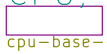
CPU, RAM, CS



cpu-base-ram-cs.sch

Video Interface

video-interface.sch

Pokey PIA Keyboard Mouse Joystick

pokey-pia-kbd-mouse-joy.sch

Pokey2 Audio

pokey2-audio.sch

SIO ROM XRAM CART/ECI

sio-rom-xram-cart-eci.sch

Power Video-Out Mini-PBI Misc

power-video-out-mini-pbi-misc.sch

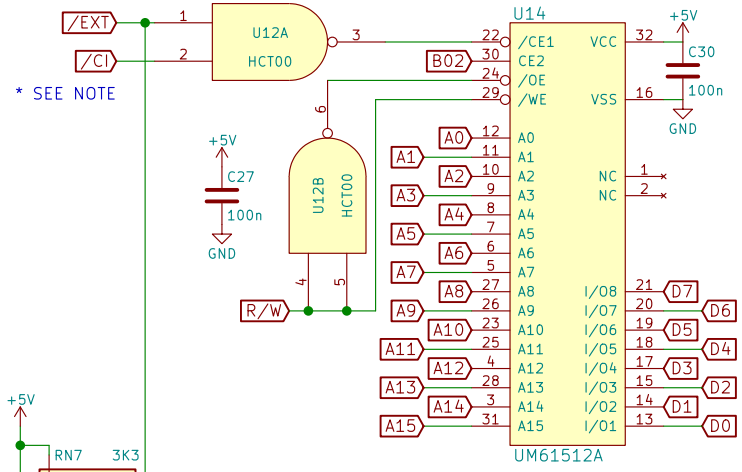
Redrawn in KiCad by Ivo van Poorten
Based on Michael St. Pierre's revision 1.1 2017-10-1

