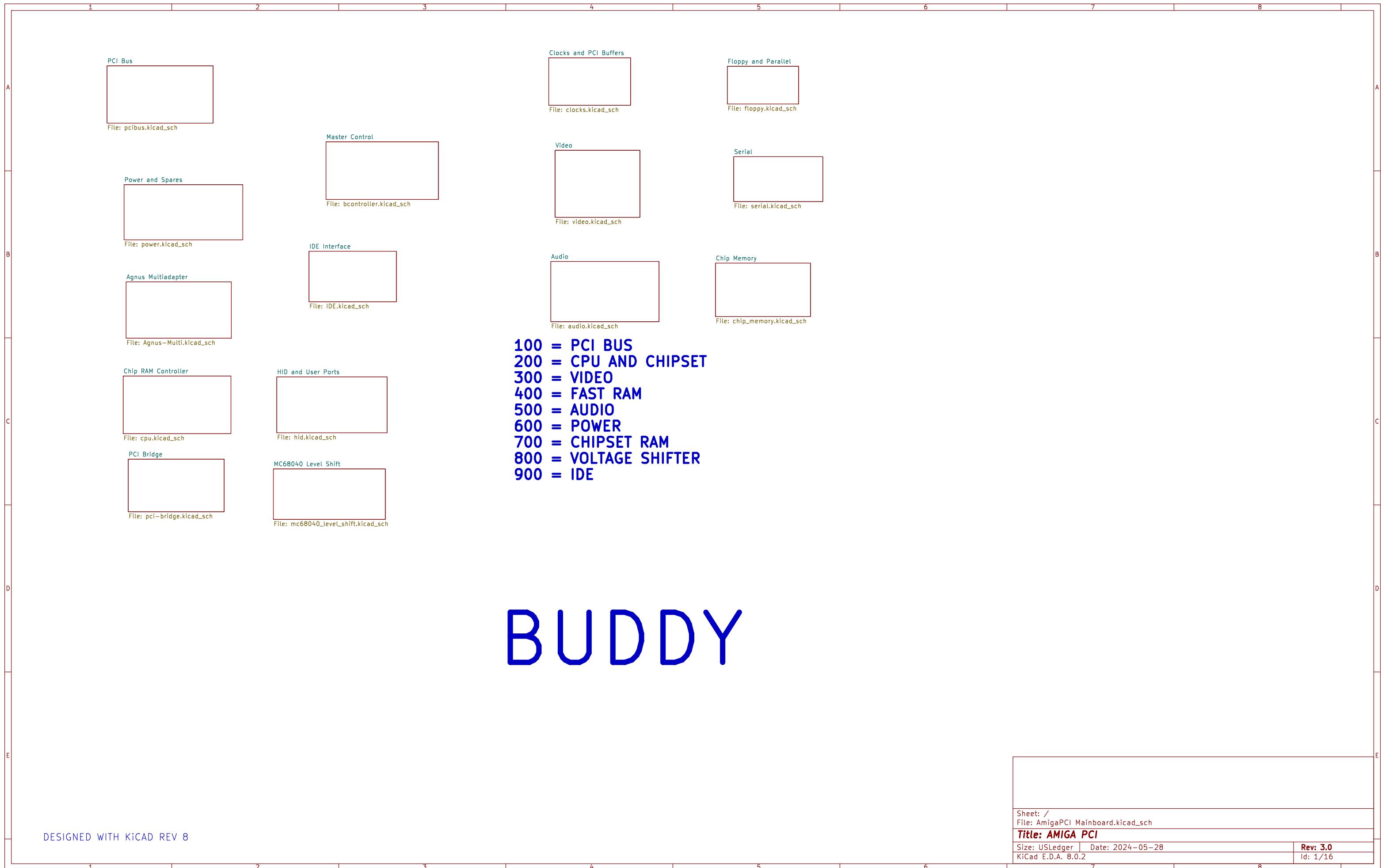
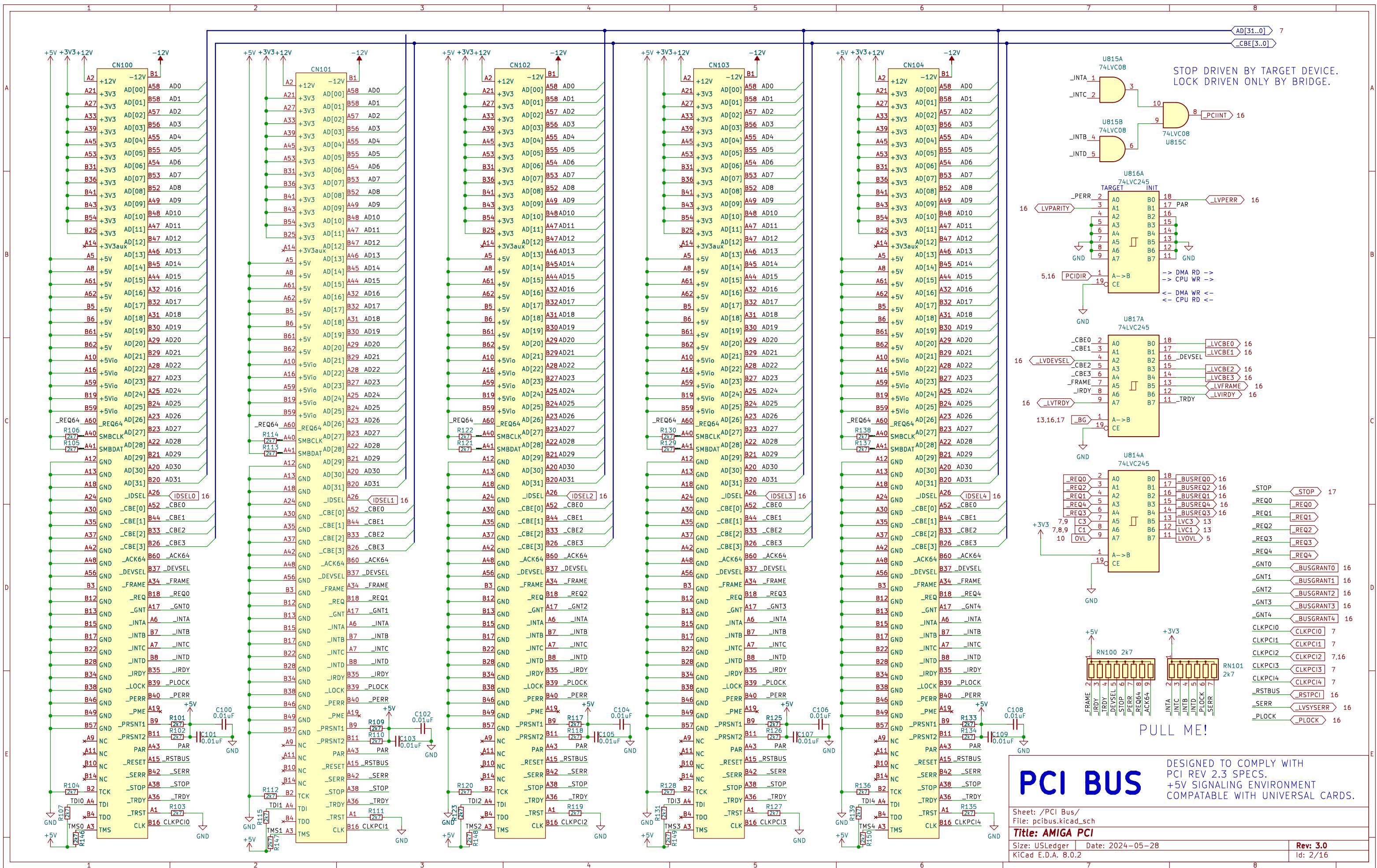
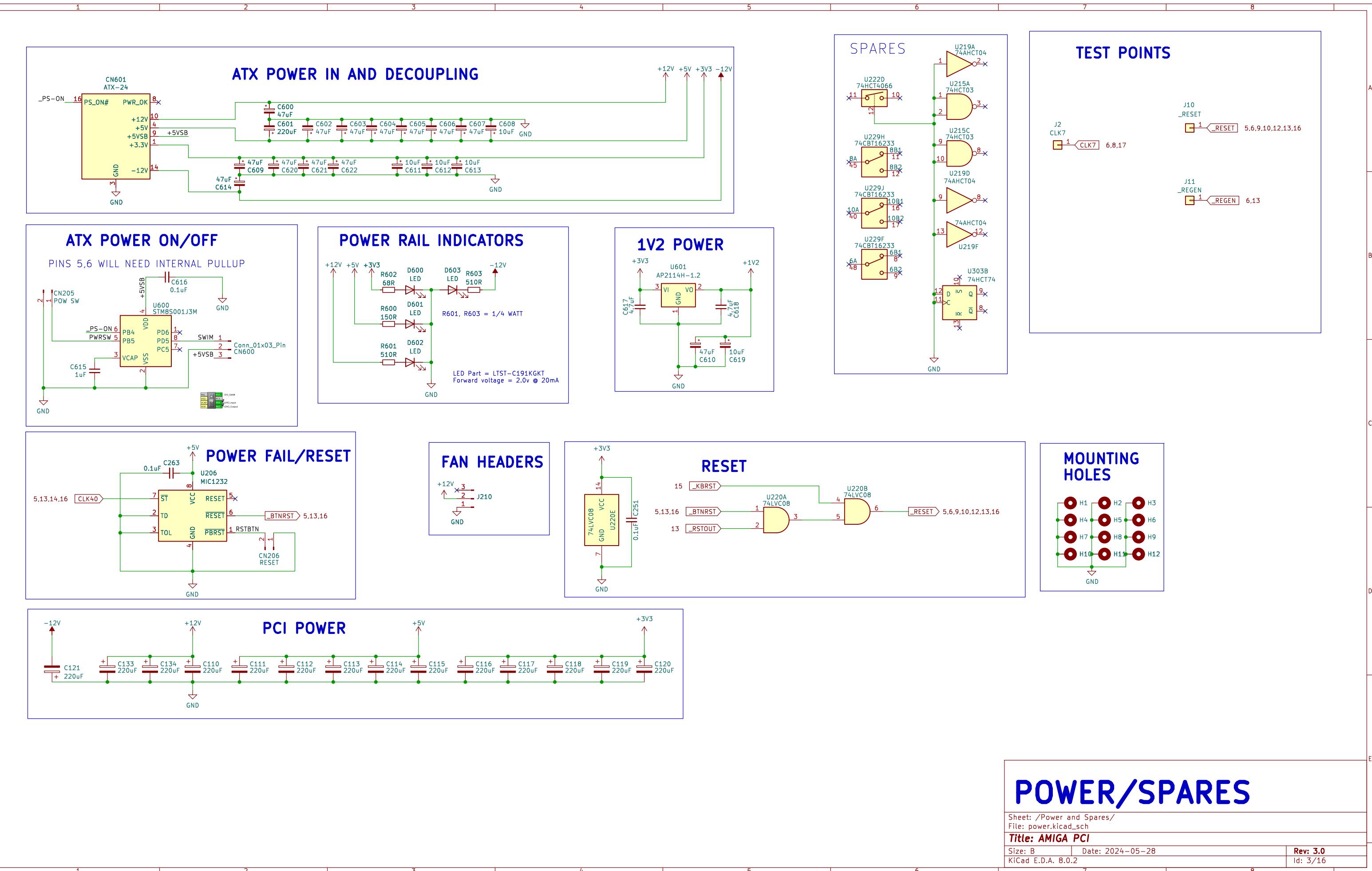


