

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 like the original cartridge, but F have better characteristics for finding problems with the PLA. 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.