

PT-SS50-RAM/ROM

User's Manual

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Peripheral Technology

PT-SS50-RAM/ROM

The SS50-RAM/ROM is a memory board for a 6800 or 6809 SS50 computer. This board is intended to be used in systems that do not use extended addressing. There is no decoding on this board for use in systems that use address bits A16-A19 like the SWTPC S-09 computer. The SS50-RAM/ROM board can enable up to 64K of RAM in 4K blocks. Typically RAM is disabled for the IO block usually at 8000 or E000. Ram would also be disabled at the address of the monitor ROM contained on the processor board. This is usually F000-FFFF for a 6809 system and E000-EFFF for a 6800 system. Additional blocks of memory may need to be disabled depending on how much ROM is enabled on the processor board. The speed of the RAM chip typically is less than 120ns so this board can be used in systems with processor speeds to 2MHZ since a 250ns chip would support 2MHZ operation. Only one half of the RAM is used; the other half is disabled. The selection of the 128K RAM chip was due to it being available and the cost of the chip being so low that cost was not an issue when discarding half of the capacity.

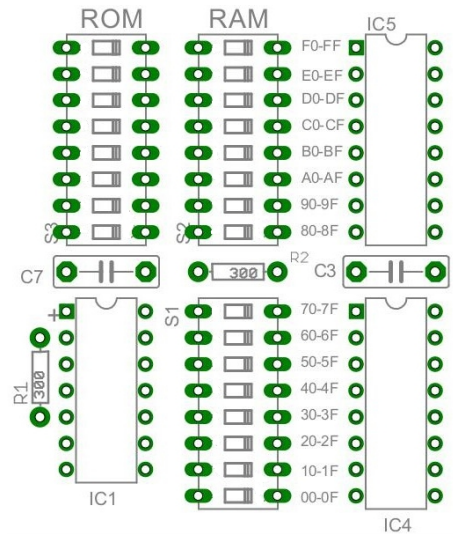
EPROM/EEROM

Up to 32K of EPROM may be selected in 4K blocks from address 8000-FFFF. When you select a 4K block of EPROM you must disable the 4K block of RAM at the same address. For 1MHZ systems use an EPROM with 450ns or faster. For 2 MHZ systems use EPROMS with a speed of 250ns or faster. 27256 EPROMS or 28C256 EEROMS are supported. If you elect to use a 27512 or 28C2512 you may have two different sets of programs installed. Only half of the EPROM is accessible at a time to the processor, either the lower half or the upper half. The selection is made by JP1 which is marked either lower or upper.

Selecting RAM or EPROM

The selection is made by the dip switch. Moving the switch to “ON” enables the block.

Don't enable both RAM and EPROM at the same address.

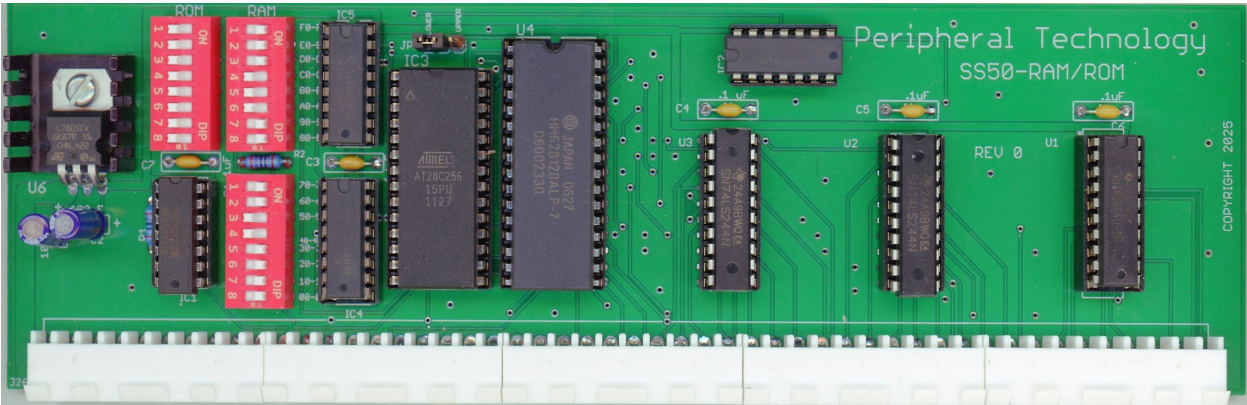
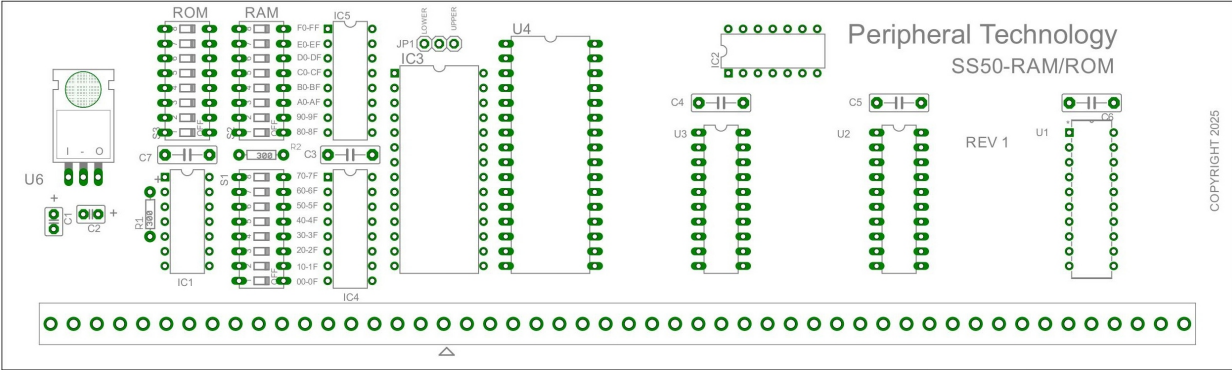


