## 256 kB RAM for the Sony HB-F9P/S

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# Marning:

The most important part in the computer is the printed circuit board (PCB). Parts can be replaced, but not the PCB. Do not try to unsolder the parts, but cut them loose and then remove the solder pins. The use of IC sockets is recommended.



Sony HB-F9P MSX2 Computer.

## **Requisites:**

- 74LS139
- 4 pieces 41464 (or equivalent)

#### **Preparation:**

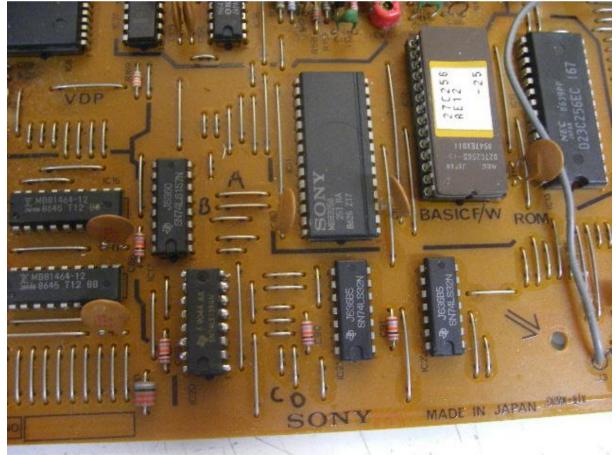
- 74LS139, shorten pins 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, and 15.
- 74LS139, connect pin 2 to pin 14.
- 74LS139, connect pin 3 to pin 13.
- 41464, shorten pins 1 and 4 of all 4 pieces.
- Remove the case with the keyboard.
- Take the main PCB out of the case.



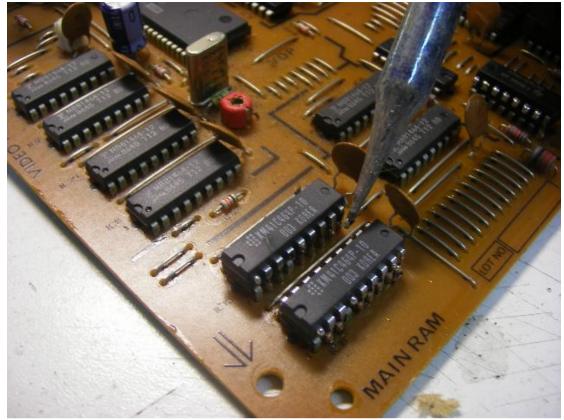
128 kB RAM memory.

### Installation:

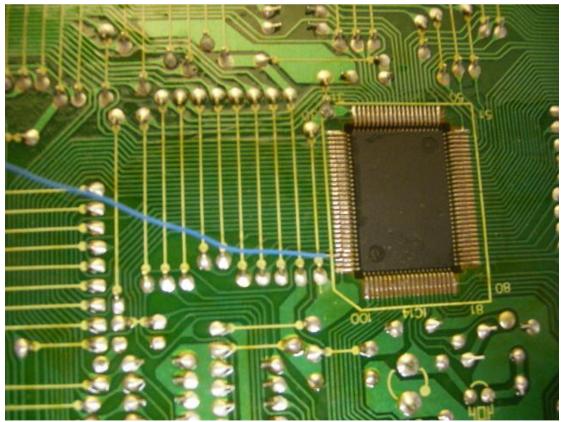
- → First mark all wire bridges as shown on the image below.
- Disconnect wire bridge A (see photo).
- Disconnect wire bridge B (see photo).
- Disconnect wire bridge C (see photo).
- Disconnect wire bridge D (see photo).
- Solder the remaining pins of one additional 41464 to the same pins of IC15.
- Solder the remaining pins of one additional 41464 to the same pins of IC16.
- Solder the remaining pins of one additional 41464 to the same pins of IC18.
- Solder the remaining pins of the last additional 41464 to the same pins of IC19.
- Solder the remaining pins of the 74LS139 to the same pins of IC20 (74LS157).
- Connect pin 1 of the 74LS139 to pin 3 of IC22 (74LS32).
- Connect pin 2 of the 74LS139 to pin 5 of IC21 (74LS32).
- Connect pin 4 of the 74LS139 to the left side of wire bridge A.
- Connect pin 5 of the 74LS139 to the front side of wire bridge D.
- Connect pin 6 of the 74LS139 to pin 1 of IC15 (41464) and pin 1 of IC16 (41464).
- Connect pin 7 of the 74LS139 to pin 1 of IC18 (41464) and pin 1 of IC19 (41464).
- Connect pin 9 of the 74LS139 to pin 4 of IC18 (41464) and pin 4 of IC19 (41464).
- Connect pin 10 of the 74LS139 to pin 4 of IC15 (41464) and pin 4 of IC16 (41464).
- Connect pin 11 of the 74LS139 to the front side of wire bridge C.
- Connect pin 12 of the 74LS139 to the left side of wire bridge B.
- Connect pin 13 of the 74LS139 to pin 4 of IC14 (S1985).
- Connect pin 15 of the 74LS139 to pin 11 of IC22 (74LS32).



The wire bridges are marked (A, B, C, D).



## Adding extra memory chips.



The connection to the S1985.