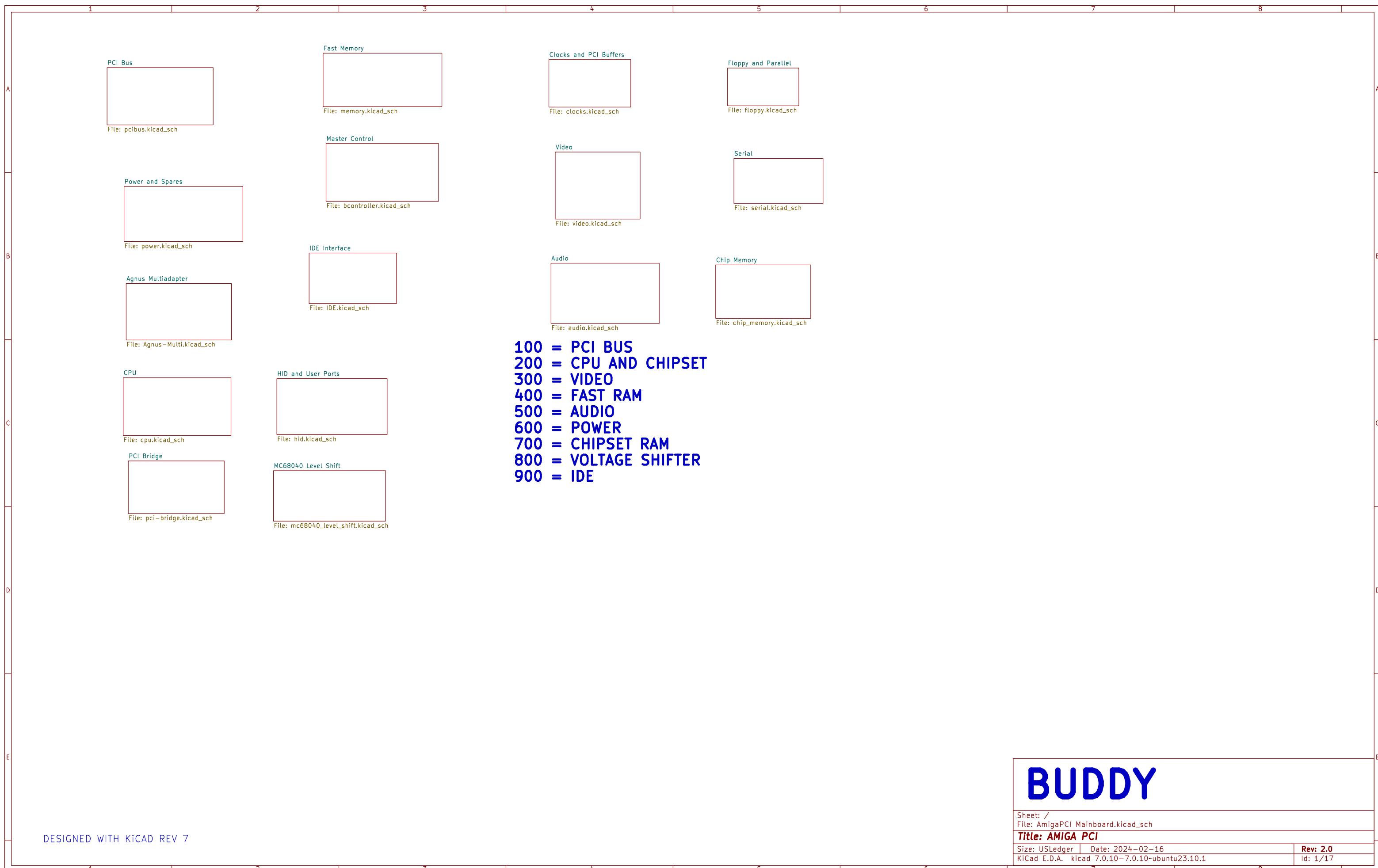


1 2 3 4 5 6 7 8

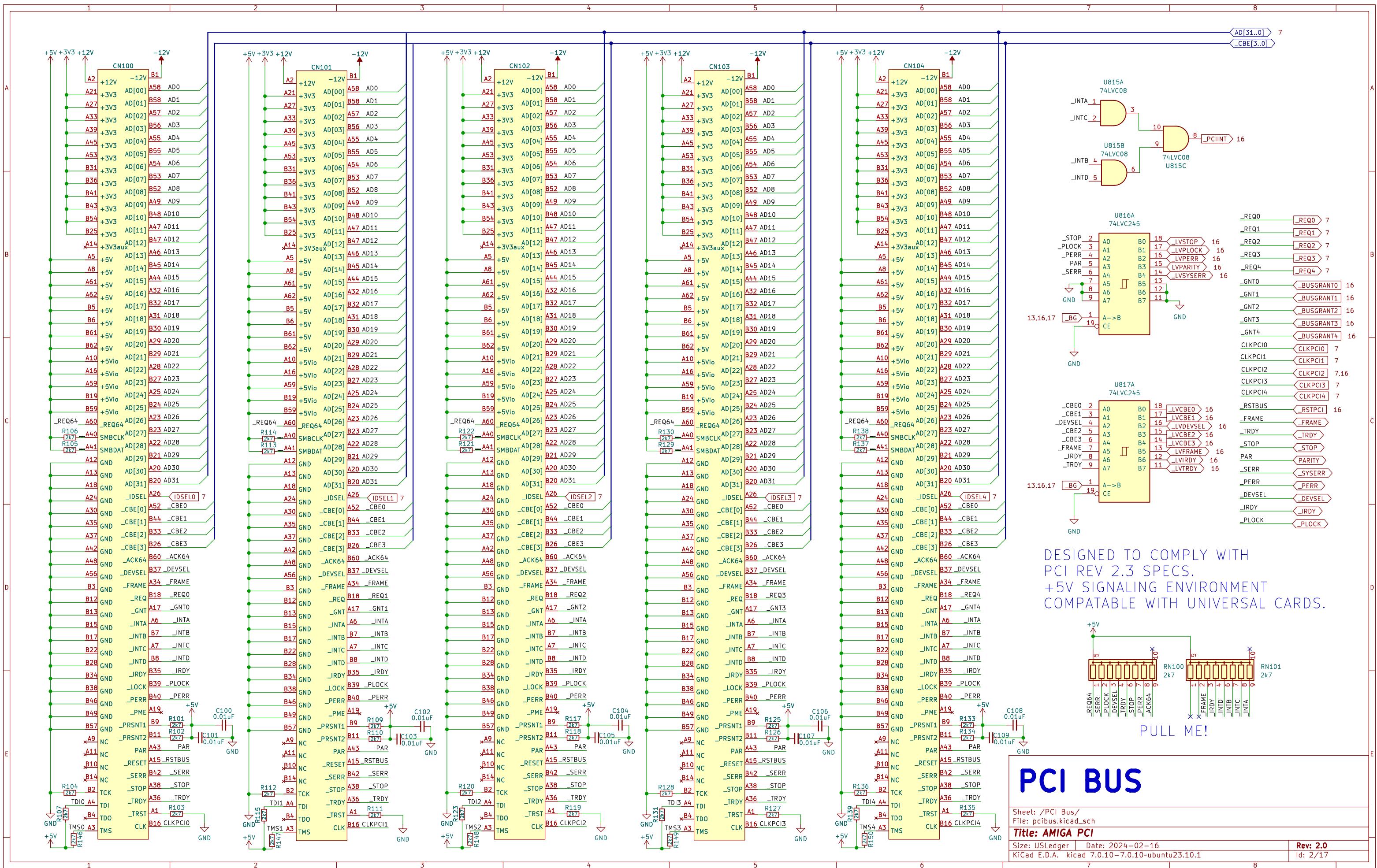


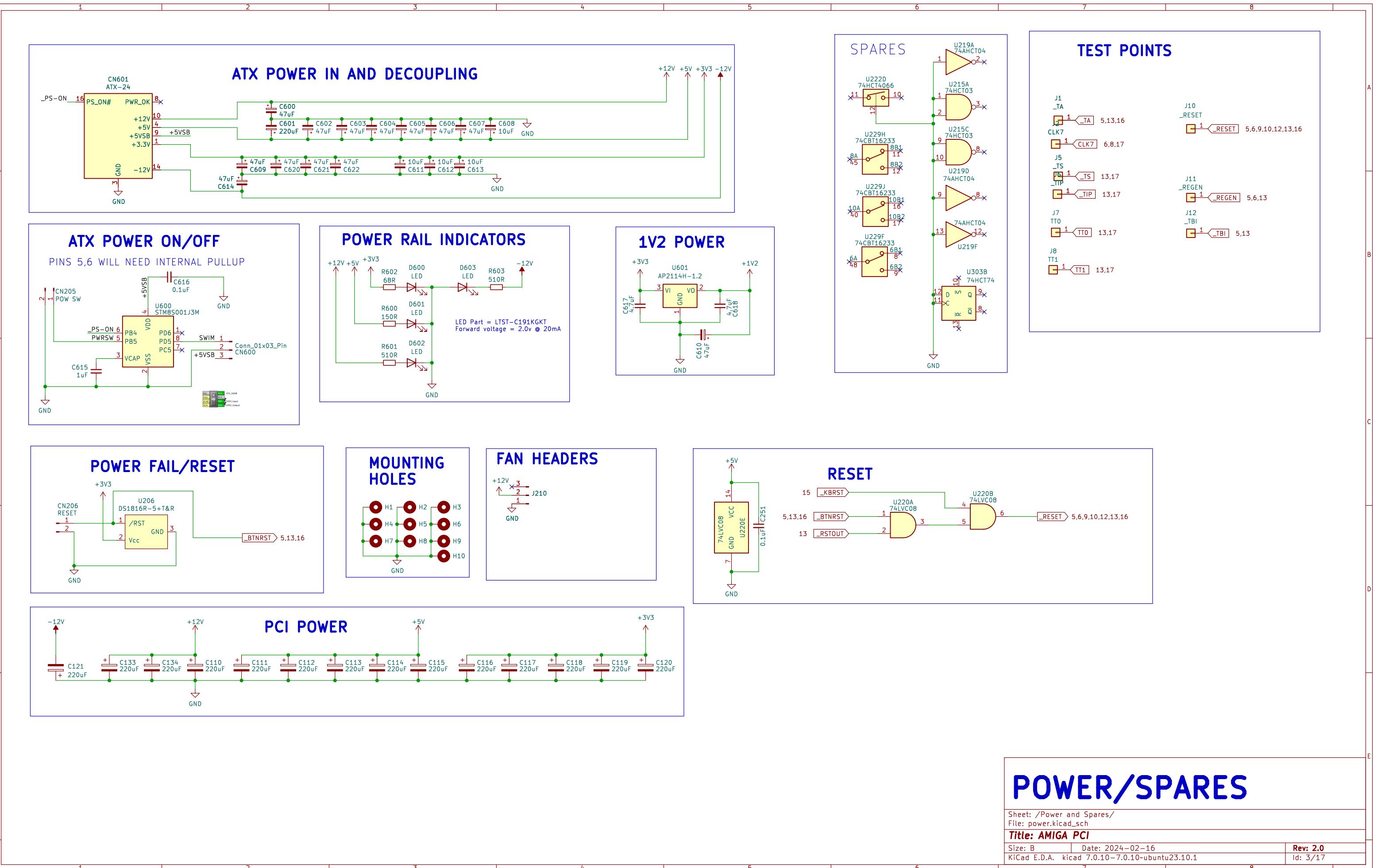
BUDDY

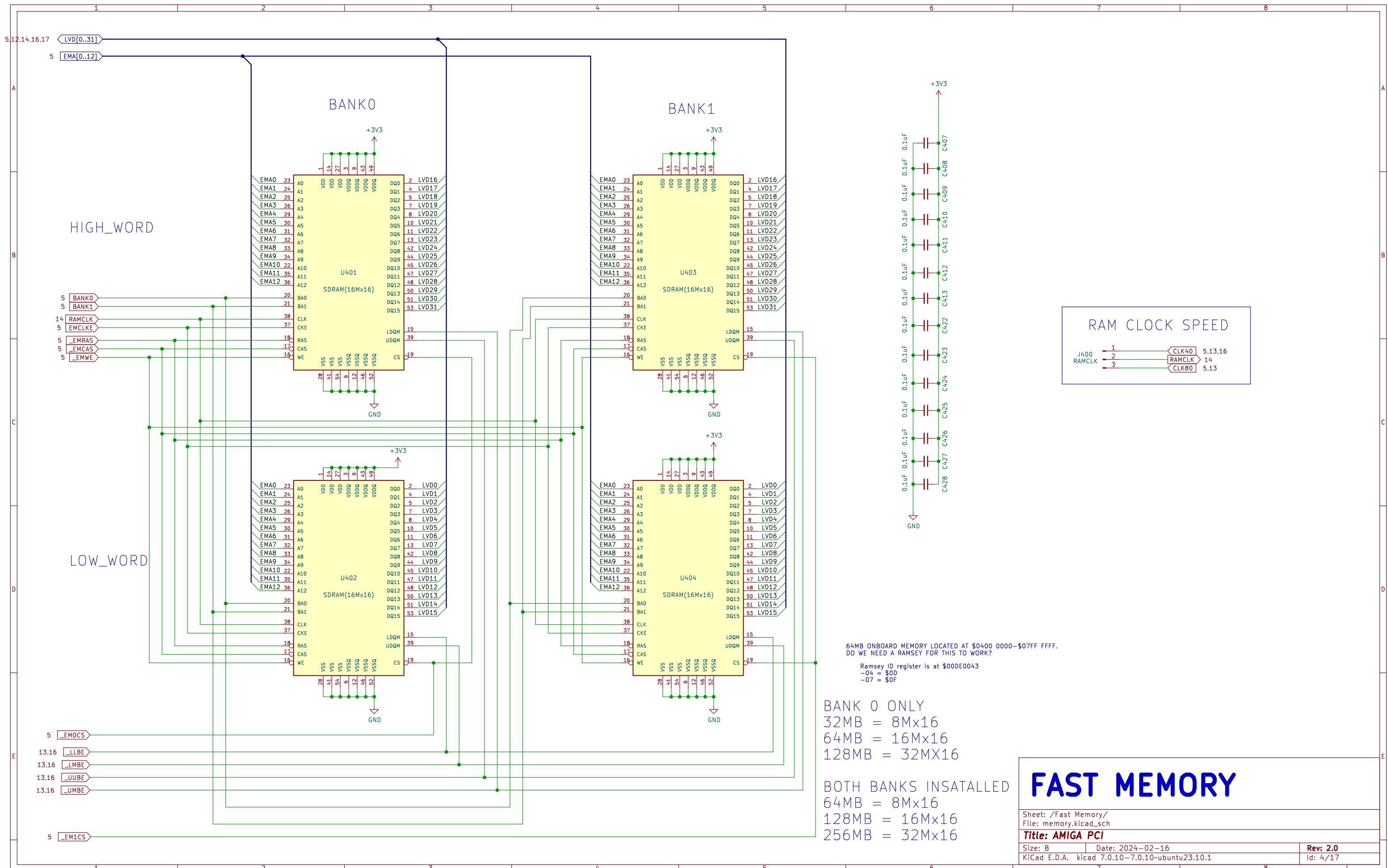
Sheet: /
File: AmigaPCI Mainboard.kicad_sch

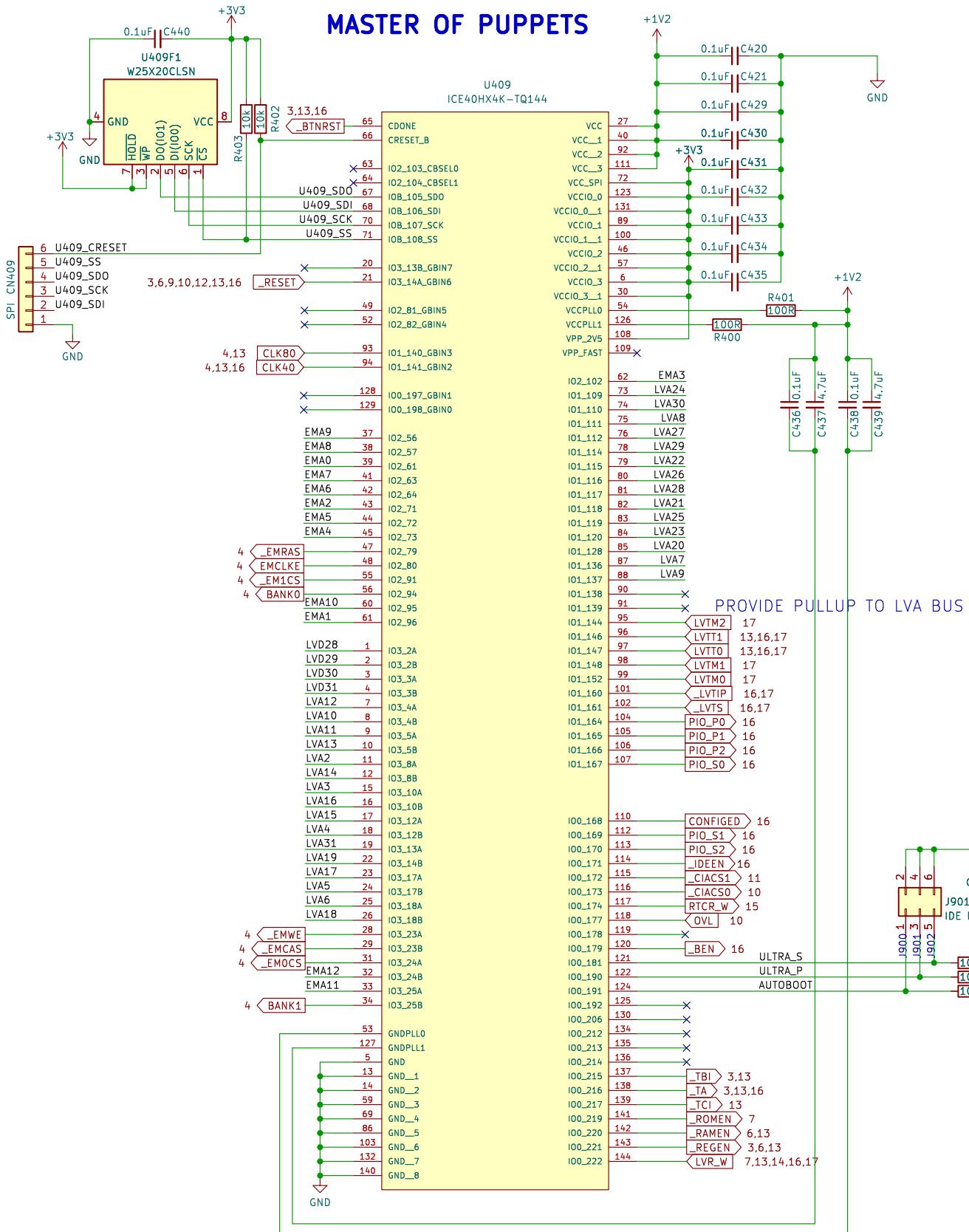
Title: AMIGA PCI

Size: USLetter	Date: 2024-02-16	Rev: 2.0
KiCad E.D.A. kicad 7.0.10-7.0.10~ubuntu23.10.1	Id: 1/17	









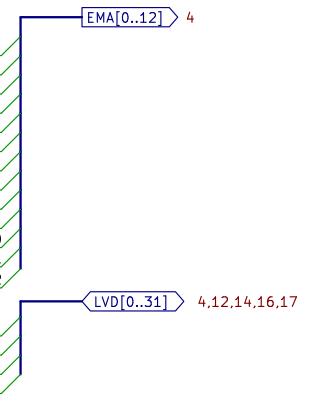
U409 PROVIDES RAM, IDE, AND PCI BRIDGE AUTOCONFIG, ADDRESS DECODE, REPLACEMENT GARY FUNCTIONS, STARTUP AND KEYBOARD RESET, AND FAST RAM CONTROLLER.

PROVIDE PULLUP TO LVA BUS

IDE MODES
J901
+3V3

