

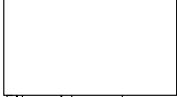
	1	2	3	4	5	6
A						
B						
C						
D						
	1	2	3	4	5	6

Sheet: CPU



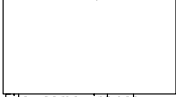
File: cpu.sch

Sheet: Video



File: video.sch

Sheet: Gamepads and Interrupts



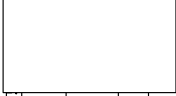
File: game-int.sch

Sheet: Power, USB, Serial



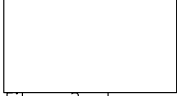
File: usbser.sch

Sheet: SD Card



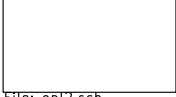
File: sd-card.sch

Sheet: Keyboard, Mouse



File: ps2.sch

Sheet: OPL2 sound



File: opl2.sch

Sheet: Real time clock



File: rtc.sch

nils.eilers@gmx.de

Sheet: /  
File: main.sch

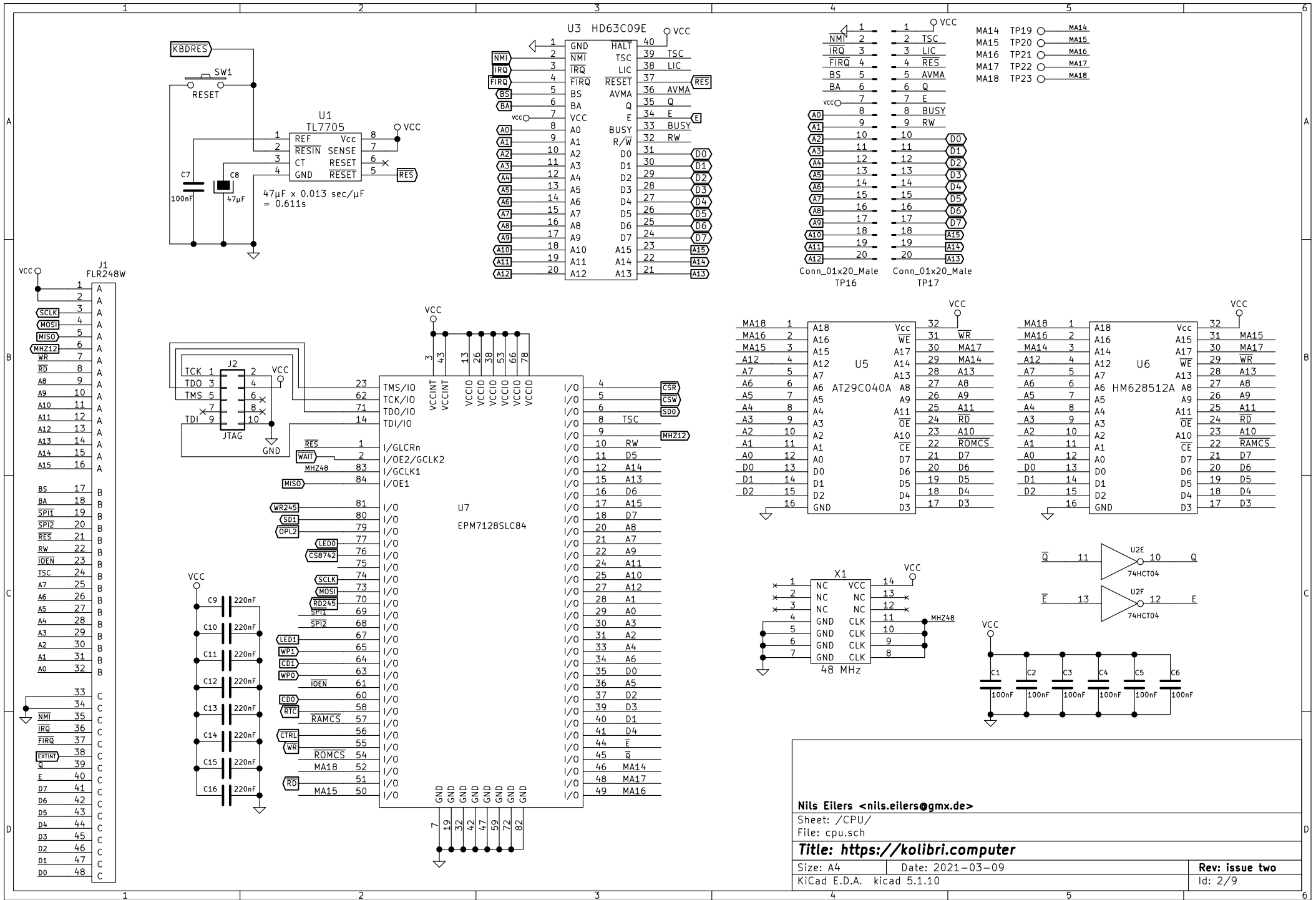
Title: kolibri

Size: A4      Date: 2021-03-09

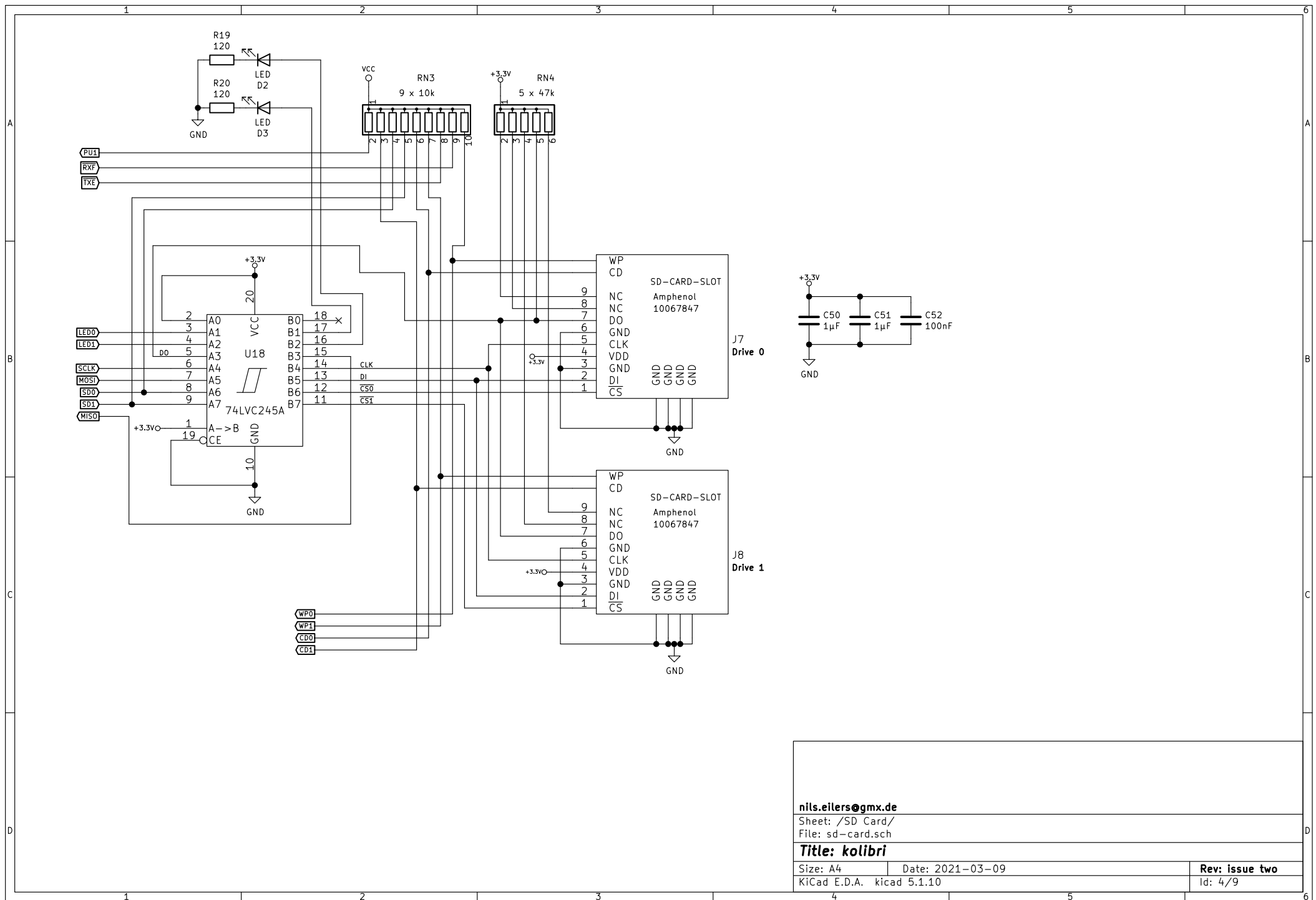
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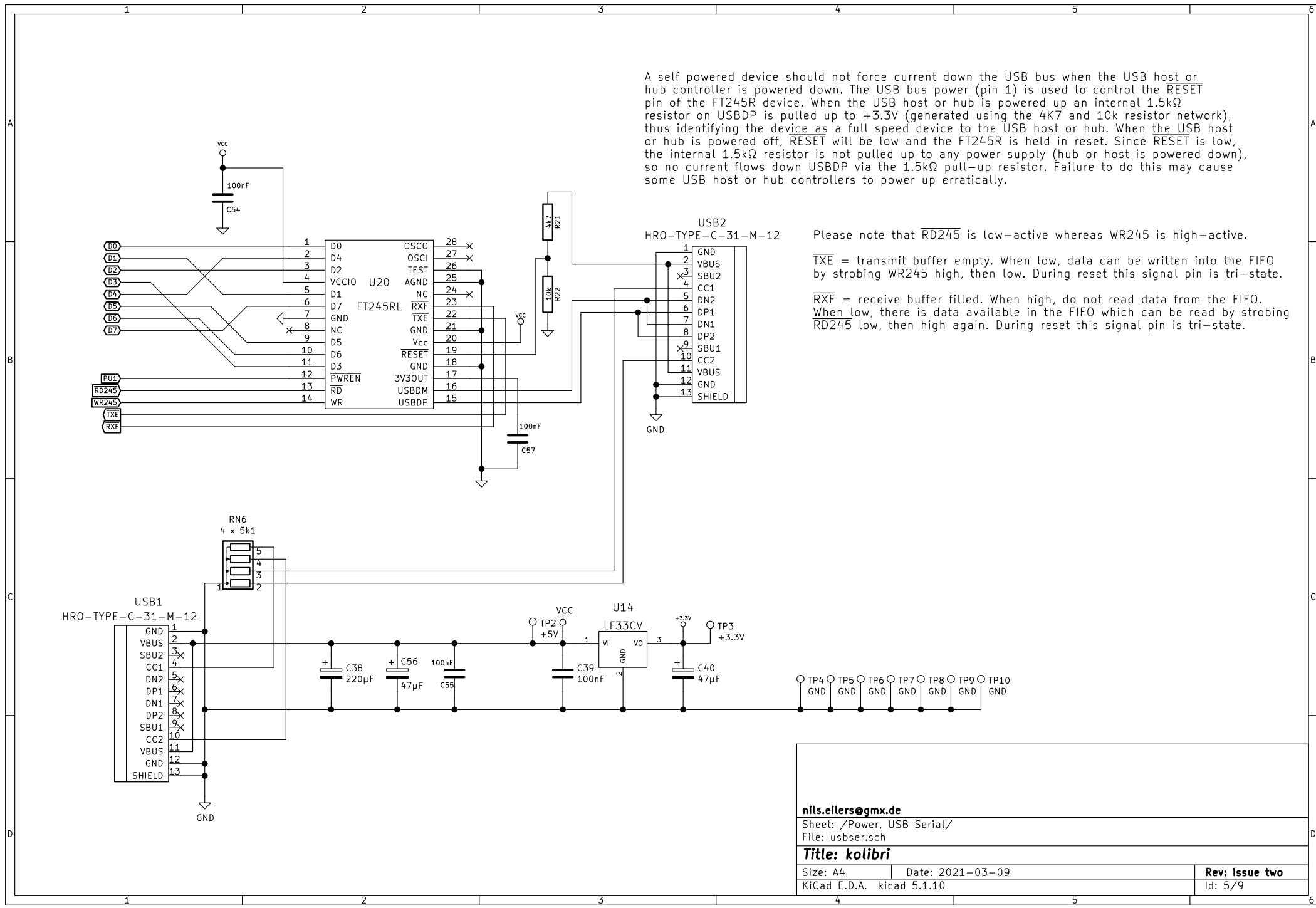
Rev: issue two

