

To use an older 2532 eeprom:

Steps:

1. remove old IC from the board. Bend up ONLY pin 20 on the Eeprom and solder it down to the board.
2. Don't cut any traces! Leave pin 21 traced to pin 24 as it was originally. At this point, verify that Eeprom pin 12 is connected to ground and card edge pin 12. Also verify that card edge 24 is connected to ground. Solder a wire from ground anywhere to pin 7 on IC #2.
3. Solder a wire from the hole on the pcb where Eeprom pin 20 should have been to pin 1 on IC #2. (This will connect that pin to card edge pin 18.)
4. Solder a wire from the unattached Eeprom pin 20 to pin 2 on IC #2.
5. Solder a wire from Eeprom pin 24 to pin 14 on IC #2.

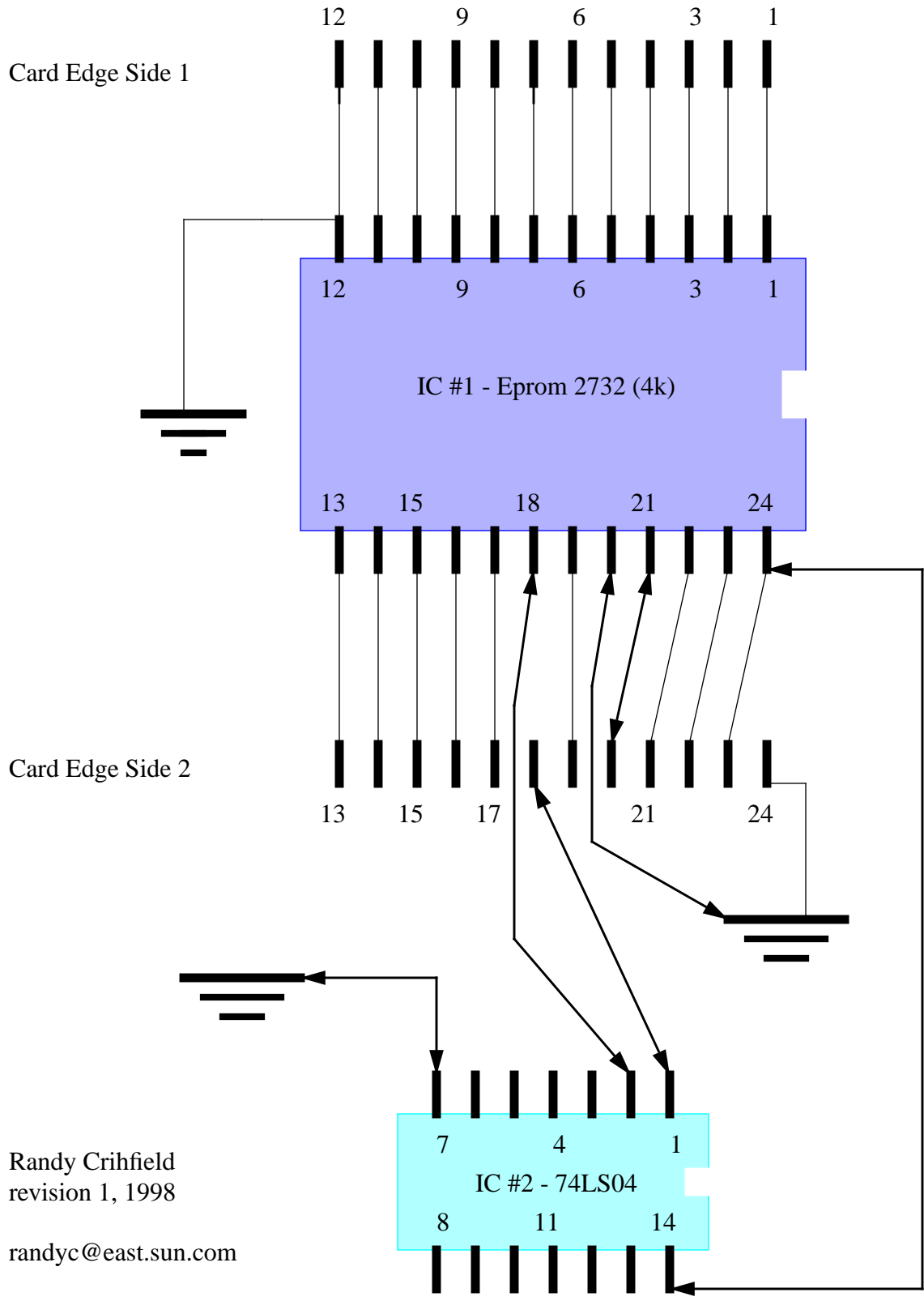
Steps to make an Atari 2600 Eprom Cartridge: Revision #1

Make sure all the card edges are present on the pc board. All the card edges are used in this cartridge. In the picture, lines with arrows denote wires needed, and solid thin lines denote connections that are usually pre-existing. The card edges 18 and 20 can be picked up where the chip should have soldered into holes at locations 18 and 20. Note that these two are normally reversed, that is pin 18 will originally be running to card edge pin 20 and pin 20 will originally be running to card edge pin 18. You will use this to your advantage. Note that the Atari carts with revision E boards are consistent with almost every other third party cart made, and are perfect for this modification. Games such as Pac-Man, ET, Berzerk, Missile Command, Space Invaders, and Defender work great for me. Games such as Combat, Video Olympics, or other very early Atari games do not work because ALL the cardedges are needed and these games, which are 2K, do not have card edge 20.

All references to “pin” are assumed to be the eprom, unless referenced specifically as belonging to “IC #2” or “card edge”. Also, IC #2 is a 7406, and the resistor is a 8.2K Ohms (or Grey-Red-Red-Gold).

1. Remove old IC from board. Bend up pin 18 and pin 20 on the eprom, and attach the eprom to the board.
2. Cut pin 21 free from pin 24 on the pcb. Solder a wire from pin 21 to the hole in the pcb where pin 18 should have been (this will attach to the card edge pin 20)
3. Solder a wire from the unattached pin 20 to ground. At this point, verify that pin 12 is connected to ground and card edge pin 12. Also verify that card edge 24 is connected to ground. Solder a wire from ground to pin 7 on IC #2.
4. Solder a wire from the hole on the pcb where pin 20 should have been to pin 1 on IC #2. This will connect that pin to card egde pin 18.
5. Solder a wire from the unattached pin 18 to pin 2 on IC #2.
6. Solder a wire from pin 24 to pin 14 on IC #2.

That's it! Click the newly modified pc board back into its original mounting, routing the wires out of the way of the mounting and any moving parts. After testing the newly created cart, glue IC #2, in dead bug style, to the bottom of the case so it won't rattle around. Be sure to use a strong glue such as crazy glue. This style of cart works for high quality low voltage eproms, such as most 2732 and some 2732A. The cost in parts runs about \$3 for the eprom, \$.50 for the chip, and of course the cost of an old Atari cart.



Randy Carihfield
 revision 1, 1998
 randyc@east.sun.com