Sheet: /
File: 1088XEL.sch

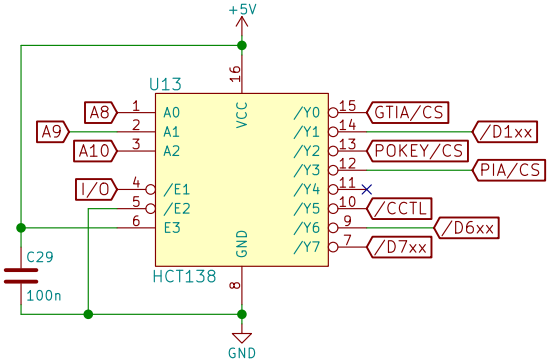
Title: 1088XEL

Size: A4	Date: 2017-11-09	**Rev: A**
KiCad E.D.A. kicad 4.0.5+dfsg1-4		Id: 1/7

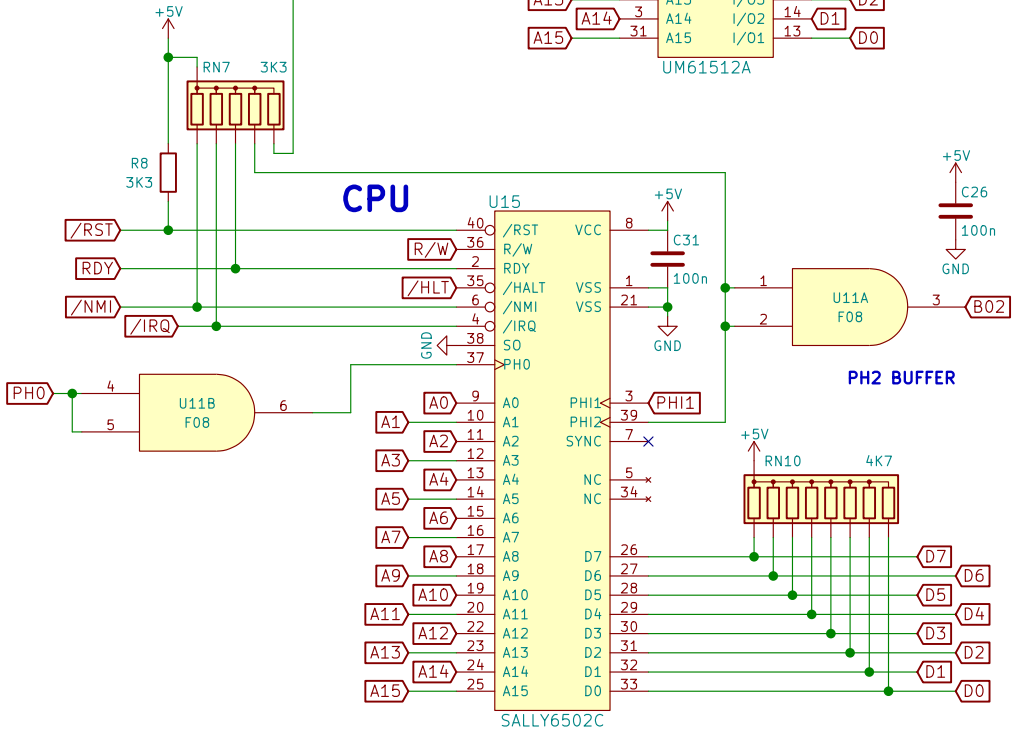
64kB BASE MEMORY



CHIP SELECT DECODING



CPU