Id: 1/9









A self powered device should not force current down the USB bus when the USB host or hub controller is powered down. The USB bus power (pin 1) is used to control the RESET pin of the FT245R device. When the USB host or hub is powered up an internal 1.5kΩ resistor on USBDP is pulled up to +3.3V (generated using the 4K7 and 10k resistor network), thus identifying the device as a full speed device to the USB host or hub. When the USB host or hub is powered off, RESET will be low and the FT245R is held in reset. Since RESET is low, the internal 1.5kΩ resistor is not pulled up to any power supply (hub or host is powered down), so no current flows down USBDP via the 1.5kΩ pull-up resistor. Failure to do this may cause some USB host or hub controllers to power up erratically.

Please note that RD245 is low-active whereas WR245 is high-active.

TXE = transmit buffer empty. When low, data can be written into the FIFO by strobing WR245 high, then low. During reset this signal pin is tri-state.

RXF = receive buffer filled. When high, do not read data from the FIFO. When low, there is data available in the FIFO which can be read by strobing RD245 low, then high again. During reset this signal pin is tri-state.

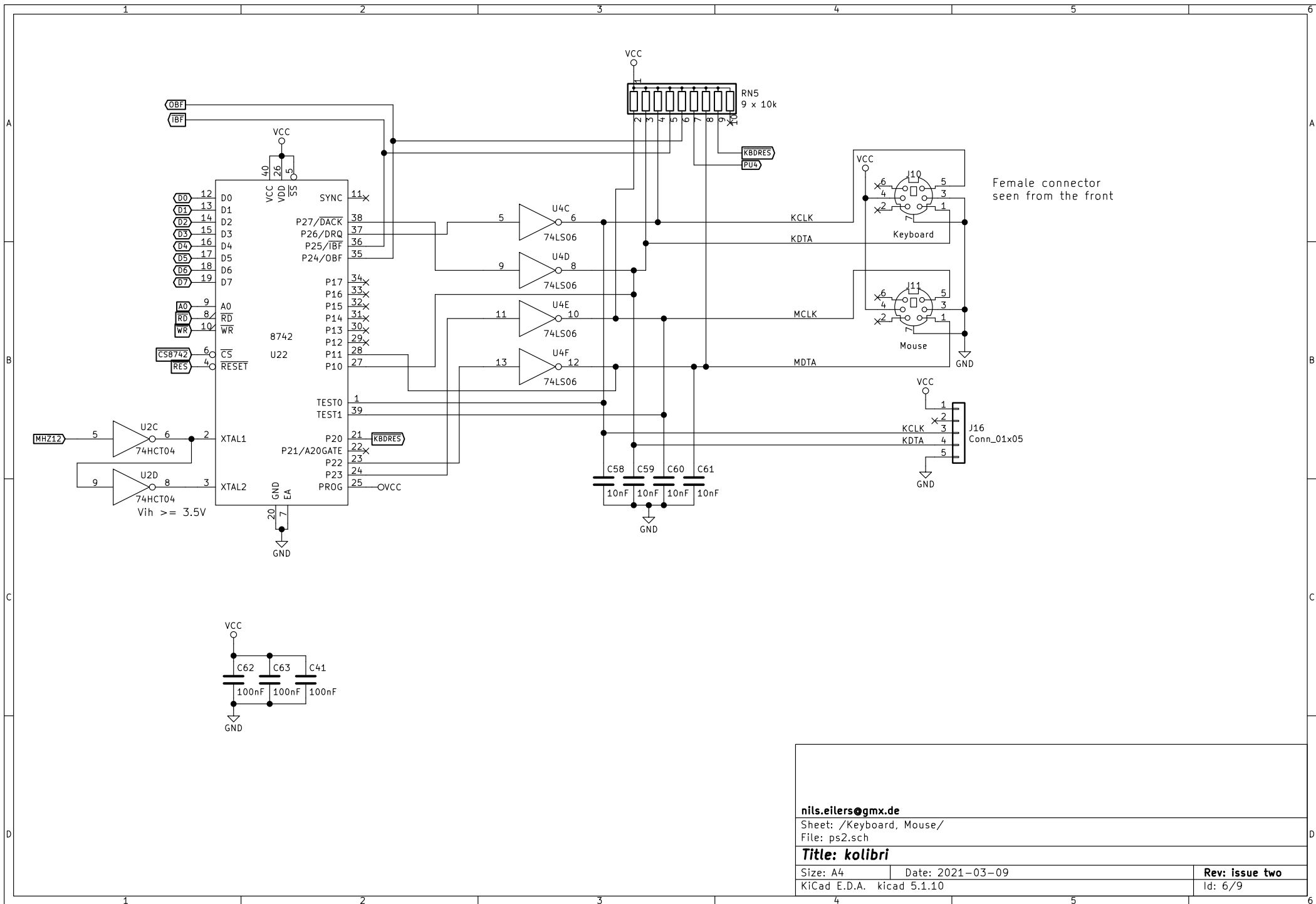
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Sheet: /Power, USB Serial/  
File: usbser.sch

