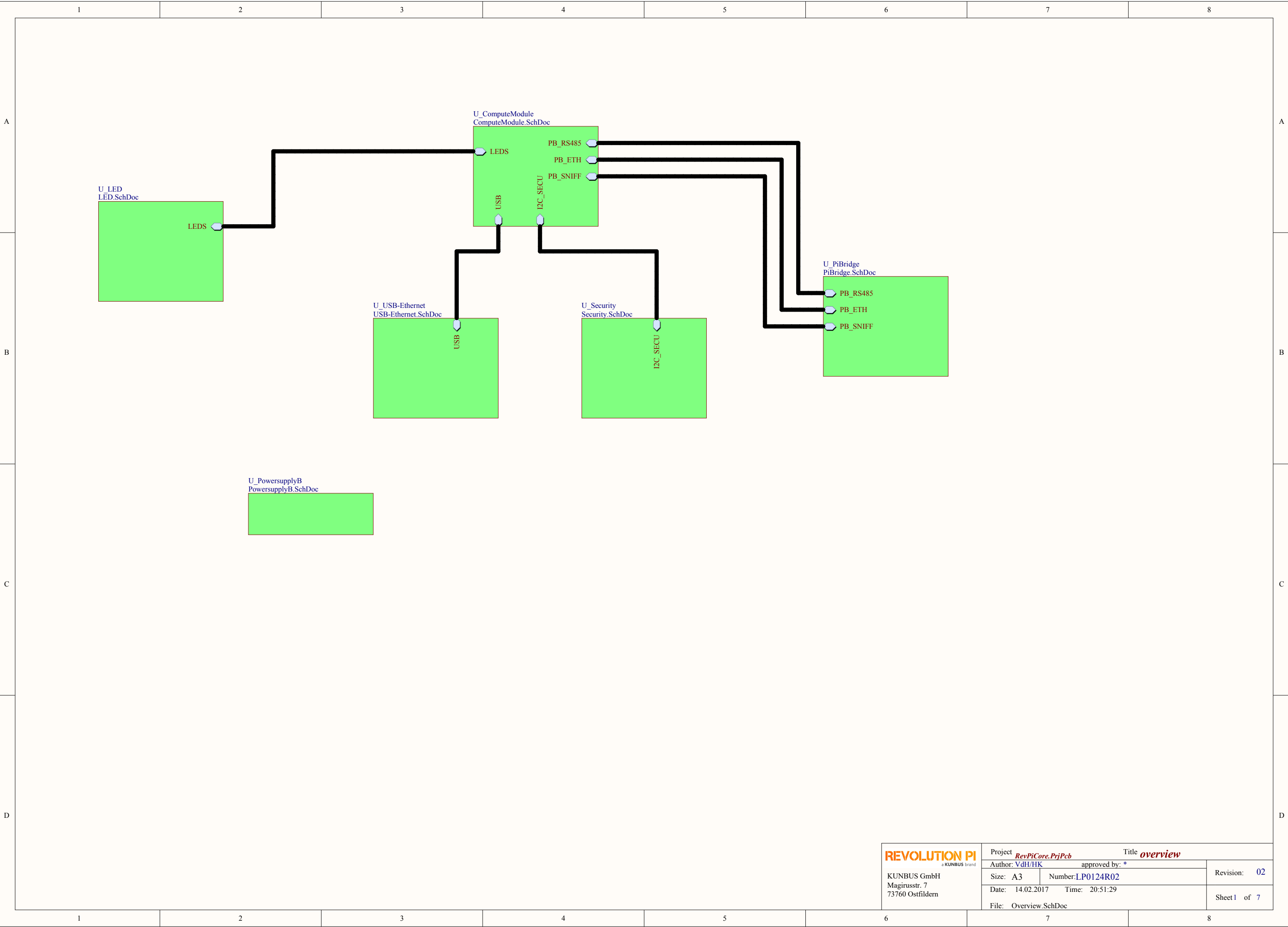
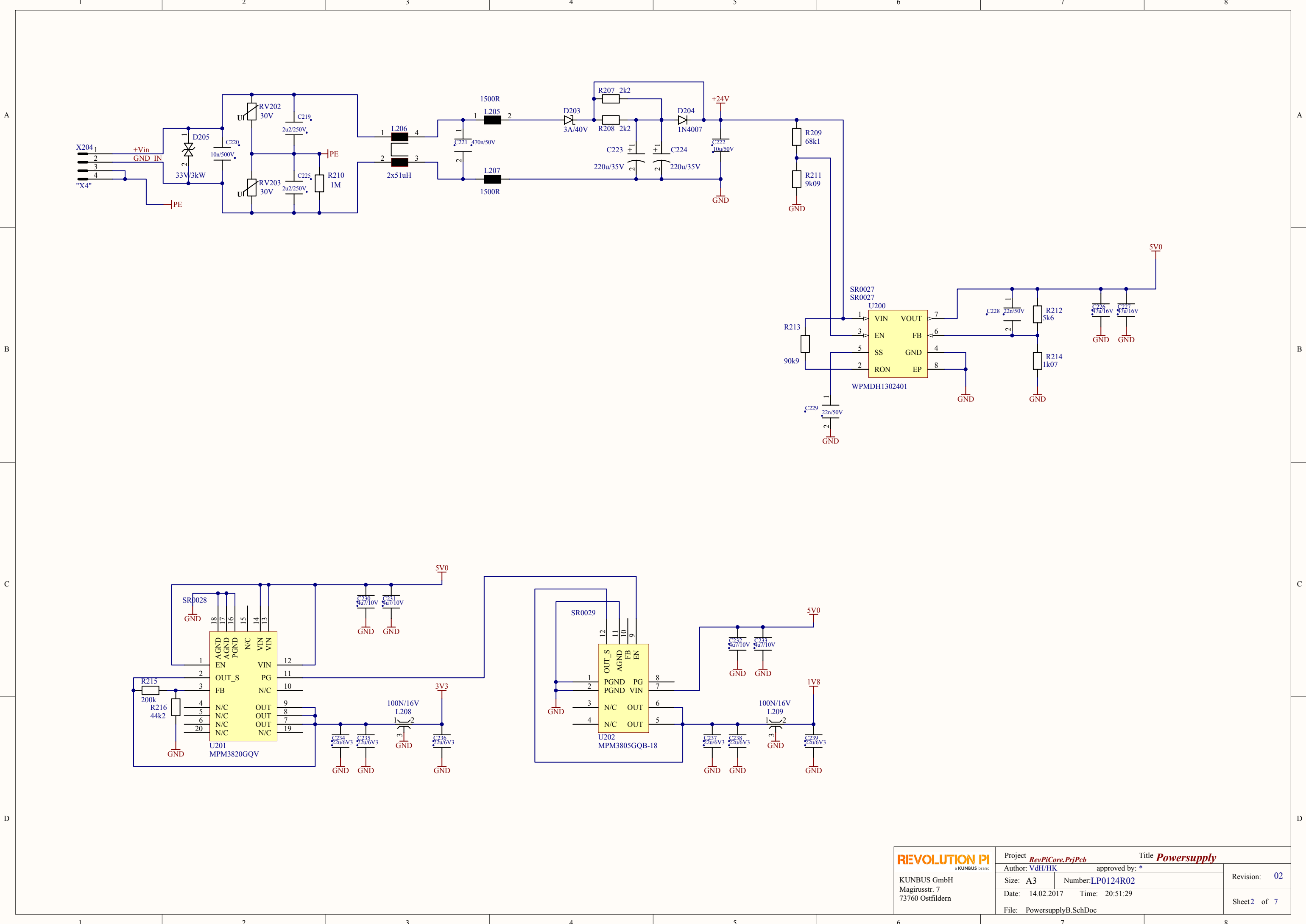
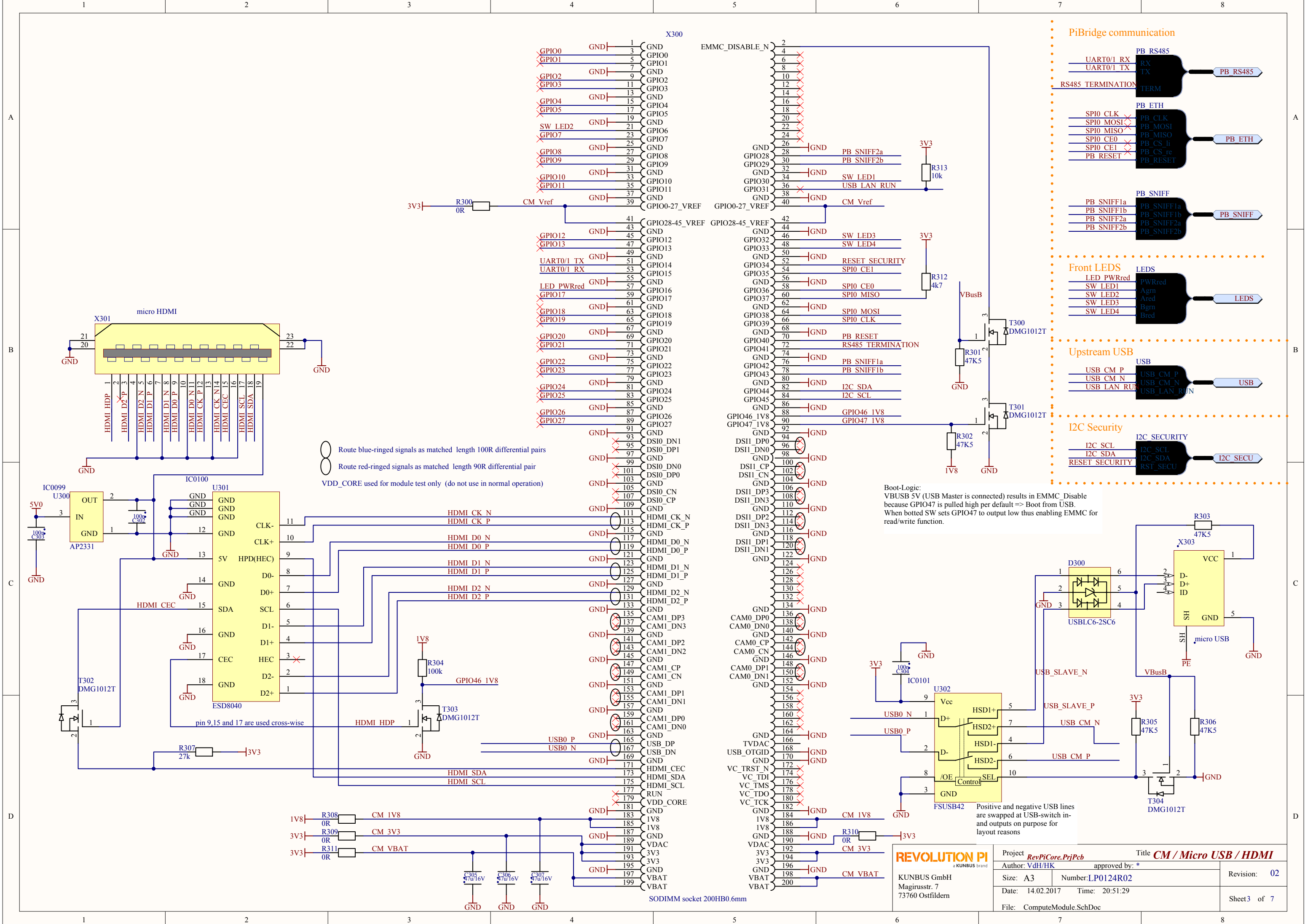
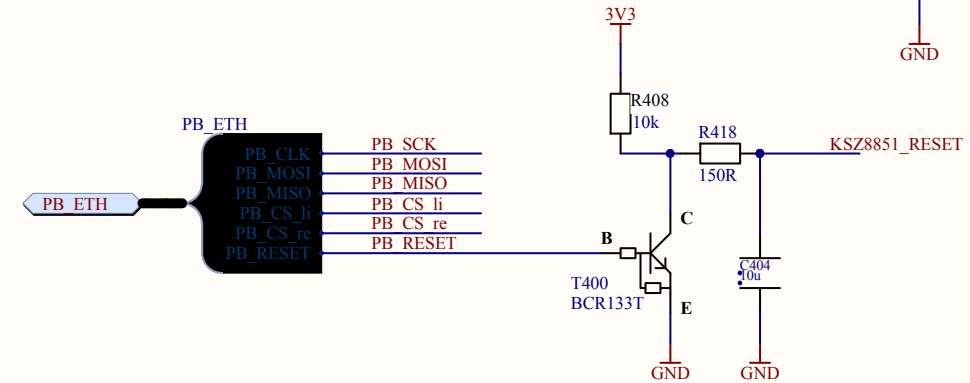
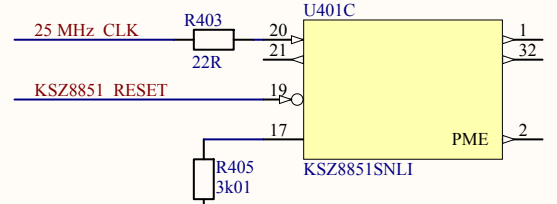
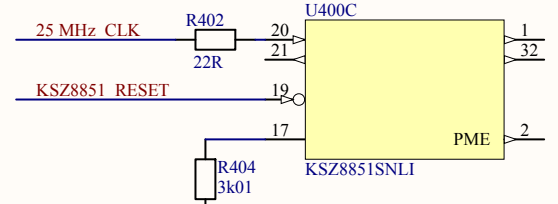
