RP1
Resistor SIL x8

RP2
Resistor SIL x8

+5V

GND

R6
10K

Q2
2N2907

/BUSACK

/NMI

R7
1K

U1
Z80

LED3
DMA

PD7
CLK

PC6
/RESET

PB1
/INT

R8
10K

/BUSREQ

/BUSRQ

/WAIT

/MREQ

/IORQ

/RD

/WR

/BUSAK

/RFSH

/HALT

/M1

RAM_CE2

PB2

U2
AS6C1008-55PCN

RAM_A15

RAM_A16

U3
74HC00N

BANK0

PD4

R4
10K

Q1
2N2907

R5
680

LED2
HALT

R1
10K

PB3
/WAIT

PB0
/WAIT_RES

R2
1K

LED1
IO_OP

PC4
PC3
PC5
PC2

PD3
BANK1

D1
1N5817_C698892

D2
1N5817_C698892

R3
1K2

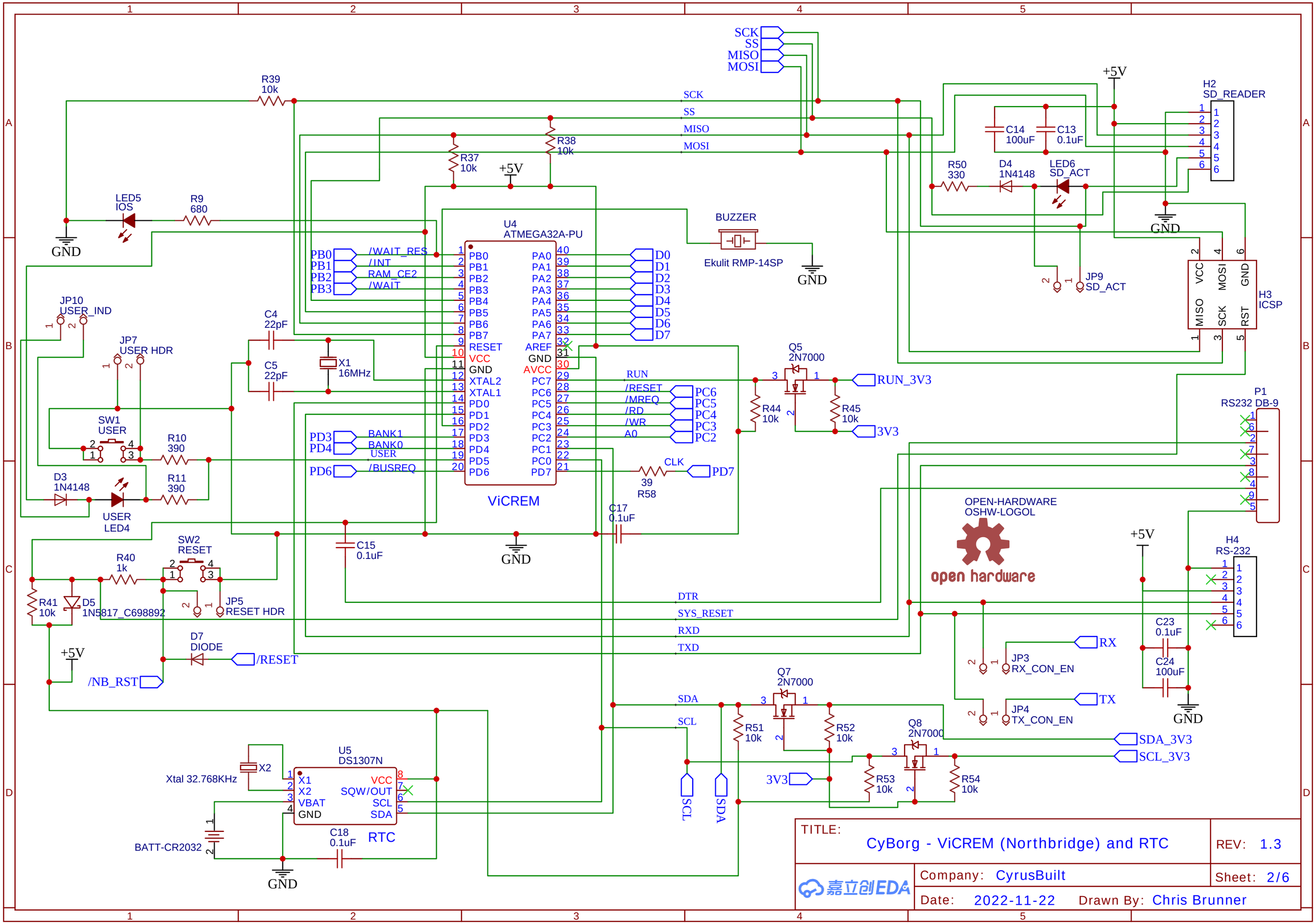
C1
100nF

C2
100nF

C3
100nF

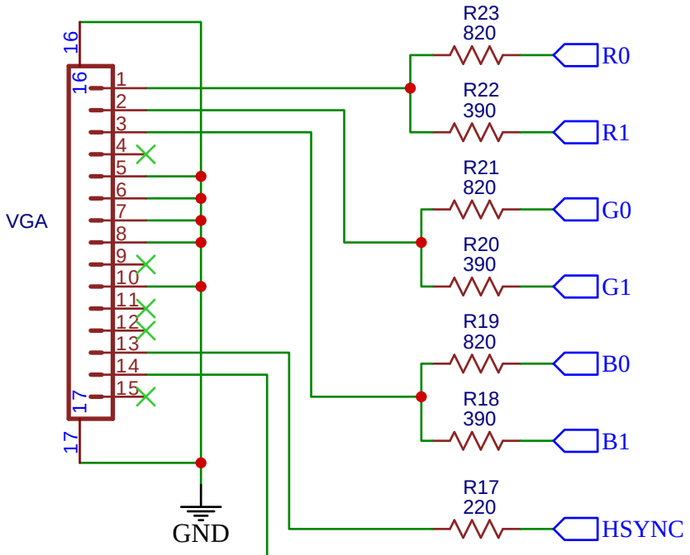
TITLE: CyBorg - CPU, RAM, Bus	REV: 1.3
Company: CyrusBuilt	Sheet: 1/6
Date: 2022-11-21	Drawn By: Chris Brunner

