

**PT-SS50-1MB**

**User's Manual**

**Copyright 2024**

**Peripheral Technology**

# PT-SS50-1MB

The SS50-1MB is a memory board for a 6809 SS50 computer using extended addressing. This board cannot be used with used in typical 64K systems. To use this board your system must generate it's baud rates somewhere other than the CPU board. Some examples of this are all Peripheral Technology motherboards PT-B2 and MP-B3R, with baud rate generators on the motherboard. The MP-MP board can be used because baud rates are generated by the MP-ID interface board which must be used with the MP-MP. This board is intended to be the only memory board in the system. The upper half of the memory can be disabled in 64K blocks should you have some special need for the address space.

SWTPC FLEX will report 896K of memory on boot by the SBOX utility. The available RAM reported is only for your information. FLEX is limited to 64K of memory. UniFLEX can use memory above 64K, but currently reproduction hardware to run UNI-FLEX is not available. OS9 Level 2 can use the memory but to date an OS9 L2 port for the SWTPC computer has not been located.

This leaves the only use for the memory above 64K for experimenters who wish to write their own programs.

# PAL Equations

Name SS50-1MB;  
PartNo U6;  
Date 12/27/21;  
Revision 01;  
Designer Frederic Brown;  
Company Peripheral Technology;  
Assembly None;  
Location None;  
Device p22v10;

/\* \*\*\*\*\* INPUT PINS \*\*\*\*\* \*/

PIN 1 = NC ;/\* \*/  
PIN 2 = A13 ;/\* \*/  
PIN 3 = A14 ;/\* \*/  
PIN 4 = A15 ;/\* \*/  
PIN 5 = A16 ;/\* \*/  
PIN 6 = A17 ;/\* \*/  
PIN 7 = A18 ;/\* \*/  
PIN 8 = A19 ;/\* \*/  
PIN 9 = E ;/\* \*/  
PIN 10 = VMA ;/\* \*/  
PIN 11 = I7 ;/\* \*/  
PIN 13 = I6 ;/\* \*/  
PIN 14 = I5 ;  
PIN 15 = I4 ;/\* \*/  
PIN 16 = I3 ;/\* \*/  
PIN 17 = I2 ;/\* \*/  
PIN 18 = I1 ;/\* \*/  
PIN 19 = I0 ;

/\* \*\*\*\*\* OUTPUT PINS \*\*\*\*\* \*/

PIN 20 = ROMIO ;/\* E000-FFFF DECODE \*/  
PIN 21 = CS2 ;/\* \*/  
PIN 22 = CS1 ;/\* \*/  
PIN 23 = CS0 ;/\* \*/

/\*\* Logic Equations \*\*/

ROMIO = A15 & A14 & A13 & !E & !VMA ;

!CS0 = !A19 & !(A15 & A14 & A13) & !E & !VMA ;

!CS1 = A19 & !A18 & !A17 & !A16 & !ROMIO & I0 & !E & !VMA # /\* CS FOR 80000 TO 8DFFF \*/

A19 & !A18 & !A17 & A16 & !ROMIO & I1 & !E & !VMA #

A19 & !A18 & A17 & !A16 & !ROMIO & I2 & !E & !VMA #

A19 & !A18 & A17 & A16 & !ROMIO & I3 & !E & !VMA #

A19 & A18 & !A17 & !A16 & !ROMIO & I4 & !E & !VMA #

A19 & A18 & !A17 & A16 & !ROMIO & I5 & !E & !VMA #

A19 & A18 & A17 & !A16 & !ROMIO & I6 & !E & !VMA #

A19 & A18 & A17 & A16 & !ROMIO & I7 & !E & !VMA

;

CS2 = CS0 & CS1 ;

# Parts List SS50-1MB

Quantity	Designation	Description
1	RN2	10K 9 pin SIP - 8 resistors
2	C1-C2	100uF 16 V Electrolytic Capacitor
5	C3-C7	0.1 uf Disc Cap
1	U1	74LS640
1	U2-U3	74LS244
1	U4,U5	HM62512 512Kx8 SRAM any speed
1	U6	ATF22V10C-15PU
1	U7	74LS367
1	U9	7805
1		Small Heat sink for U9
		Hardware, #4 screw,washer,nut
1		14 pin IC Socket
3		20 pin IC Socket
2		32 pin IC Socket
1		8x2 male header
4		Shorting Plugs as needed
1		Index Pin for Molex Connector Molex 0015040219
5		Molex Connector - <b>0009482101</b>
1		SS50-1MB Board

# Parts Placement SS50-64K



