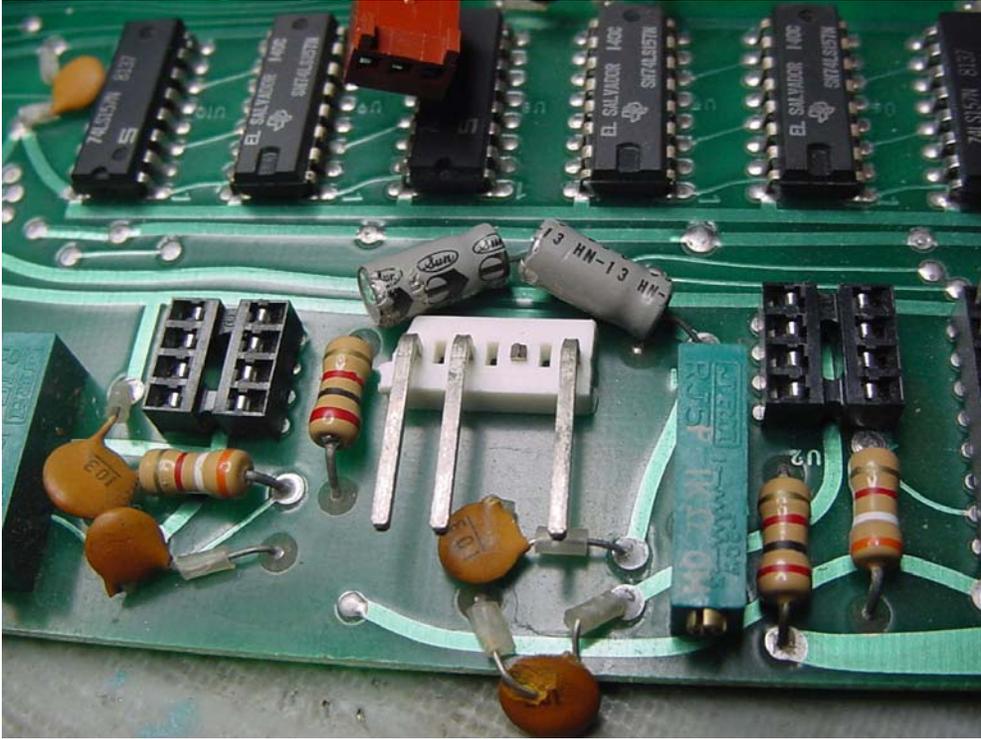# TAC/SCAN XY VIDEO MOD
INSTALL GUIDE

This install guide if for the Sega/Gremlin 5in1 Multigame kit.

It corrects the XY image of the Tac/Scan game to display properly on horizontal mount monitors.

Step1. Remove the G80 Timing pcb from your card cage.

Step2. Remove 8pin Dip op amps from sockets U2 & U3 as shown below.

Make sure the two disc capacitors in front of the 3 pin connector are pressed down to board to keep the leads from shorting on the 3 largs pins.

Step3. Solder the three pins on the included cable to the card edge as shown in the picture below.
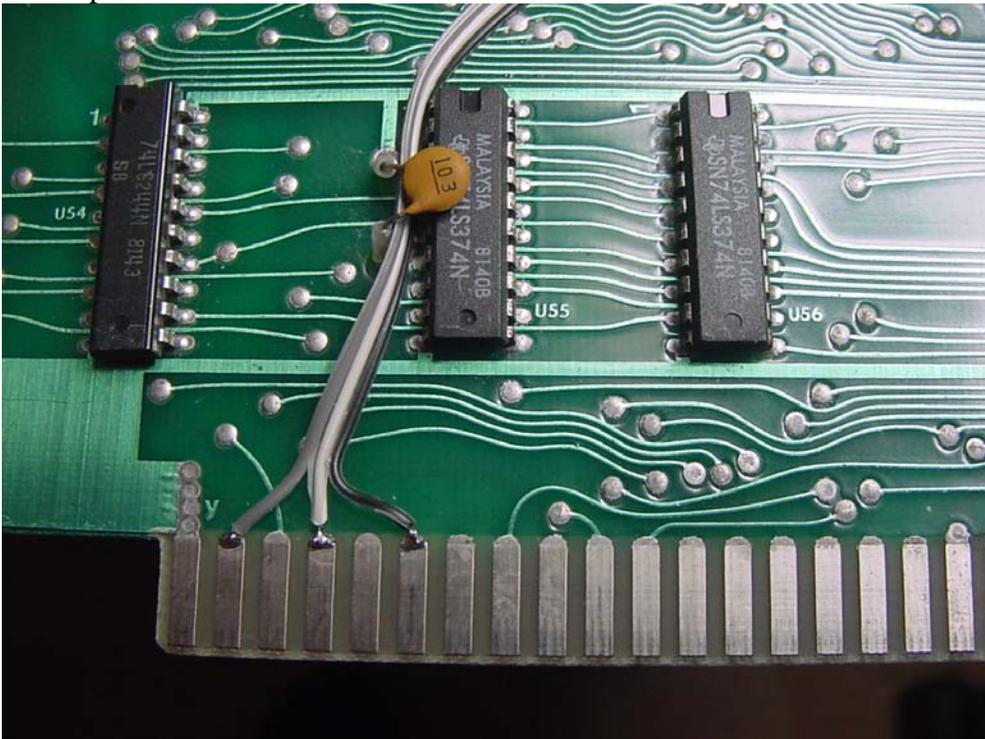
*Step4.* Plug the XY mod board onto the two sockets at U2 & U3 making sure that the pins are properly aligned.