* NOTE: /EXT = /EXTSEL, REQUEST BY EXTERNAL DEVICE (PBI) TO TURN OFF RAM ACCESS
/CI = /CASINH, RAM CAS INHIBIT GENERATED BY U1MB MMU DECODING

Redrawn in KiCad by Ivo van Poorten
Based on Michael St. Pierre's revision 1.1 2017-10-1

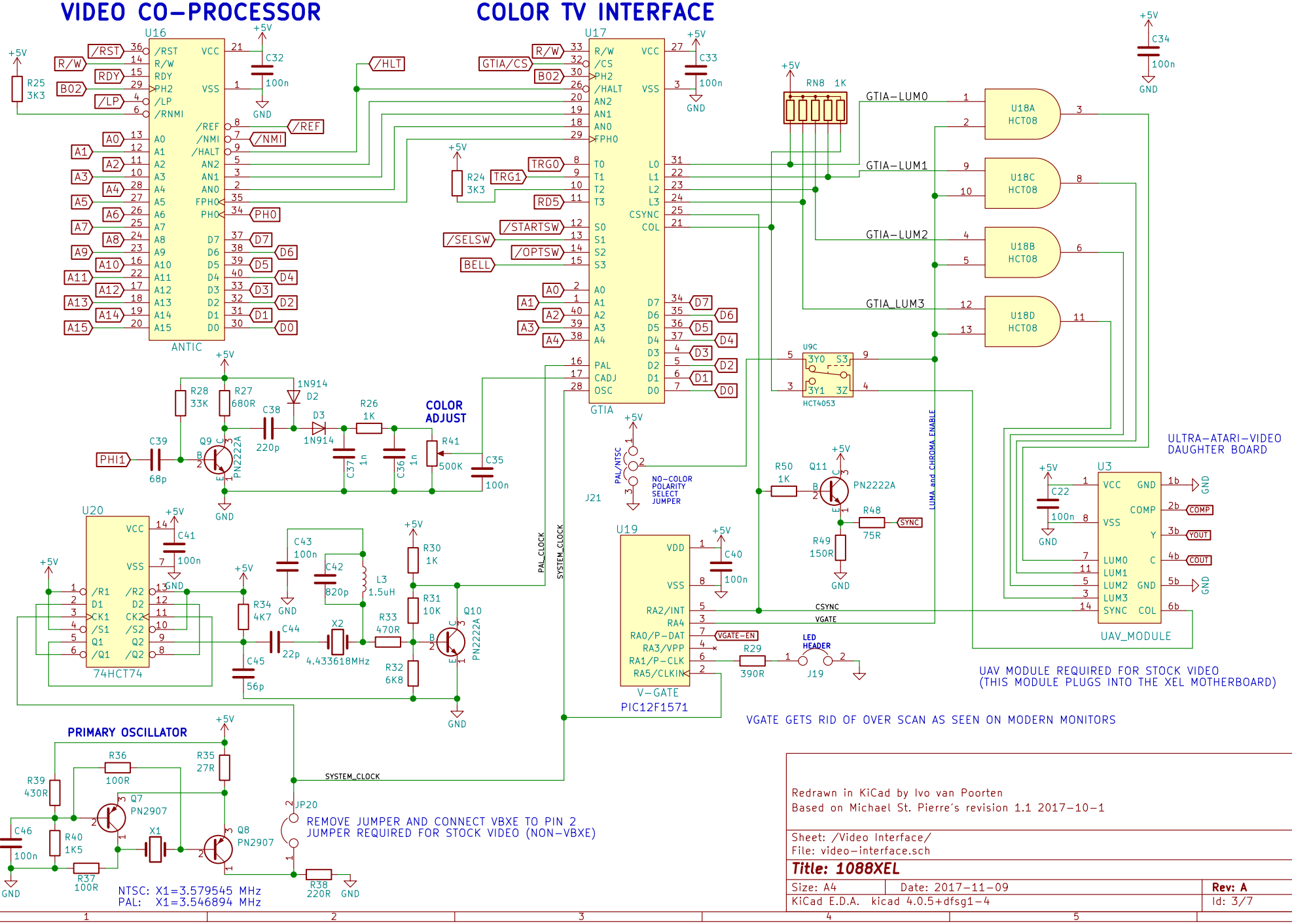
Sheet: /CPU, RAM, CS/
File: cpu-base-ram-cs.sch