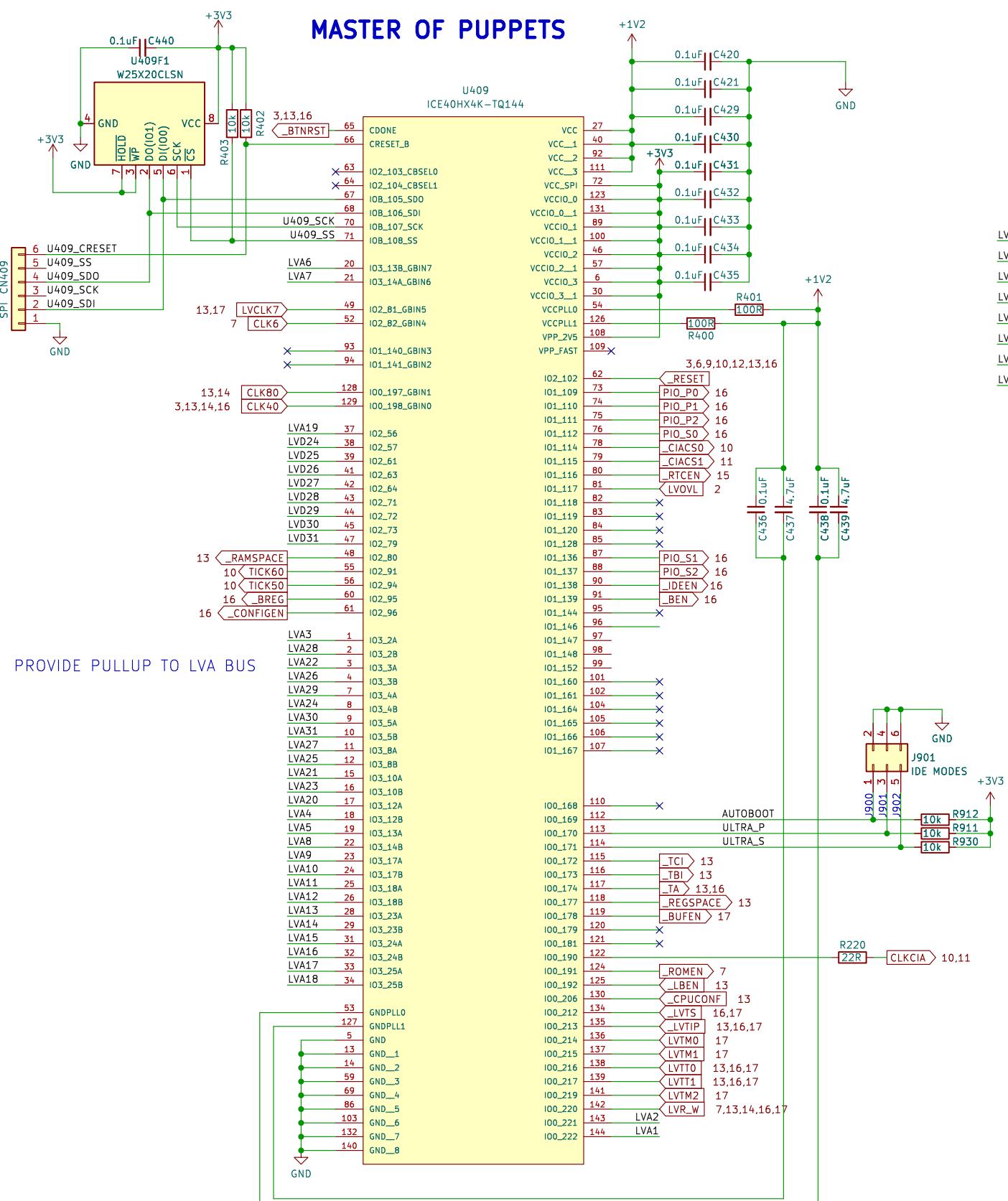
1 2 3 4 5 6 7 8



1 2 3 4 5 6 7 8

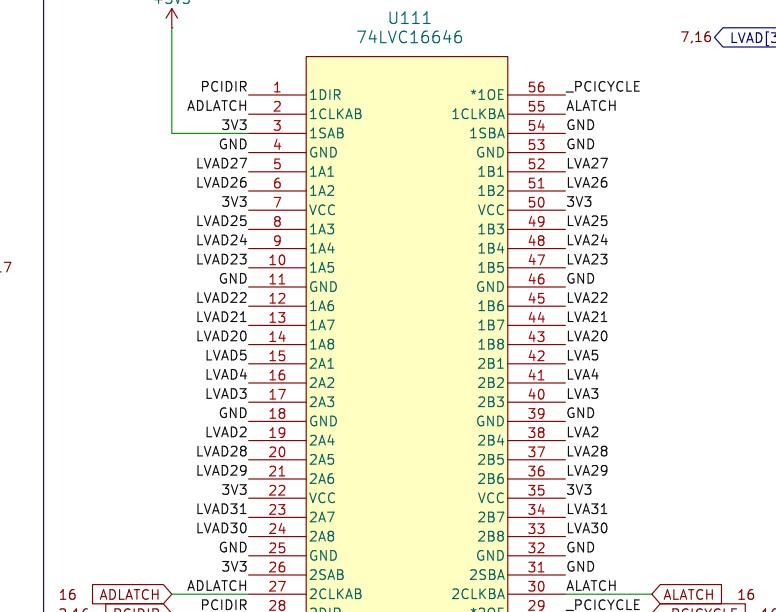






**U409 PROVIDES ONBOARD DEVICE AUTOCONFIG, ADDRESS DECODE, AND REPLACEMENT GARY FUNCTIONS**

## ADDRESS LATCH



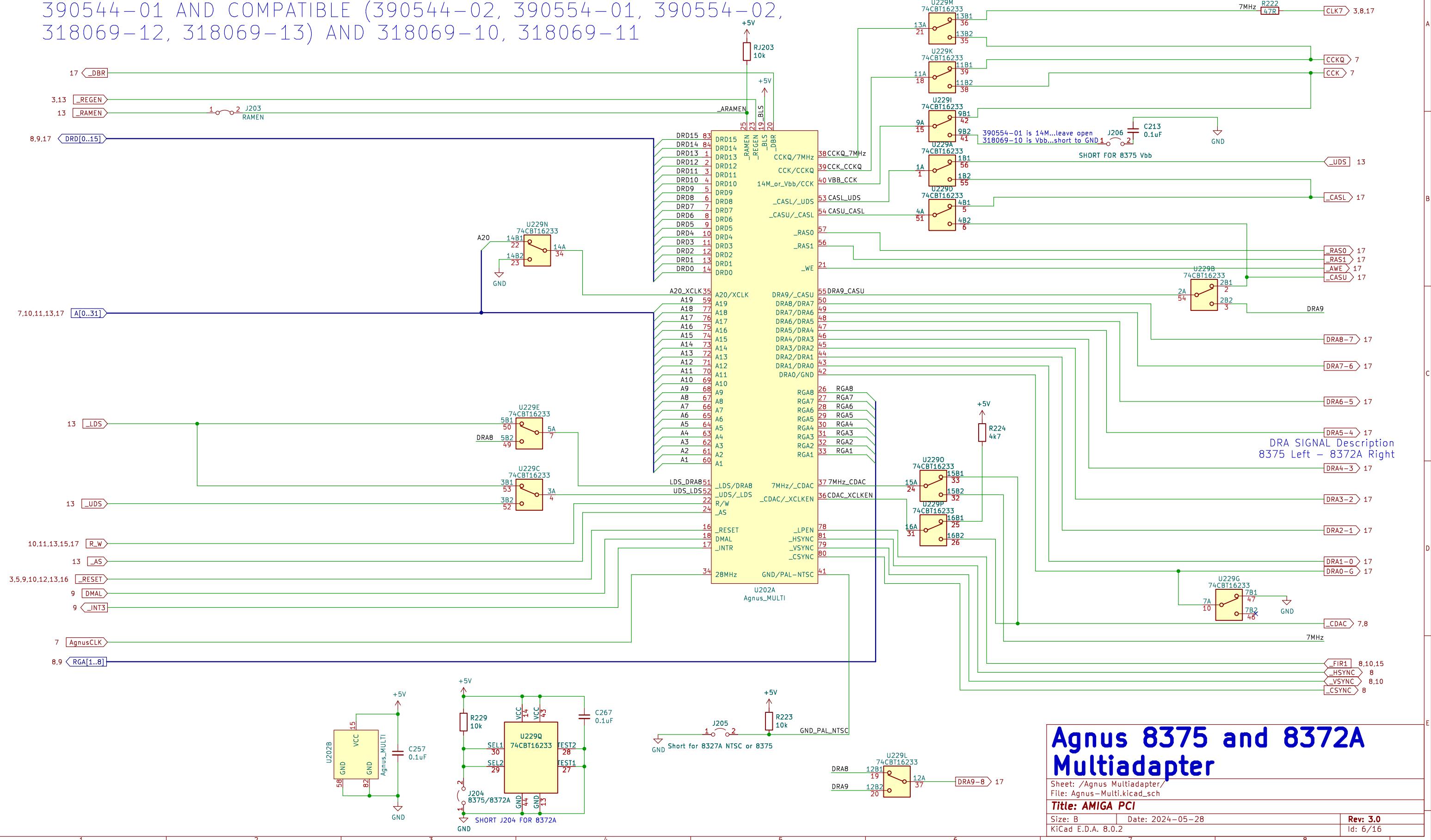
SUPPORTS 8372A (ALL PART NUMBERS)