Step5. Plug in the two 8pin Dip Op amps back into the sockets on the XY Mod board.

Step6. Attach the included 3pin connector/cable onto the XY Mod board.

Step7. Solder the ground lead on the XY mod board to pin8 of U9.

After completing the above steps your board should like the pictures below.
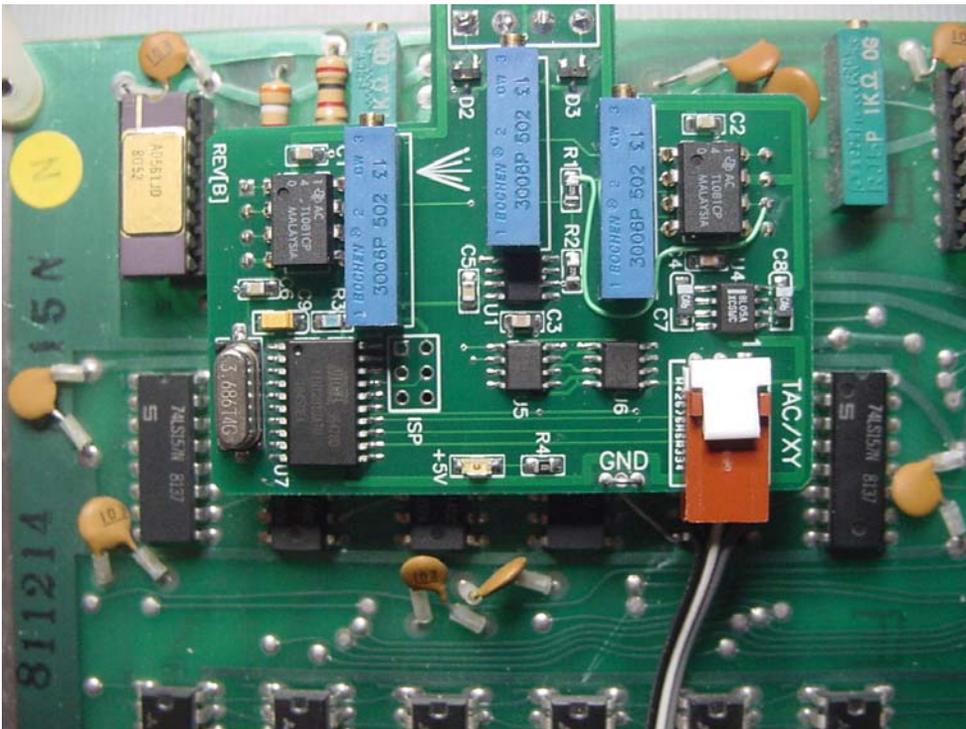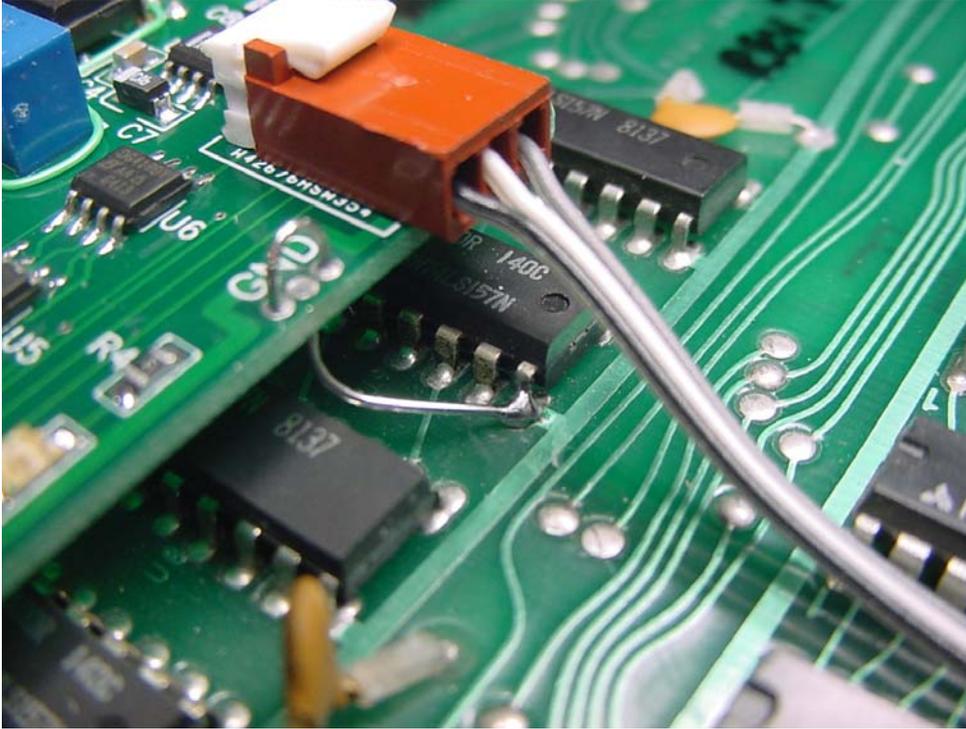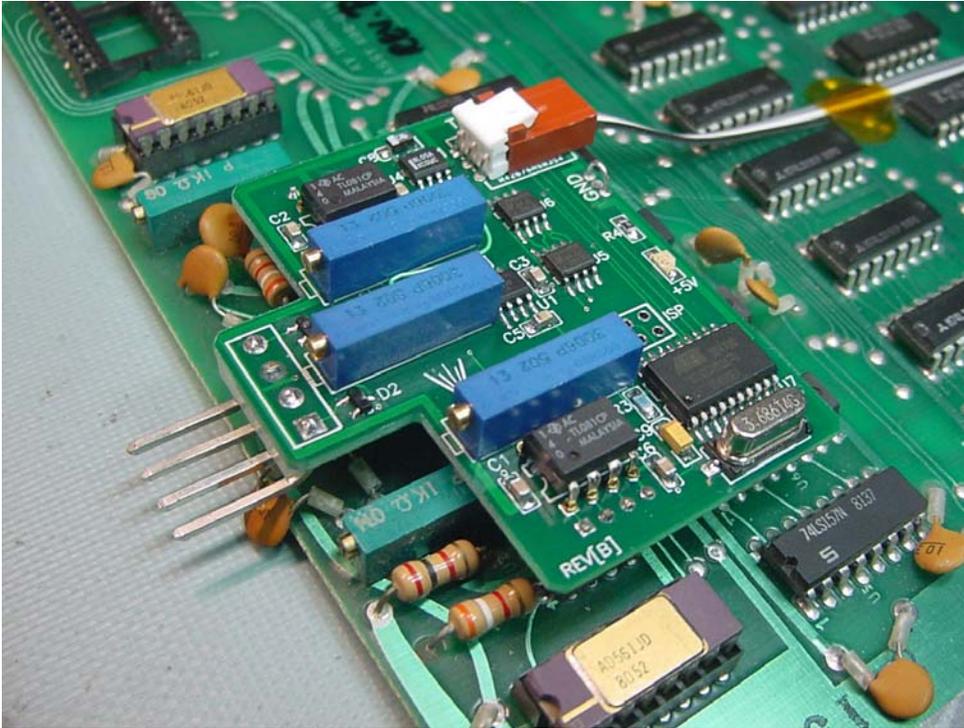
The XY cable from the wiring harness will now plug into the XY mod board instead of the XY timing board as shown above.

The trim pot in the center requires no adjustment and will not be included on future XY mod boards.

The other two trim pots are included as X & Y offset adjustments. These can be used to "center" the image on your monitor, but normally do not need adjustmet.

The two trim pots on the XY timing board still function exactly as before and are used as X & Y size adjustments.

Step8. Reinstall the XY timing board back into the card cage with the XY Mod board installed.


Sega/Gremlin 5in1 board modifications.

