



Fox Delta

Amateur Radio Projects & Kits

FD- GCPU - 0613

GCPU Parts List: PIC18F4550 General Purpose 128X64 Graphic LCD CPU

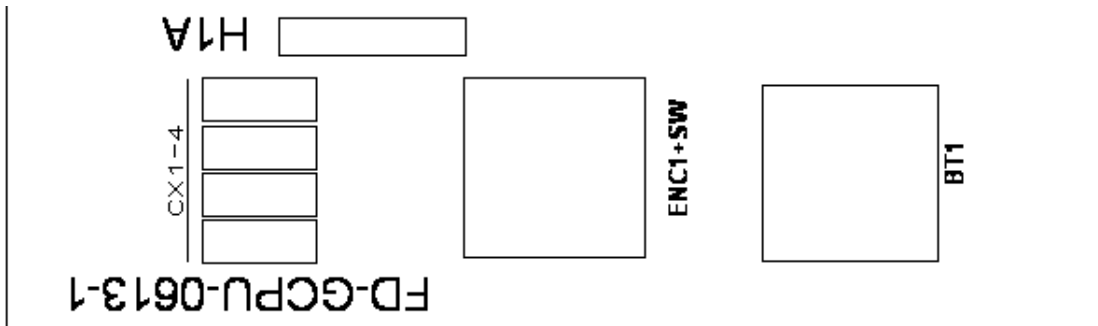
Graphic CPU – 0613 Parts List:

Qty	Part ID	Part Details
1	U1	PIC18F4550 Pre-Programmed DIP40
1	LCD	128X64 Graphic LCD: JHD128X64E
1	Q1	IRFD110
1	Z1	LM385-2.5V
1	J1	DC 12V connector
1	J2	USB PCB Connector
1	J3	D9F R/A PCB Connector: Signal+I2C
1	Q2	BC557B or 2N3906 or 2N2907 (GP PNP)
1	Q3	2N3553 RF Transistor TO92
2	D2, 3	1N4007
2	D1, 4	1N4148
1	BT1	12MM Push Button
1	FD-GCPU-0613	Double Sided PTH PCB Main Board
1	FD-GCPU-0613-1	Double Sided PTH PCB Keyboard
1	P1	10K Preset (LCD Contrast)
1	P2	10K POT + Knob (LCD Backlight Control)
1	ENC1	Alps EC12 Encoder with Switch
1	OSC	20MHZ Crystal Oscillator
1	DIP8	8XDIP SWITCH
1	U2	74HC595 DIP16
	U3	74HC165 DIP16
1	U4	7805 5V regulator
2	DIP16	IC Sockets
1	RLY	OEN42 12V 1CO Relay (USB/DC Select)
1	40DIP	IC Socket
7	RFC1, 2, 3, 4, 5, 6, 7,	10uH RFC
2	FB1, 2	Ferrite Beads
1	Set	Nuts / Bolts for LCD and KB Mounting
1	FRC16	PCB R/A FRC16 Socket for Extension
1	LCD Header	0.1IN 20PIN Header Male+Female for LCD
1	KB Header: H1/1A	0.1IN 5PIN Header Male+Female
1	Case	Free Powder Coated Metal Case
1	Set	LCD and KB Spacers (4+2)

QTTY	Capacitors	
3	C1, 8, 16	10uF Tantalum
7	C3, 7, 17, 18, 19, 20, 21	1uF Tantalum
5	C4, 11, 12, 13, 14	0.001uf Poly/Maylar
1	C6	0.47uf Poly/Maylar
5	C2, 15, 9, 10, 5	0.1uf Poly/Maylar

