



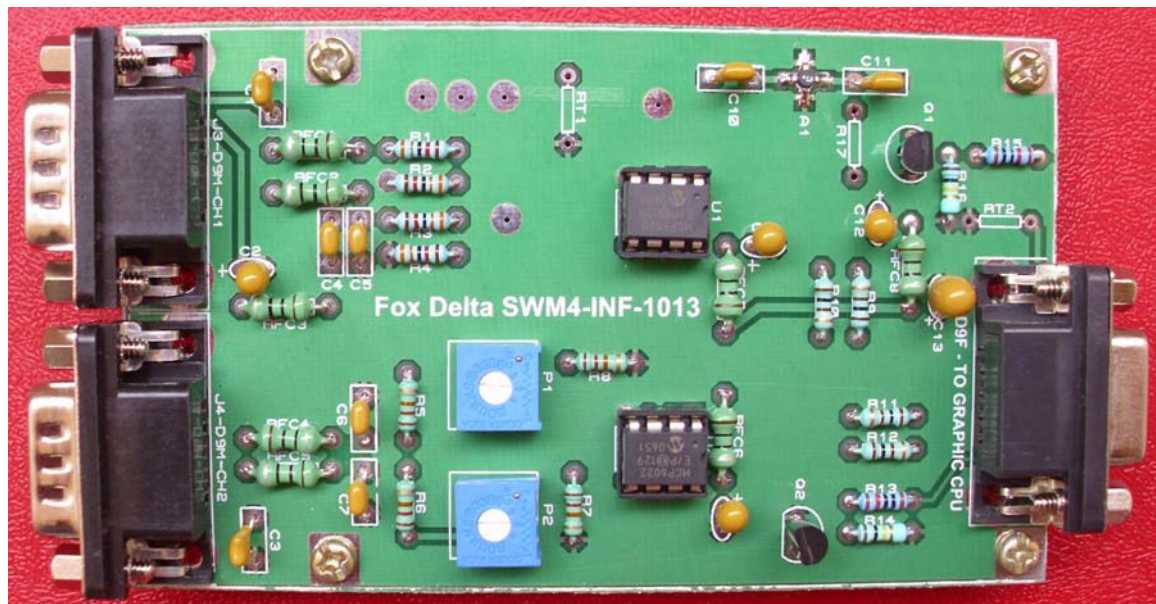
SWM4-INF-1013: SWR Bridge Breakout Board for “FD- INFINITY” GCPU-0613

SWM4-INF-1013 is an interface board to connect FD-GCPU-0613 (Fox Delta “INFINITY” Graphic CPU) to two existing (or newer) analog Bridges. Existing bridges are “Simple” and “Dual Scale” HF Bridges.

D9M connectors are provided for analog bridge making it a 1 to 1 interface for your “Simple” and “Dual Scale HF Bridge” that you may already have with your SWM2 or SWM3 CPUs.

Scaling function (used in Dual Scale HF Bridge) is shared with I2C lines of GCPU. You do not require this interface Board if you decide to make a D9 cable yourself, to interconnect GCPU to a suitable Bridge.

Completed SWM4-INF-1013:



Notes:

1. Q1 (ERA3SM) and C10, C11, R17 and RT1/RT2 may be offered as an option. Check “parts list for kit for details.
2. Q1 is a signal path buffer 50 ohms gain block. Check your bridge if this extra gain is required or not. If not required, you may place a shorting wire between INPUT and OUTPUT of Q1 to bypass the signal stage.

Side View: Connect Simple or Dual scale Analog Bridge here:



With Suitable RF input from bridge, we have SWR + Frequency:



RF Bridges connected to this interface requires that RF Pick-up from TX line is fed to PIN9 of the D9M connector.

