

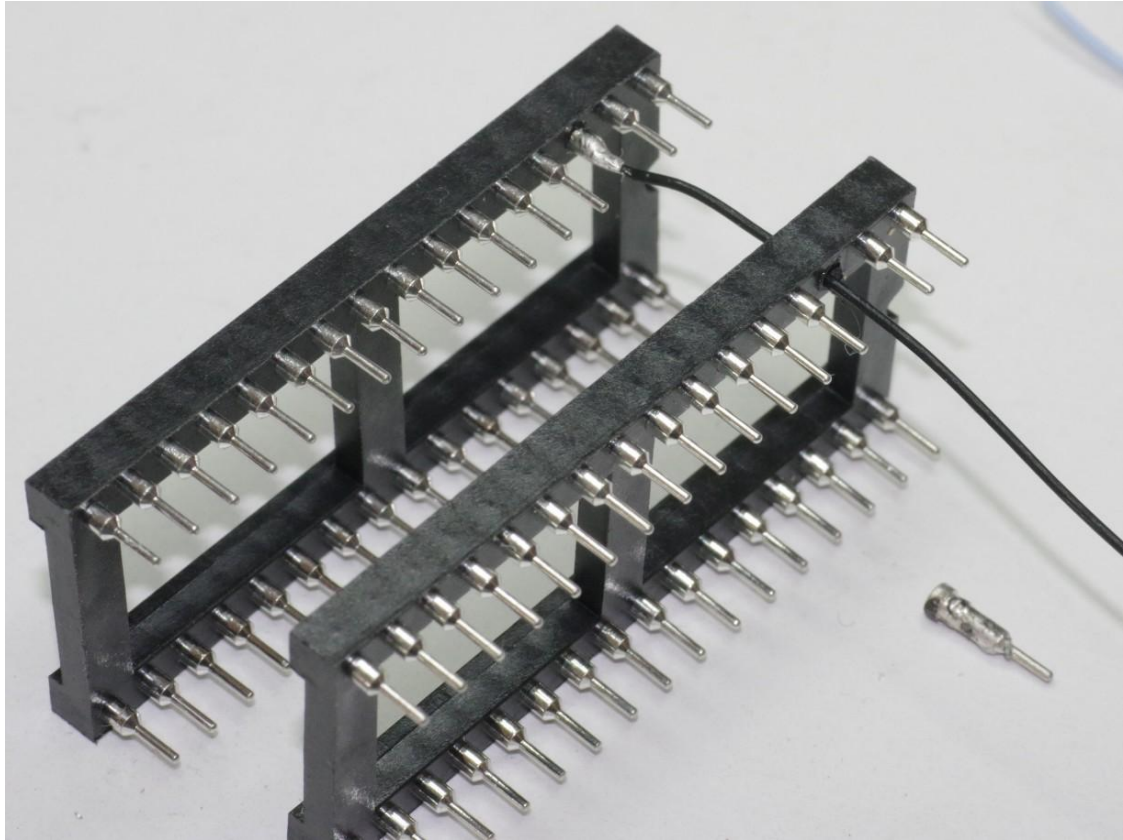
IMPORTANT PATCH for Rev. 3 and 3a boards!!! Please note !!!

Due to timing problems with faster 6502 CPUs, when using a 6502 that is approved for clock rates faster than 1MHz and generally for all CMOS versions (65C02), the following patch must be applied to the board!

1. The patch can only be applied with RAM chips of 64KB - or larger - in a 32 pin DIL package. If a 16 or 32KB RAM is to be used, a 1MHz NMOS CPU (e.g. 6502A) must be used, since these memory chips do not have the required CS2 connector.
2. Solder in all IC sockets except for IC U3 (628128).
3. Two 32-pin precision sockets are required for the static memory chip.
Pin 30 of the first socket must be carefully removed. Then solder the socket into the circuit board at position U3. DO NOT solder the pad for pin 30!
4. On the second 32-pin socket, pin 30 must be shortened by about 1mm. An insulated wire with a maximum thickness of 0.7mm must then be soldered to this pin. Then thread the wire through the hole of the missing pin of the first socket and through the open solder pad to the underside of the board. Plug the second socket onto the already soldered one.
5. Solder the open end of the wire on the underside of the board to socket pin 39 of the 6532 (U4). Fix the wire in several places with some hot glue.

The patch connects chip select 2 (CS2) of the RAM chip to the system clock PHI2. This prevents data from being accidentally overwritten when the memory address changes.

If you do not apply the patch for the above listed CPUs this can result in massive disruptions and unexpected results while running the computer. When using memory of a size of 64KB or larger, the patch should always be executed, even if an older 1MHZ NMOS 6502 CPU is used.



Picture: Courtesy of Meinolf Schmidt.

