

Tivo PROM Replacement by Piggy-Back method.

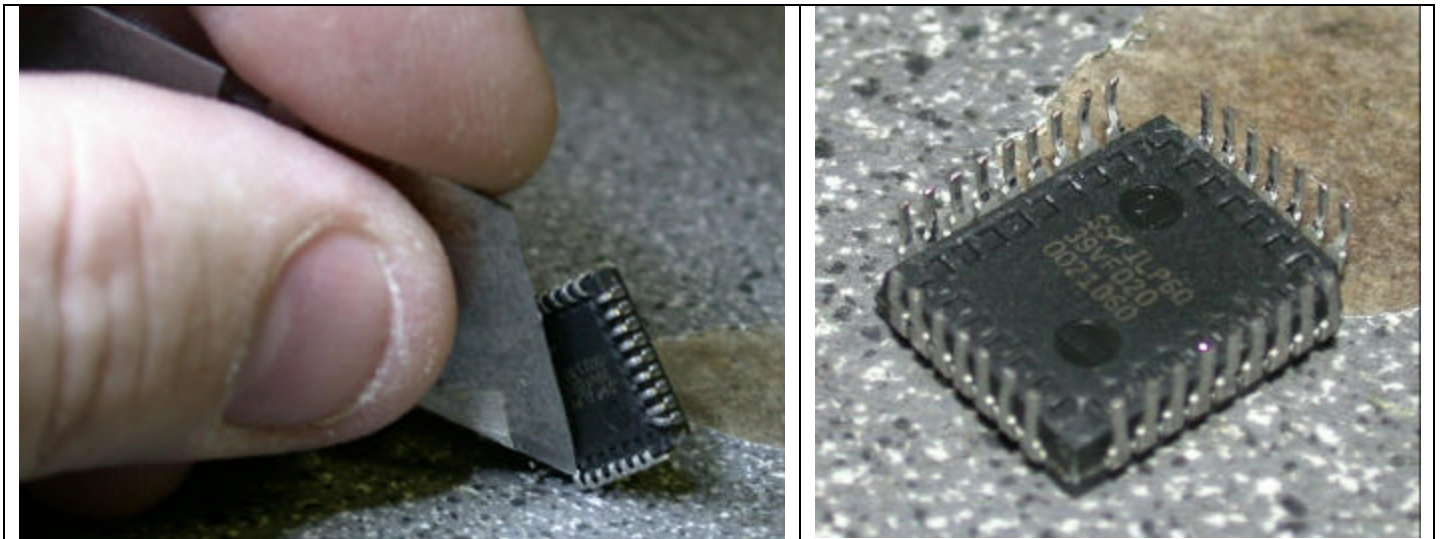
(By Jmayes – Jmayes.com Rev 1.0 7/2006)

Preface

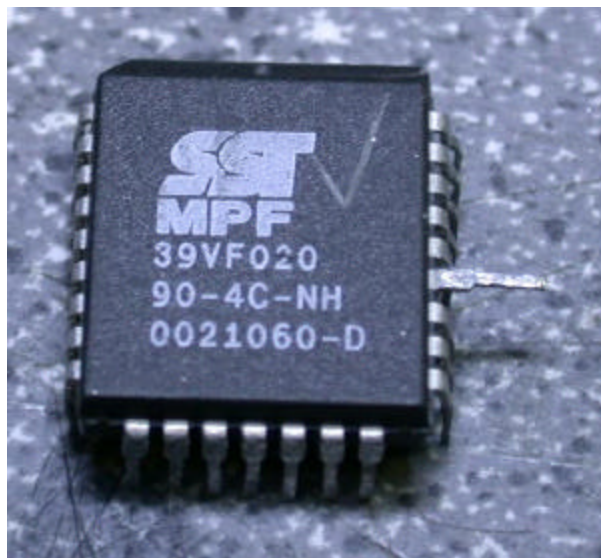
Many people have destroyed their boards trying to remove the old PROM, this method does not require removing the old PROM, the new programmed PROM is simply soldered on top of the old one and two jumper wires are installed. This job is not for the total Nubie, you should have good soldering skills or find a friend who does. Use of a magnifying glass is mandatory so you can see any solder bridges before applying power.

Step 1, Program a new PROM, be sure it's verified to work because this method does not easily allow you to remove it for reprogramming. I understand a 39x PROM can be reprogrammed in-circuit so this should be your first choice for replacement PROM type.