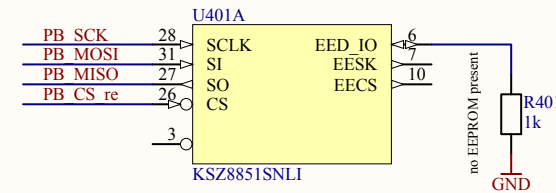
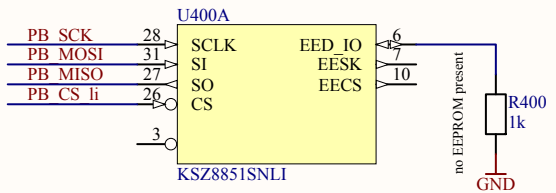




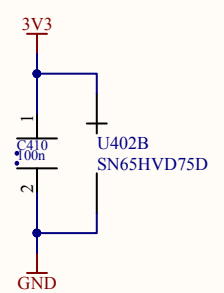
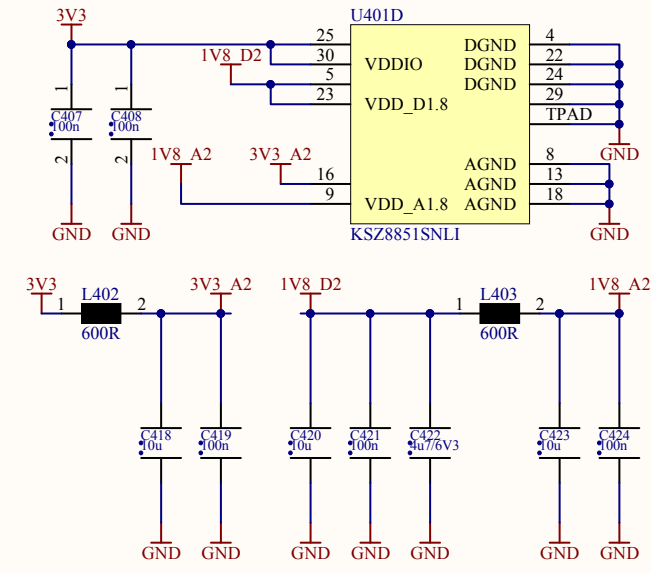
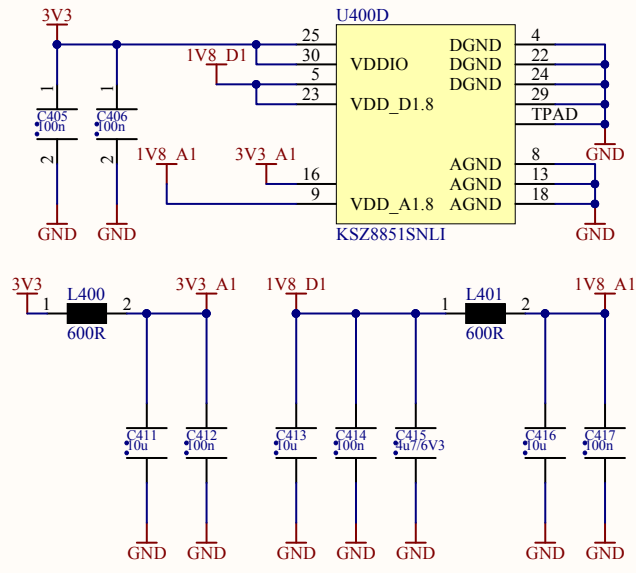
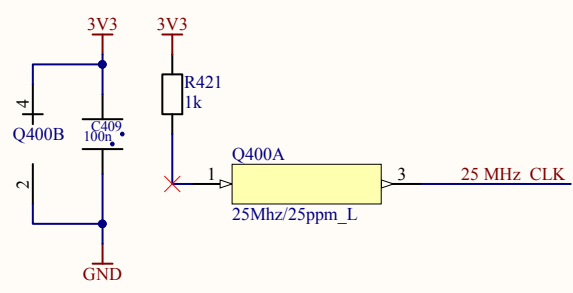
