DIGITAL
SERVICE &
DESIGN

DSD 2114-16K

The 16K RAM memory board is designed for the 2114 1024 x 4 Static Ram memory chip and to work with all SS-50 BUS computer systems. The TEXAS INSTRUMENTS TMS 4045 Static Ram chip is electrical and pin compatible and may also be used on this memory card.

Power requirments 7-8VDC unregulated at 3.5A max. for the 2114s and 3.0A max. for the TMS 4045.

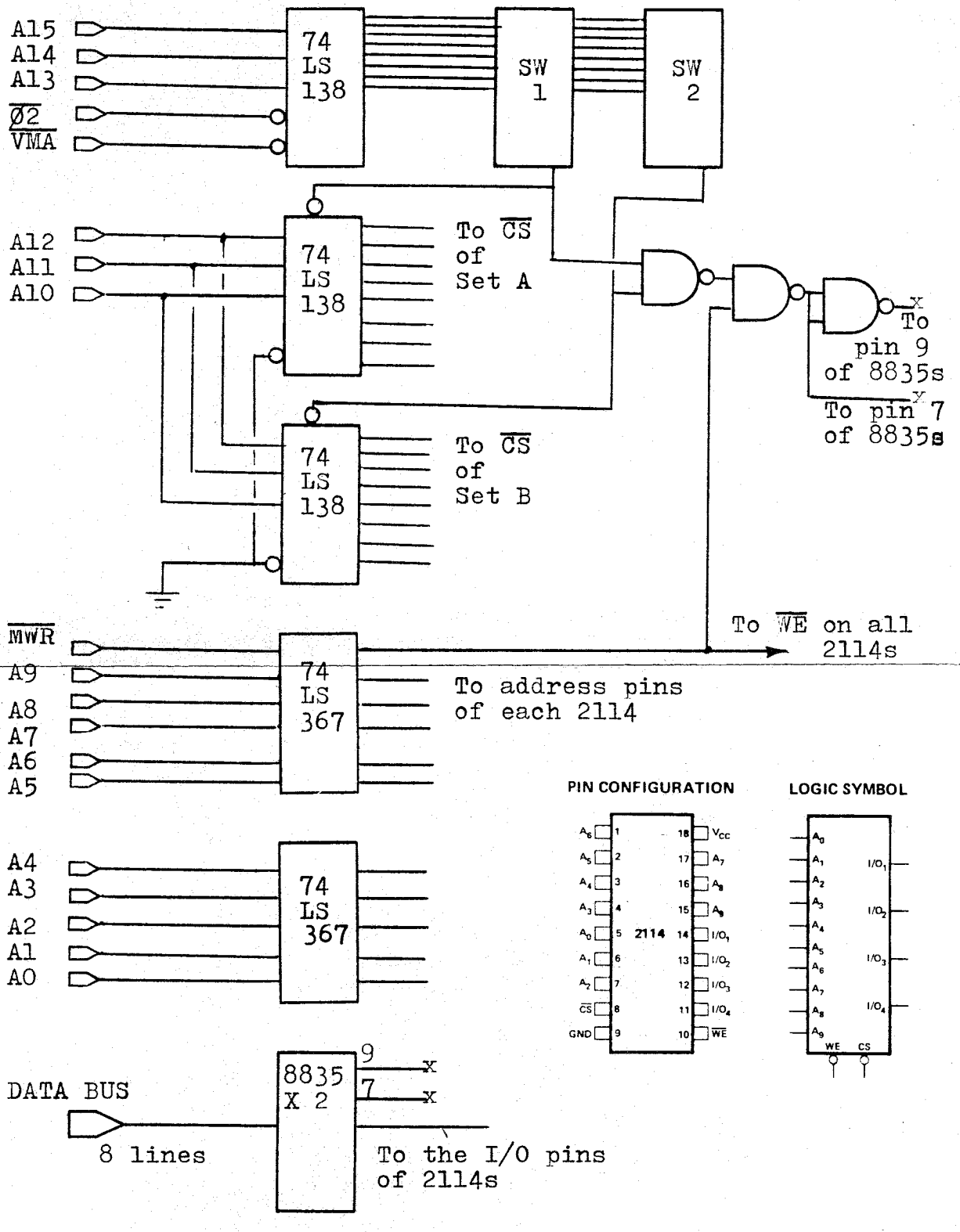
This board may also be used as a single 8K Ram memory by installing element set A and associated parts. For assembly it is recommened to use an UNGAR #535 27 watt element with UNGAR #6962 tip. If you use IC sockets, use a socket with good contact area and a firm grip on each lead of the memory chips. Above the switch SW-1 is marked, 0 2 4 6 8 A C E, each hex charactor references to the start of each 8K block. This aid will help in selecting the memory blocks.