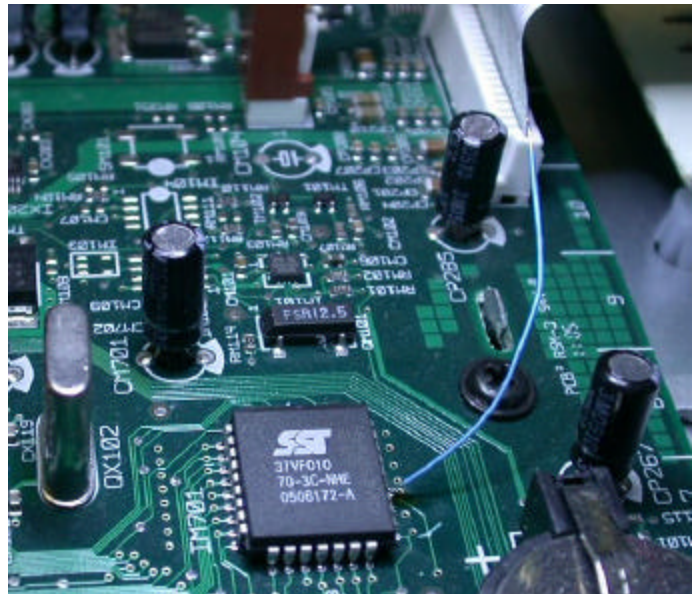
Step 2, Bend the leads on the replacement PROM straight up using a small blade knife. Use a needle nose pliers to straighten the leads after you have them bent out far enough.



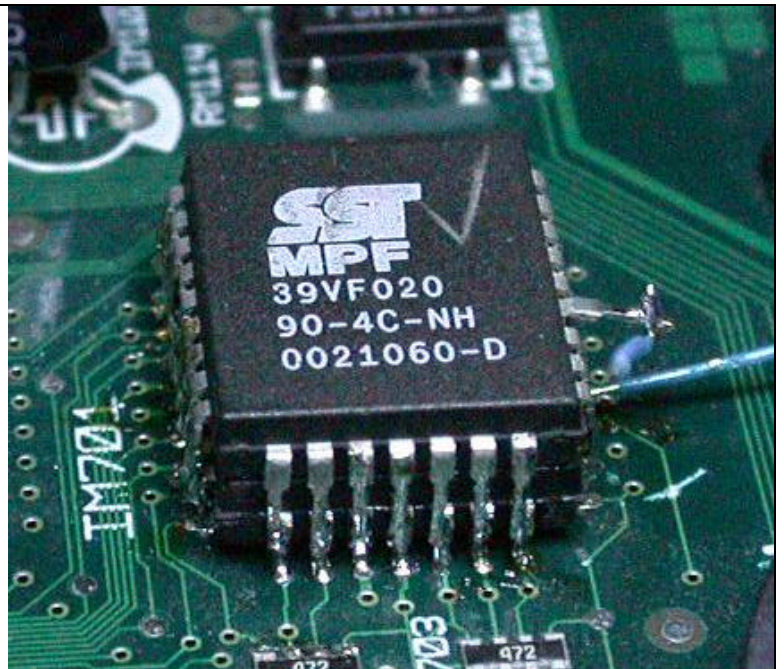
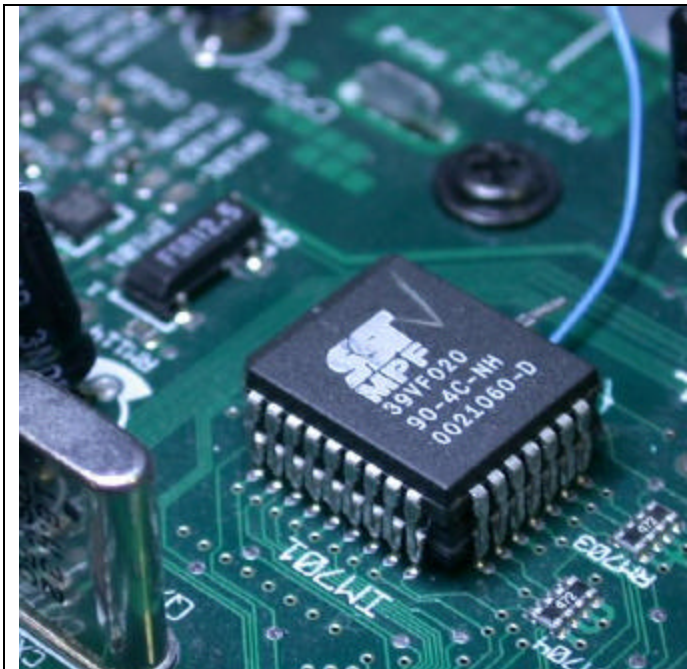
Step 3, Bend out pin-24 on the replacement prom like the picture below.