ULTRA_S
ULTRA_P
AUTOBOOT
I00_191
I00_192
I00_193
I00_194
I00_195
I00_196
I00_197
I00_198
I00_199
I00_200
I00_201
I00_202
I00_203
I00_204
I00_205
I00_206
I00_207
I00_208
I00_209
I00_210
I00_211
I00_212
I00_213
I00_214
I00_215
I00_216
I00_217
I00_218
I00_219
I00_220
I00_221
I00_222

TBI 3,13
TA 3,13,16
TCI 13
ROMEN 7
RAMEN 6,13
REGEN 3,6,13
LVR_W 7,13,14,16,17



I'M PULLING YOUR STRINGS

MASTER CONTROL

Sheet: /Master Control/
File: bcontroller.kicad_sch

Title: AMIGA PCI

Size: B	Date: 2024-02-16	Rev: 2.0
KiCad E.D.A. kicad 7.0.10~ubuntu23.10.1		Id: 5/17

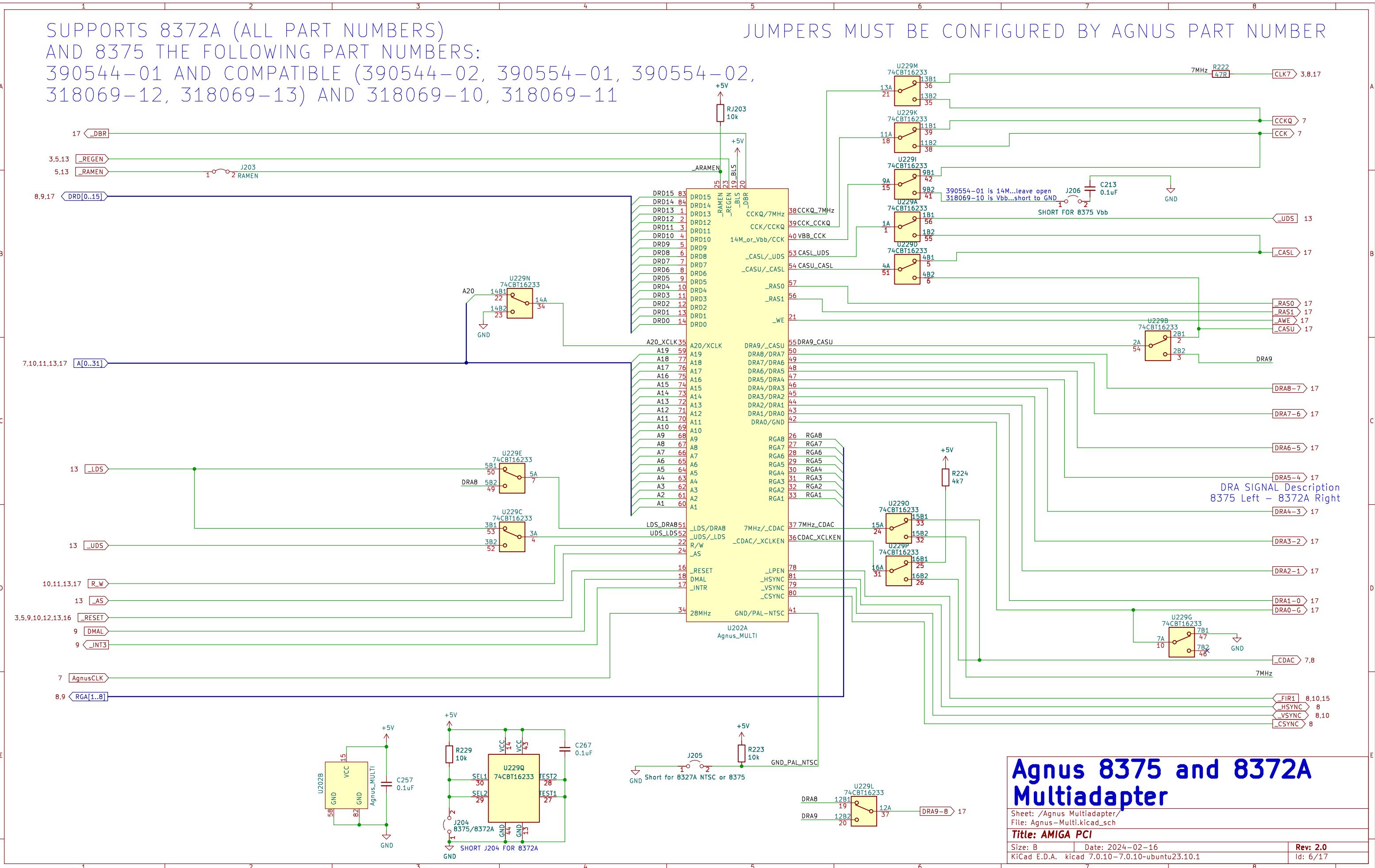
SUPPORTS 8372A (ALL PART NUMBERS)