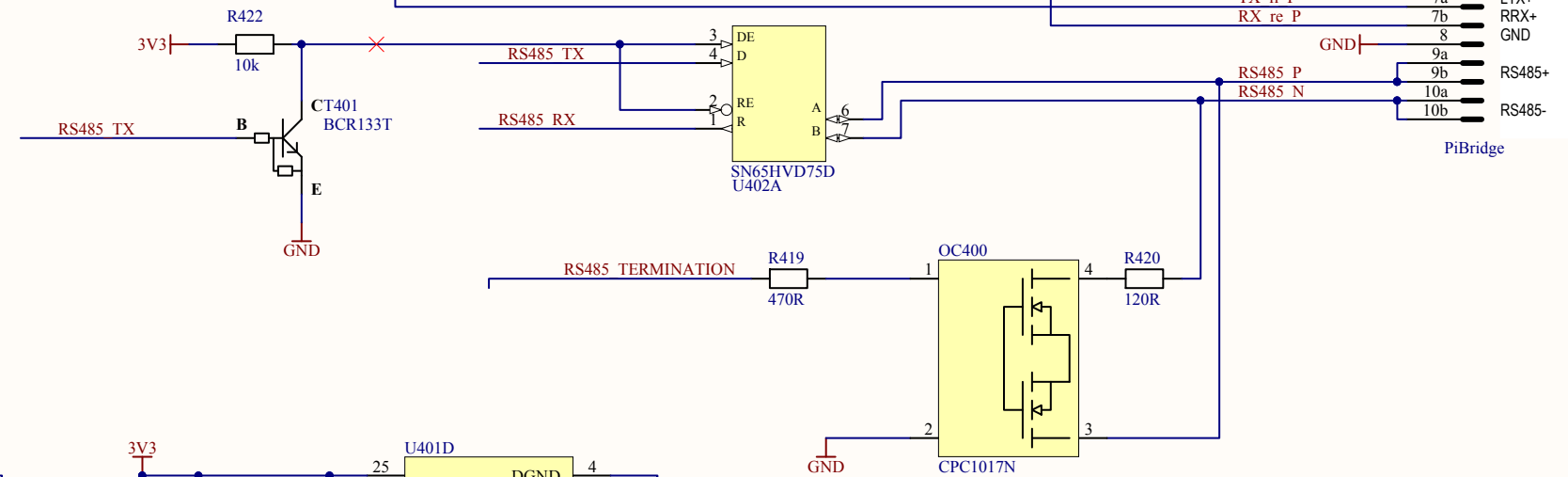
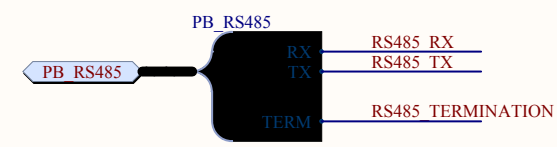
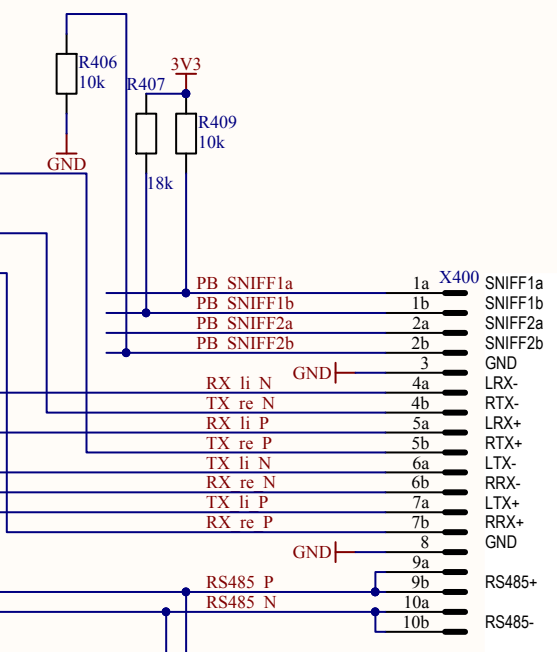
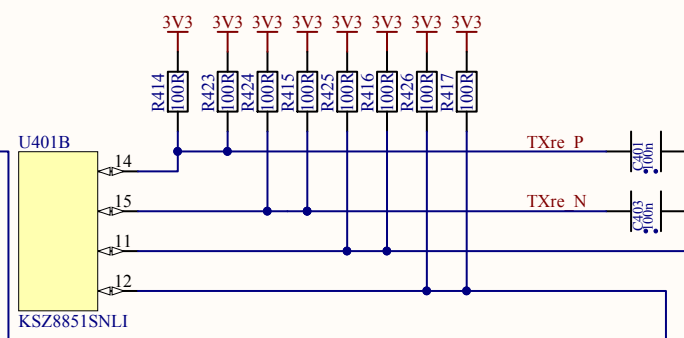
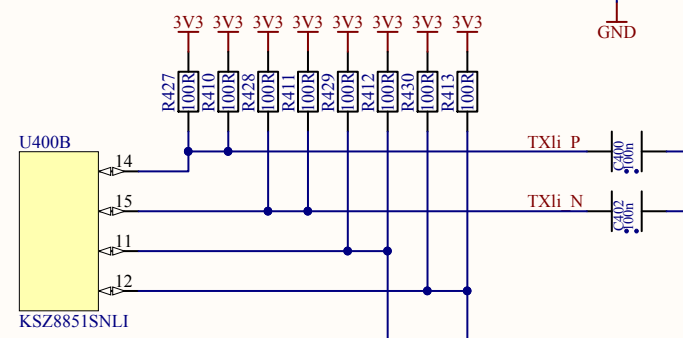


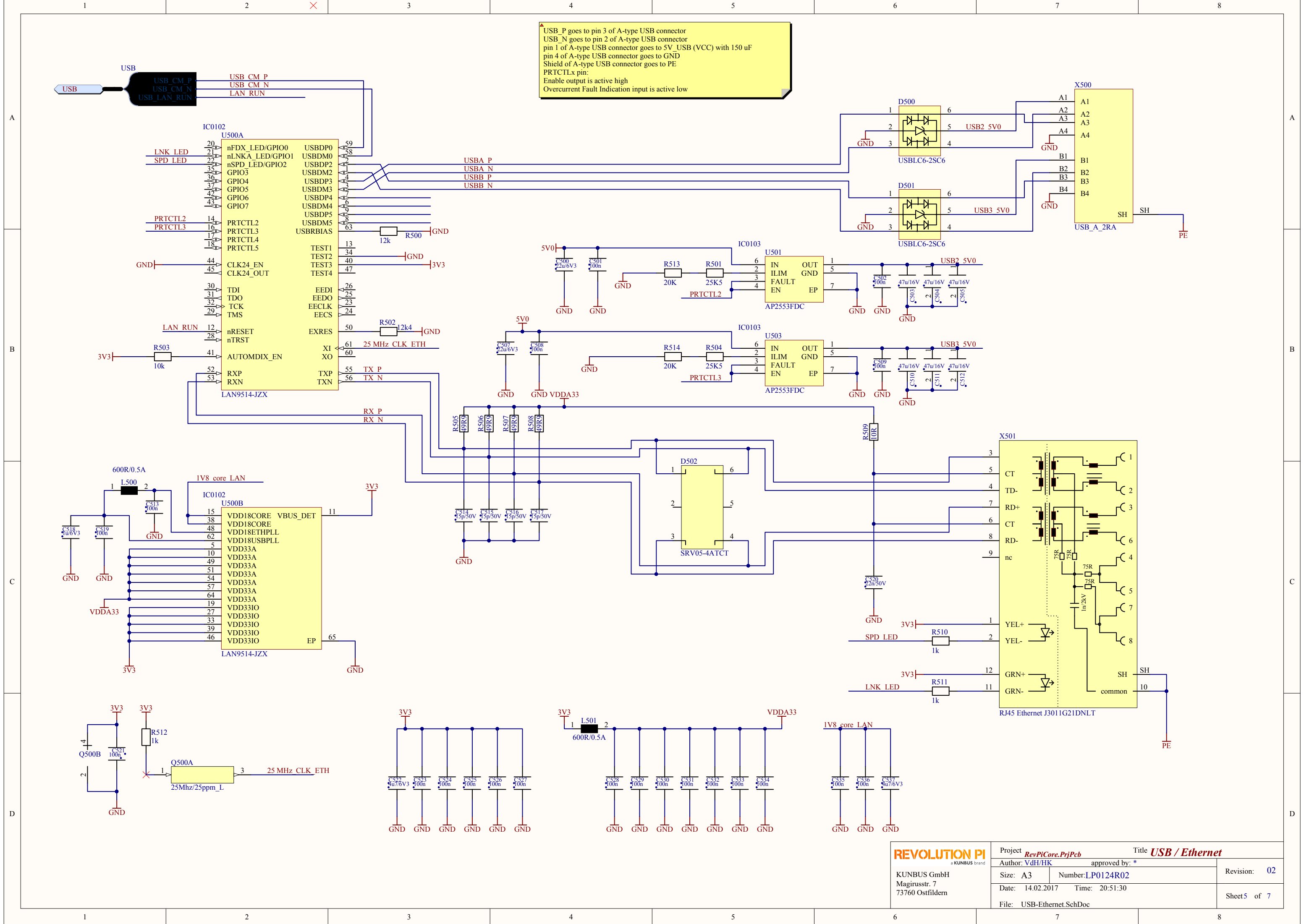