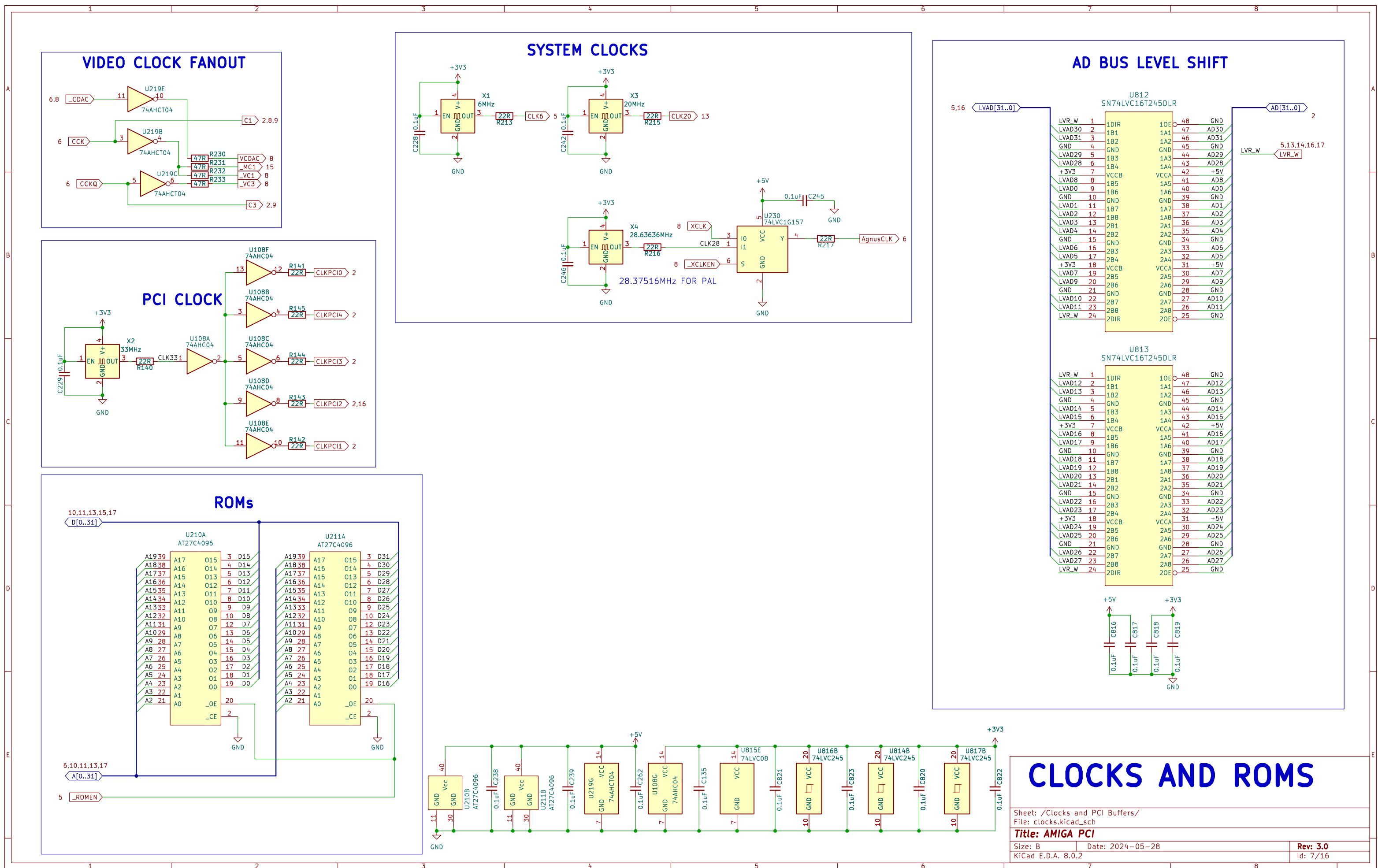
AND 8375 THE FOLLOWING PART NUMBERS:

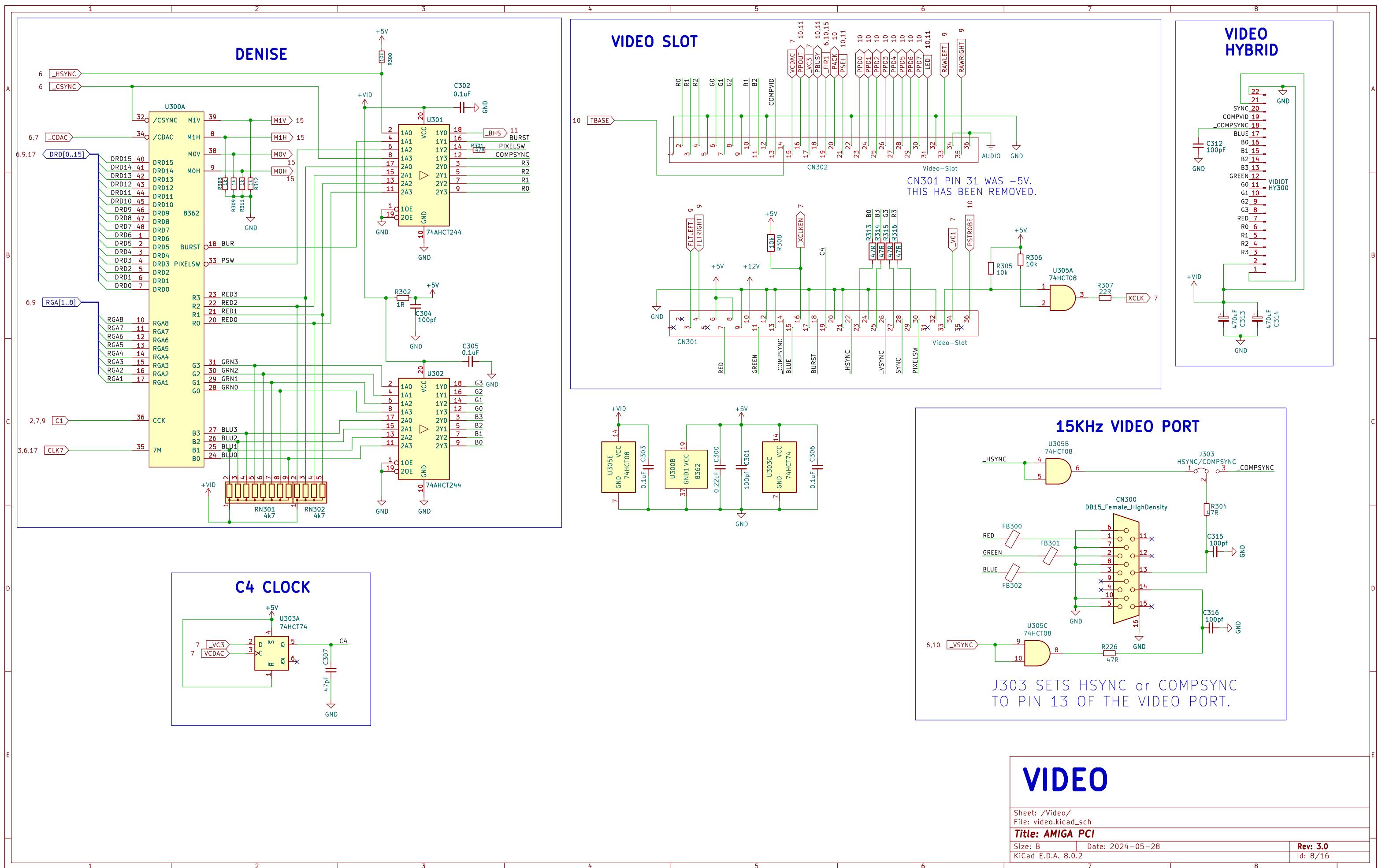
390544-01 AND COMPATIBLE (390544-02, 390554-01, 390554-02,

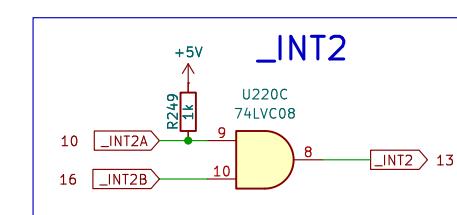
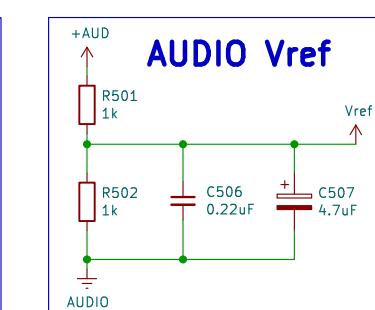
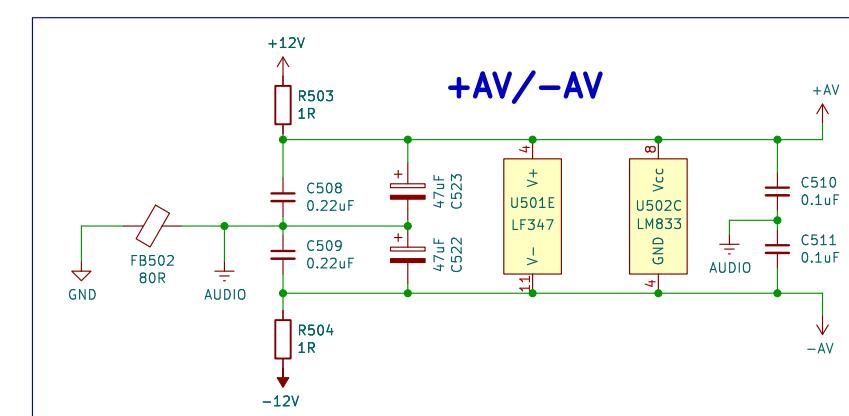
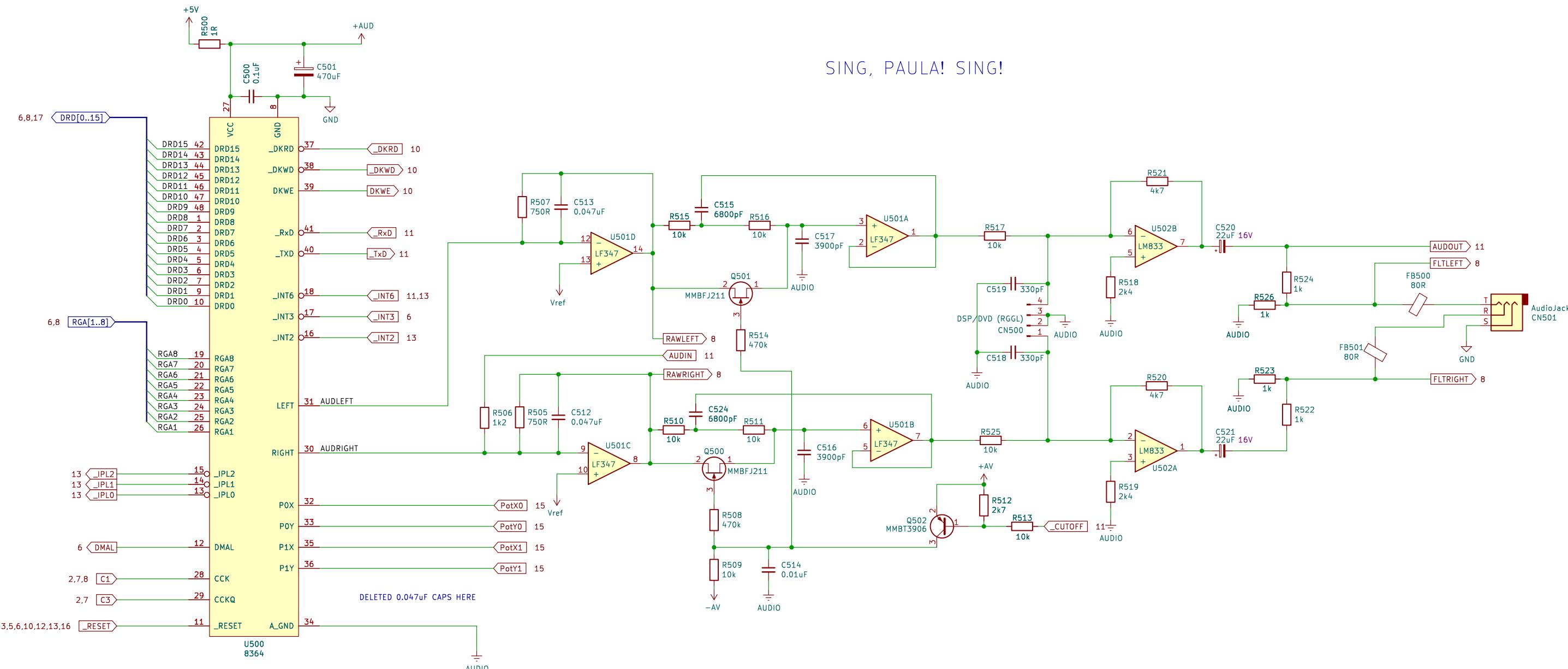
318069-12, 318069-13) AND 318069-10, 318069-11