AND 8375 THE FOLLOWING PART NUMBERS:

390544-01 AND COMPATIBLE (390544-02, 390554-01, 390554-02,

318069-12, 318069-13) AND 318069-10, 318069-11

JUMPERS MUST BE CONFIGURED BY AGNUS PART NUMBER

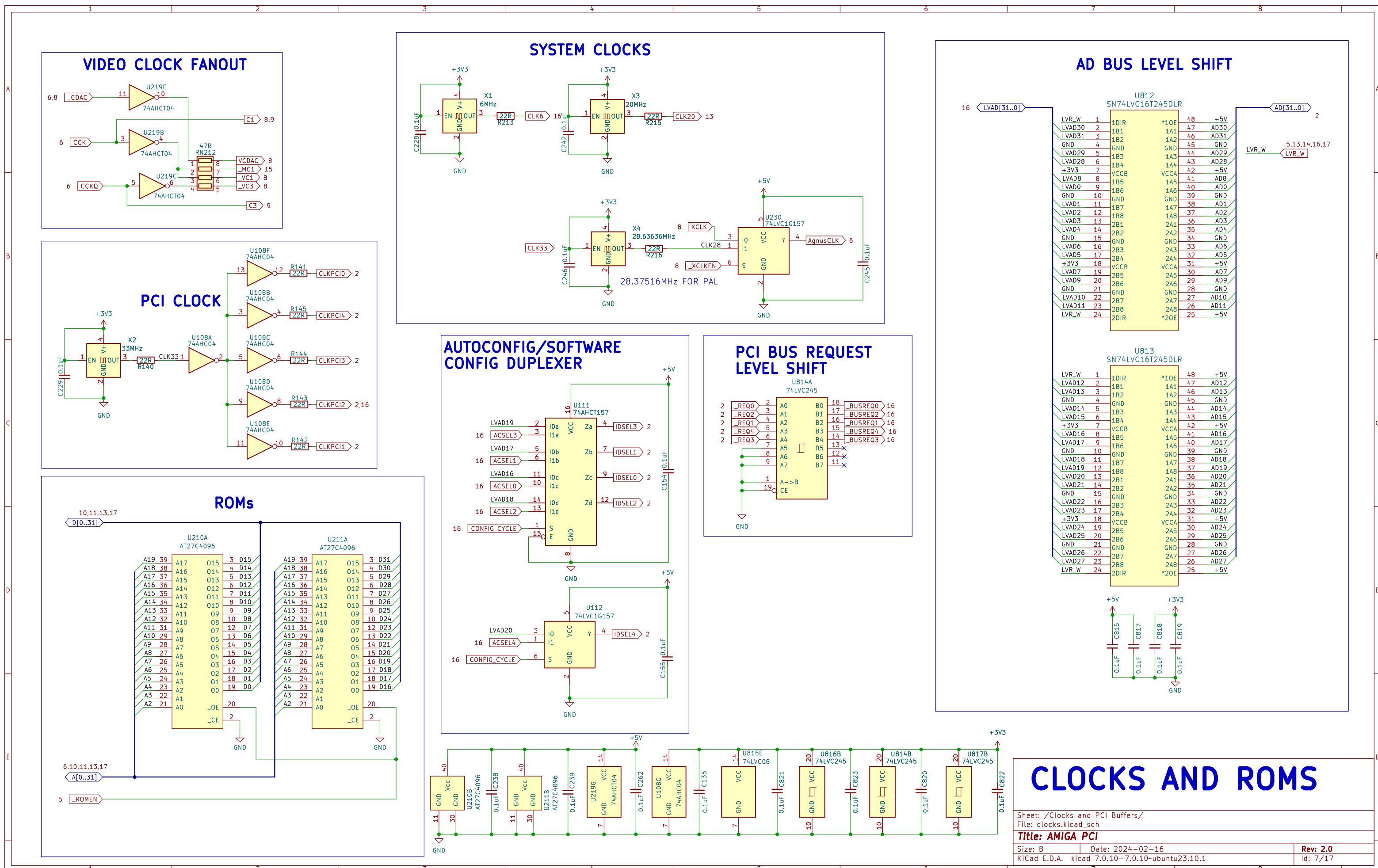


Agnus 8375 and 8372A Multiadapter

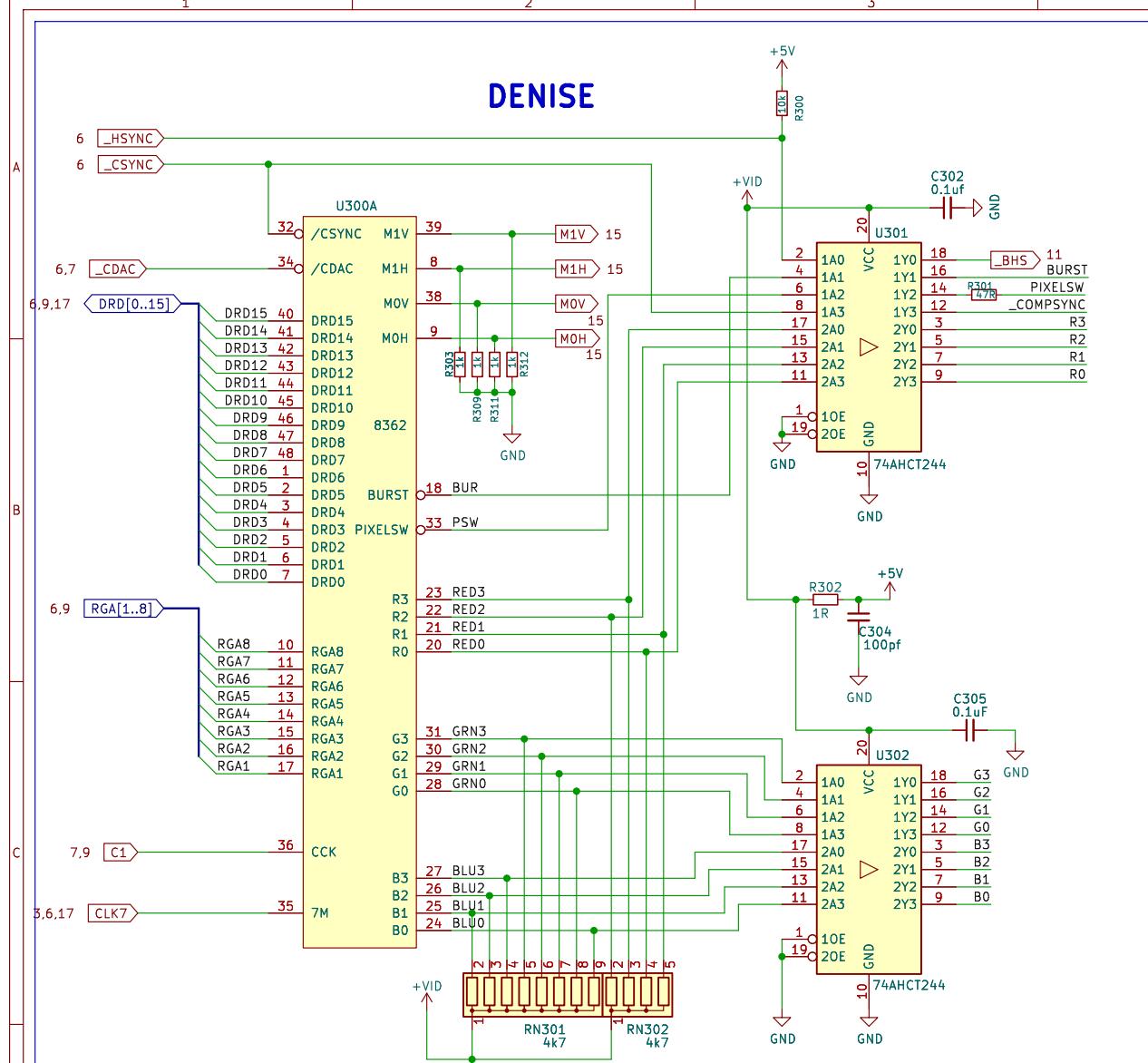
Sheet: /Agnus Multiadapter/
File: Agnus-Multi.kicad_sch

Title: AMIGA PCI

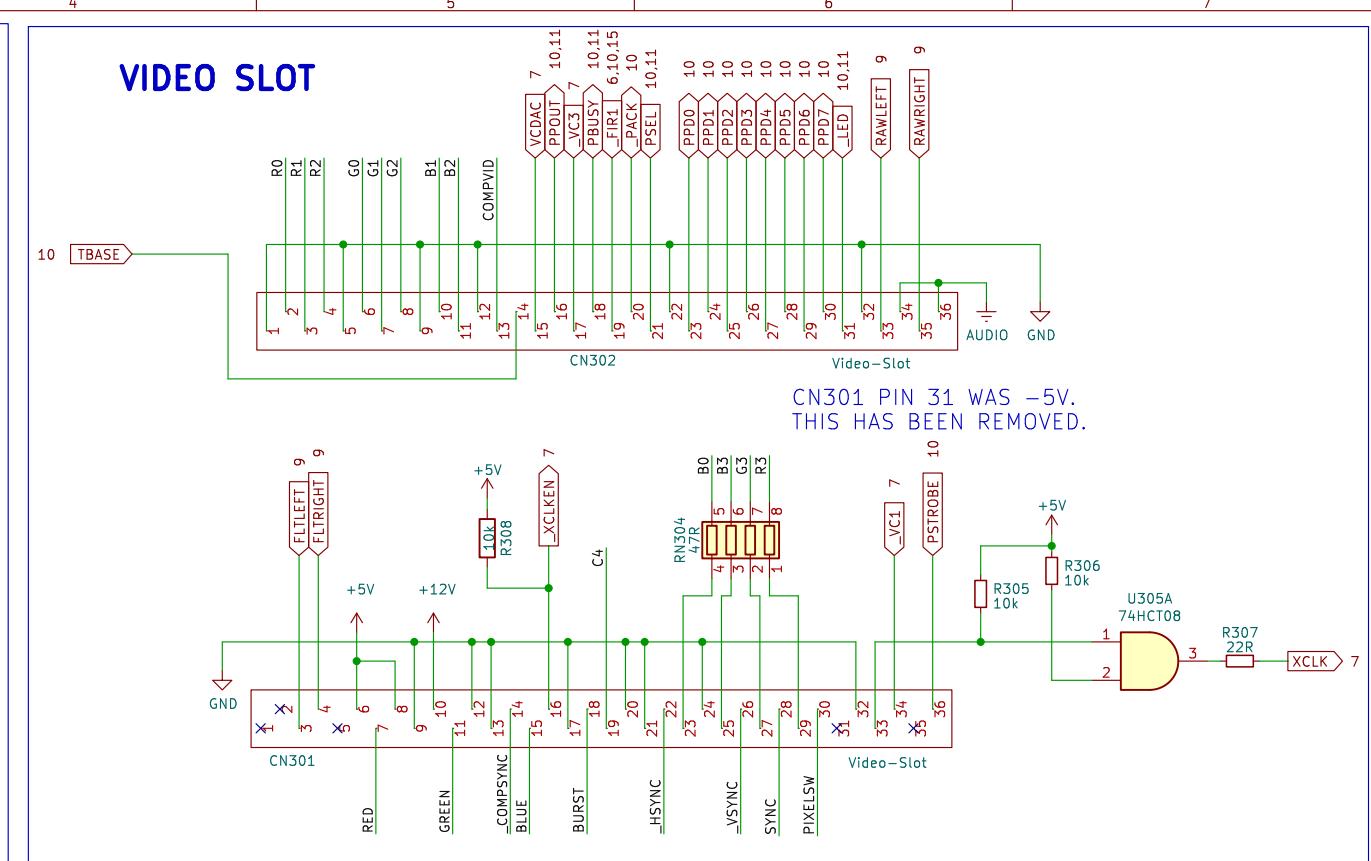
Size: B	Date: 2024-02-16	Rev: 2.0
KiCad E.D.A. kicad 7.0.10~7.0.10~ubuntu23.10.1		Id: 6/17