Title: 1088XEL

Size: A4	Date: 2017-11-09	**Rev: A**
KiCad E.D.A. kicad 4.0.5+dfsg1-4		Id: 2/7

VIDEO CO-PROCESSOR

COLOR TV INTERFACE

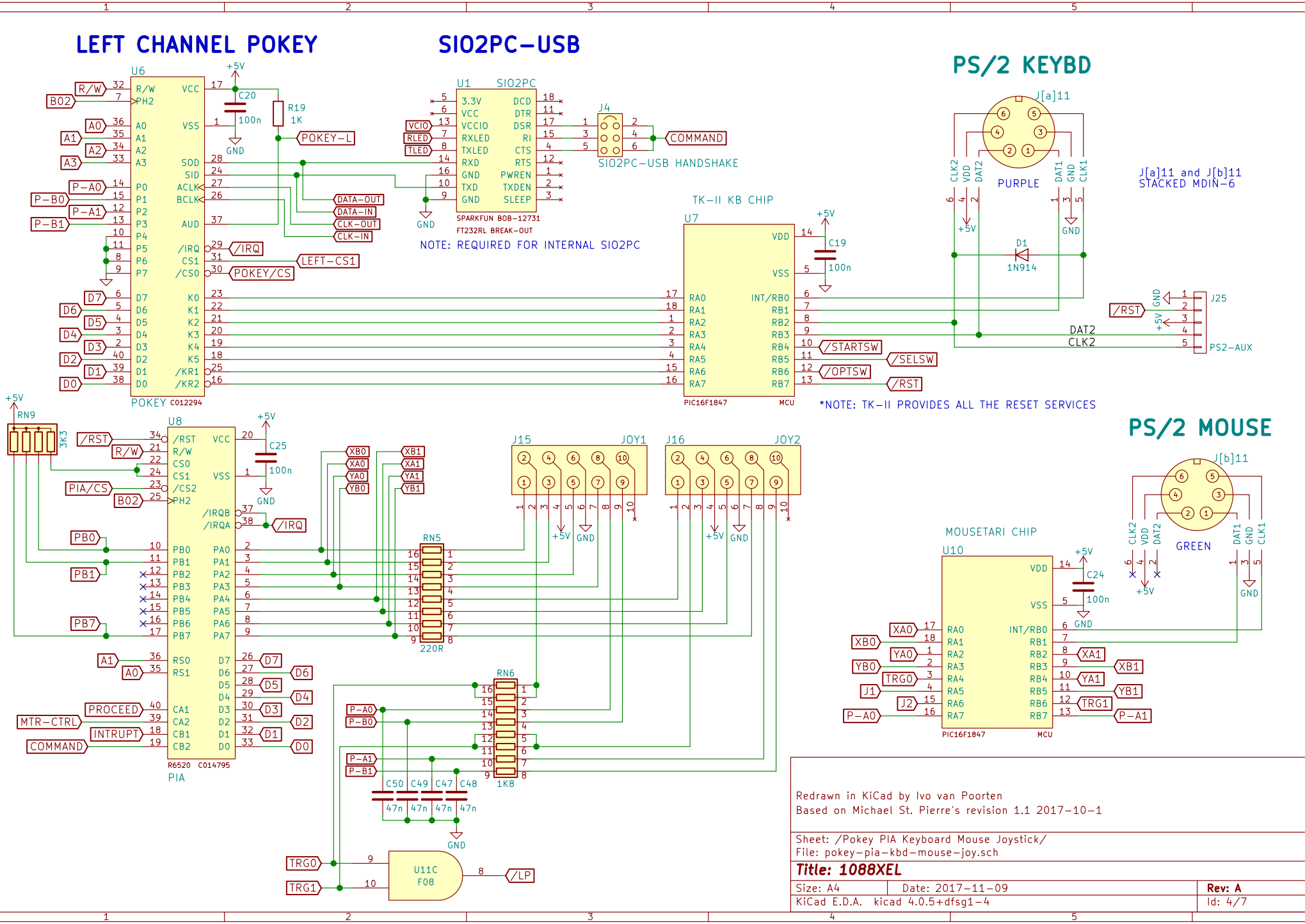


Redrawn in KiCad by Ivo van Poorten
Based on Michael St. Pierre's revision 1.1 2017-10-1