JUMPERS MUST BE CONFIGURED BY AGNUS PART NUMBER









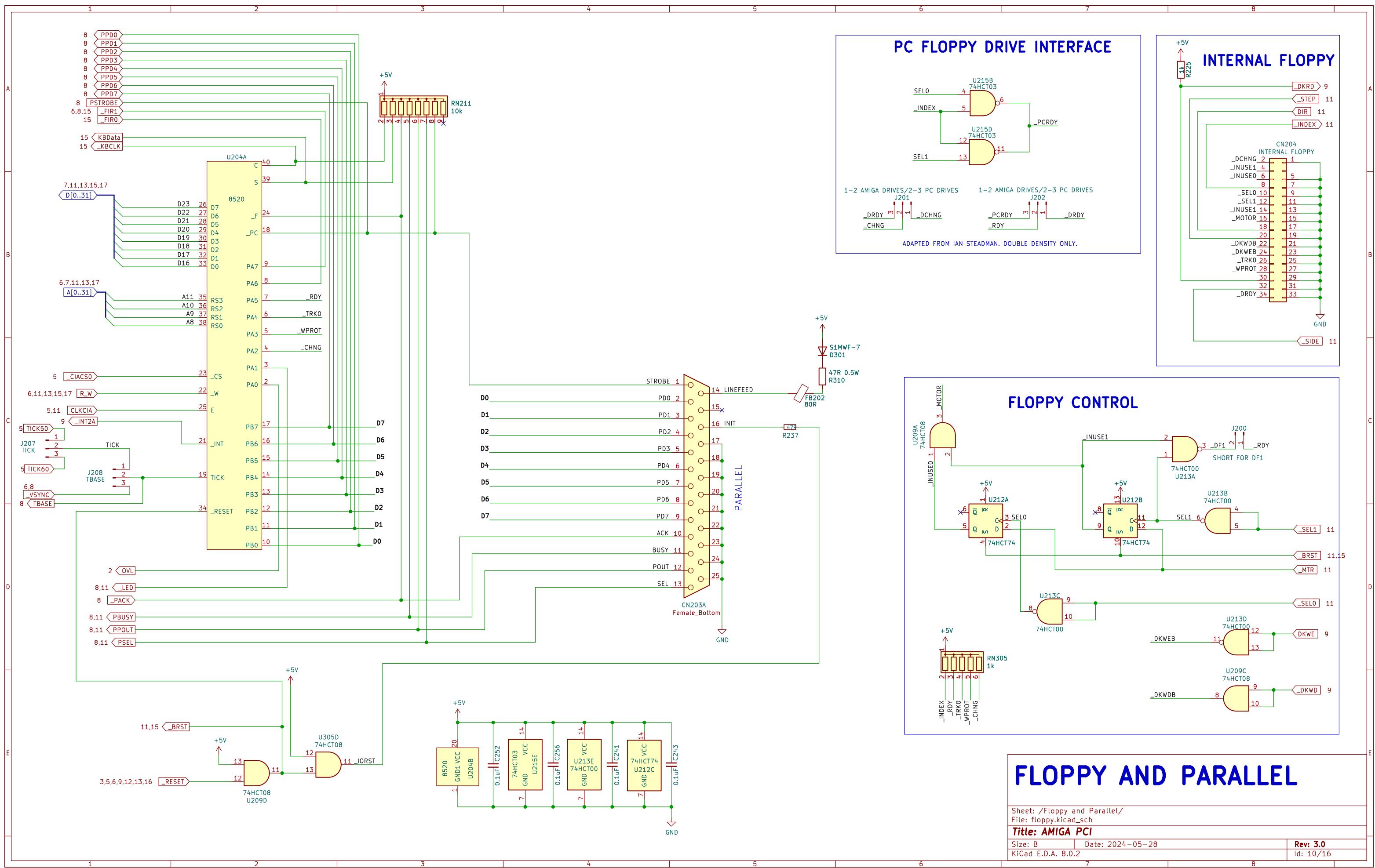
# PAULA/AUDIO

Sheet: /Audio/  
File: audio.kicad\_sch

Title: AMIGA PCI

Size: B Date: 2024-05-28  
KiCad E.D.A. 8.0.2

Rev: 3.0  
Id: 9/16



Sheet: /Floppy and Parallel/  
File: floppy.kicad\_sch

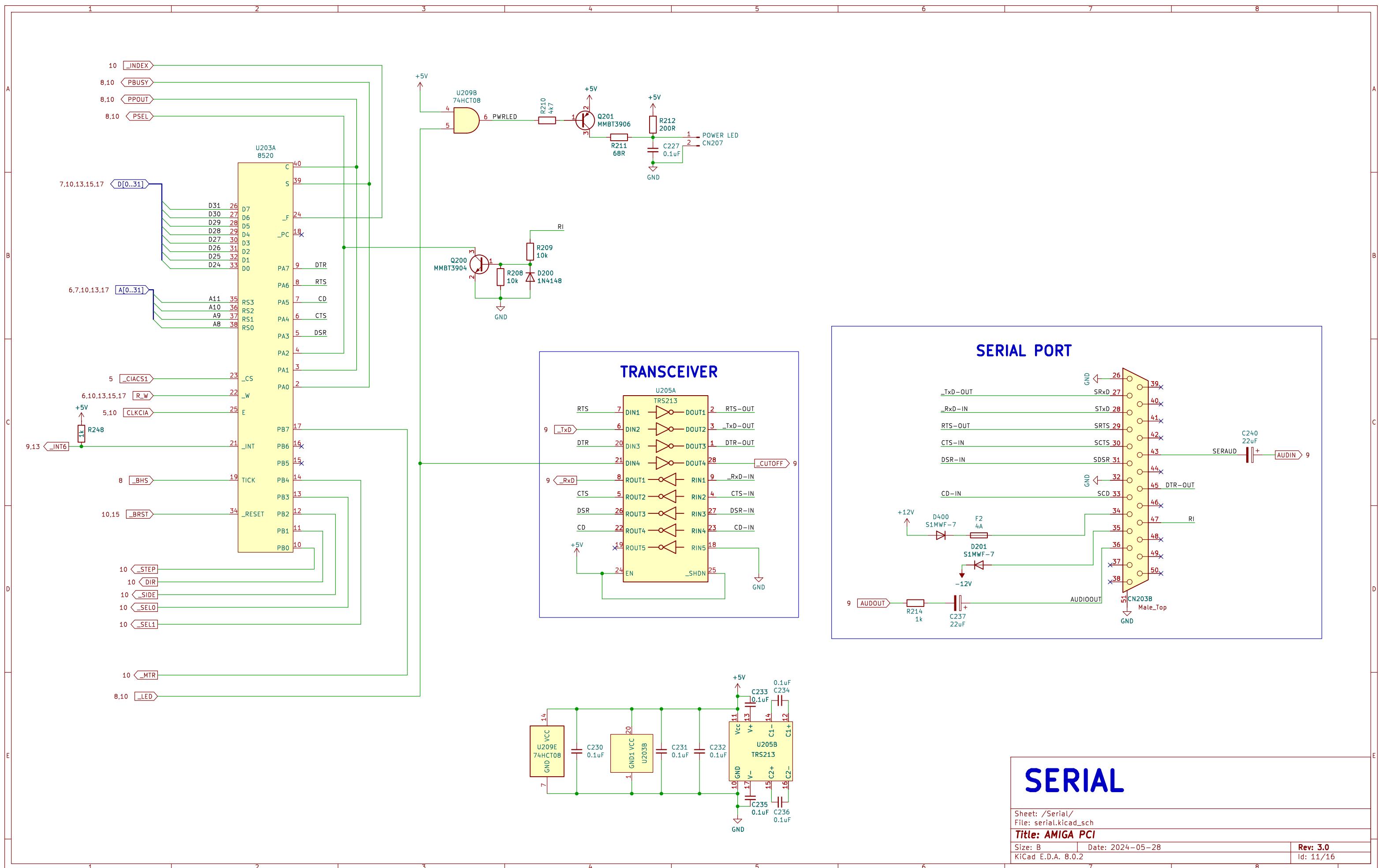
Title: AMIGA PCI

Size: B Date: 2024-05-28

KiCad E.D.A. 8.0.2

Rev: 3.0

Id: 10/16

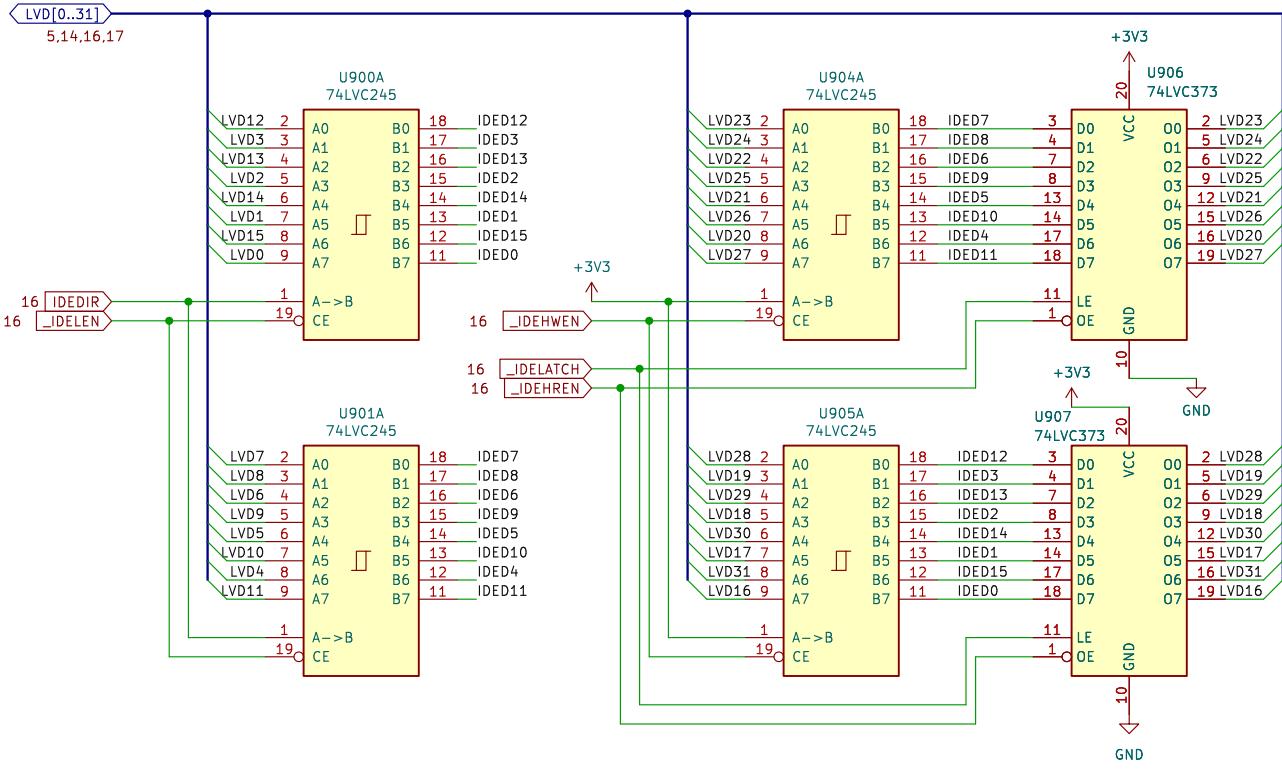


74LVC245 ENABLED FOR FIRST WORD DURING WRITES.  
DATA ALWAYS FLOWS A->B.  
74LVC373 LATCHES DATA FOR FIRST WORD DURING READS.

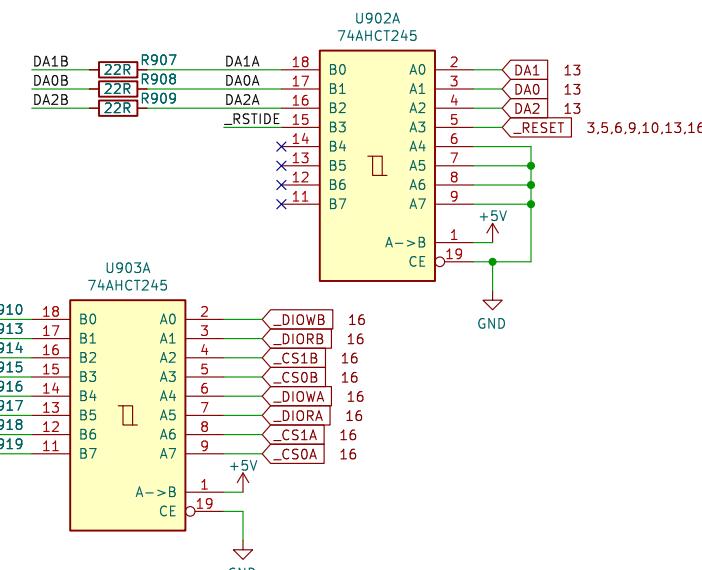
DURING WRITE CYCLES, ALL DATA IS REAL-TIME.  
FOR THE FIRST WRITE COMMAND, D16..31 IS ENABLED.  
FOR THE SECOND WRITE COMMAND, D0..15 IS ENABLED.

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.

## DATA BUFFERS



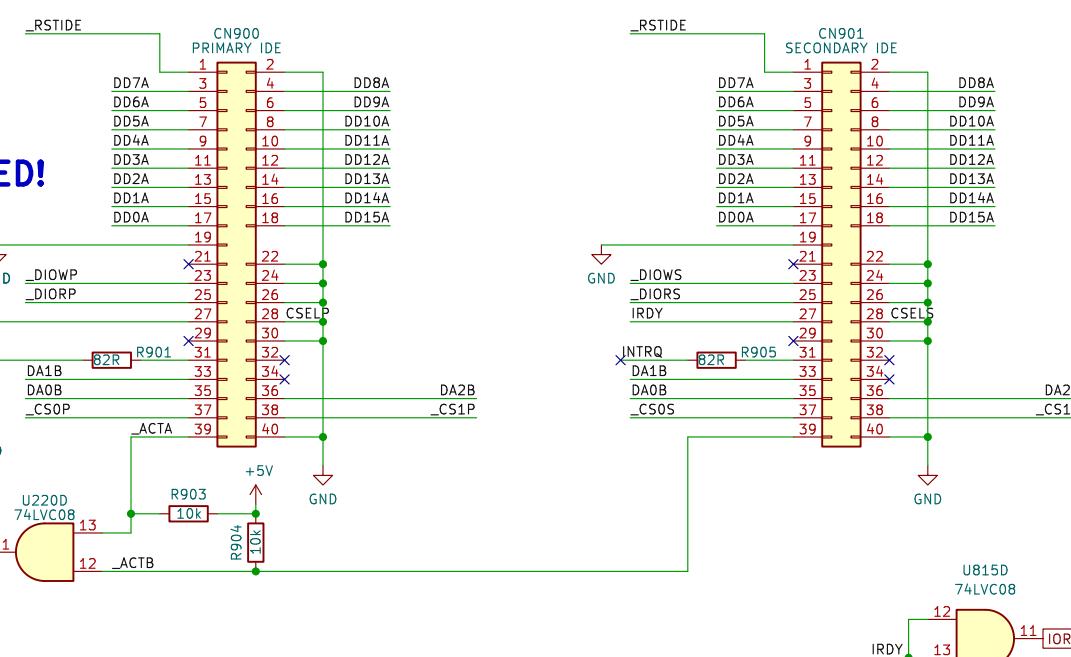
## BUFFERS AND TERMINATION



## DATA TERMINATION

DD8A	22R	R920	IDED0
DD7A	22R	R921	IDED15
DD9A	22R	R922	IDED1
DD6A	22R	R923	IDED14
DD10A	22R	R924	IDED2
DD5A	22R	R925	IDED13
DD11A	22R	R926	IDED3
DD4A	22R	R927	IDED12
DD3A	22R	R928	IDED11
DD12A	22R	R929	IDED4
DD2A	22R	R931	IDED10
DD13A	22R	R932	IDED5
DD1A	22R	R933	IDED9
DD14A	22R	R934	IDED6
DD0A	22R	R935	IDED8
DD15A	22R	R936	IDED7

