Wallpaper One Specification

* SC/MP running at 2Mhz Clock Speed working in 4k Memory space (A12-A15 are not decoded)
* 2k of ROM (maximum) between 000-7FF
* 1k x 8 RAM (maximum) between 800-BFF (minimum 256 x 8 bytes)
* 1k x 1 Display RAM between C00-FFF. Write via bit 0, write only, arranged as 32 x 32 pixels square(ish).
* SA is connected to a pull-to-one switch.
* NRST is connected to a pull-to-zero switch.
* F0-F2 are connected to a 7442, which has 8 switches 0-7 coming out of it, each line pulls low a normally high level on SB, with diodes to control flow. (slightly modified as I originally forgot a 7442 was inverse output)
* Cassette I/O via Sin and Sout. I must’ve copied it from somewhere ☺

Parts

National Semiconductor 8050 Processor.

* 2716 2k x 8 EPROM “Monitor” (lost)
* 2102 1k x 1 SRAM
* 2112 256 x 4 SRAM (pair, up to 8)

Rebuild Parts

Arduino Leonardo (?)

4 x 3 Keypad remapped

5110 LCD, or a 128x64 OLED LCD.