Title: kolibri

Size: A4      Date: 2021-03-09  
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Sheet: /Keyboard, Mouse/  
File: ps2.sch

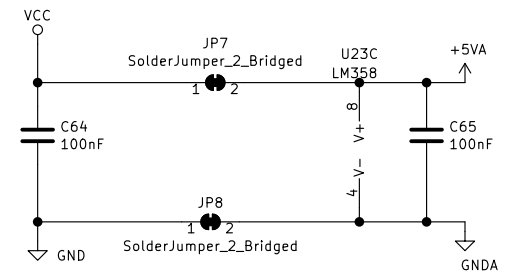
**Title: kolibri**

Size: A4 Date: 2021-03-09

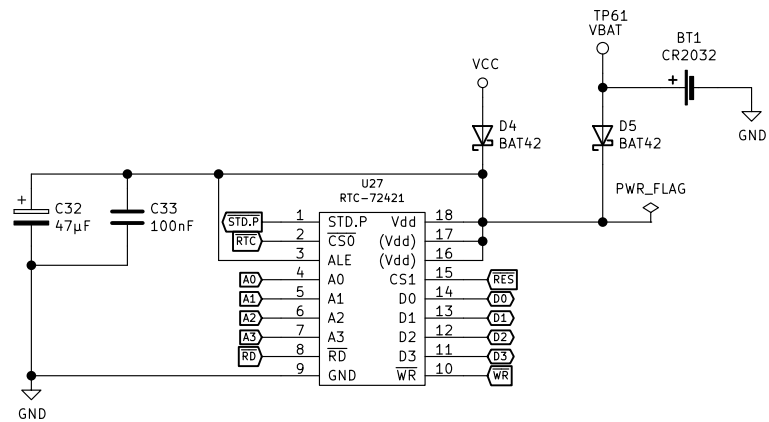
KiCad E.D.A. kicad 5.1.10

Rev: issue two

Id: 6/9



Id: 7/9



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Sheet: /Real time clock/  
File: rtc.sch

**Title: kolibri**

Size: A4 Date: 2021-03-09

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**Rev: issue two**

Id: 8/9



