

Components

Microcontroller

Preferred microcontroller would be a Raspberry Pi Pico, since it has a large amount of SRAM, and built in hardware for UART and SPI.

Input

Likely use an E1115F module from Adafruit as a PS/2 to TTL decoder for keyboard input. Will require a level shifter to convert to 3.3v logic for the Pico. Will also require a 5v supply in order to power the keyboard, but has a 3.3v regulator to provide power to some other component. Reserving half of UART0 for the Pico for the keyboard.

Display

Still trying to decide if wanting to use an eInk or LCD display. Can likely run the eInk easily off of a set of AA batteries, but might also be able to use the LCD with AA batteries. Would prefer at least a 5" screen of some kind, wider the better.

Addons

Wifi

An ESP8266/ESP01 module could be used to add wifi, and be interfaced with the Pico using UART1.

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