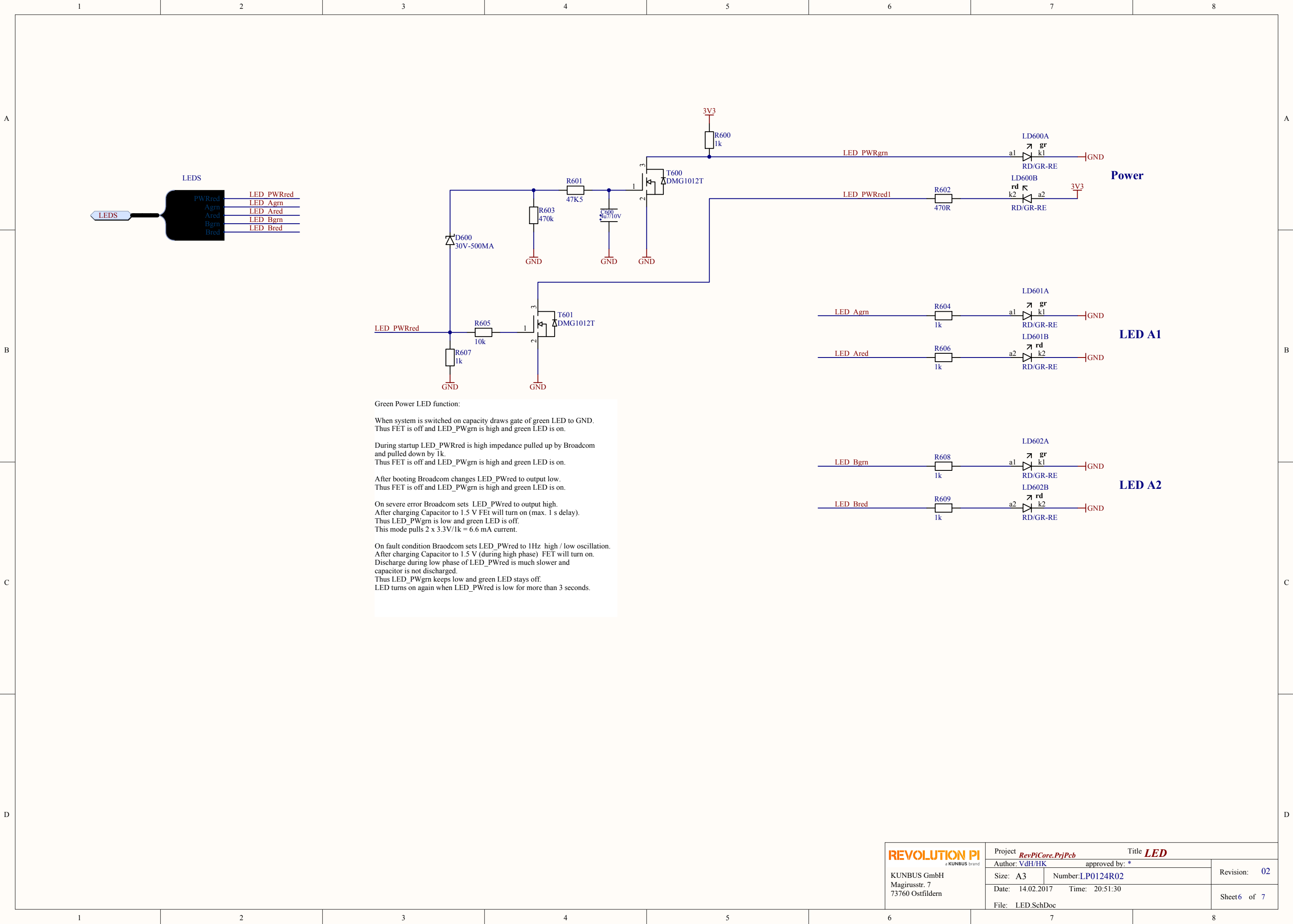
refer to Micrel appnote 120
* use Force mode / autoneg disabled
* Auto MDI / MDI-X disable
* 100 BASE-TX



time constant for a RESET from GPIO is 1.5 ms because of current limitation by 150R







Green Power LED function:

When system is switched on capacity draws gate of green LED to GND. Thus FET is off and LED_PWgrn is high and green LED is on.

During startup LED_PWred is high impedance pulled up by Broadcom and pulled down by 1k. Thus FET is off and LED_PWgrn is high and green LED is on.

After booting Broadcom changes LED_PWred to output low. Thus FET is off and LED_PWgrn is high and green LED is on.

On severe error Broadcom sets LED_PWred to output high. After charging Capacitor to 1.5 V FEI will turn on (max. 1 s delay). Thus LED_PWgrn is low and green LED is off. This mode pulls $2 \times 3.3V/1k = 6.6 \text{ mA}$ current.

On fault condition Braodcom sets LED_PWred to 1Hz. high / low oscillation. After charging Capacitor to 1.5 V (during high phase) FET will turn on. Discharge during low phase of LED_PWred is much slower and capacitor is not discharged. Thus LED_PWgrn keeps low and green LED stays off. LED turns on again when LED_PWred is low for more than 3 seconds.