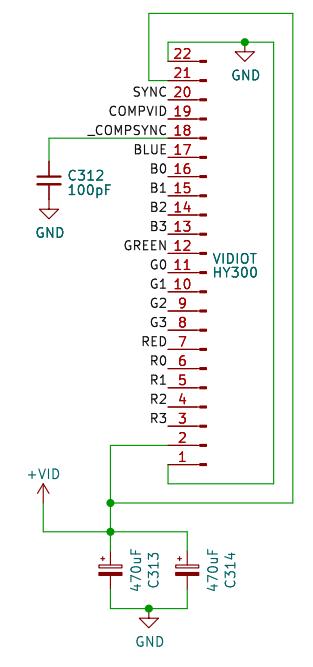
DENISE



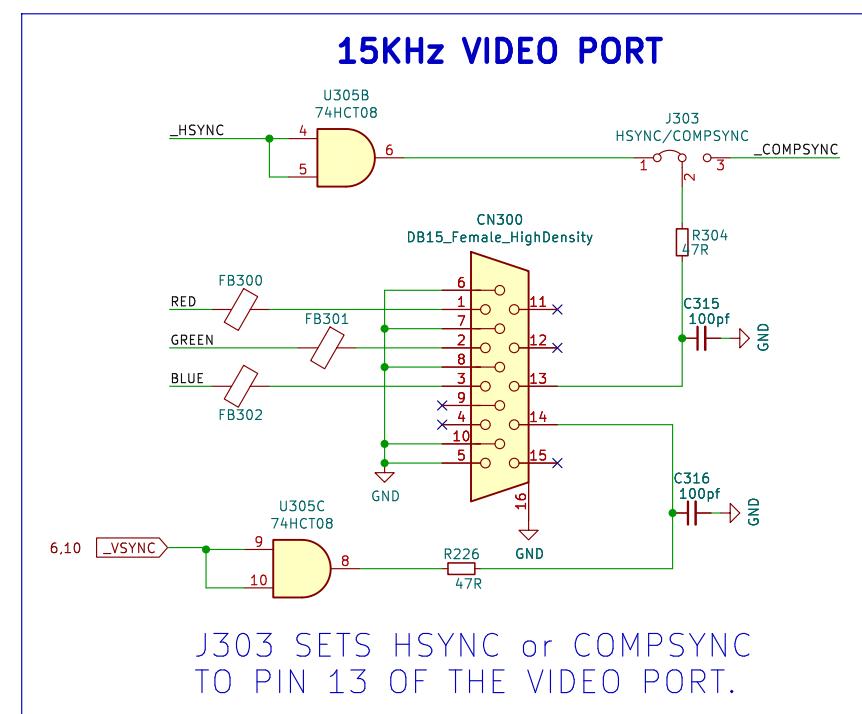
VIDEO SLOT



VIDEO HYBRID



15KHz VIDEO PORT

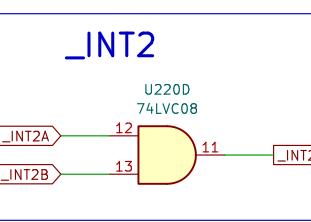
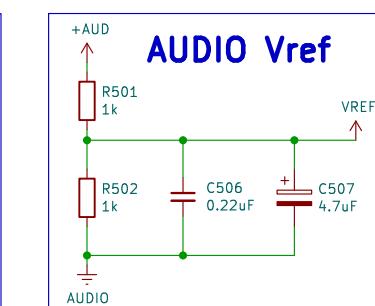
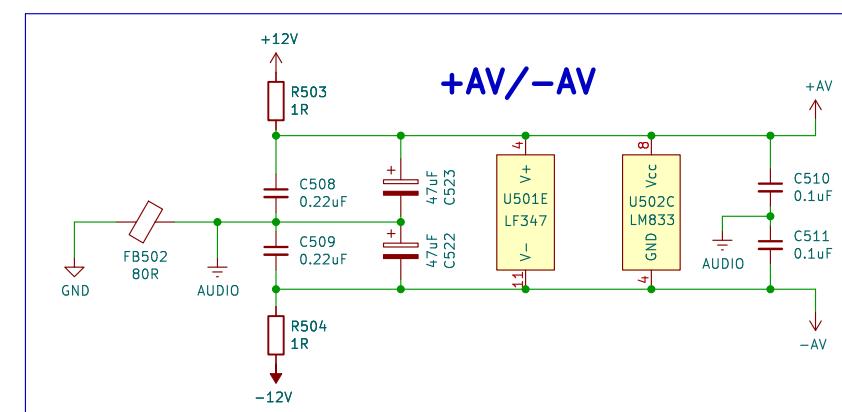
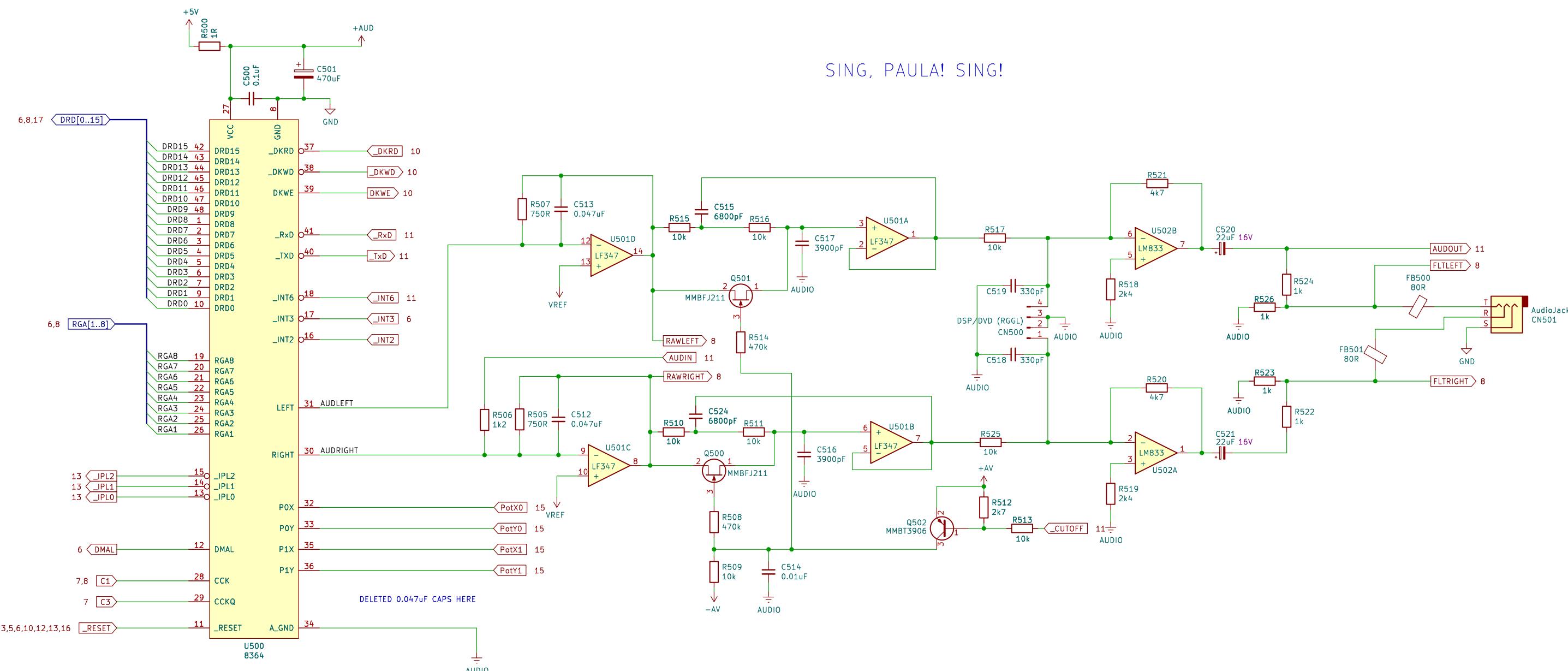