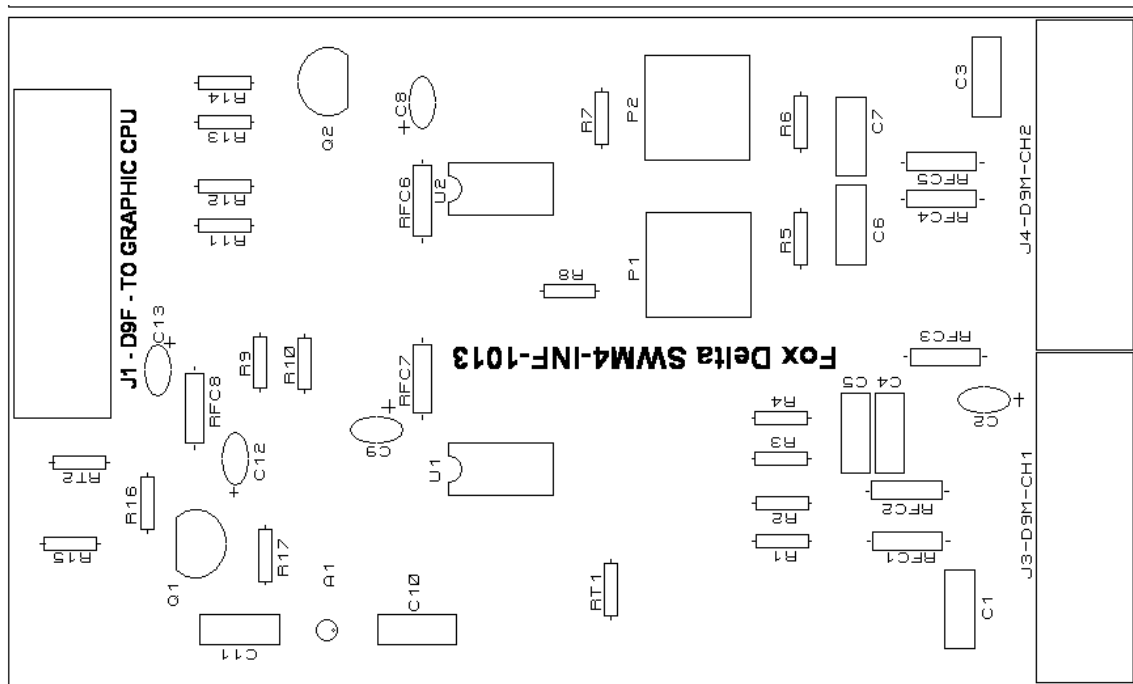
GCPU DIP Switch Settings for SWM4-INF-1013:

DIP SWITCH	Comment
1 OFF	Bridge type selection
2 OFF	Bridge type selection
3 ON	Bridge type selection
4 ON	OFF = enable CH1 frequency counter
5 ON	
6 ON	
7 ON	OFF = Std Alone
8 ON	