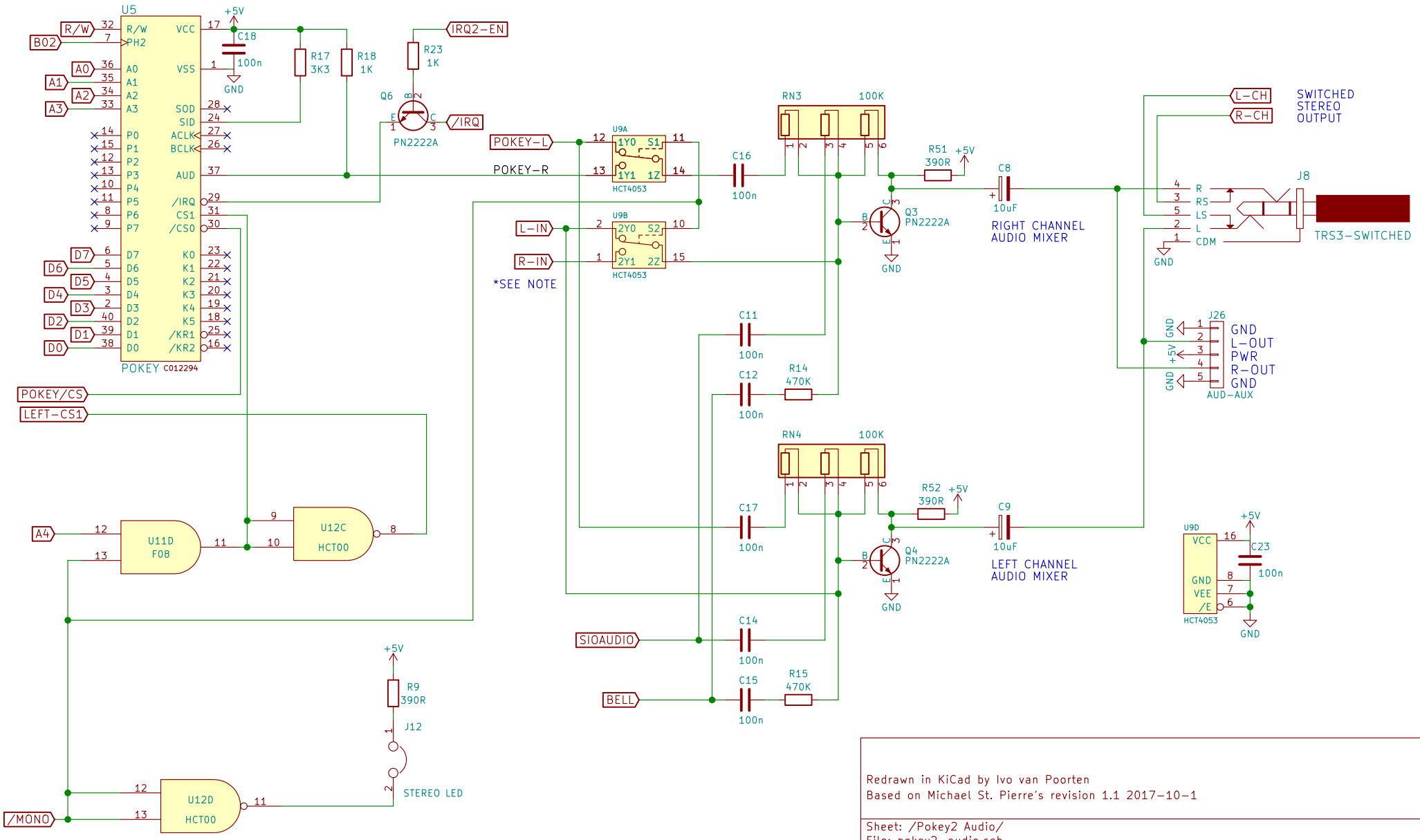
Sheet: /Video Interface/
File: video-interface.sch

Title: 1088XEL

Size: A4	Date: 2017-11-09	Rev: A
KiCad E.D.A. kicad 4.0.5+dfsg1-4		Id: 3/7


LEFT CHANNEL POKEY
SIO2PC-USB
PS/2 KEYBD
PS/2 MOUSE
U6
POKEY C012294
U1 SIO2PC
SPARKFUN BOB-12731
FT232RL BREAK-OUT
SIO2PC-USB HANDSHAKE
NOTE: REQUIRED FOR INTERNAL SIO2PC
TK-II KB CHIP
U7
PIC16F1847 MCU
*NOTE: TK-II PROVIDES ALL THE RESET SERVICES
J[a]11
PURPLE
J[a]11 and J[b]11
STACKED MDIN-6
J25
PS2-AUX
U8
PIA
R6520 C014795
220R
1K8
J15 JOY1
J16 JOY2
MOUSETARI CHIP
U10
J[b]11
GREEN
U11C
F08
Redrawn in KiCad by Ivo van Poorten
Based on Michael St. Pierre's revision 1.1 2017-10-1
Sheet: /Pokey PIA Keyboard Mouse Joystick/
File: pokey-pia-kbd-mouse-joy.sch
Title: 1088XEL
Size: A4
Date: 2017-11-09
Rev: A
KiCad E.D.A. kicad 4.0.5+dfsg1-4
Id: 4/7

RIGHT CHANNEL POKEY



*NOTE: R-IN and L-IN GO DIRECTLY INTO THE SUMMING AMPLIFIERS, SO REQUIRE AN INLINE RESISTOR AND CAPACITOR ON THE MPBI DEVICE IF THE HAVE AUDIO OUTPUTS