You will need to solder two wires on your existing 5in1 Multigame so that the XY mod board can recognize when to display the image normally and when to adjust the image during Tac/Scan game play.

Step1. Remove CPU board with 5in1 kit installed from the card cage

Step2. Remove the 8035 40pin dip from its socket on the 5in1 daughter board.

***Step3.*** Solder one end of the included wire on the to the card edge as shown in the picture below.
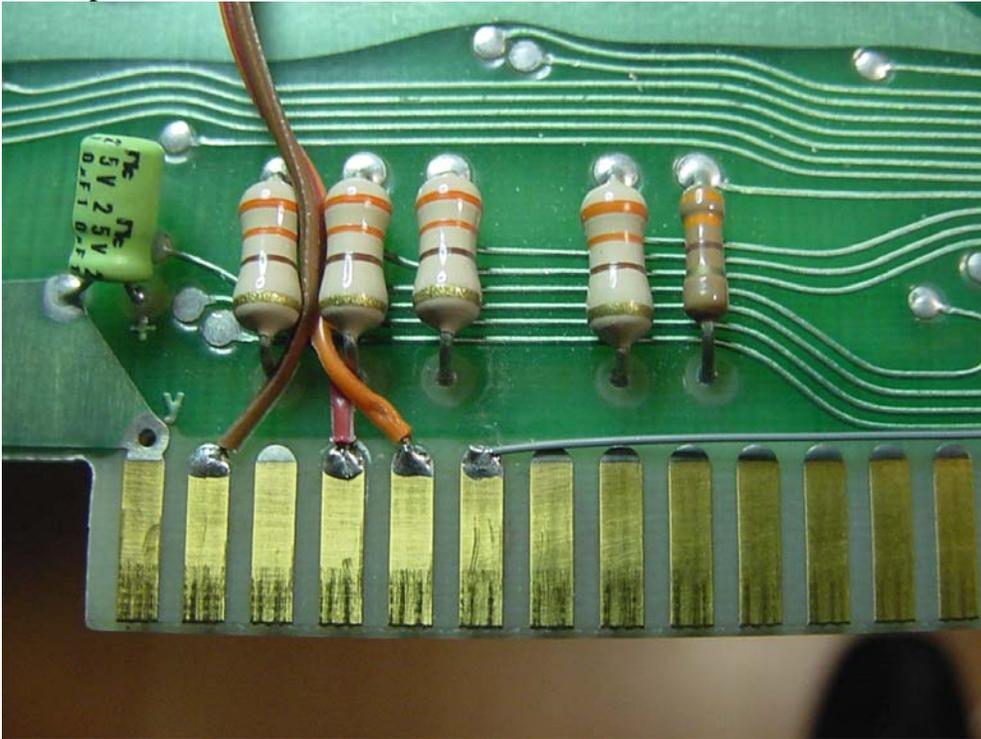