嘉立创EDA

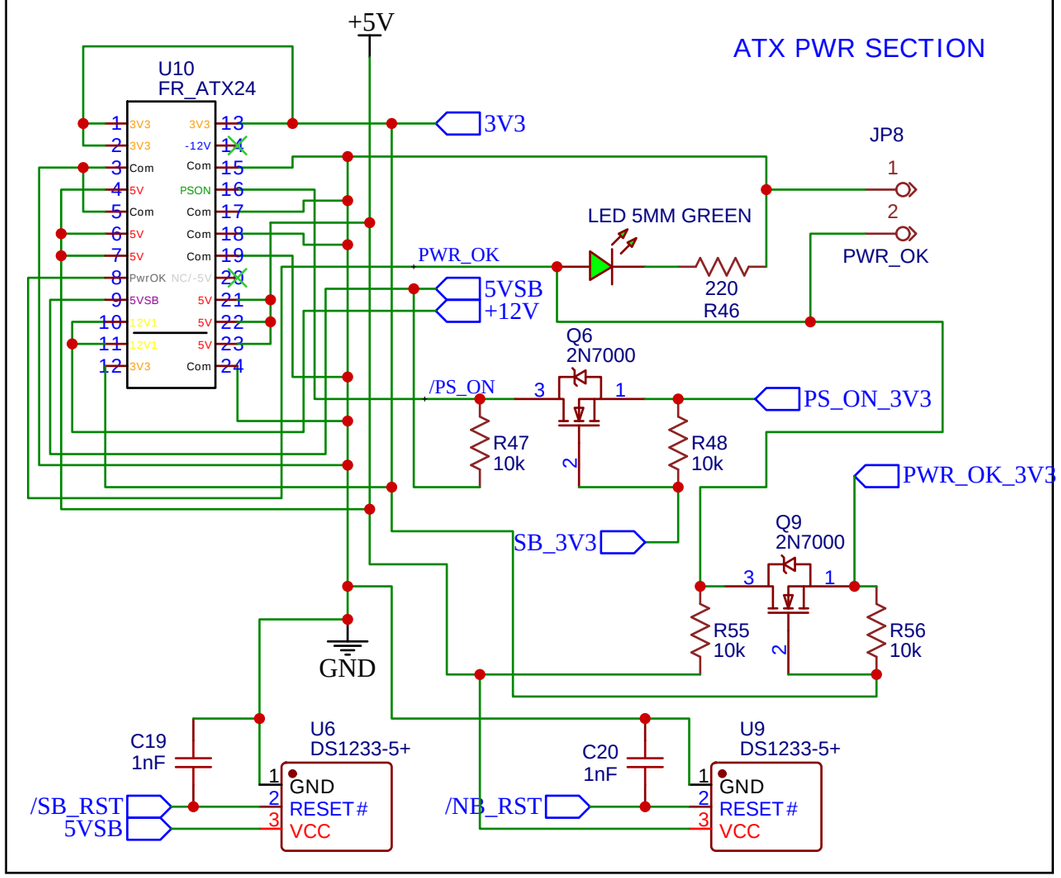


TITLE: CyBorg - ViCREM (Northbridge) and RTC		REV: 1.3
嘉立创EDA	Company: CyrusBuilt	Sheet: 2/6
	Date: 2022-11-22 Drawn By: Chris Brunner	