VIDEO

Sheet: /Video/
File: video.kicad_sch

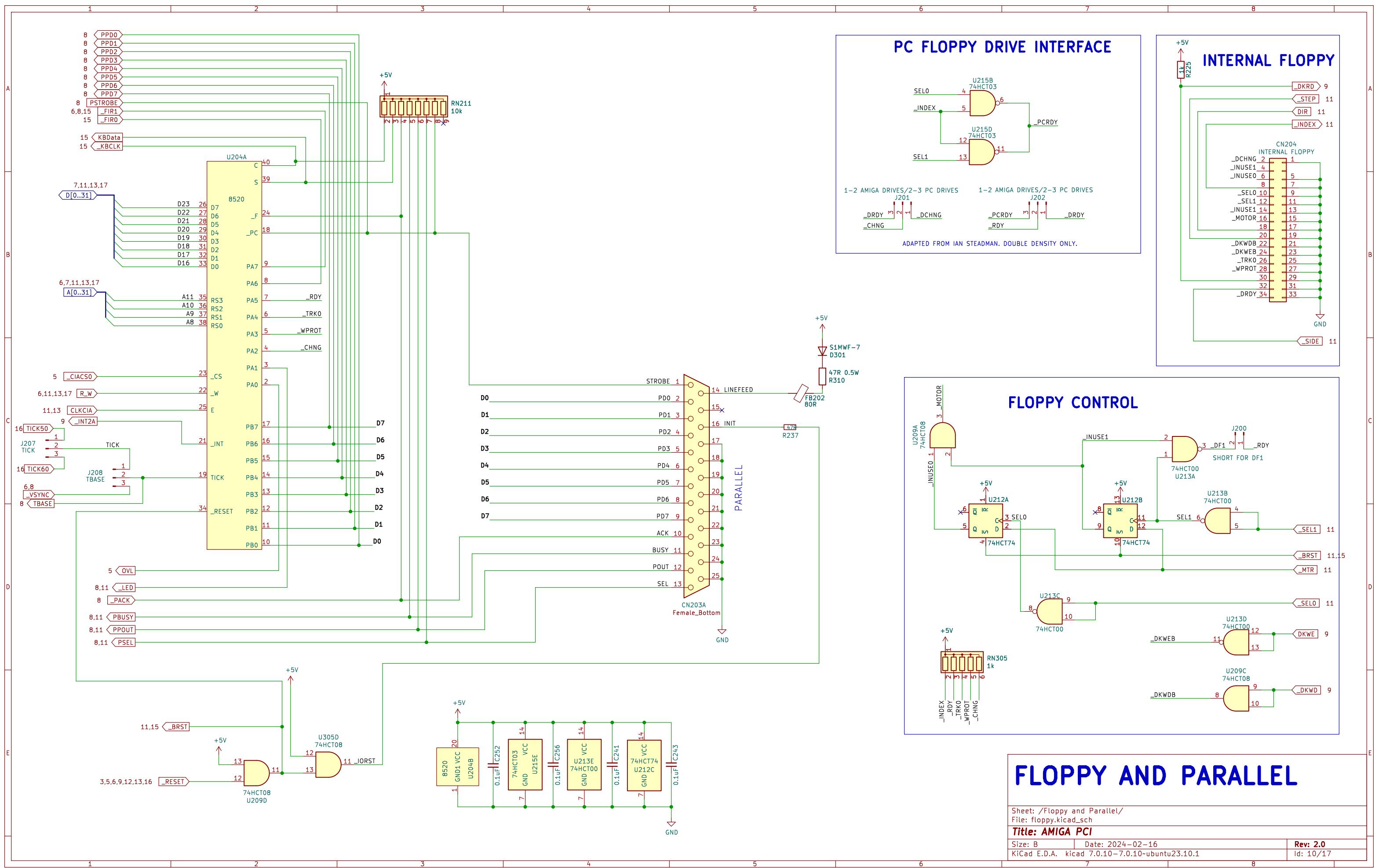
Title: AMIGA PCI

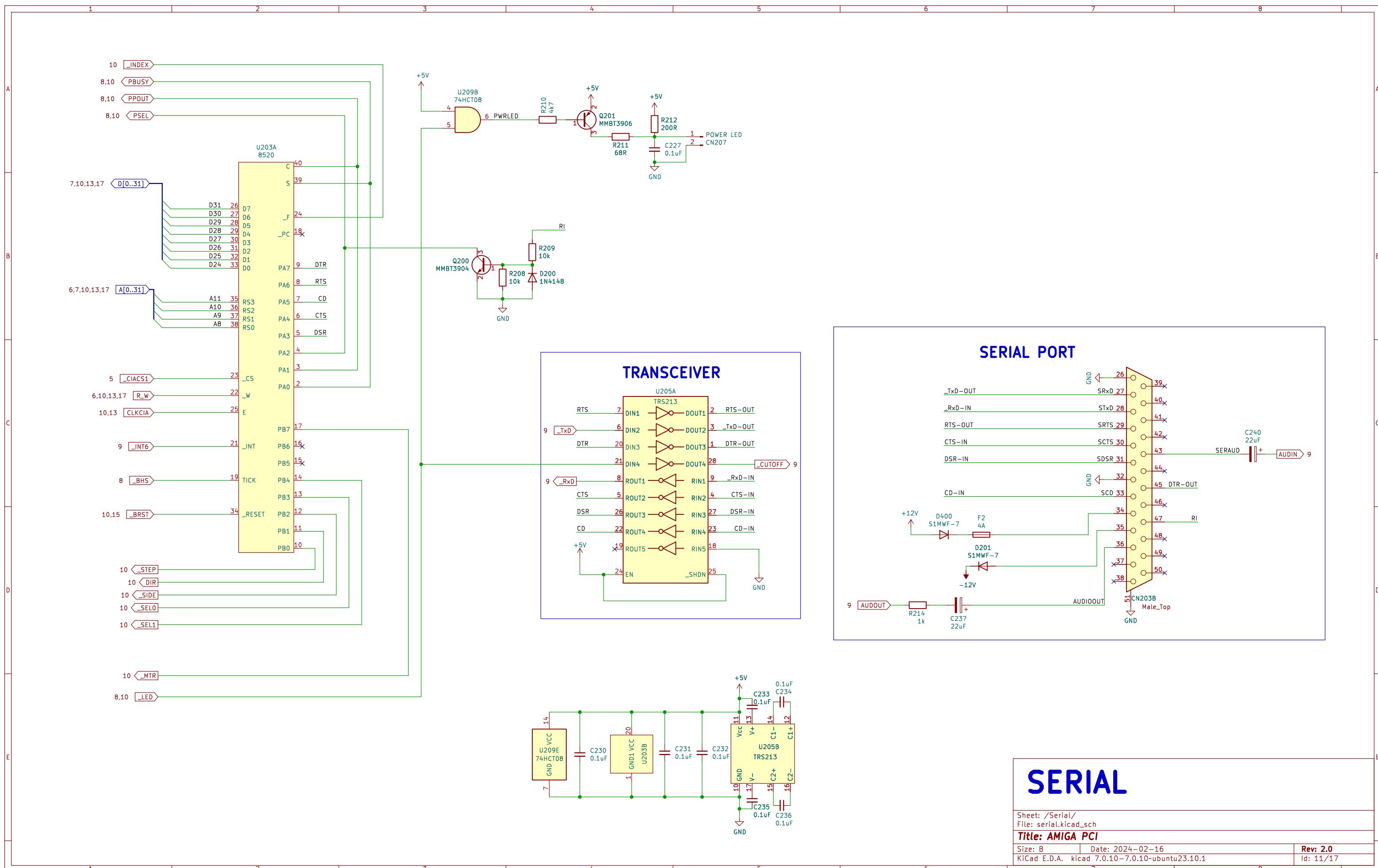
Size: B	Date: 2024-02-16	Rev: 2.0
KiCad E.D.A. kicad 7.0.10~7.0.10~ubuntu23.10.1		Id: 8/17



PAULA/AUDIO

Sheet: /Audio/
File: audio.kicad_sch
Title: AMIGA PCI
Size: B Date: 2024-02-16 Rev: 2.0
KiCad E.D.A. kicad 7.0.10~7.0.10~ubuntu23.10.1 Id: 9/17





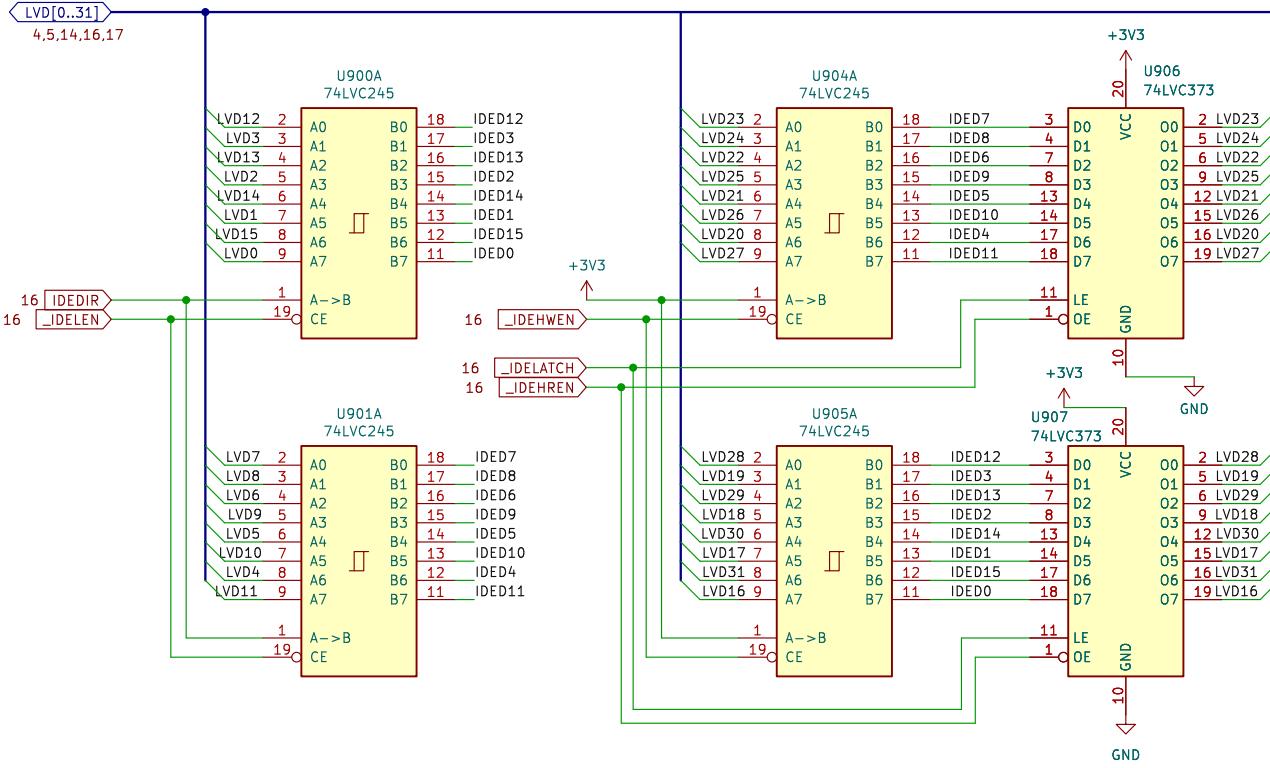
74LVC245 ENABLED FOR FIRST WORD DURING WRITES.
DATA ALWAYS FLOWS A->B.

74LVC373 LATCHES DATA FOR FIRST WORD DURING READS.

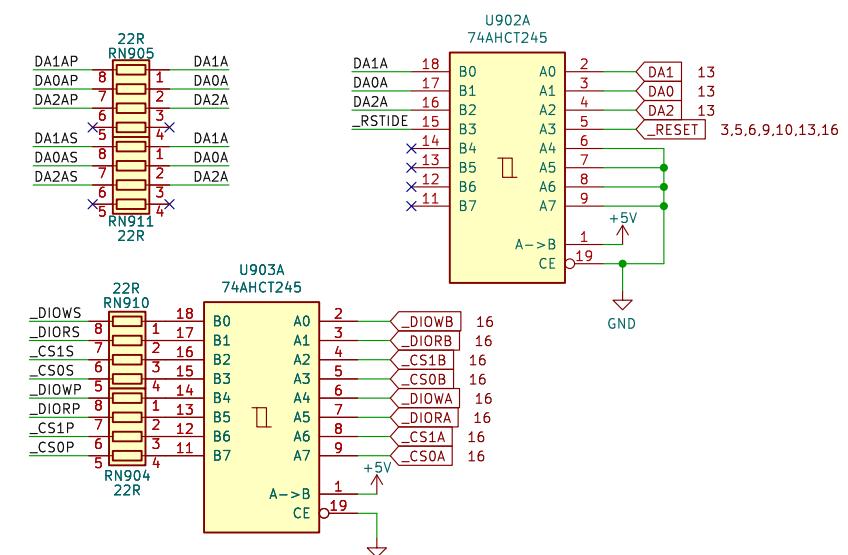
DATA BUFFERS

DURING WRITE CYCLES, ALL DATA IS REAL-TIME.
FOR THE FIRST WRITE COMMAND, D16..31 IS ENABLED.
FOR THE SECOND WRITE COMMAND, D0..15 IS ENABLED.

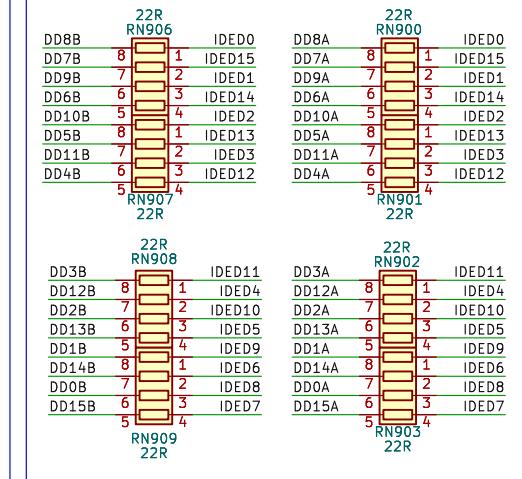
DURING READ CYCLES, D16..31 IS LATCHED
AFTER THE FIRST READ COMMAND FROM THE IDE DEVICE.
THE SECOND READ FROM THE IDE DEVICE DRIVES
D0..15 LIVE. THE DATA IS THEN LATCHED BY THE MC68040.