Now feed the wire through the hole or via located toward the middle of the card edge as shown below. If the hole is filled with solder then you will need to remove the solder. Now flip the board over so that the wire can be soldered onto the back of the PCB.
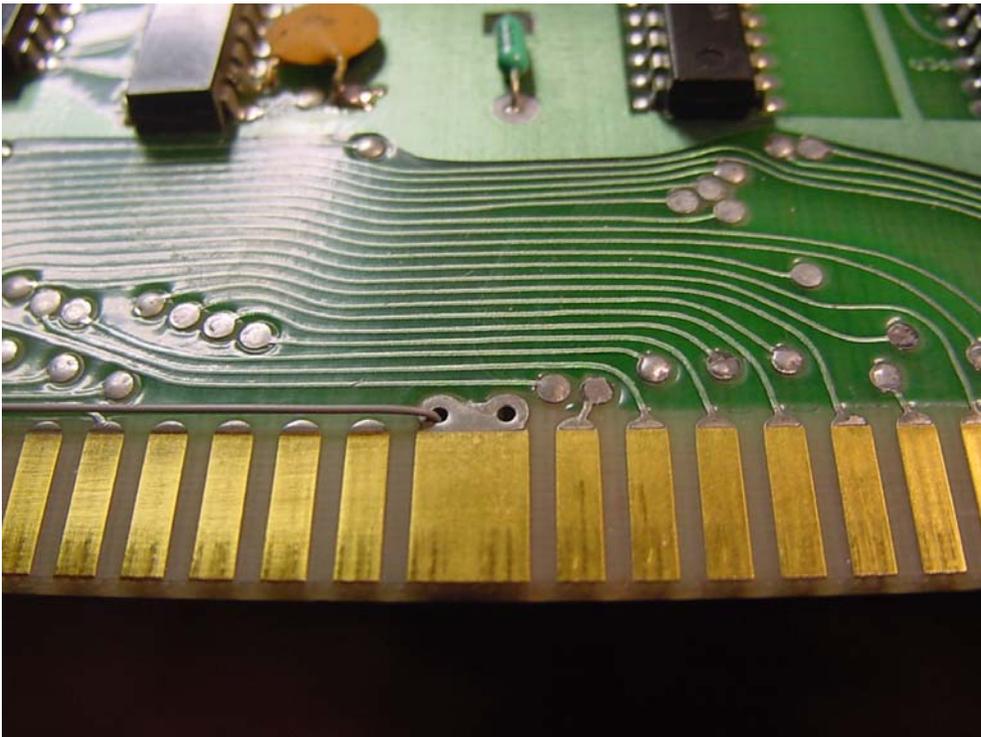
Step4. Cut the wire to length and solder to pin19 of what used to the the Security chip socket as shown below.
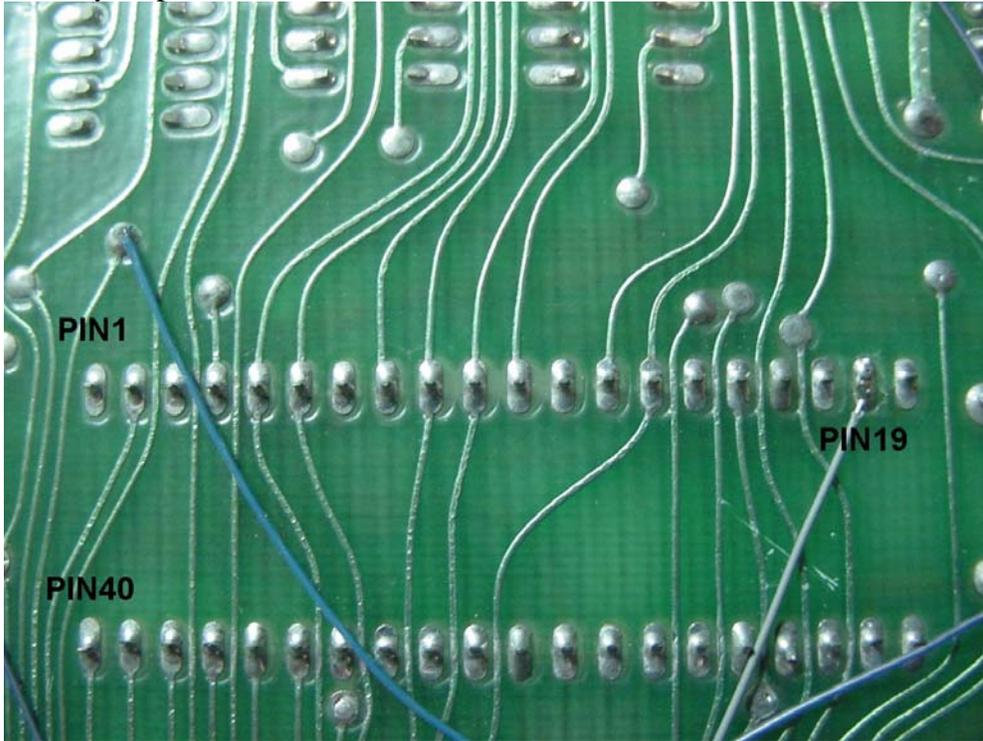
Step5. Now flip the board back and solder a second wire to pin19 of P2 on the 5in1 daughter board as shown below. Feed wire through socket of 8035 40pin Dip as