## PORTS BYTE SWAPPED!



## IDE INTERFACE

Sheet: /IDE Interface/  
File: IDE.kicad\_sch

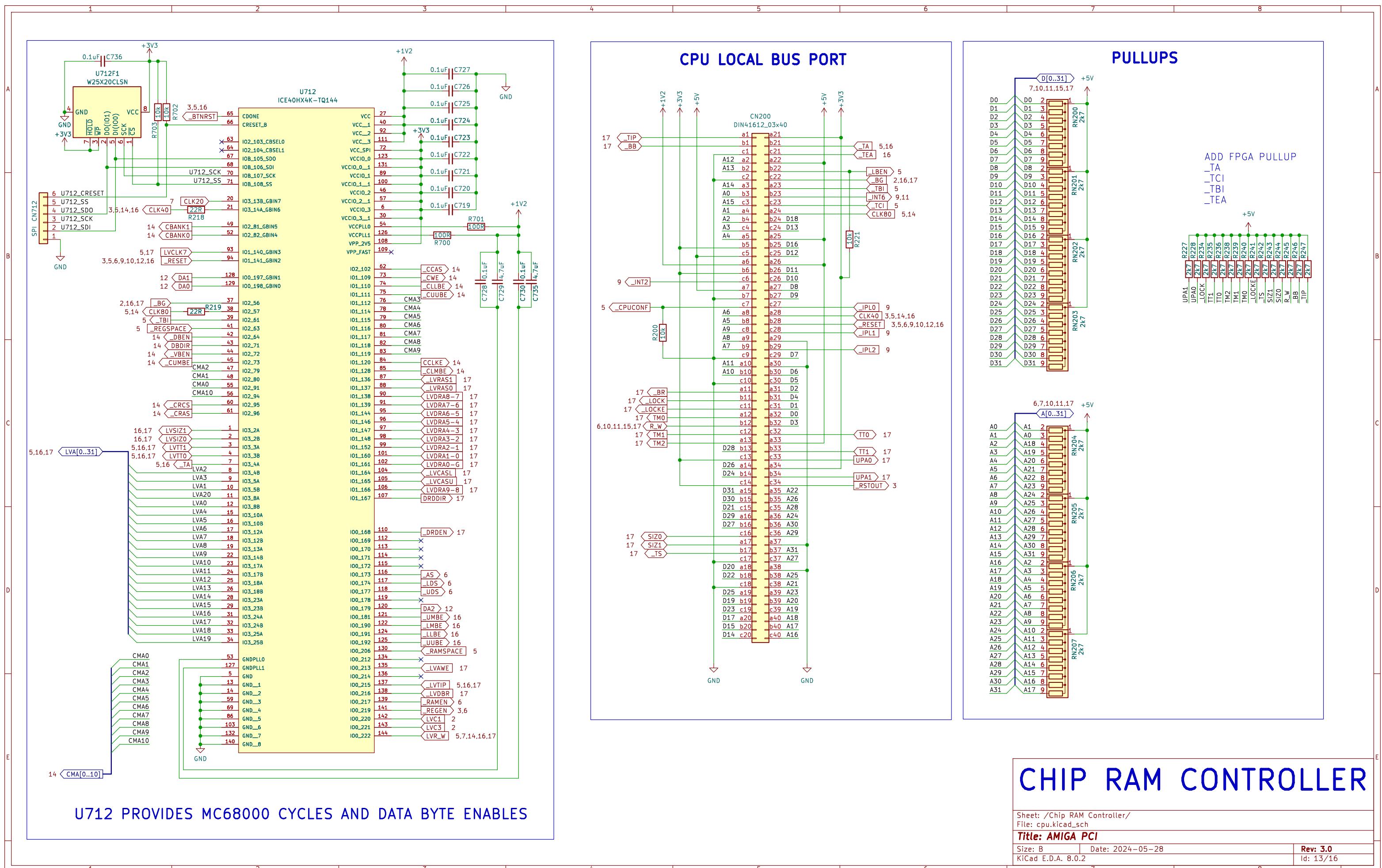
Title: AMIGA PCI

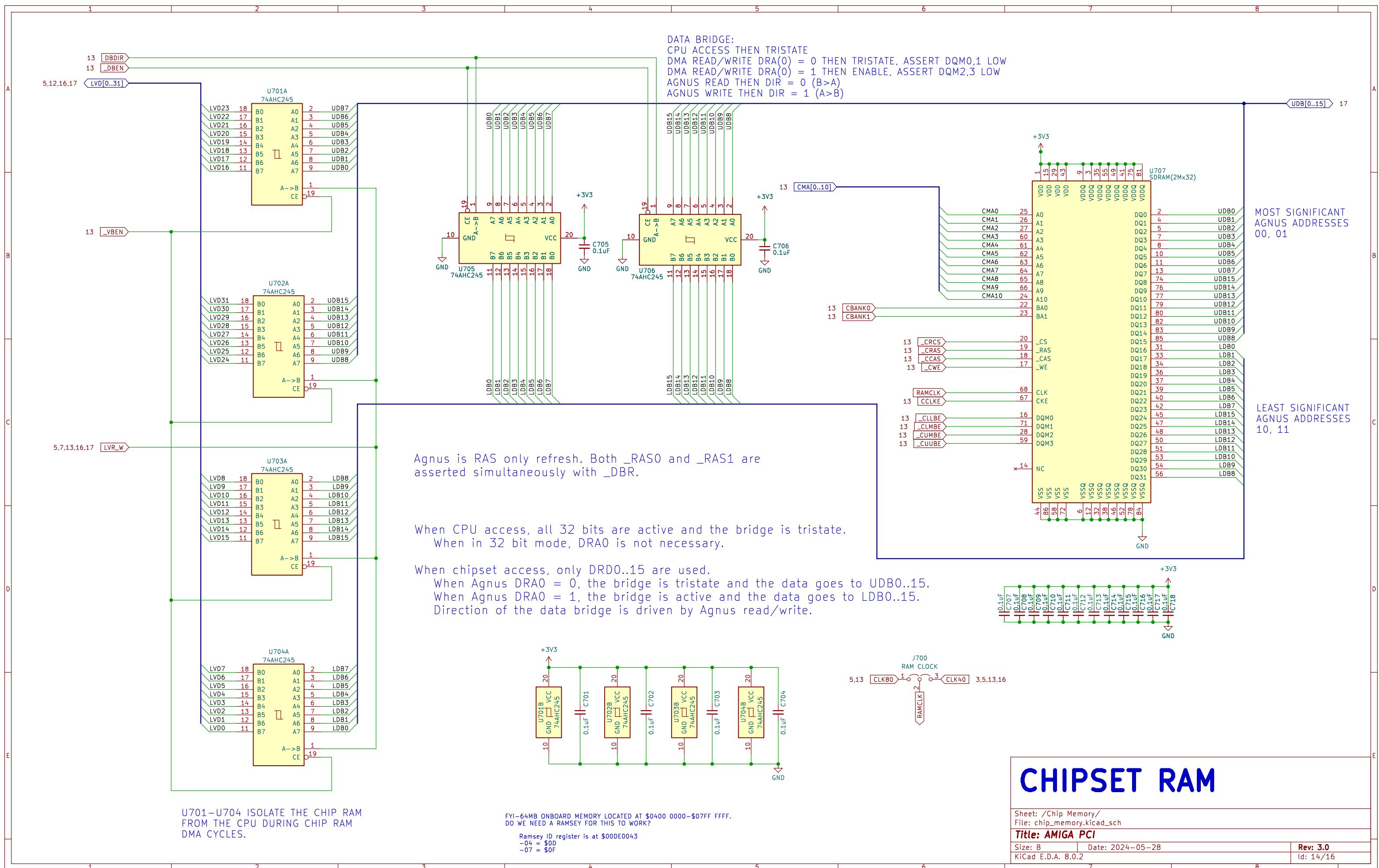