BUFFERS AND TERMINATION

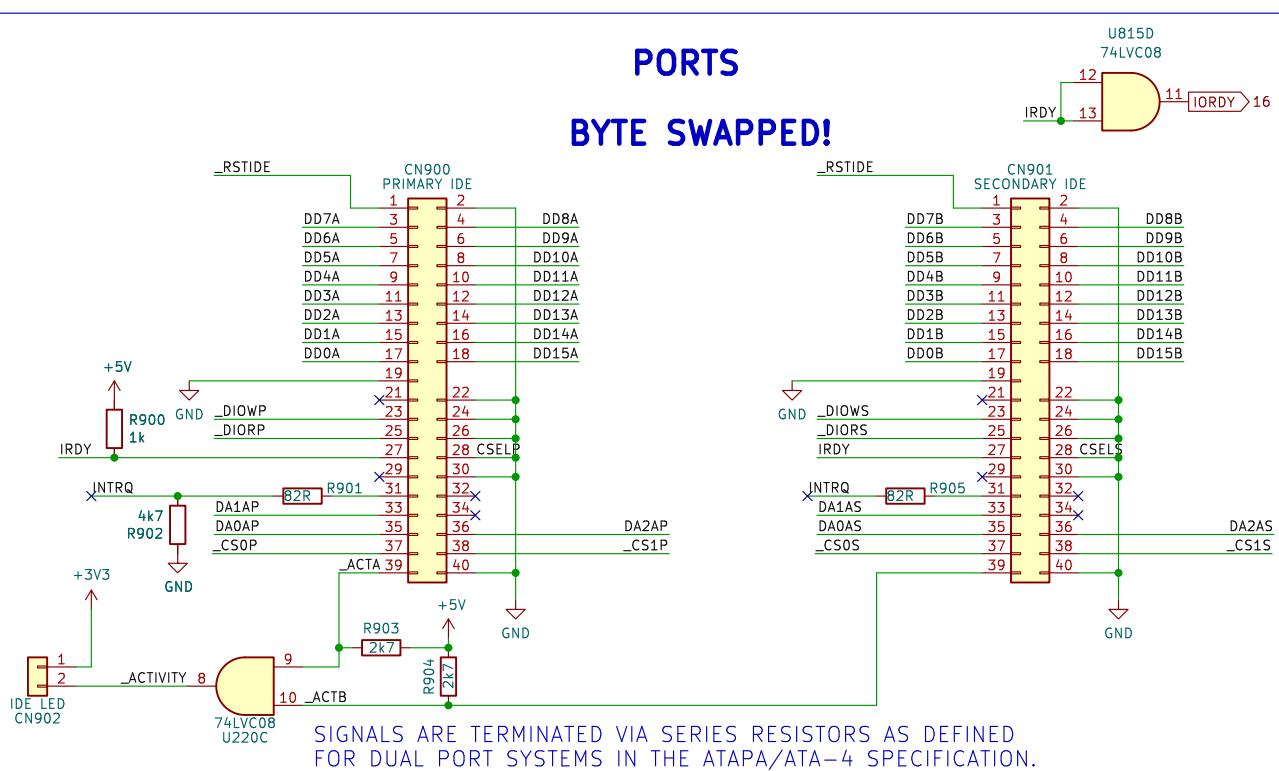


DATA TERMINATION



PORTS

BYTE SWAPPED!