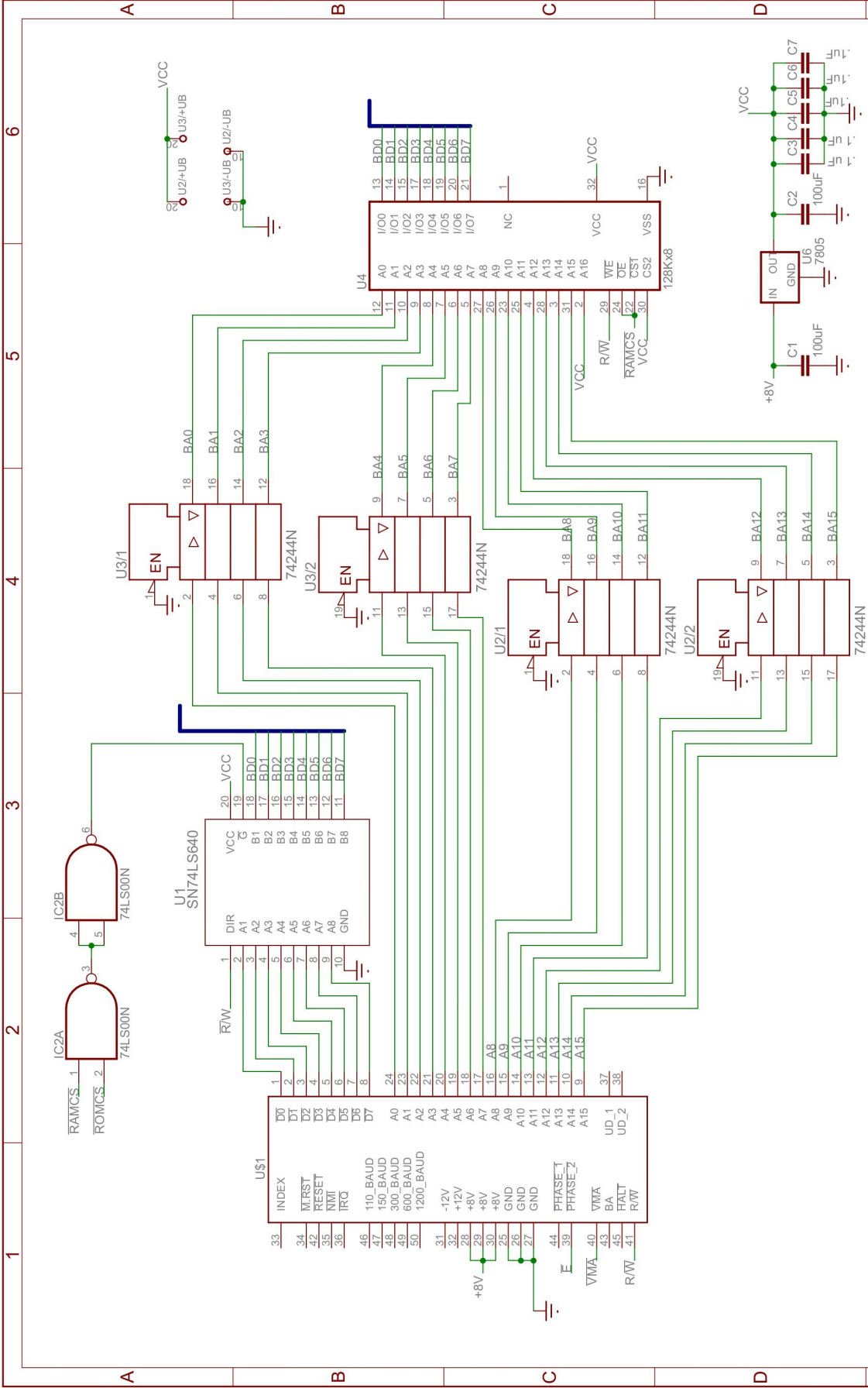
Offset in EEPROM	Address in 6800's memory
JP1 - Lower	
0000	8000
1000	9000
2000	A000
3000	B000
4000	C000
5000	D000
6000	E000
7000	F000
JP1 - Upper	
8000	8000
9000	9000
A000	A000
B000	B000
C000	C000
D000	D000
E000	E000
F000	F000

Parts List SS50-RAM/ROM

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Quantity	Designation	Description
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2	R1-R2	300 1/4 Watt Resistor
2	C1-C2	100uF 16 V Electrolytic Capacitor
5	C3-C7	0.1 uf Disc Cap
1	U1	74LS640
1	U2-U3	74LS244
1	IC3	27C256, 27C512, 28C256, 28C512
1	U4	HM628128 128Kx8 SRAM any speed
2	IC4,IC5	74LS156
3	S1-S3	8 Position Dip Switch
1	U6	7805
1		Small Heat sink for IC6
		Hardware, #4 screw,washer,nut
3		20 pin IC Socket
1		28 pin IC Socket
1		32 pin IC Socket
1		Shorting Plug
1		Index Pin for Molex Connector Molex 0015040219
5		Molex Connector - 0009482101
1		SS50-RAM/ROM Board

Parts Placement SS50-64K





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