Size: B Date: 2024-05-28

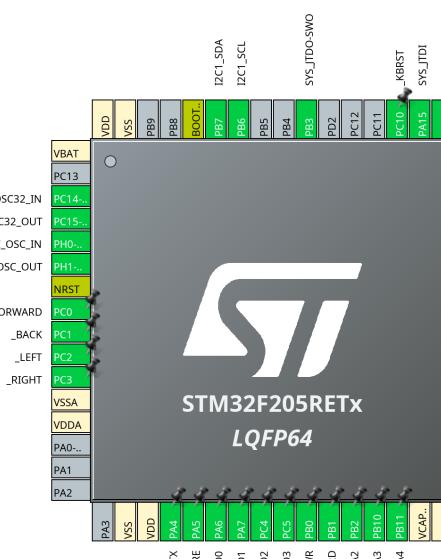
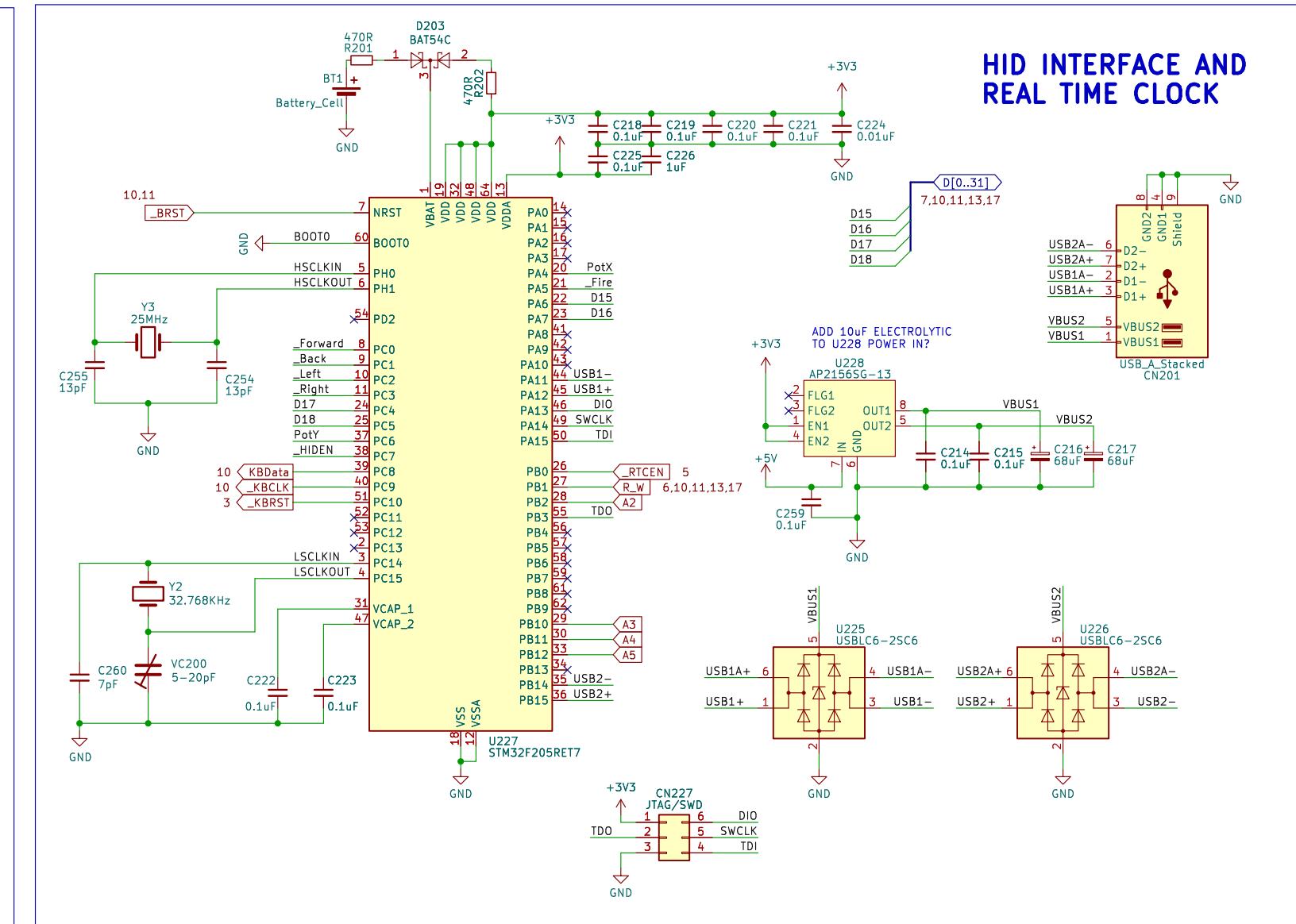
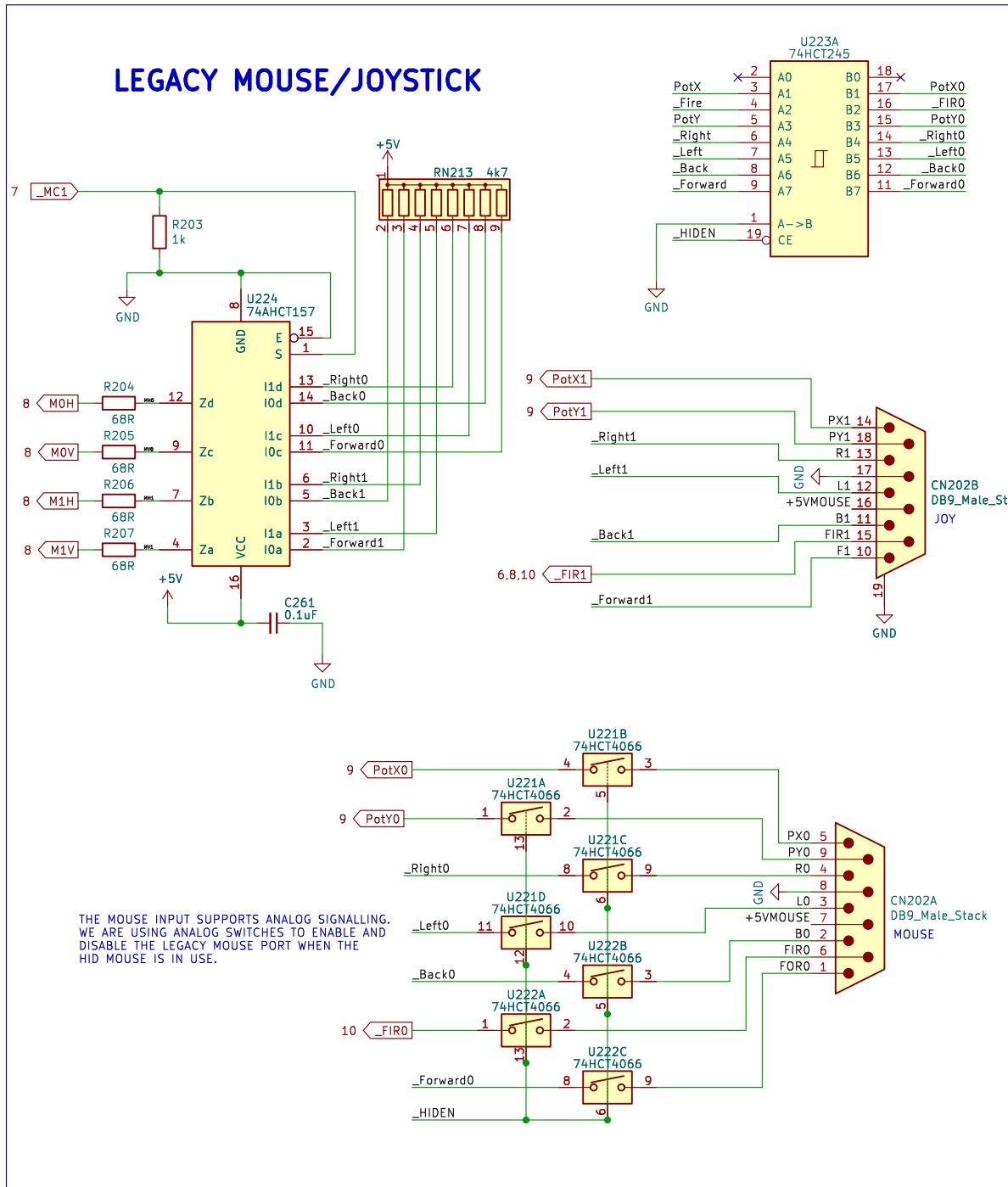
KiCad E.D.A. 8.0.2

