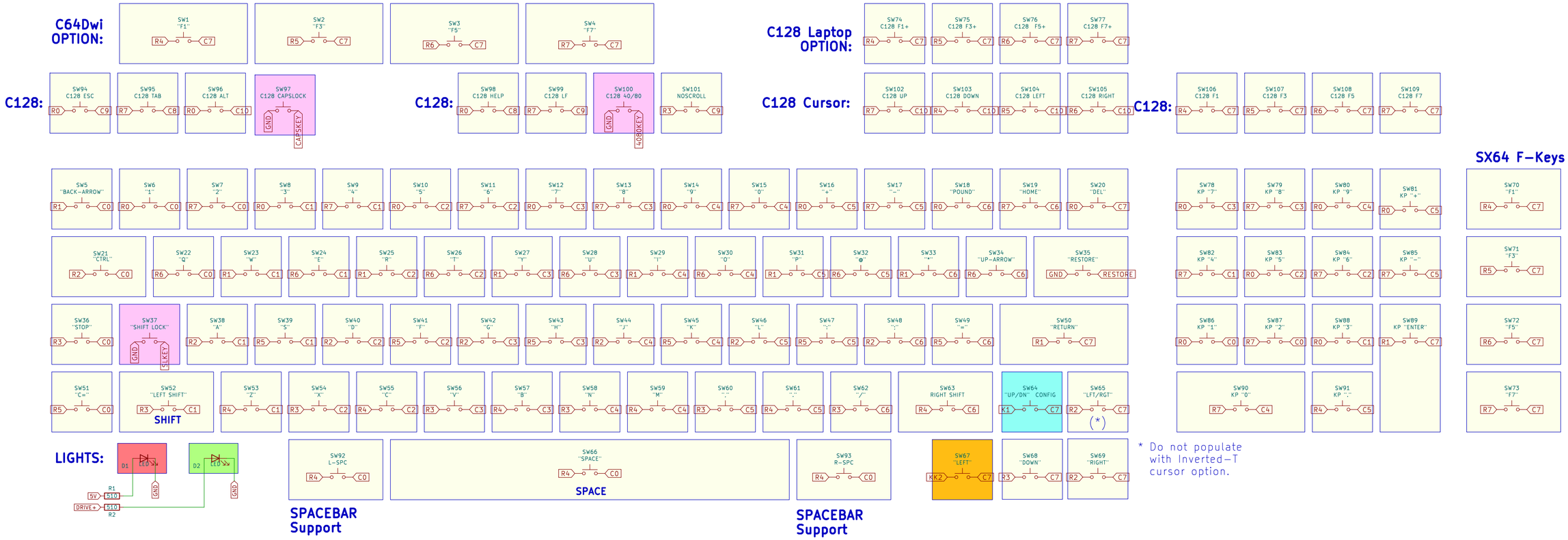
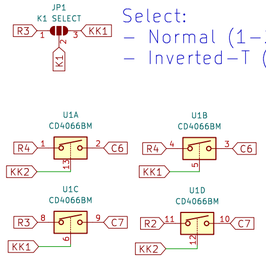


Legend:

- Normal
- Configurable
- Locking
- Special

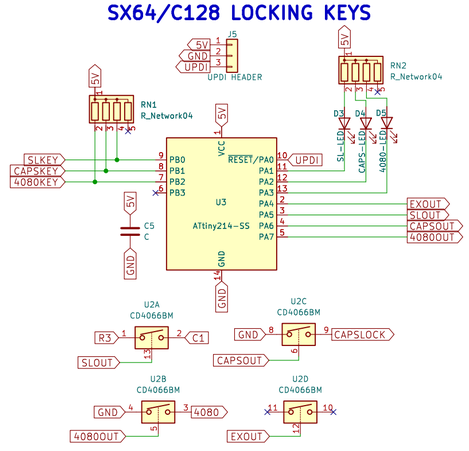
INVERTED-T CURSOR



Select:
- Normal (1-2)
- Inverted-T (2-3)

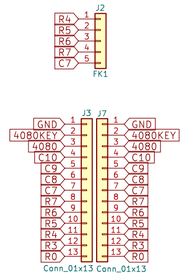
This circut is taken from the C65 schematics. Two keys K1 and KK2 control 4 lines on the 4066 that simulate pressing the SHIFT and DOWN or RIGHT keys as the same time.

SX64/C128 LOCKING KEYS



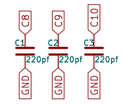
The ATTINY gets input from the locking keys which put GND voltage to the pin. The ATTINY debounces the inputs and toggles the corresponding output to the 4066 chip which connects the keyboard lines.

BLOCK HEADERS



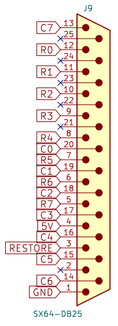
Block header help to protect traces when pcv sections are detached.

C128 CAPS

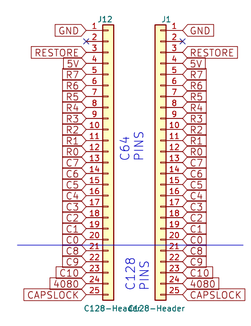


POWER TAP

SX64/C64 DB25



C128/C64 HEADER



NOTES:

The ROW and COL designations are based on the original VIC-20 keyboard pinout, which is a variation of the PET pinout.

The SX64/C64 DB25 does not connect LED, SHIFTLOCK, or extra GND pins. SHIFTLOCK is handled by onboard circuitry, and requires +5V to be present on pin 4.

DESCRIPTION

Multi-configurable MX Keyboard:

- C128 Standard Layout
- C128 Optional F-Keys replacing top Cursor.
- C128 Optional Inverted-T Cursor.
- C128 "Laptop" without Numeric Pad.
- C128 numpad implemented as duplicate C64 keys.
- SX-64 Standard Layout with DB25 plug.
- SX-64 Optional Inverted-T Cursor for modded case.
- C64 "Pro" with numpad and Inverted-T cursor.
- C64D "What If?" Keyboard with Plus/4 style F-keys.

FEATURES

- Standard 6U SPACEBAR with stabilizer support.
- OptionL 9U SPACEBAR using additional support keys.
- SHIFTLOCK toggle circuit with LED support.
- CAPSLOCK and 40/80 toggle with LED support.
- Inverted-T using C65-style SHIFT control.
- Power and Drive Activity LEDs.

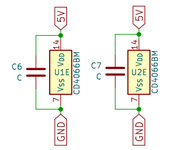
REVISIONS

- Sent to JLC on 2023-09-01
  - * Extra fee for "too many slots"
  - * Separator holes too big. Must reduce to 1.8mm

NOTES

SX-64 Keyboard thickness:
- Bottom to Top of keycaps...: 19.0 mm
- Bottom to Bottom of keycaps...: 9.0 mm
- Keycap height (tallest).....: 10.0 mm
- Top of Pcb to bottom of keycap: 4.8 mm
- PCB+Sheild.....: 3.2 mm

Updated: 2023-09-01



C128SX MX KEYBOARD

CSX-V1-R1

Steve J. Gray

Sheet: /
File: C128SX-mx.kicad_sch

Title: C128SX Keyboard

Size: A2	Date: 2023-09-01	Rev: CSX-V1-R1
KiCad E.D.A. kicad 7.0.6		Id: 1/1