

The Lil Old ZX81 Information Repository

Intro

Welcome, here you will find the information taken from the original UK ZX81 instruction assembly instructions.

Please note that this document is for information purposes only :)

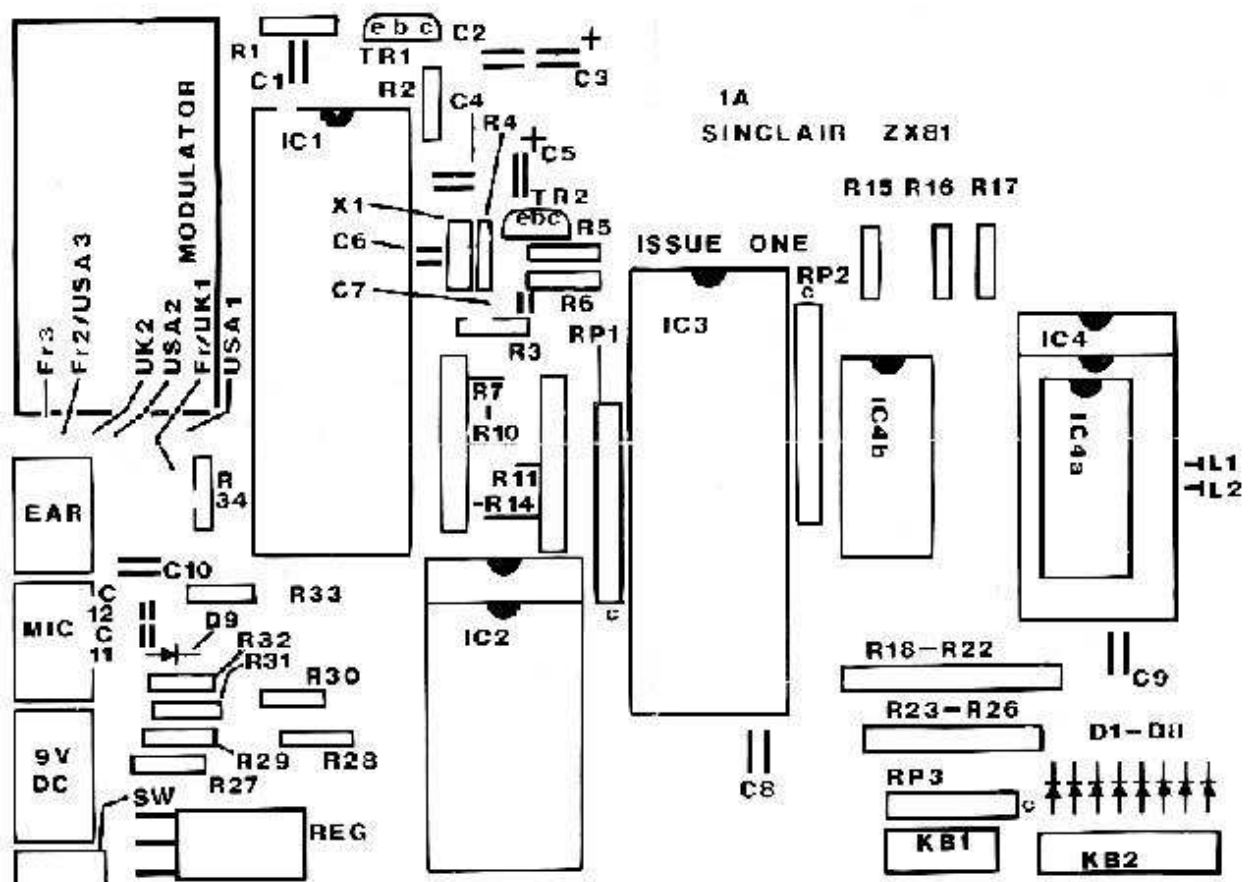
GRAPHICS FILES - Circuit diagram, component layout etc

Click on the following descriptions to download the required file.