IDE INTERFACE

Sheet: /IDE Interface/
File: IDE.kicad_sch

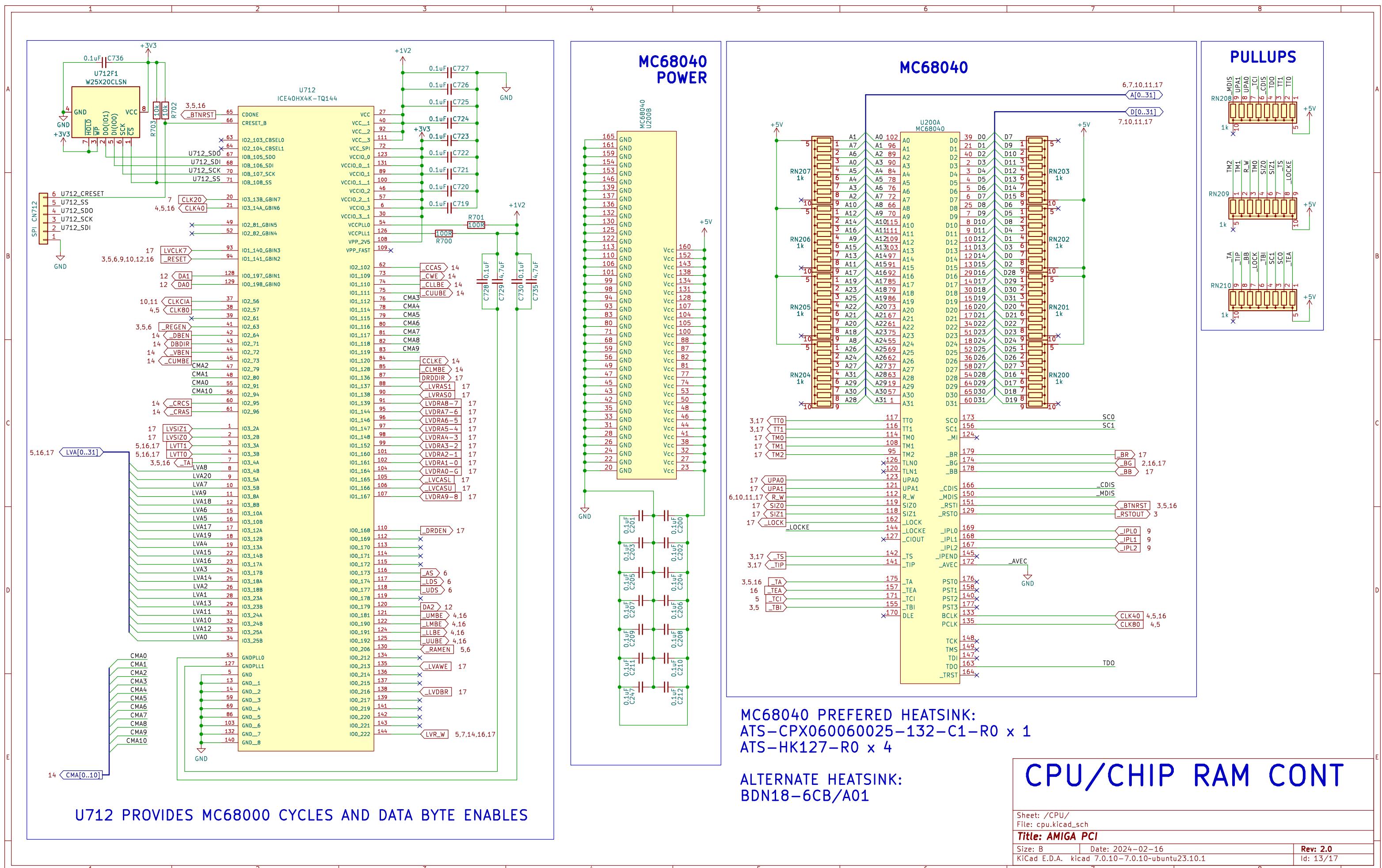
Title: AMIGA PCI

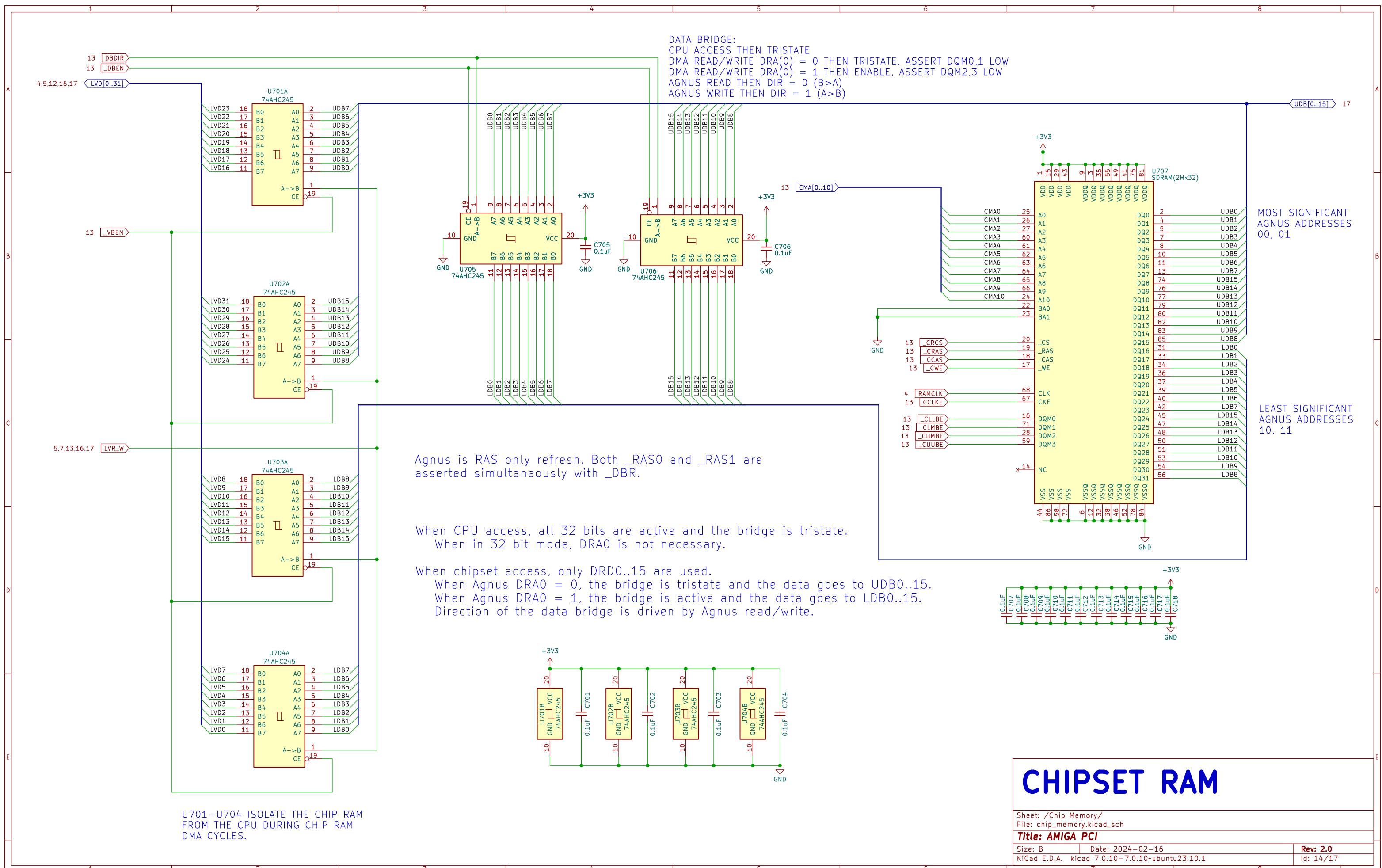
Size: B Date: 2024-02-16

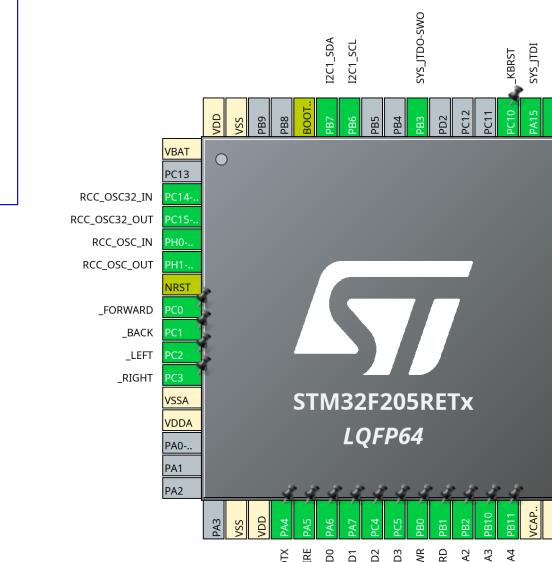
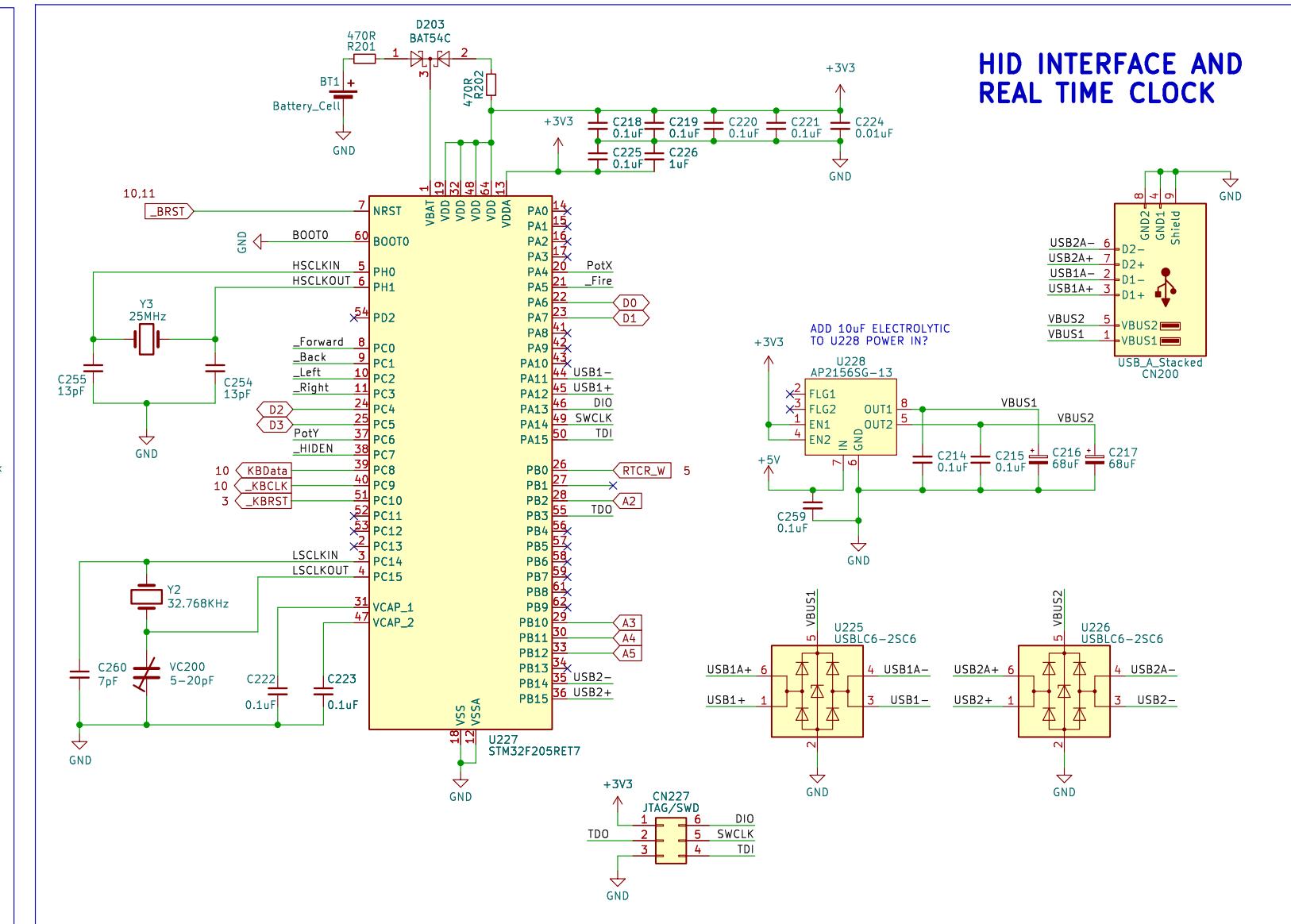
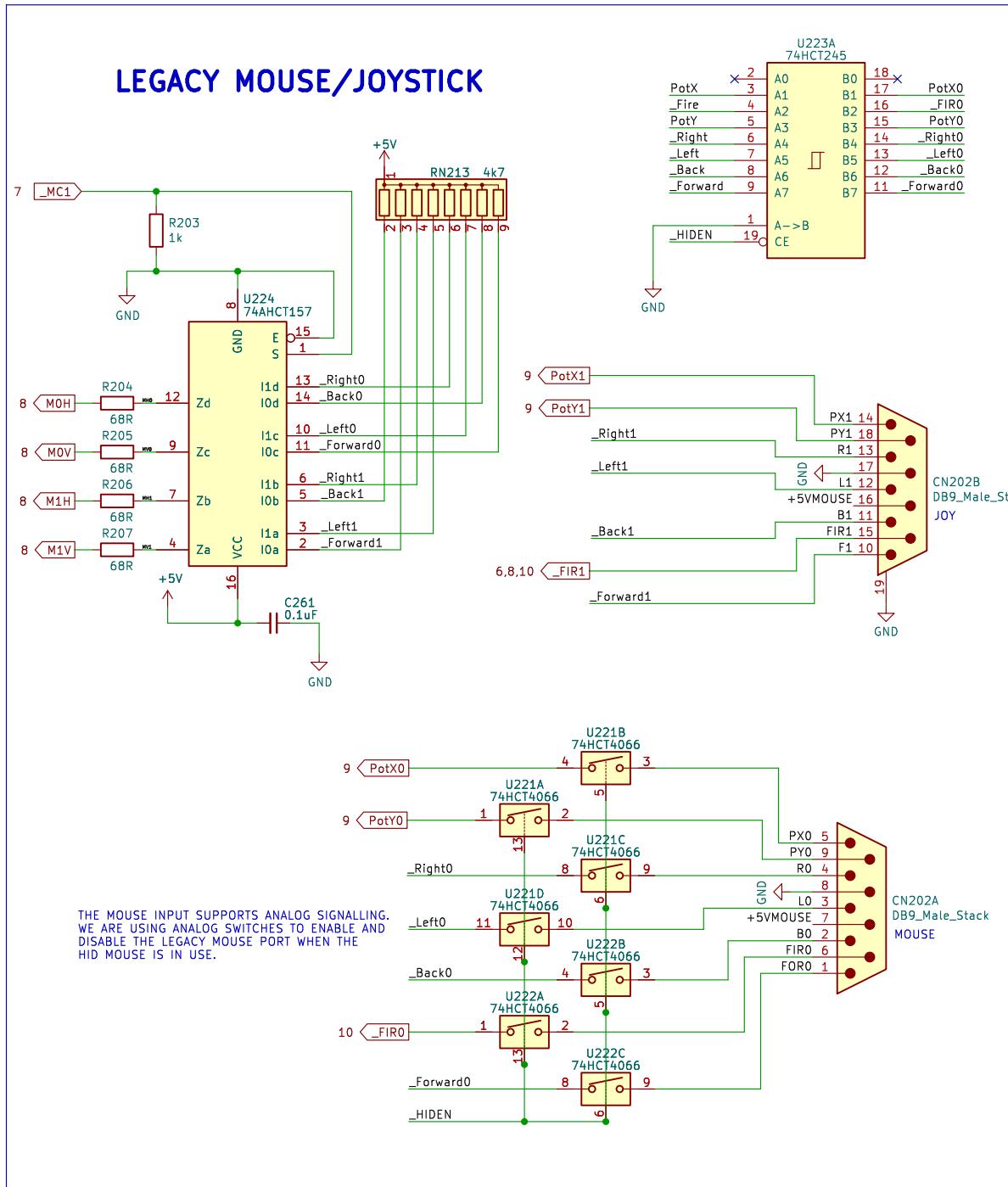
KiCad E.D.A. kicad 7.0.10~7.0.10~ubuntu23.10.1