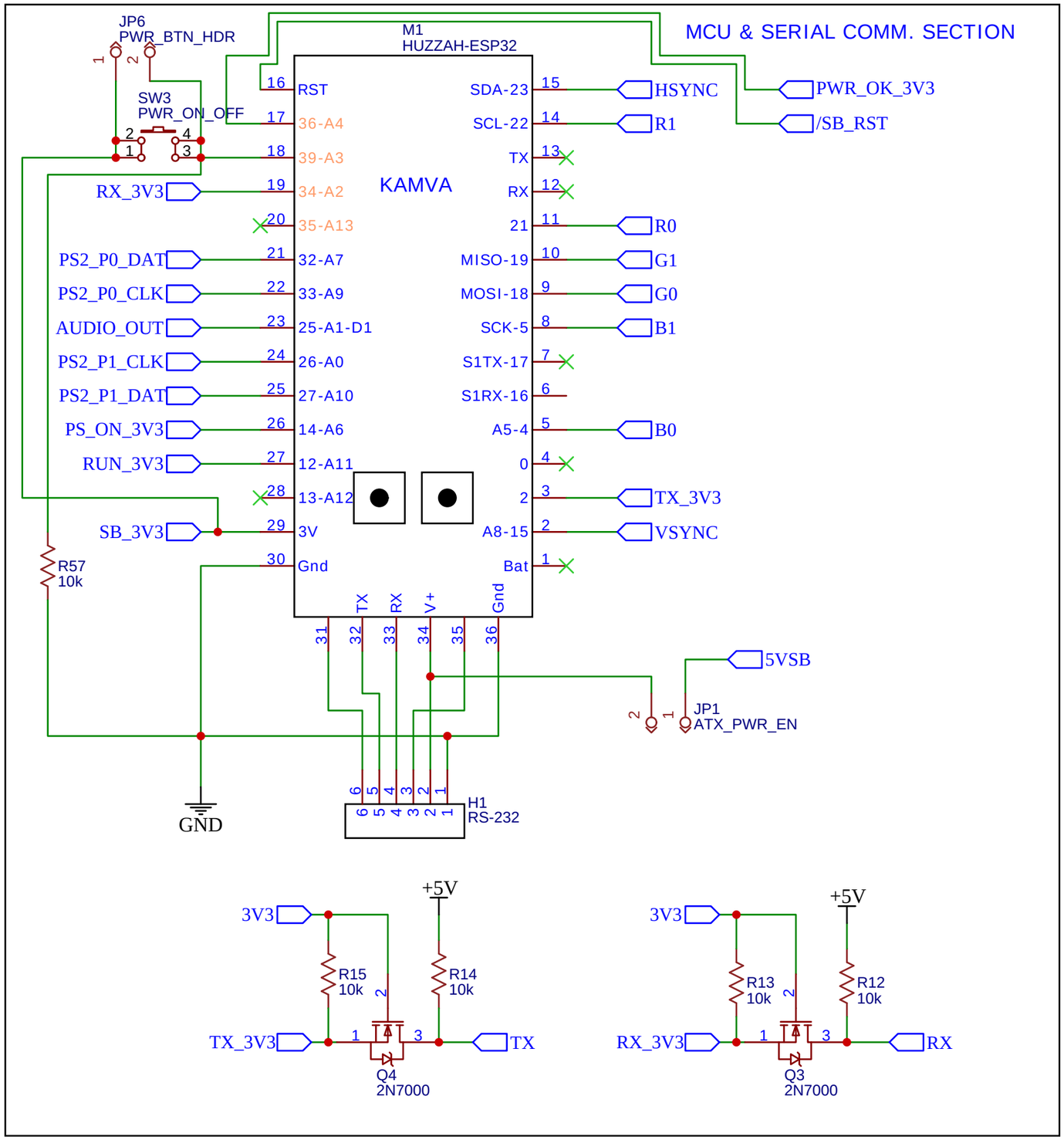
VGA SECTION



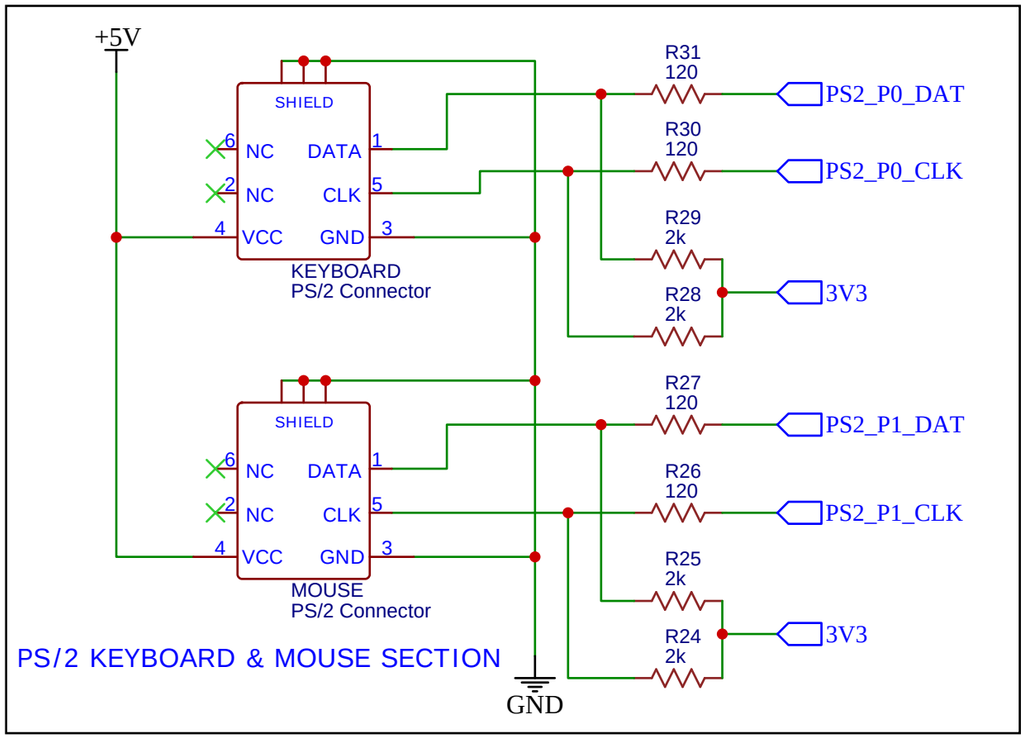
ATX PWR SECTION

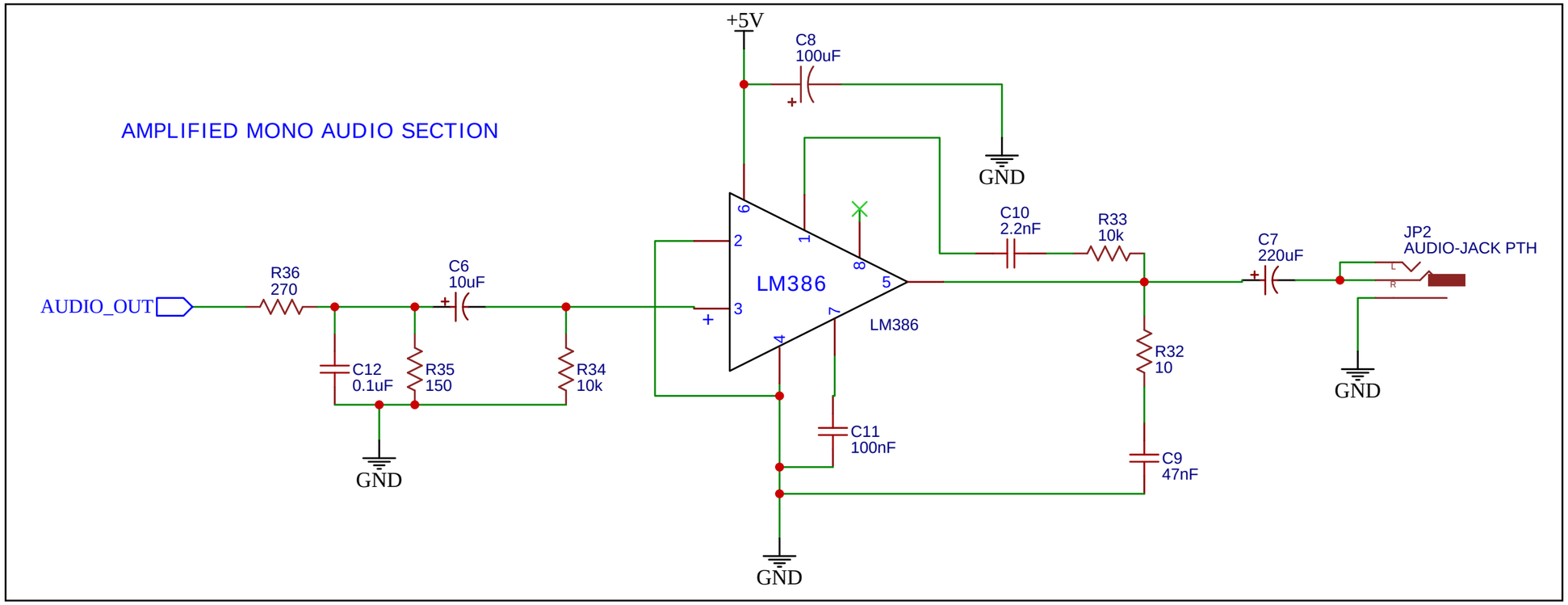


MCU & SERIAL COMM. SECTION