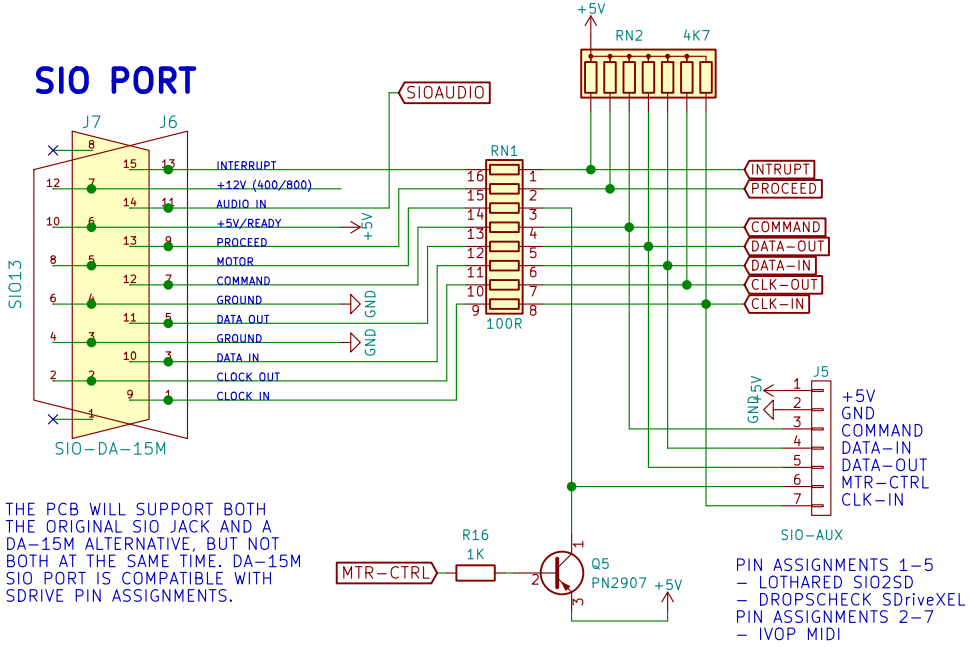
Redrawn in KiCad by Ivo van Poorten
Based on Michael St. Pierre's revision 1.1 2017-10-1

Sheet: /Pokey2 Audio/
File: pokey2-audio.sch

Title: 1088XEL

Size: A4	Date: 2017-11-09	**Rev: A**
KiCad E.D.A. kicad 4.0.5+dfsg1-4		Id: 5/7

SIO PORT

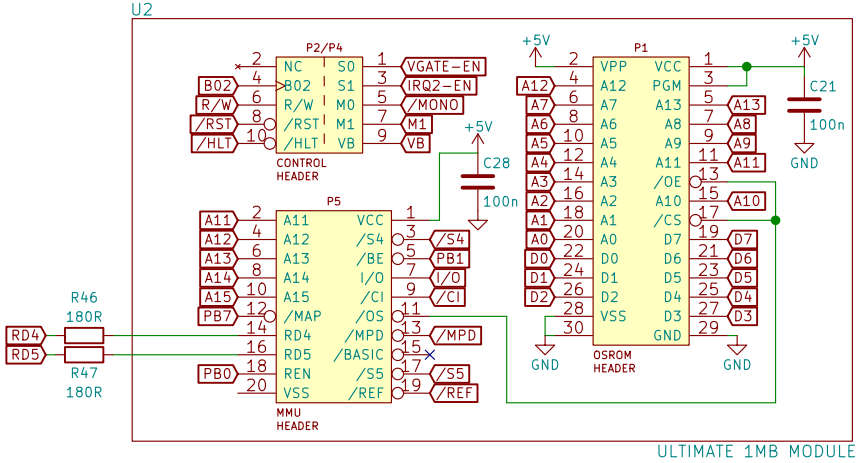


THE PCB WILL SUPPORT BOTH THE ORIGINAL SIO JACK AND A DA-15M ALTERNATIVE, BUT NOT BOTH AT THE SAME TIME. DA-15M SIO PORT IS COMPATIBLE WITH SDRIVE PIN ASSIGNMENTS.