Rev: 3.0

Id: 12/16







# HID and USER PORTS

Sheet: /HID and User Ports/  
File: hid.kicad\_sch

## Title: AMIGA PCI

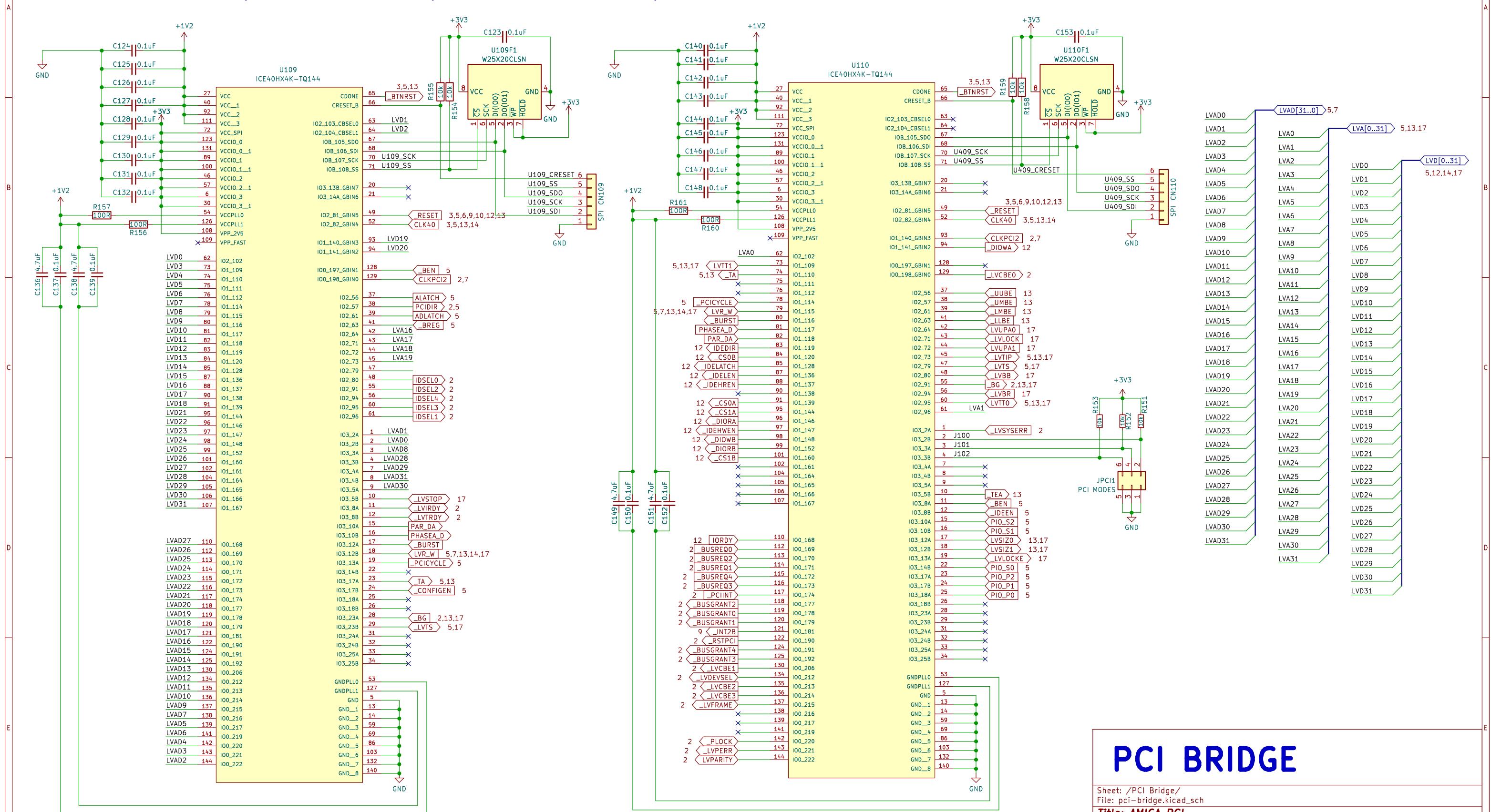
Size: B Date: 2024-05-28

KiCad E.D.A. 8.0.2

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

## U110: BUS ARBITRATOR, INTERRUPT HANDLING, PARITY ERROR DETECTION, IDE CONTROLLER



## PCI BRIDGE

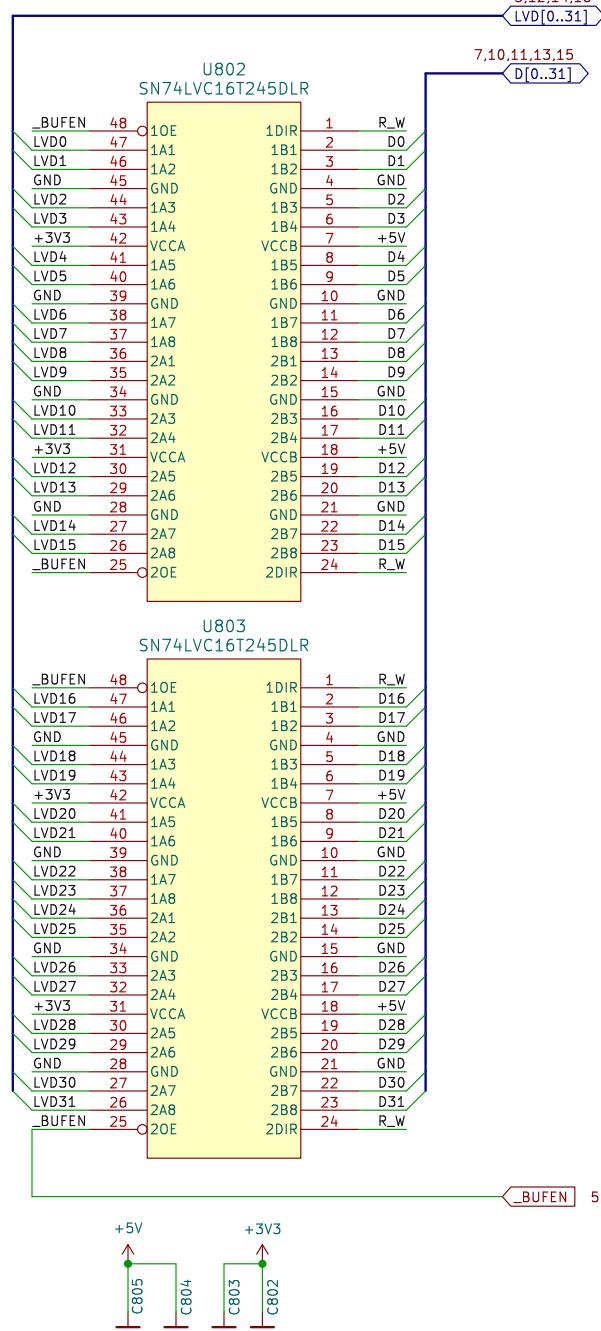
Sheet: /PCI Bridge/  
File: pci-bridge.kicad\_sch