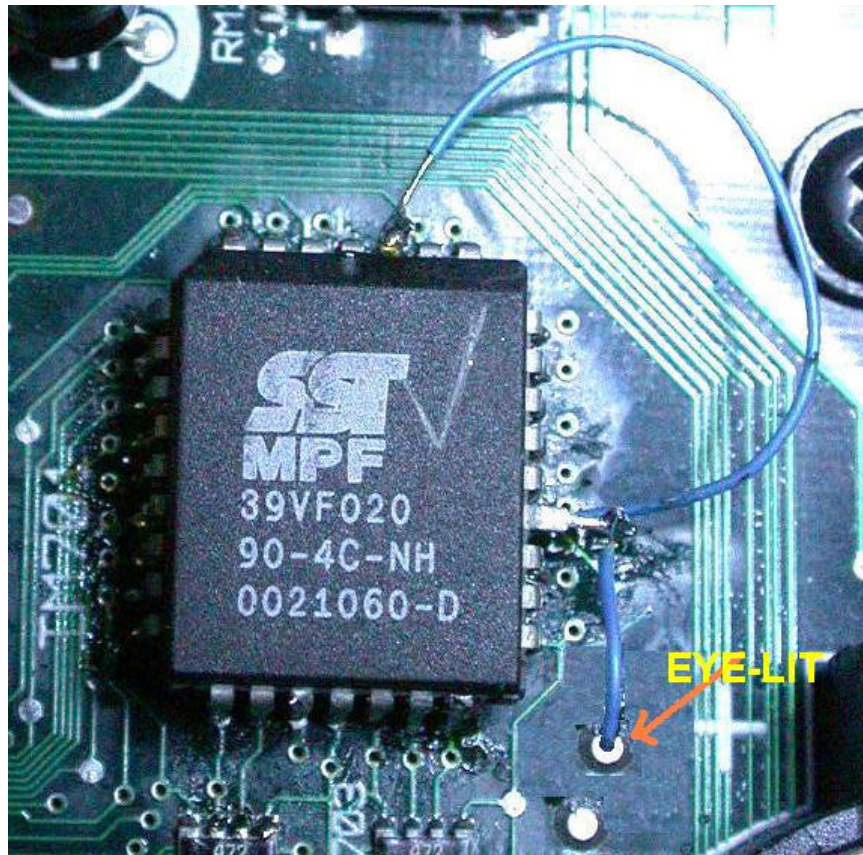
Step 4, Cut this trace connecting pin-24 on the main board and solder a short wire (1") to the old prom



Step 5, Place the new modified PROM on top of the old one and check for good alignment of the leads, it should fit on top a little snug, if it is loose and moves around easily bend the leads further inward so you get a good snug fit. Then Solder all the leads (Except for pin 24) to the old prom. Should you create any solder shorts solder wick will easily fix you up. Solder a short piece of wire (1/2") to the pin-24 sticking out on the new PROM.



Step 6, Attach the longer wire to pin 32 of the stacked PROMS and the short wire to the eye-lit of the cut-trace.



One last note, you can easily switch back to the original PROM by switching the wires going to the pin-24's, place the long one to the new prom and the short one to the original and your back to the factory PROM.

New Prom does not work?

Be sure to check each and every solder joint using a pick to be sure it has a good solder adhesion, use a magnifying glass to be sure there are no solder bridges (shorts), if all else fails and you believe you have a bad replacement prom you can actually stack another right on top of the two of them, just jump pin-24 to pin 32 on each one you want to 'disable' and jump pin-24 of the target prom to the cut trace eye-lit (to enable it), there is no limit to stacking (well not more then 10 anyway).

I hope this information helps!

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I can only answer limited questions so please post in the forum and allow the experts to help.