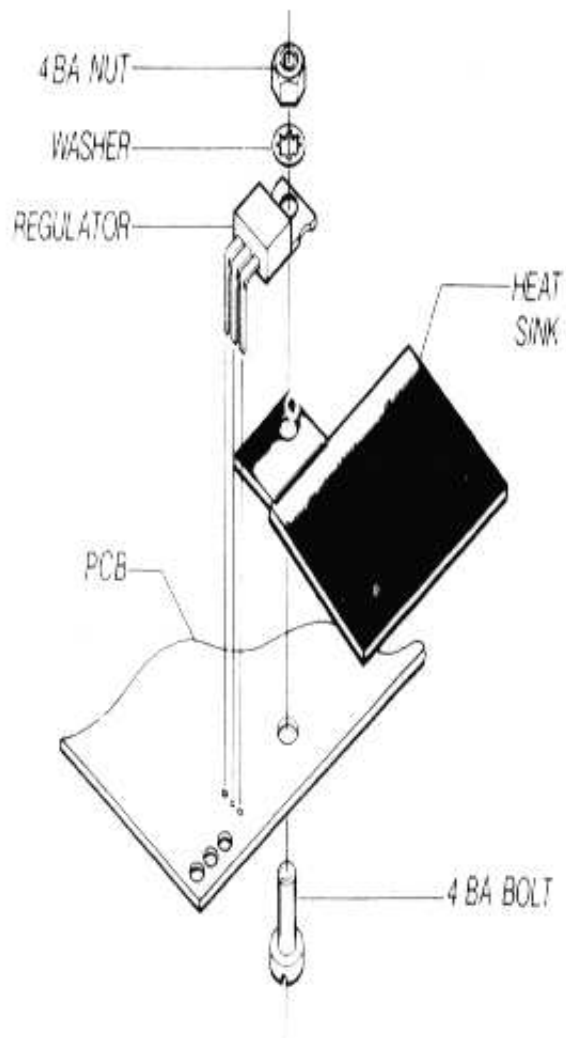
All the files are *gif*, some are big so you might like to right click and download to your computer.

Circuit diagram - 415k

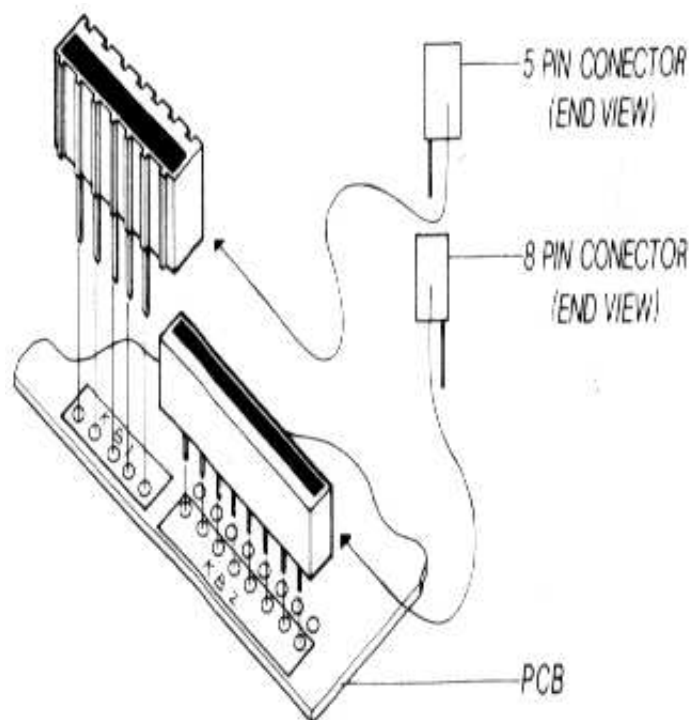
[Component Layout](#)



