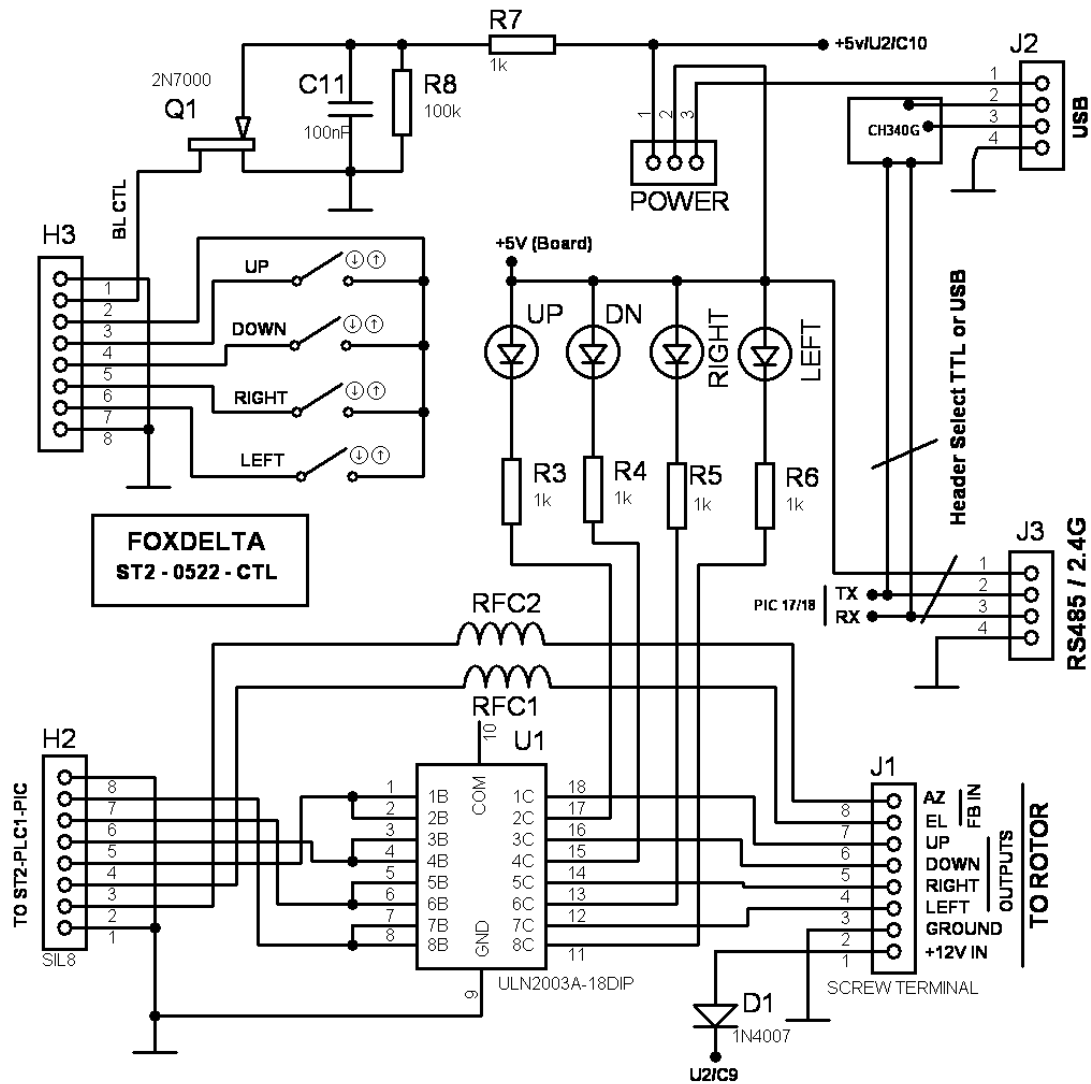


## ST2-USB/TTL CONTROL Board Parts List:

Quantity	Part ID	Details
1	U3	ULN2803A DIP 18
1	IC Sockets	DIP18
1	U2	7805 TO220
1	U1	CH340G SO16
1	D1	1N4007
1	X1	12MHZ Crystal HC49US
2	S1	3PIN DATA / USB select header
1	POWER	USB / Rotor Power : Source Select
1	Q1	2N7000 TO92
4	CONF BTN	4mm Push Buttons
4	LED	4 X LEDs 3mm
3	FBX1, 2, 3	RFC 10uH - 47uH
2	RFC1, 2	RFC 10-47uH
4	H1, 2, 3, 4,	8PIN Female Headers (Board Interconnect)
3	C4, 5, 11	Capacitor 0.1uF
4	C2, 3, 6, 7	Capacitor 22pf Ceramic
4	C1, 8, 9, 10	Capacitor 1uF Tantalum

1	J1	3.5mm SCREW TERMINAL 2 X 4 = 8
1	J3	3.5mm SCREW TERMINAL 2 X 1 = 4
1	J2	USB PCB
2	R1, 2	Resistor 22 Ohms
5	R3, 4, 5, 6, 8	Resistor 100K 1/4w
1	R7	Resistor 4.7K /14w
1	Case	Plastic PLC case

### ST2-0522-CTL Board Schematic:



73s / Dinesh Gajjar / 25<sup>th</sup> May 2022

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