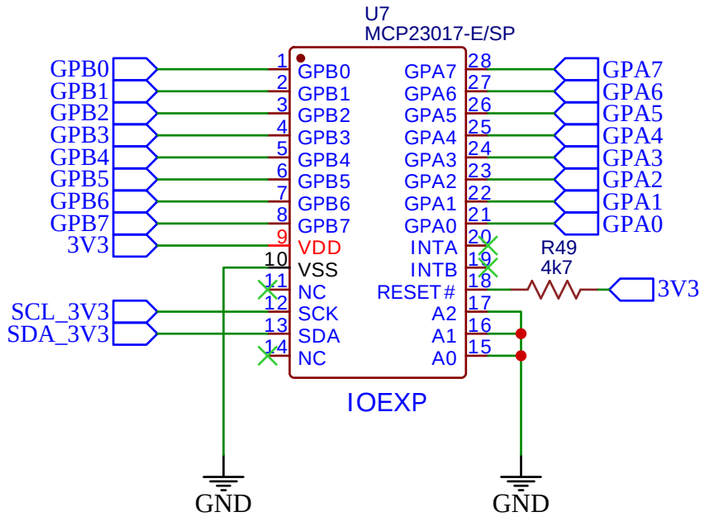


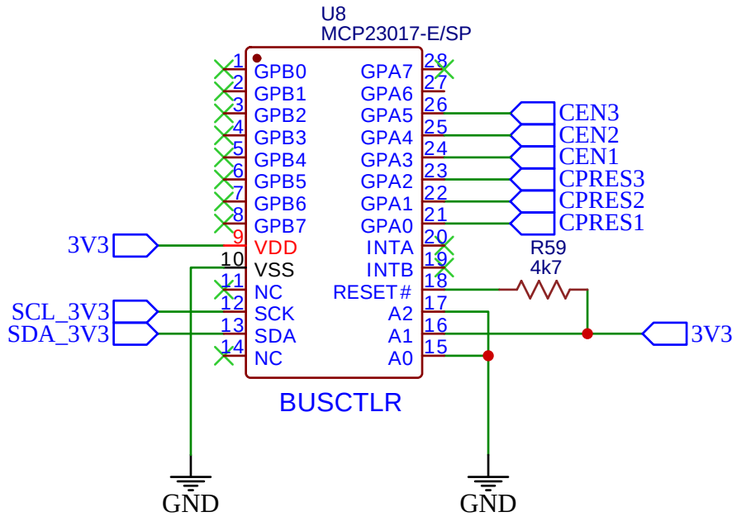
TITLE: CyBorg - KAMVA (Southbridge) - MCU & VGA		REV: 1.3
嘉立创EDA	Company: CyrusBuilt	Sheet: 3/6
	Date: 2022-11-23 Drawn By: Chris Brunner	





TITLE: CyBorg - KAMVA (Southbridge) - Audio & PS/2	REV: 1.3
Company: CyrusBuilt	Sheet: 4/6
Date: 2022-11-23 Drawn By: Chris Brunner	