PIN ASSIGNMENTS 1-5
- LOTHARED SIO2SD
- DROPSCHECK SDriveXEL

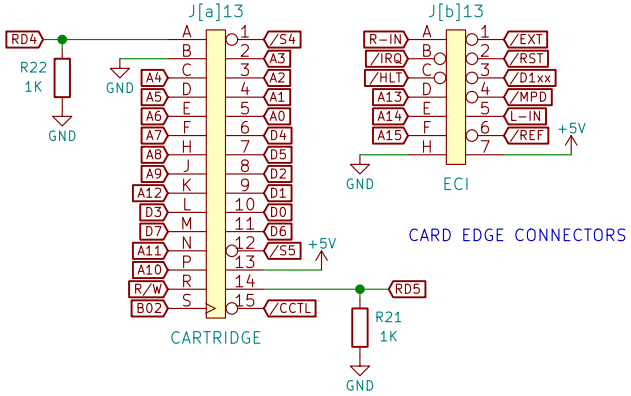
PIN ASSIGNMENTS 2-7
- IVOP MIDI

OS/LANGUAGE/RAM-EXPANSION/SDX/R-TIME8



ULTIMATE 1MB MODULE

CART/ECI



CARD EDGE CONNECTORS

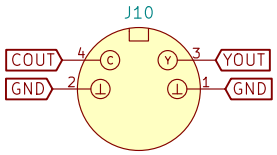
Redrawn in KiCad by Ivo van Poorten
Based on Michael St. Pierre's revision 1.1 2017-10-1

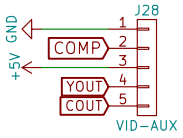
Sheet: /SIO ROM XRAM CART/ECI/
File: sio-rom-xram-cart-eci.sch

Title: 1088XEL

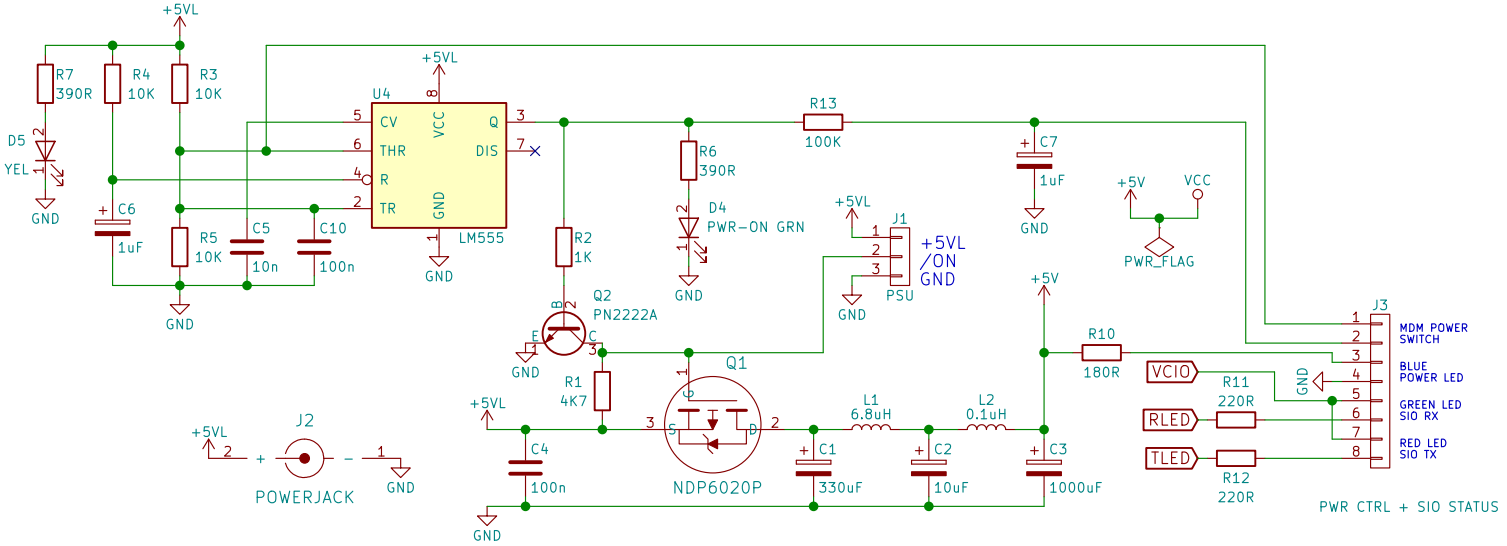
Size: A4	Date: 2017-11-09	**Rev: A**
KiCad E.D.A. kicad 4.0.5+dfsg1-4		Id: 6/7