There have been problems experience in some of the older SWTPC computers using 450ns high power 2114s. The high power 2114s requires a fairly clean power supply. If you should encounter a read/write problem you may need a heaver filter capacitor and add 2 or 3 .lufd caps to your computers power supply. I also recommend adding 6 .lufd caps, 1 ea between each main card position of your systems mother board.

PARTS LIST

C1-4	4 EA	100 ufd 16V Electrolytic cap.
C5-24	20 EA	.1 ufd disk cap.
$E1_A$-$E8_A$	16 EA	SY2114, Element Set A
$E1_B$-$E8_B$	16 EA	SY2114, Element Set B
SW 1 & 2	2 EA	DIP sw, 8 position
U1-2	2 EA	8835
U3-4	2 EA	74LS367 or 8097
U5,7 & 10	3 EA	74LS138
U6	1 EA	7400
U8,9,11 & 12	4 EA	7805 5V 1A regulators

DSD 2114-16K RAM MEMORY



PIN CONFIGURATION

LOGIC SYMBOL

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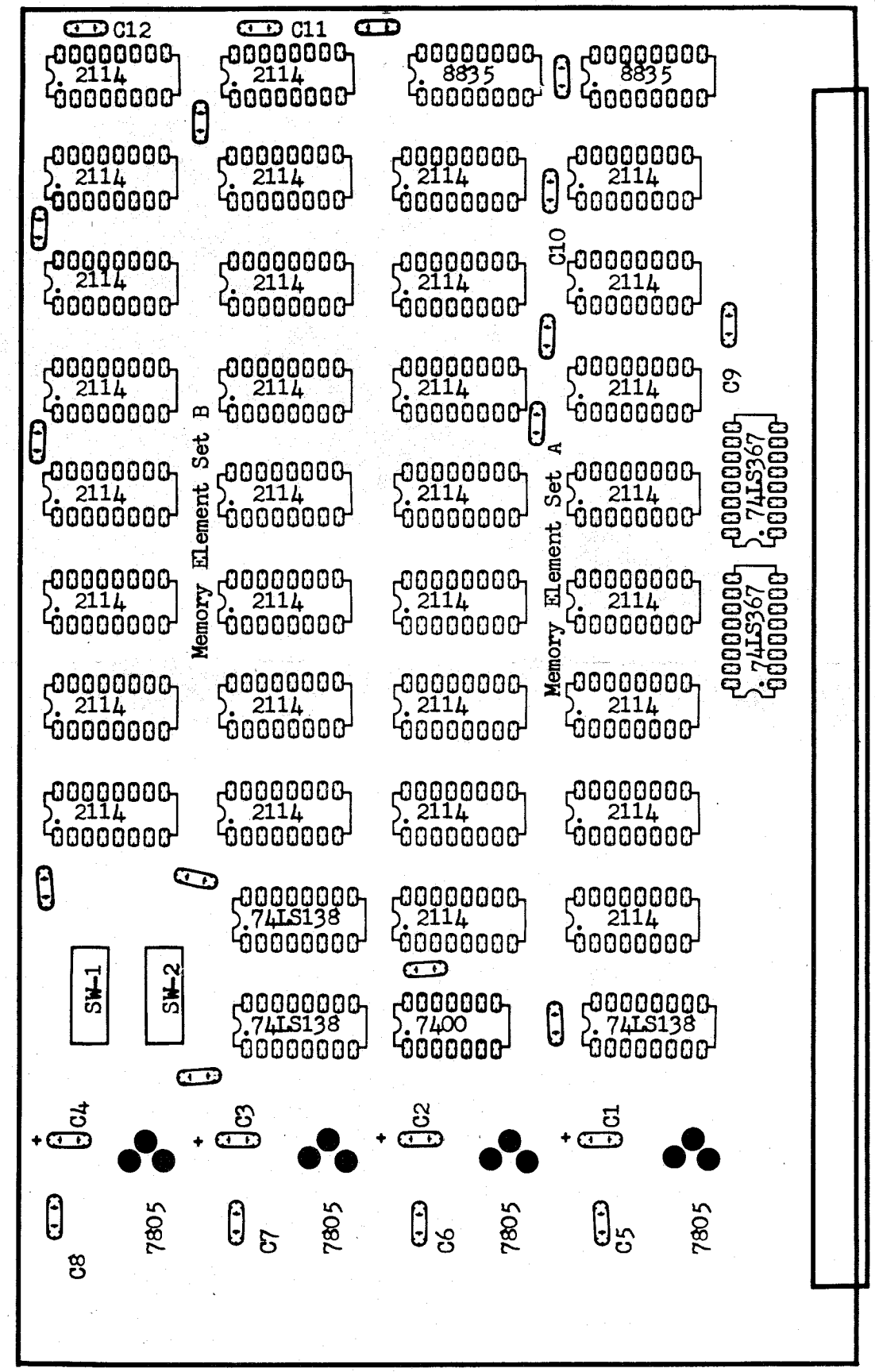