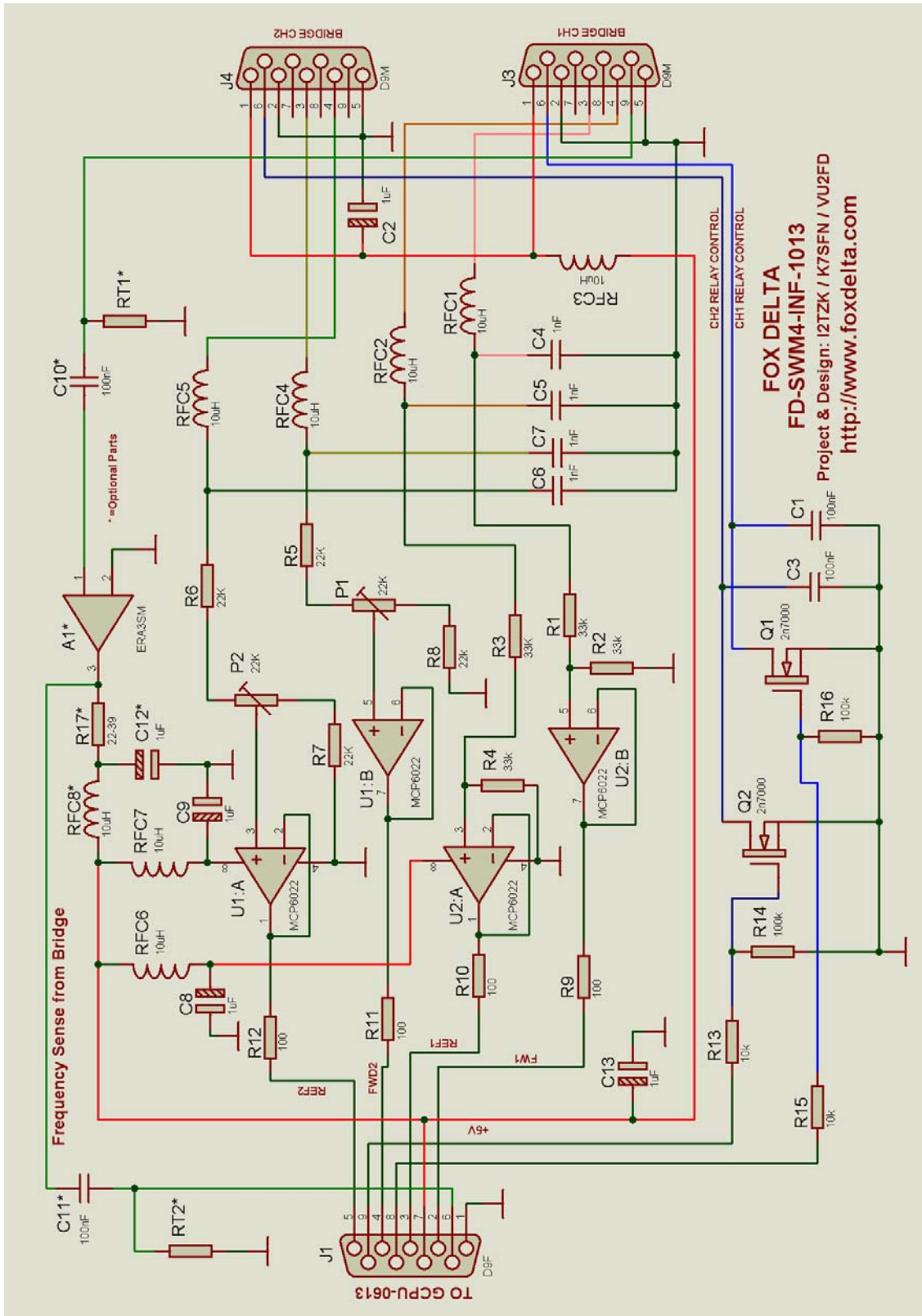
SWM4-INF-1013 KIT PARTS LIST:

Quantity	Part No.	Part ID
1	PCB	SWM4-INF-1013 DSPTH PCB
2	U1, U2	MCP6022 DIP8
2	P1, P2	Presets 20K
2	IC Sockets	8DIP
2	J3, J4	D9M connects to HF/VHF Analog Bridges
1	J1	D9F connects to GPCU
2	Q1, Q2	2N7000
4	R1, 2, 3, 4,	33K 5% Resistors ¼ W
4	R5, 6, 7, 8,	22K
2	R14, R16	100K
2	R13, 15	10K
1	R17	33
4	R9, 10, 11, 12	100
0	RT1, RT2	Termination Resistors: Not included
1	Hardware	PCB and Case Hardware
1	Metal Case	Free Powder Coated Metal Case
10	RFC1 - 8	10uH RFCs
5	C2, 8, 9, 12, 13	1uF Tantalum
4	C4, 5, 6, 7,	0.001uF Poly/Mylr
2	C1, 3	0.1uF Poly/Mylr
1	Q1	ERA3SM (Pre-soldered)

SWM4-INF-1013 PCB SILK:



SWM4-INF-1013 Schematic:



FOX DELTA
FD-SWM4-INF-1013
Project & Design: I2TZK / K7SFN / VU2FD
<http://www.foxdelta.com>

73s

Dinesh Gajjar, 12th January 2014

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