Rev: 2.0

Id: 12/17







HID and USER PORTS

Sheet: /HID and User Ports/
File: hid_kicad.sch

Title: AMIGA PCI

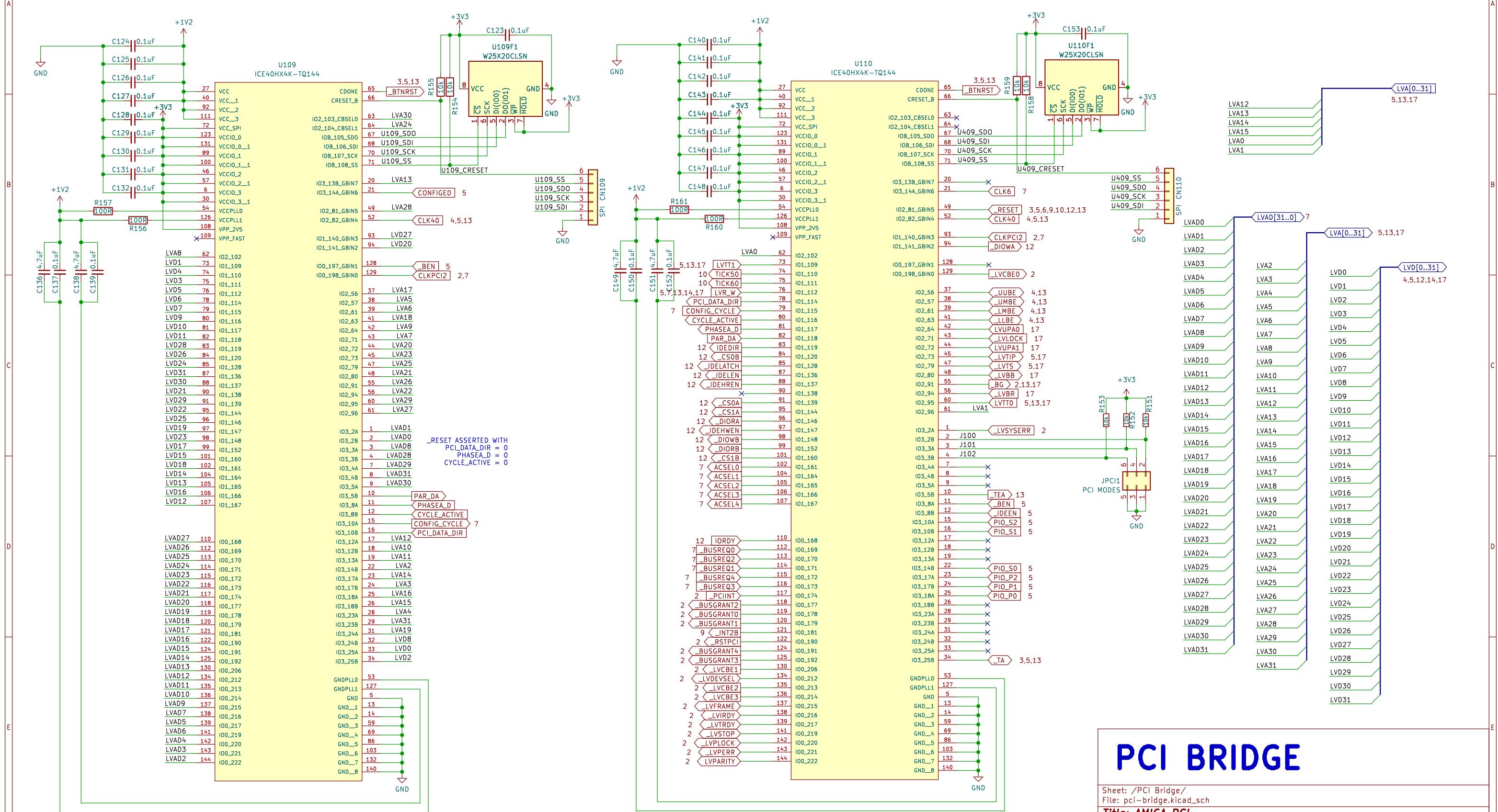
Size: B Date: 202

KiCad E.D.A. kicad 7.0.10-7.0.10~ubuntu23.10.1

ev: 2.0
d: 15/17

U109: BUFFERS AD/D/A BUSSES, AD PARITY CALC, AUTOCONFIG, BRIDGE REGISTERS

U110: PCI STATE MACHINE, BUS ARBITRATOR, INTERRUPT HANDLING, PARITY ERROR DETECTION, IDE CONTROLLER

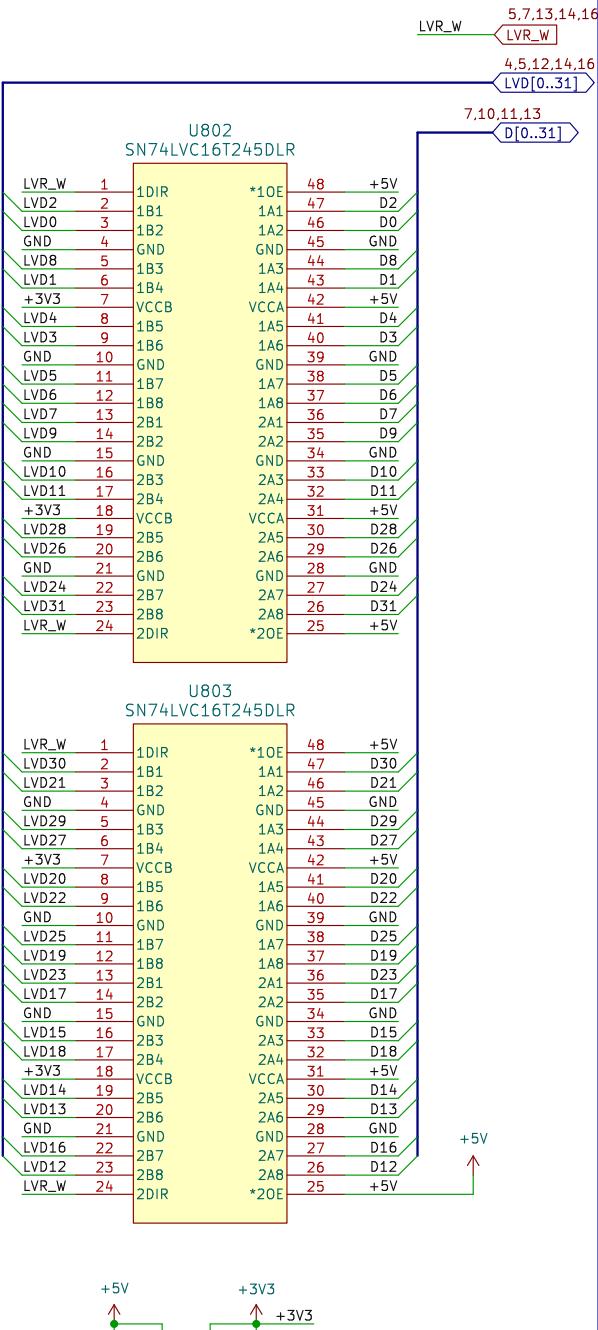


PCI BRIDGE

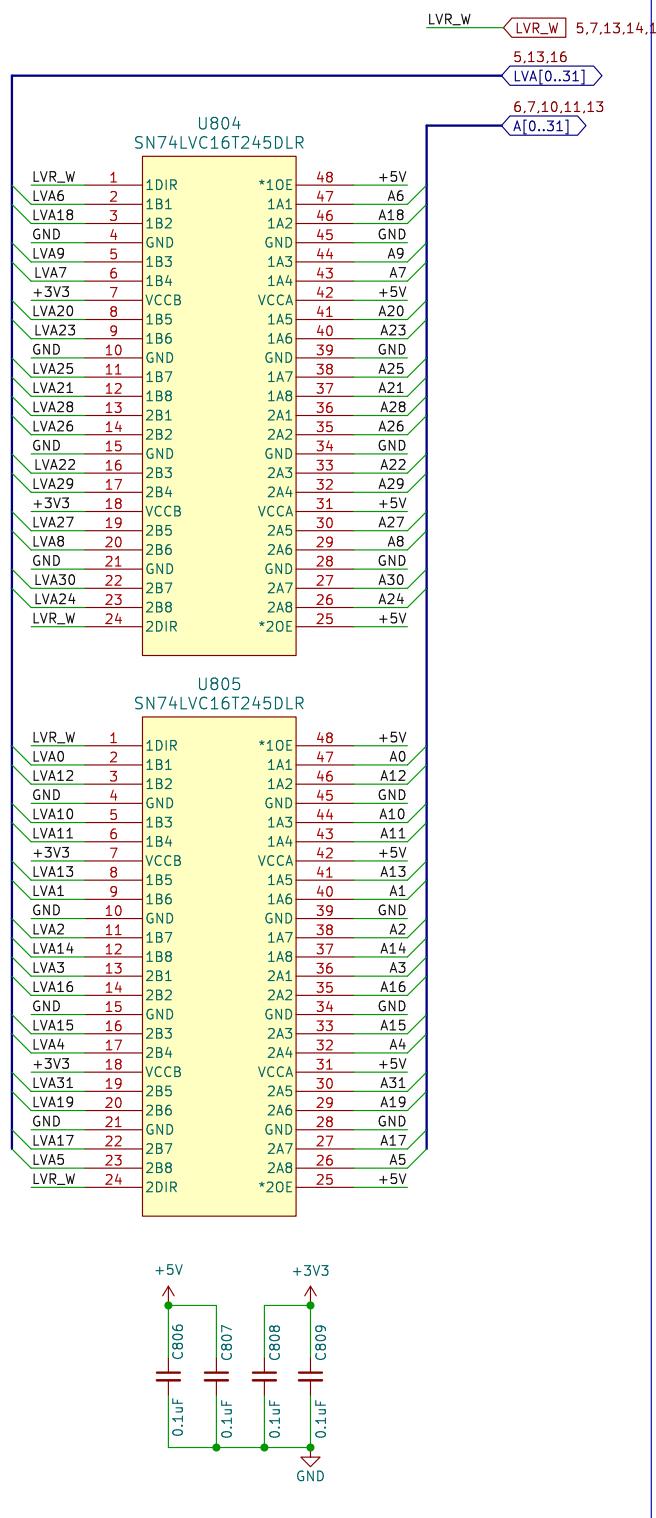
Sheet: /PCI_Bridge/
File: pci-bridge.kicad_sch

Title: AMIGA PCI	
Size: B	Date: 2024-02-16
AMIGA 1000	AMIGA 2000

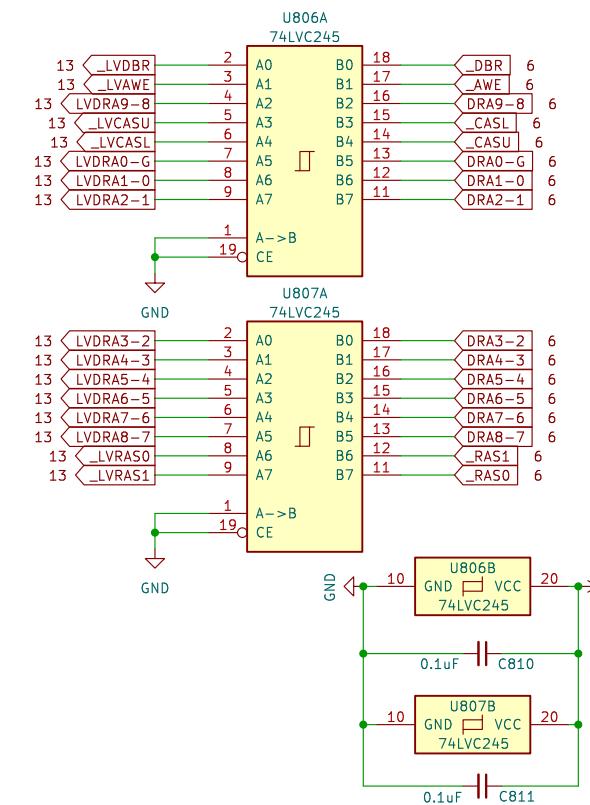
LOW VOLTAGE DATA BUFFERS



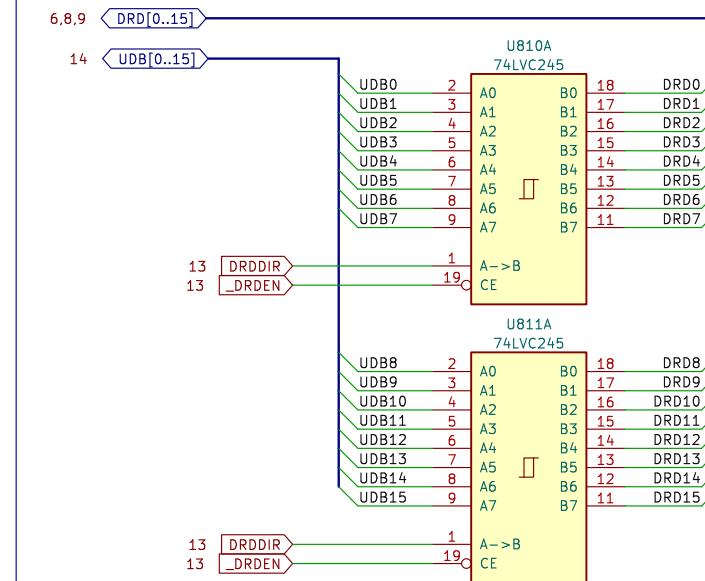
LOW VOLTAGE ADDRESS BUFFERS



LOW VOLTAGE AGNUS SIGNALS

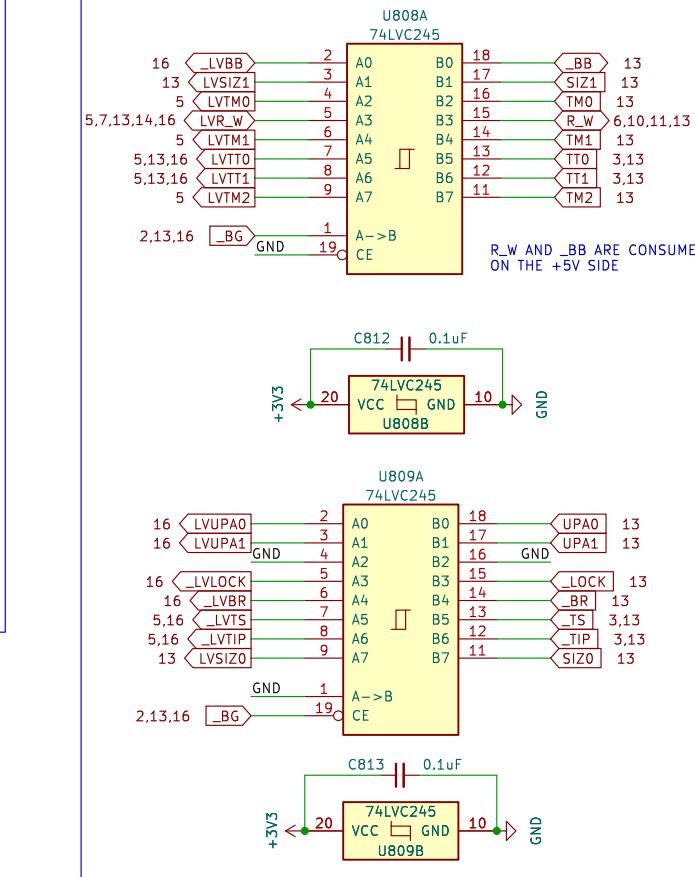


LOW VOLTAGE CHIPSET RAM DATA BUS BUFFERS

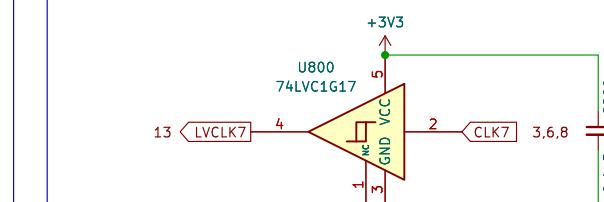


DMA READ = ENABLED, DIR = 1 (A>B)
DMA WRITE = ENABLED, DIR = 0 (B>A)
REG READ = ENABLED, DIR = 0 (B>A)
REG WRITE = ENABLED, DIR = 1 (A>B)
CPU CHIP RAM ACCESS = TRISTATE

BIDIRECTIONAL MC68040



UNIDIRECTIONAL SIGNALS



IT SEEMS MY ONLY CHANCE IS GIVING UP THE FIGHT

MC68040 LEVEL SHIFT

Sheet: /MC68040_Level Shift/
File: mc68040_level_shift.kicad_sch

Title: AMIGA PCI

Size: B Date: 2024-02-16
KiCad E.D.A. kicad 7.0.10~7.0.10~ubuntu23.10.1

Rev: 2.0
Id: 17/17