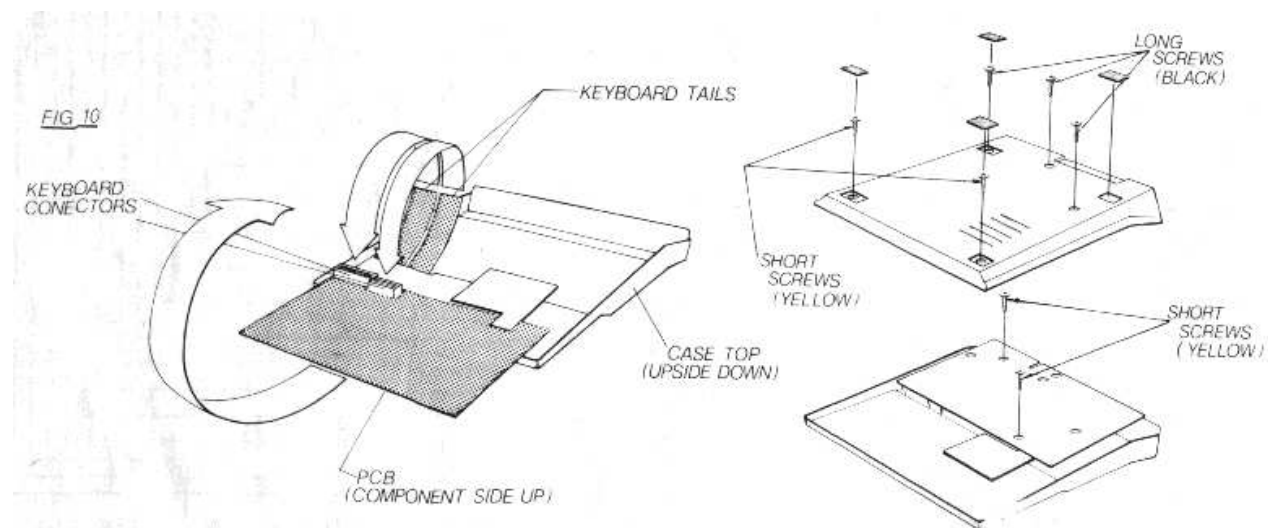
Regulator Heatsink Assembly Diagram



Keyboard Connector Assembly Diagram



Case Assembly



COMPONENT LIST

Resistors - All 5% tolerance or better

Ref Number	Value	Comments
R1	10k	
R2	680R	
R3	-	Not Used
R4	18k	
R5	330R	
R6	2k2	
R7-R14	470R	
R15	220k	
R16-R27	1k	
R28	680R	
R29	1M	
R30	-	Not Used
R31	-	Not Used
R32	-	Not Used
R33	4k7	
R34	220R	

Resistor Packs

Ref Number	Value	Comments
RP1	8 x 10k	9 leads
RP2	-	Not Used
RP3	5 x 10k	6 leads

Capacitors

Ref Number	Value	Markings	Comments
C1	47pF	47	Ceramic disc
C2	47nF	473 Z	Ceramic disc
C3	22uF	22u	Electrolytic 16V minimum
C4	47nF	473 Z	Ceramic disc
C5	1uF	1u	Electrolytic 5V minimum
C6	100pF	100, 101, n10	Ceramic disc
C7	47pF	47	Ceramic disc
C8	47nF	473 Z	Ceramic disc
C9	47nF	473 Z	Ceramic disc
C10	10nF	10n, 103	Ceramic disc
C11	47nF	473 Z	Ceramic disc
C12	47pF	47	Ceramic disc

Semiconductors

Please Note - The memory is either IC4a & IC4b or IC4.

Ref Number	Type	Comment
IC1	Sinclair Logic IC	40 pin
IC2	2364	24 pin
IC3	Z80A or D780C-1	40 pin
IC4	MK4118	24 pin
IC4a	uPD2114LC	18 pin
IC4b	uPD2114LC-1	18 pin
REG	7805	5 volt regulator
TR1	ZTX313	
TR2	ZTX313	
D1-D8	1N4448 or 1N4148 or 1S4A	
D9	-	Not Used
X1	CDA 6.5MC	3 lead ceramic filter

Miscellaneous Components

Modulator Type UM1233

3 off 3.5mm jack sockets for power, ear and mic.

2 off 40 pin IC sockets.

Either 2 off 24 pin IC sockets

or 1 off 24 pin and 2 off 18 pin IC sockets.

KB1 5 way keyboard connector.

KB2 8 way keyboard connector.

Modulator trim (black card).

Ready made flat keyboard.

Aluminium heatsink.

4BA nut, bolt and washer for fixing regulator and heatsink.

Printed Circuit Board.

2 Case Halves.

4 Rubber feet.

7 self tapping Pozidriv screws - 3 Black (long), 4 Yellow (short).