shown on next page. This keeps the wire from being damaged or tangled when the board is installed back into the cage.
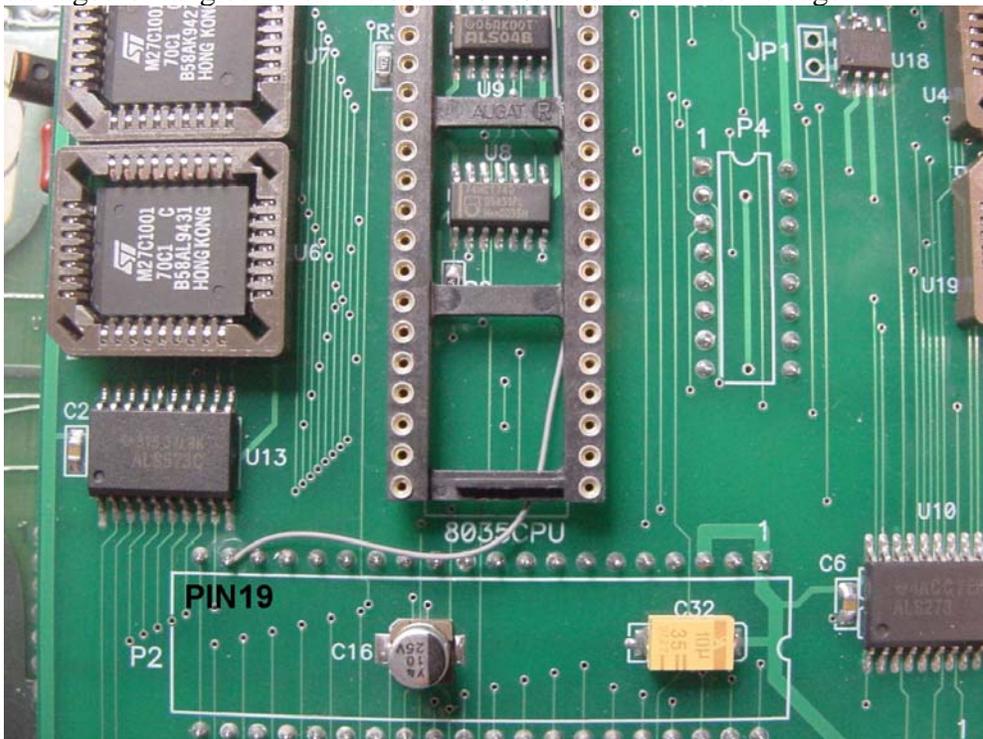
Step6. Solder other end of second wire to pin16 of U16 as shown below.
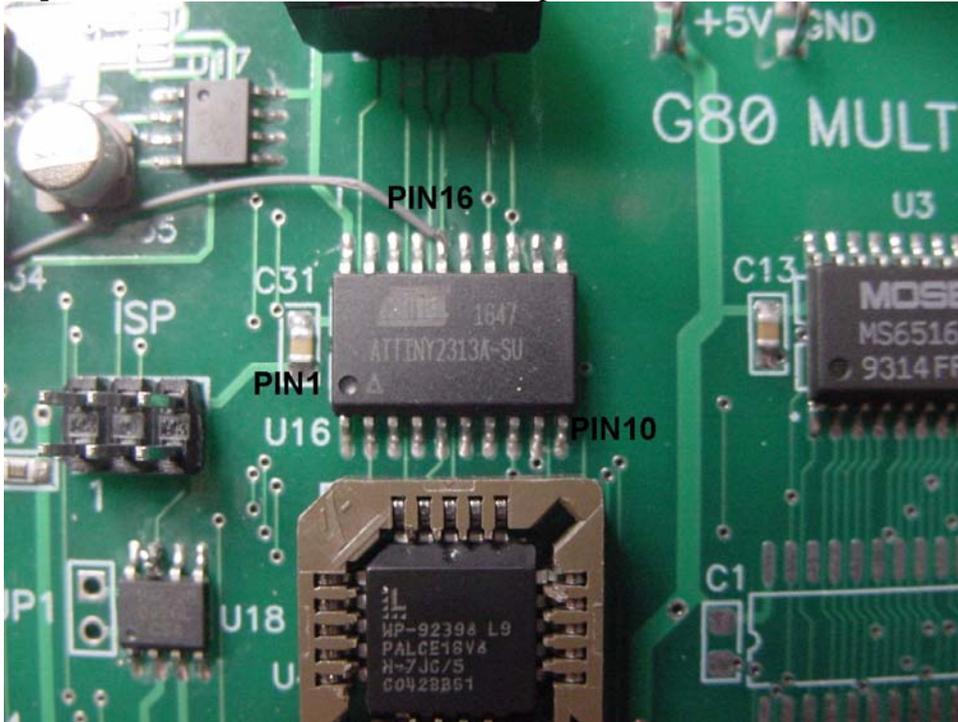
Step7. Replace the 8035 40pin dip back into its socket.
Step8. Reinstall CPU board back into card cage.

THE INSTALL IS NOW COMPLETE

IF YOU HAVE AND PROBLEMS OR SUGGESTIONS ON HOW TO IMPROVE THIS
INSTALL GUIDE PLEASE CONTACT SUPPORT@VECTOR-LABS.COM

THANK YOU FOR YOUR PURCHASE