STD VIDEO

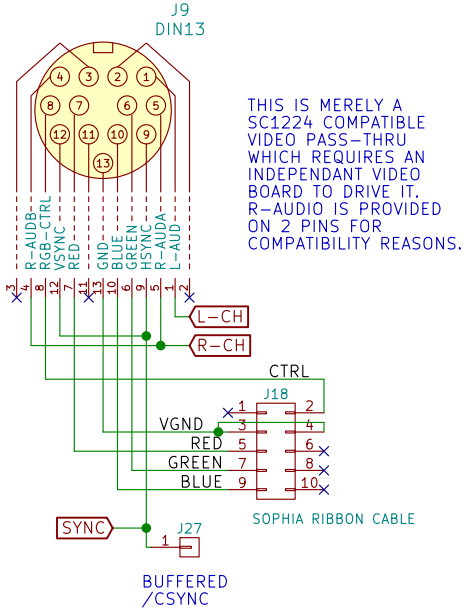




POWER INPUT AND CONTROL

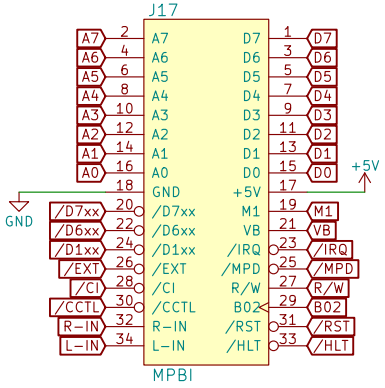


RGB / YPbPr

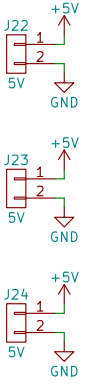


THIS IS MERELY A SC1224 COMPATIBLE VIDEO PASS-THRU WHICH REQUIRES AN INDEPENDANT VIDEO BOARD TO DRIVE IT. R-AUDIO IS PROVIDED ON 2 PINS FOR COMPATIBILITY REASONS.

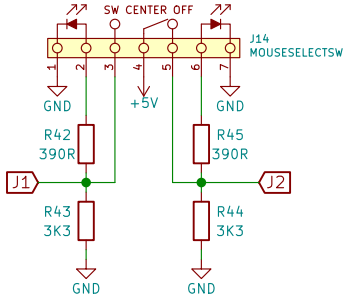
Mini-PBI



Accesory Power



Mouse Select Switch



Redrawn in KiCad by Ivo van Poorten
Based on Michael St. Pierre's revision 1.1 2017-10-1

Sheet: /Power Video-Out Mini-PBI Misc/
File: power-video-out-mini-pbi-misc.sch

Title: 1088XEL

Size: A4	Date: 2017-11-09	**Rev: A**
KiCad E.D.A. kicad 4.0.5+dfsg1-4		Id: 7/7