Building the Super Zaxxon Duo to test PLA chip

1) You will need a 74F00, 74F74, 27C512 EPROM, one pull-up resistor (4.7k-8.2k), three 0.1uF capacitors (10v – 50v) and an electrolytic capacitor 10 to 47uF. A horizontal 3sip header can be installed for a jumper to select low/high address 15, or with a switch by grounding the line pulled high. Sockets are nice if the board still fits the cartridge case with chips populated.

2) You can use LS for "true" original cartridge simulation, but the F has better characteristics for finding problems. ALS, AHCT, LV-A, ABT would probably all work for most systems. HCT might be a bit slow for good testing or use.

3) Prepare the EPROM with one or more 32KB images. A 20KB zaxxon image has three segments: 4KB (1), 8KB(2), 8KB(3). You must split the 20KB image into those as three files. Then binary-copy them back together in this pattern: 112113, size should be 32KB.

4) If you install a 32-pin EPROM adapter (can use 27c010, 27c080..), configure the adapter for 23256/27256 (A15 is disconnected from pcb socket, pulled up by pcb resistor or adapter resistor) and use the adapter's address lines A15 and higher for selecting a 32KB image on the EPROM.

5) Wash the flux off when done with ISA. Rinse/spray out the sockets. Shake that out into a garbage bin. Dry with paper towel or whatever, ISA needs to be wiped dry while still slightly wet to make the pcb look really clean.

6) Install cartridge to test and power-on your C64/C128.