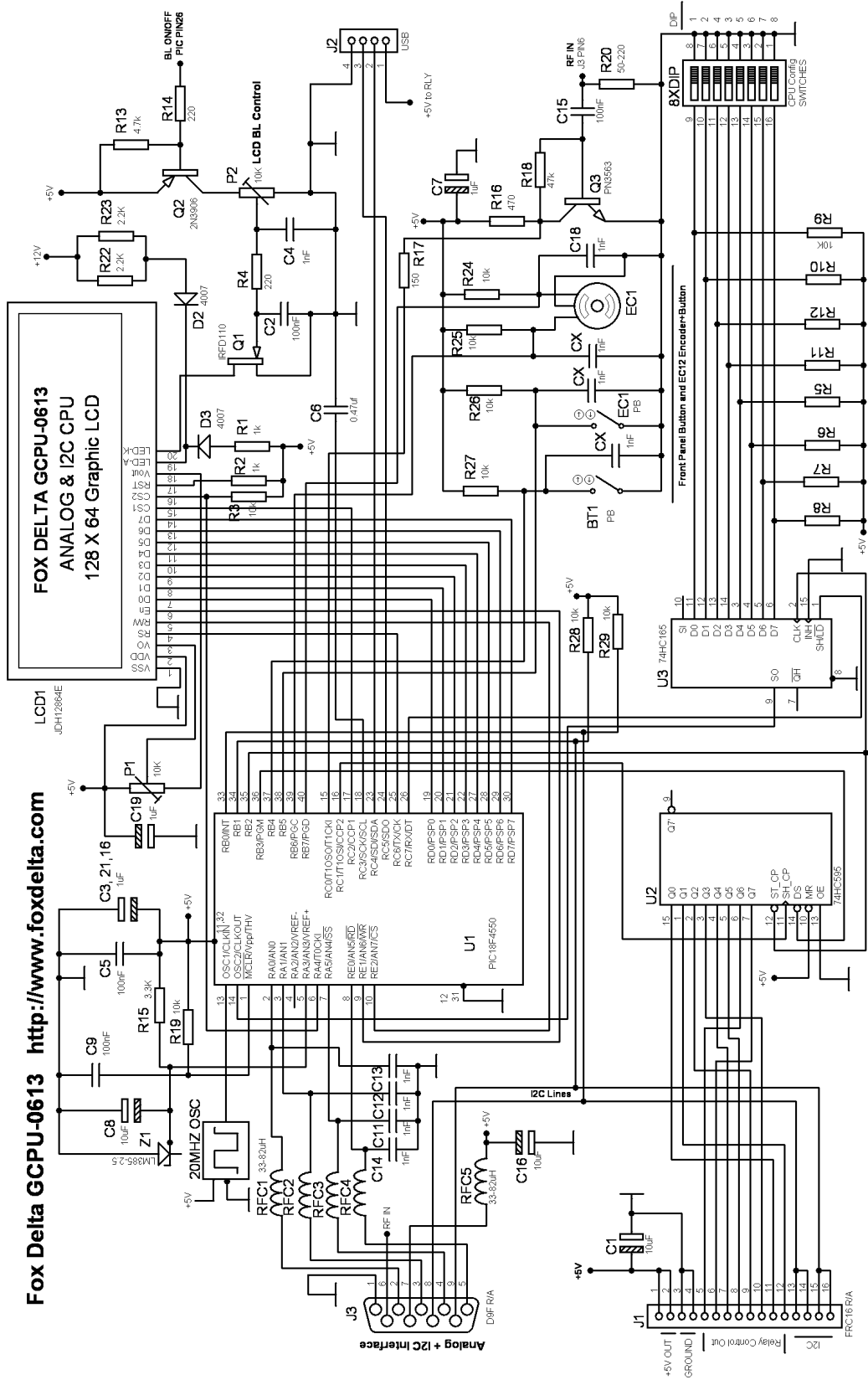
QTTY	All Resistors ¼ W 5%	
16	R3, 5, 6, 7, 8, 9, 10, 11, 12, 19, 24, 25, 26, 27, 28, 29	10K
1	R21	2.2 Ohms
2	R1, 2,	1K
2	R22, 23	2.2K
X	R20	R-Termination (50 to 220 Ohms)
2	R4, 14	220 Ohms
1	R13	4.7K
1	R15	3.3K
1	R18	47K
1	R16	470 Ohms
1	R17	150 Ohms

FD-GCPU - 0613 Keyboard Silk:



Option: CX1 to CX4 are keybounce capacitors. Suitable values from .001 to 0.1uf. Not supplied with this kit