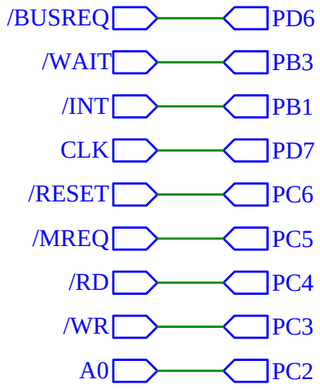
Reserved I2C Addresses

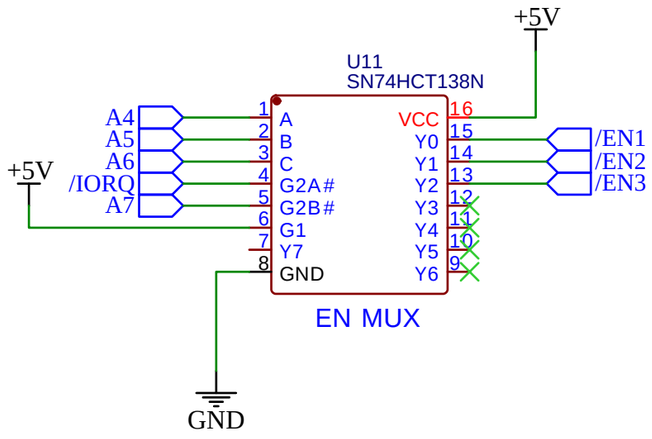
0x68 - RTC

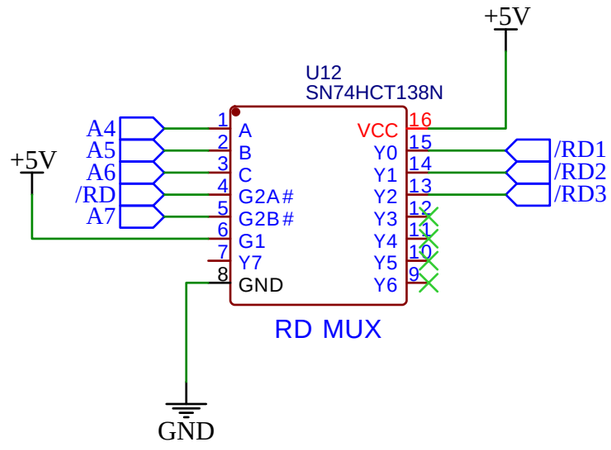
0x20 - IOEXP

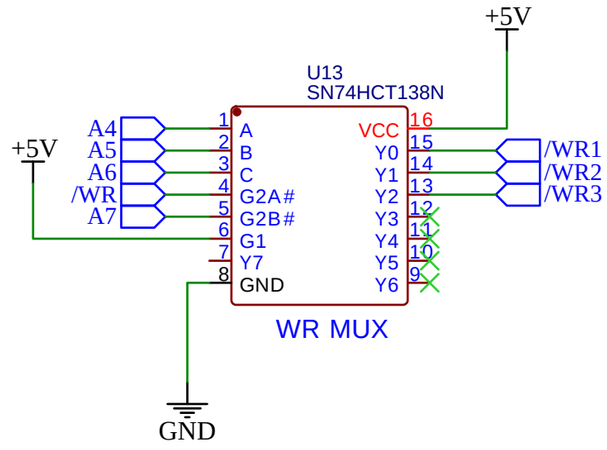
0x21 - CyBorgSPP

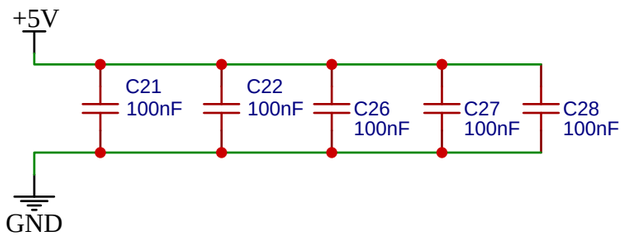
0x22 - BUSCTLR

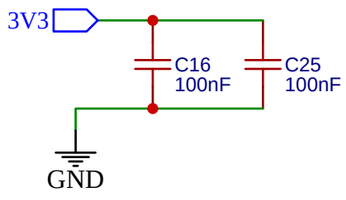






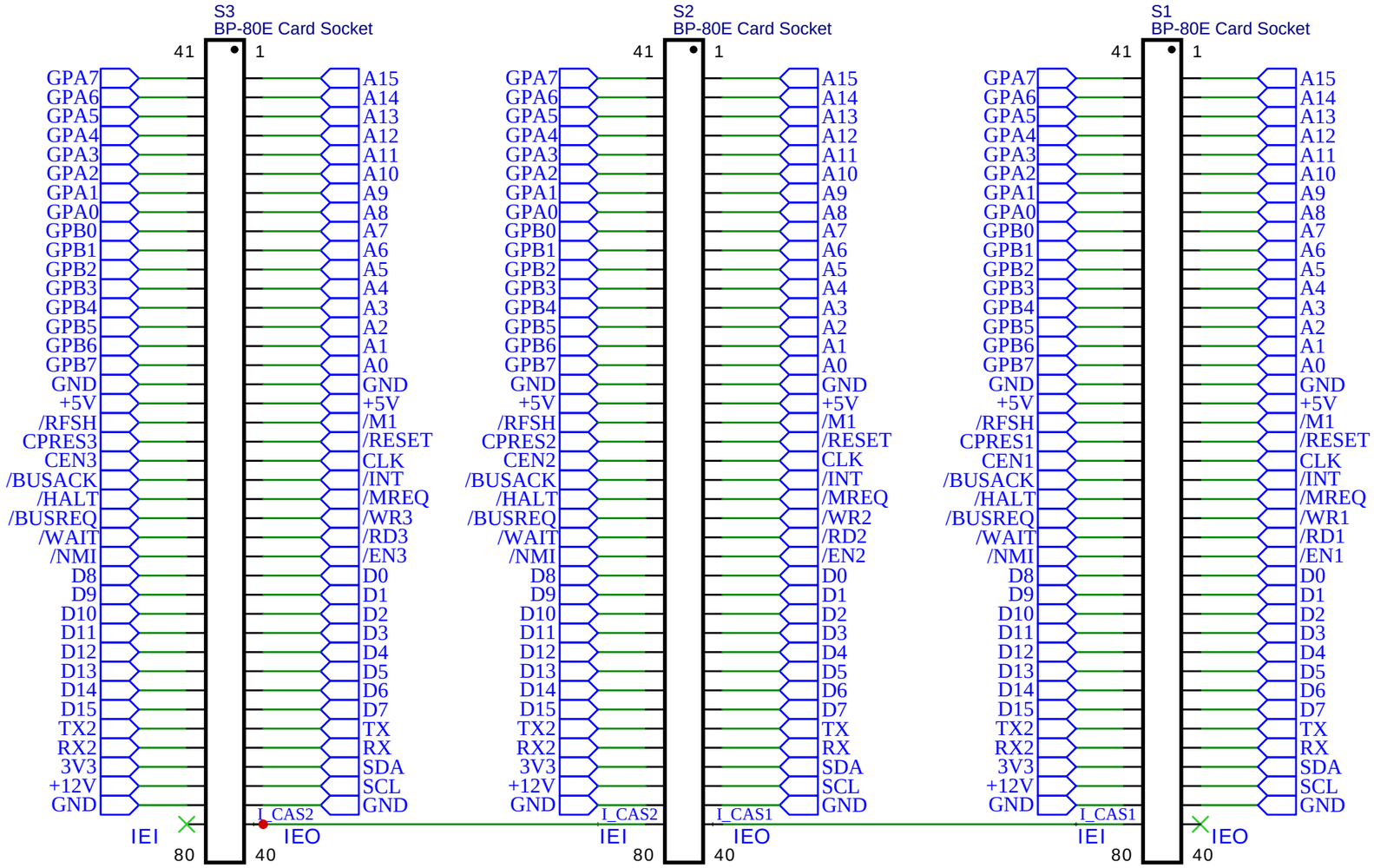




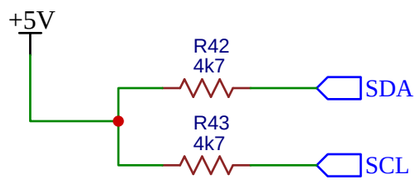


Use caution when using add-on cards designed for RC2014!!

TITLE: CyBorg - Bus Control		REV: 1.3
嘉立创EDA	Company: CyrusBuilt	Sheet: 5/6
	Date: 2022-11-24 Drawn By: Chris Brunner	



BP-80E is an unofficial variant of the RC2014 bus. BP-80E is essentially a modification of the RC80 bus which is also an unofficial RC2014 bus variant. The major differences are: A16-A23 are instead assigned to GPB0-7, n41-n48 are instead assigned to GPA0-7, address lines A4 - A7 are omitted, pins 56 & 57 are used for detection, and USER pins are assigned to extra power pins and (much like RC80) I2C bus, and interrupt cascade. This creates the potential danger when using cards designed for RC2014 and the like: If the add-on doesn't expect power on the USER pins (for example), you could fry the board or worse. Any add-on card that just uses the traditional power pins, address bus, data bus, and control signals should work fine and, of course, any boards specifically designed for the BP-80E bus should also be fine. In a future version I may change this to an entirely different slot type to avoid potential problems.



I2C Bus Term On Slot 3

TITLE: CyBorg - Expansion Bus		REV: 1.0
EasyEDA	Company: Your Company	Sheet: 6/6
	Date: 2024-11-05 Drawn By: Chris Brunner	