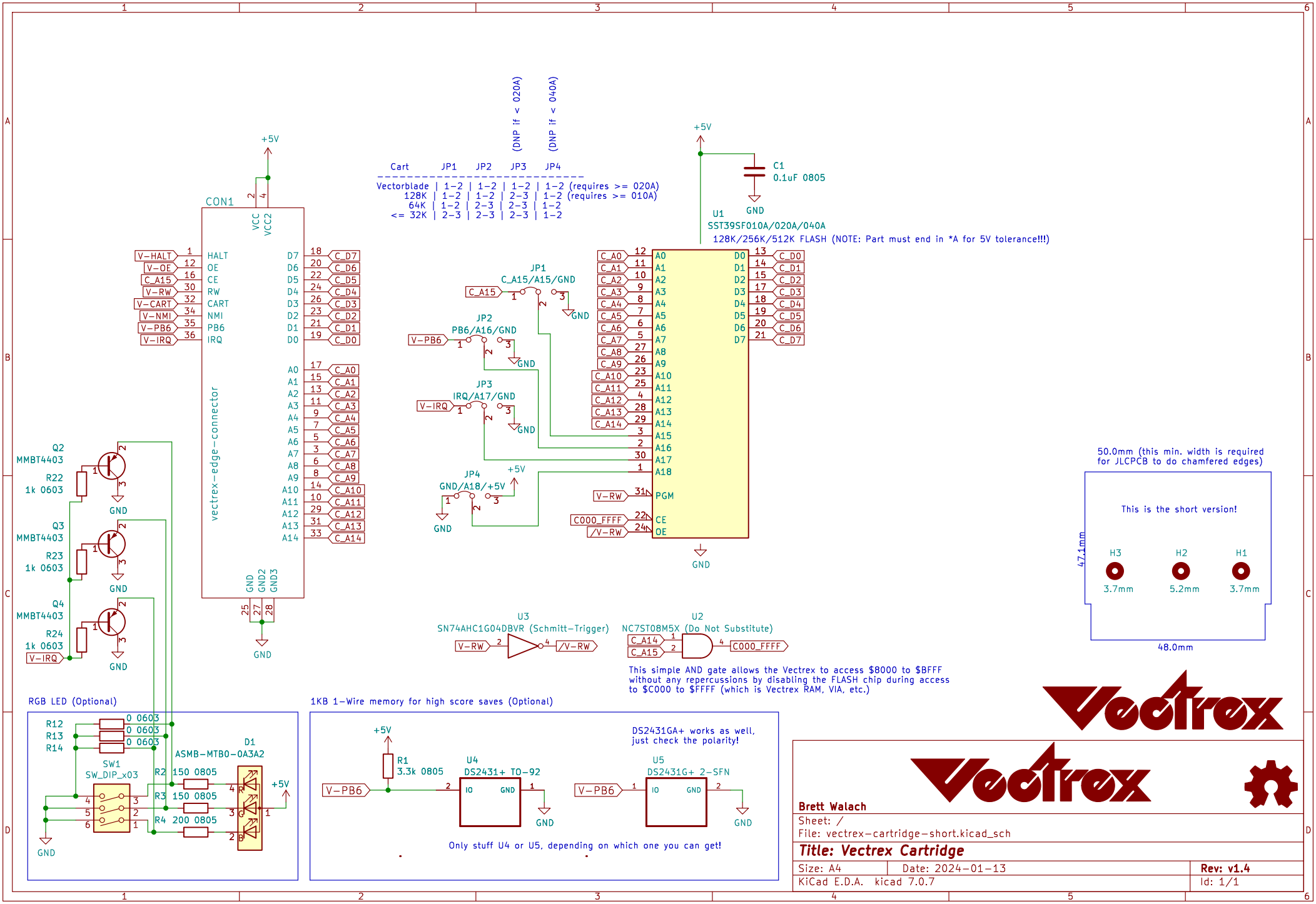
Cart JP1 JP2 JP3 JP4 (DNP if < 020A) (DNP if < 040A)
Vectorblade | 1-2 | 1-2 | 1-2 | 1-2 (requires >= 020A)
128K | 1-2 | 1-2 | 2-3 | 1-2 (requires >= 010A)
64K | 1-2 | 2-3 | 2-3 | 1-2
<= 32K | 2-3 | 2-3 | 2-3 | 1-2
CON1
vectrex-edge-connector
U1
SST39SF010A/020A/040A
128K/256K/512K FLASH (NOTE: Part must end in *A for 5V tolerance!!!)
C1
0.1uF 0805
JP1 C_A15/A15/GND
JP2 PB6/A16/GND
JP3 IRQ/A17/GND
JP4 GND/A18/+5V
Q2 MMBT4403
R22 1k 0603
Q3 MMBT4403
R23 1k 0603
Q4 MMBT4403
R24 1k 0603
U3
SN74AHC1G04DBVR (Schmitt-Trigger)
U2
NC7ST08M5X (Do Not Substitute)
This simple AND gate allows the Vectrex to access $8000 to $BFFF without any repercussions by disabling the FLASH chip during access to $C000 to $FFFF (which is Vectrex RAM, VIA, etc.)
50.0mm (this min. width is required for JLCPCB to do chamfered edges)
This is the short version!
47.1mm
48.0mm
H3 3.7mm
H2 5.2mm
H1 3.7mm
RGB LED (Optional)
SW1 SW_DIP_x03
D1 ASMB-MTB0-0A3A2
R12 0 0603
R13 0 0603
R14 0 0603
R2 150 0805
R3 150 0805
R4 200 0805
1KB 1-Wire memory for high score saves (Optional)
R1 3.3k 0805
U4 DS2431+ TO-92
U5 DS2431G+ 2-SFN
DS2431GA+ works as well, just check the polarity!
Only stuff U4 or U5, depending on which one you can get!
Vectrex
Brett Walach
Sheet: /
File: vectrex-cartridge-short.kicad_sch
Title: Vectrex Cartridge
Size: A4
Date: 2024-01-13
Rev: v1.4
KiCad E.D.A. kicad 7.0.7
Id: 1/1