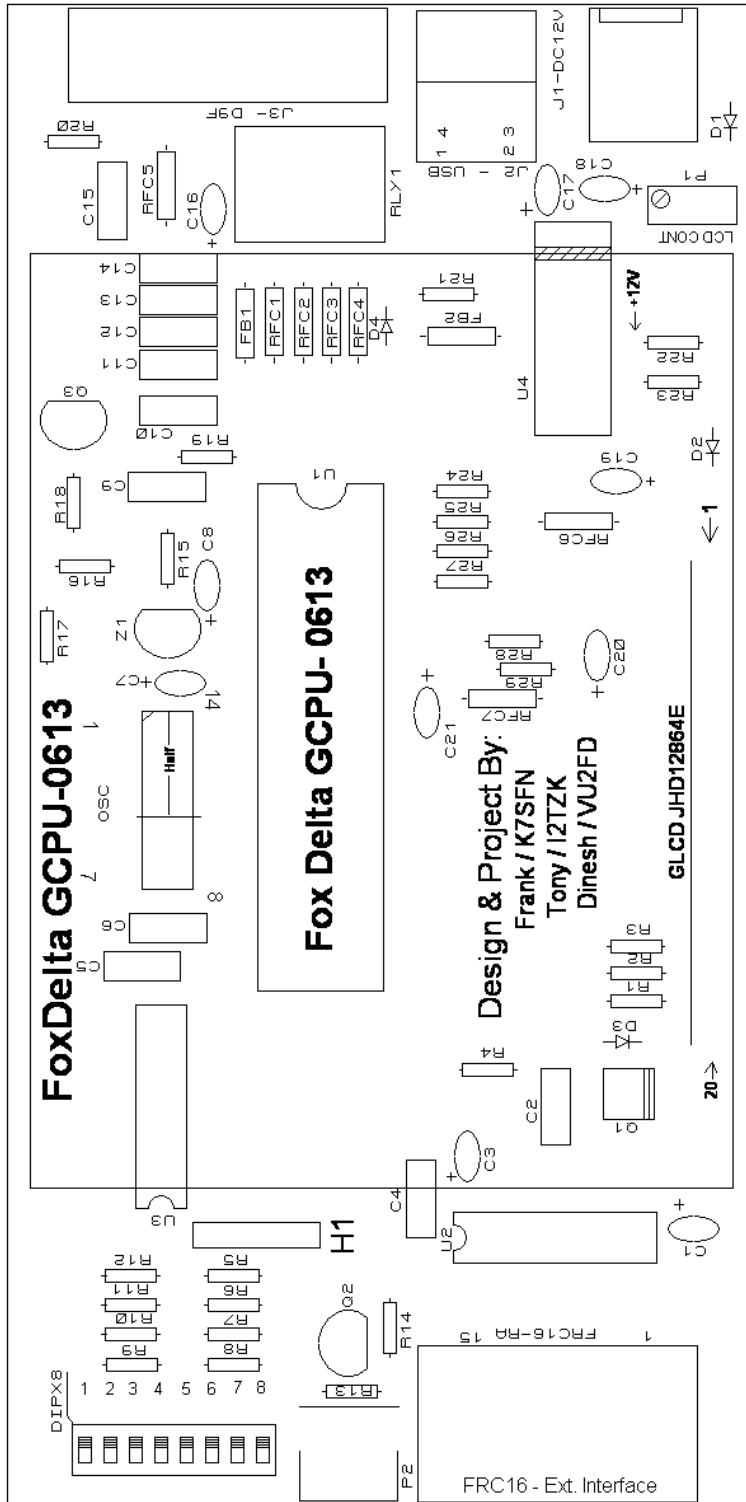
GCPU-0613 SCHEMATIC:



Fox Delta GCPU-0613 <http://www.foxdelta.com>

Project & Design by: Dinesh Gajjar / VU2FD, Antonio Alfinito (Tony) / I2TZK, Frank Dziurda / K7SFN

GCPU-0613 PCB TOP SIDE SILK:



73s
 Dinesh Gajjar
 4th July 2013

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