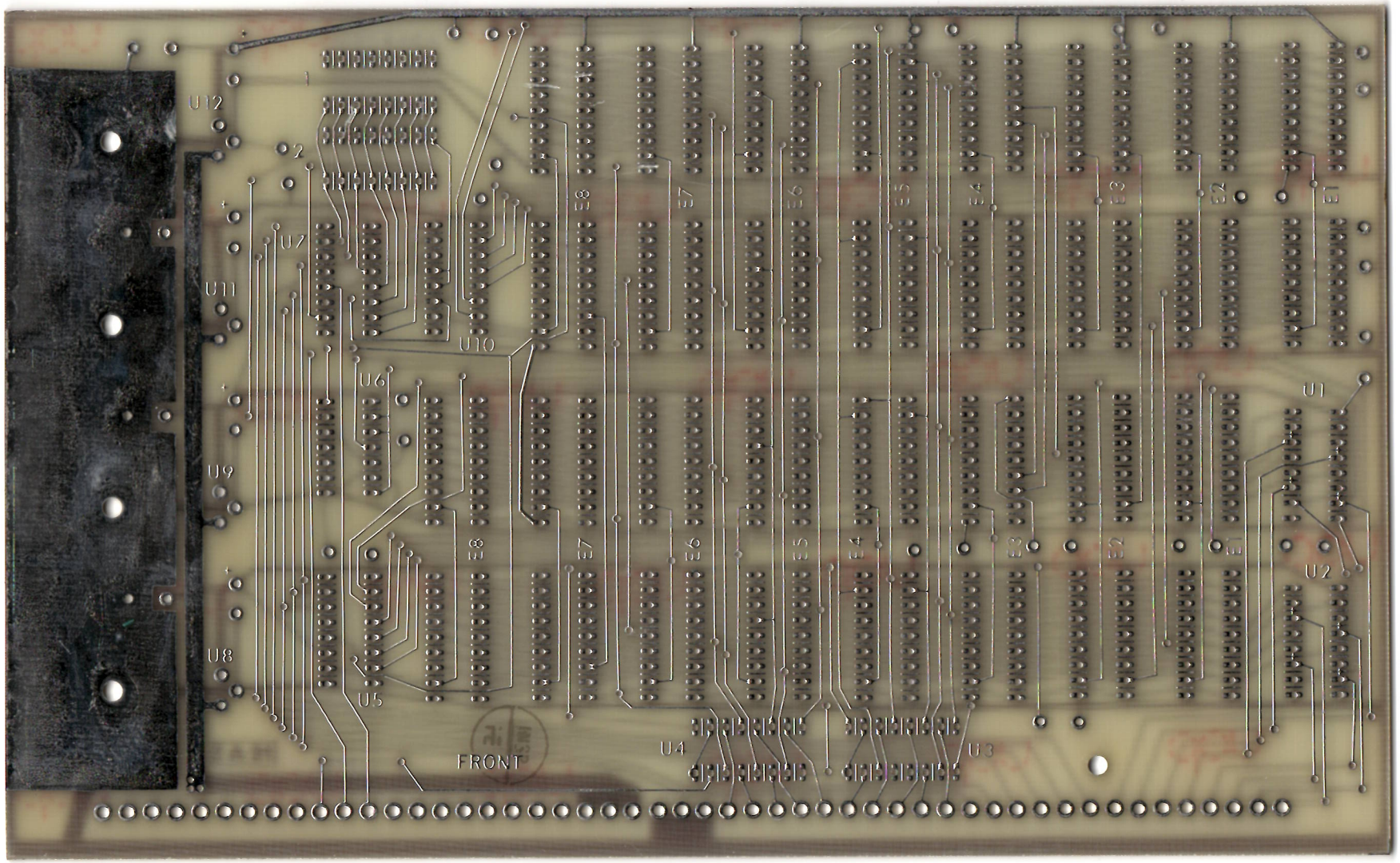
U12
U7
U11
U10
U6
U9
U8
U5
U4
U3
U2
U1
FRONT