Title: AMIGA PCI

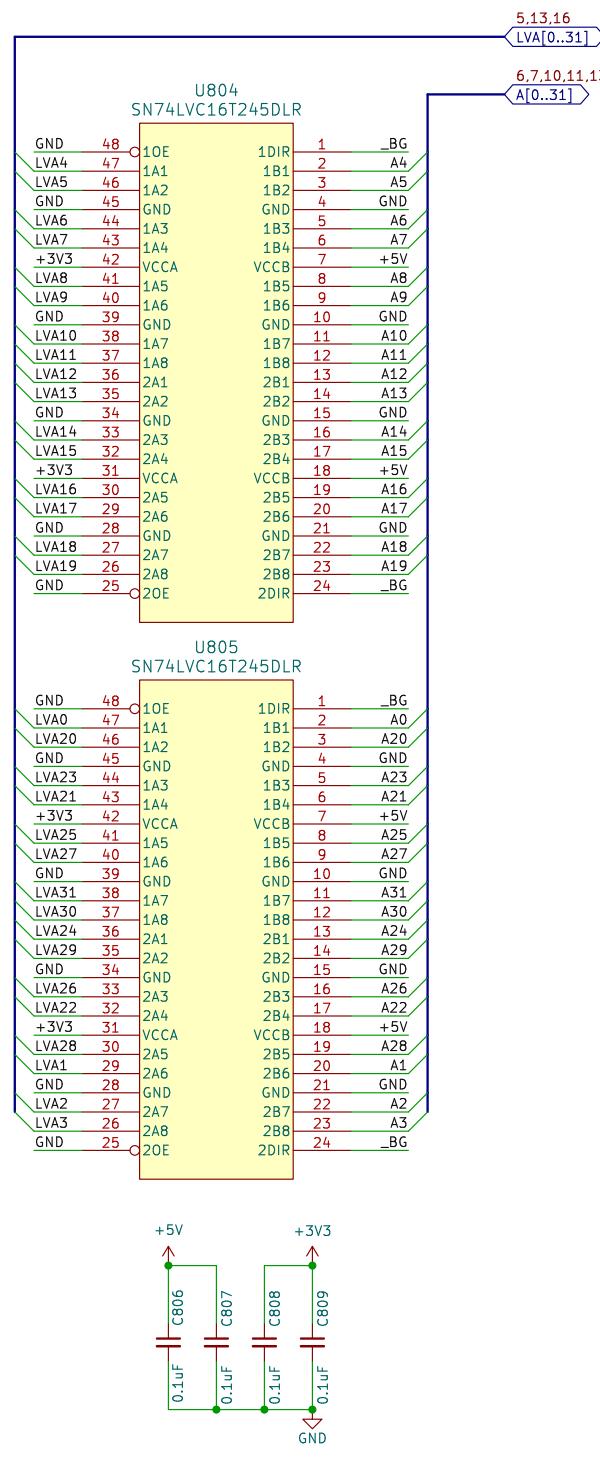
Size: B Date: 2024-05-28  
KiCad E.D.A. 8.0.2

Rev: 3.0  
Id: 16/16

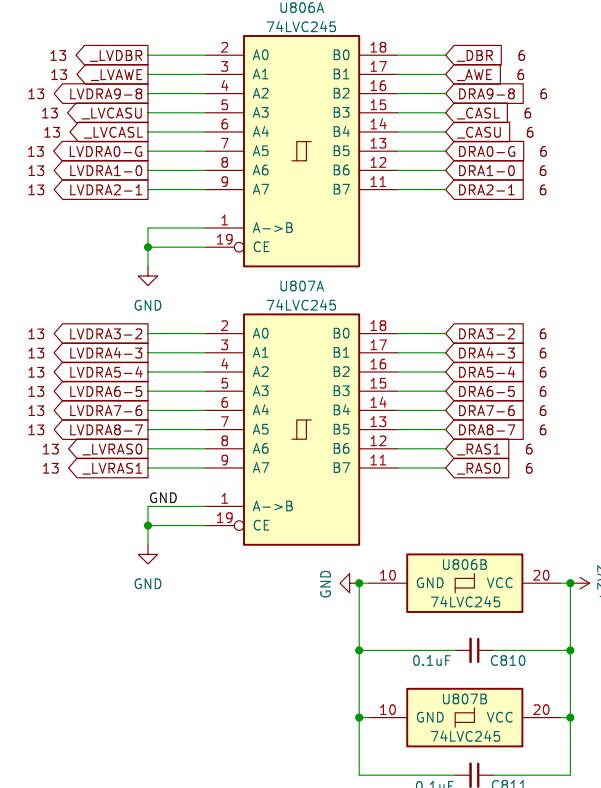
## LOW VOLTAGE DATA BUFFERS



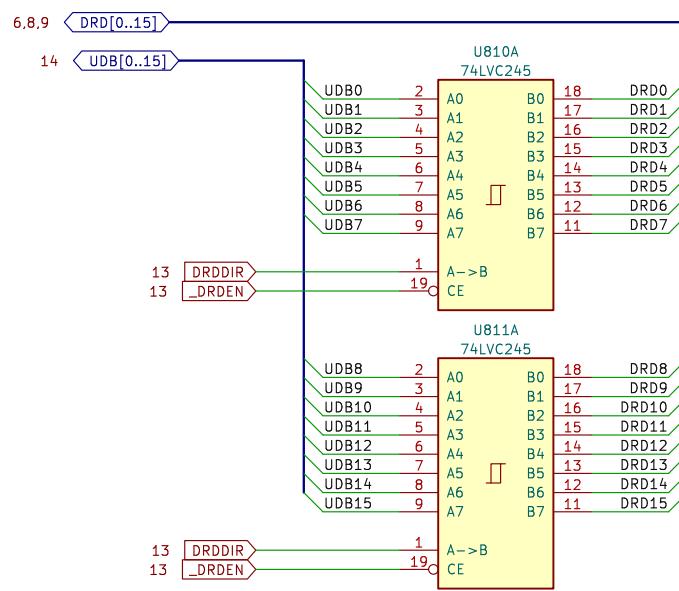
## LOW VOLTAGE ADDRESS BUFFERS



## LOW VOLTAGE AGNUS SIGNALS

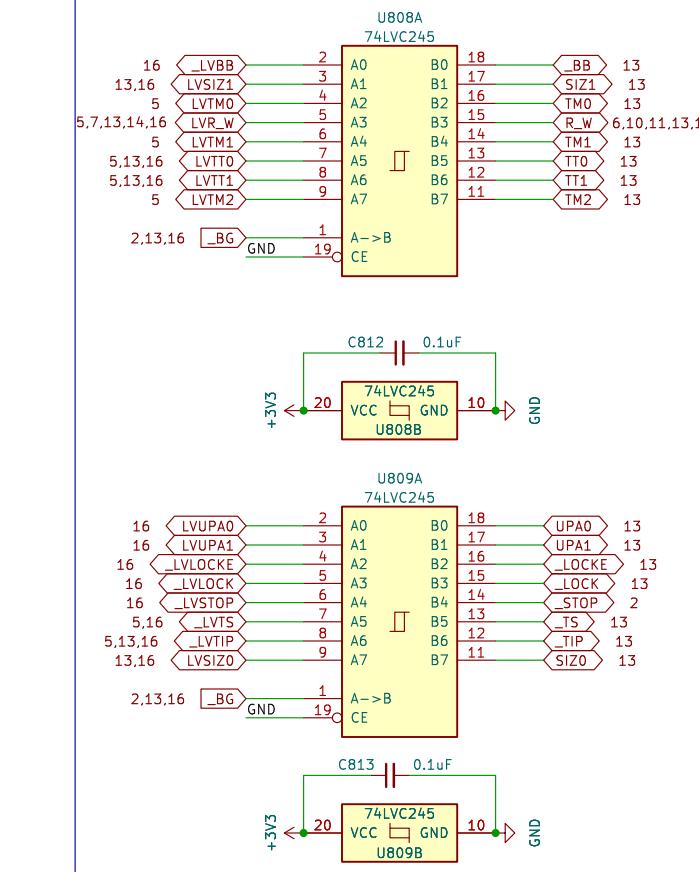


## LOW VOLTAGE CHIPSET RAM DATA BUS BUFFERS

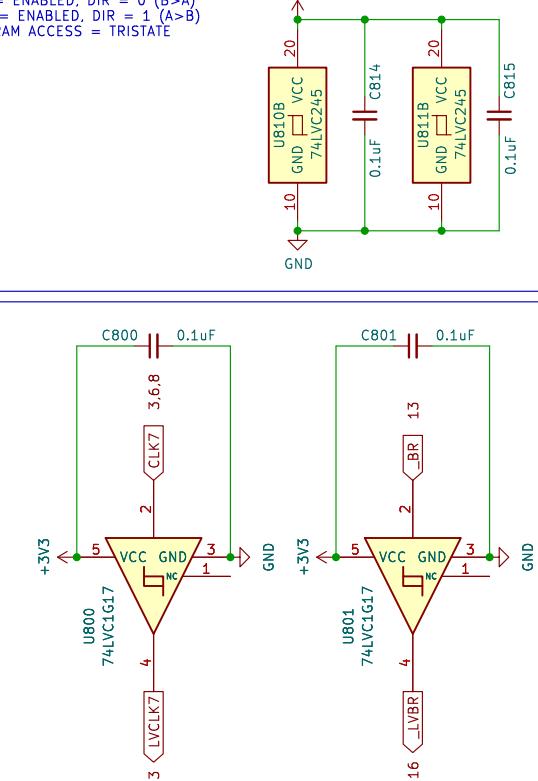


DMA READ = ENABLED, DIR = 1 (A>B)  
DMA WRITE = ENABLED, DIR = 0 (B>A)  
REG READ = ENABLED, DIR = 0 (B>A)  
REG WRITE = ENABLED, DIR = 1 (A>B)  
CPU CHIP RAM ACCESS = TRISTATE

## BIDIRECTIONAL MC68040



## UNIDIRECTIONAL SIGNALS



## MC68040 LEVEL SHIFT

Sheet: /MC68040_Level_Shift/	
File: mc68040_level_shift.kicad_sch	
Title: AMIGA PCI	
Size: B	Date: 2024-05-28
KiCad E.D.A. 8.0.2	Rev: 3.0
	Id: 17/16