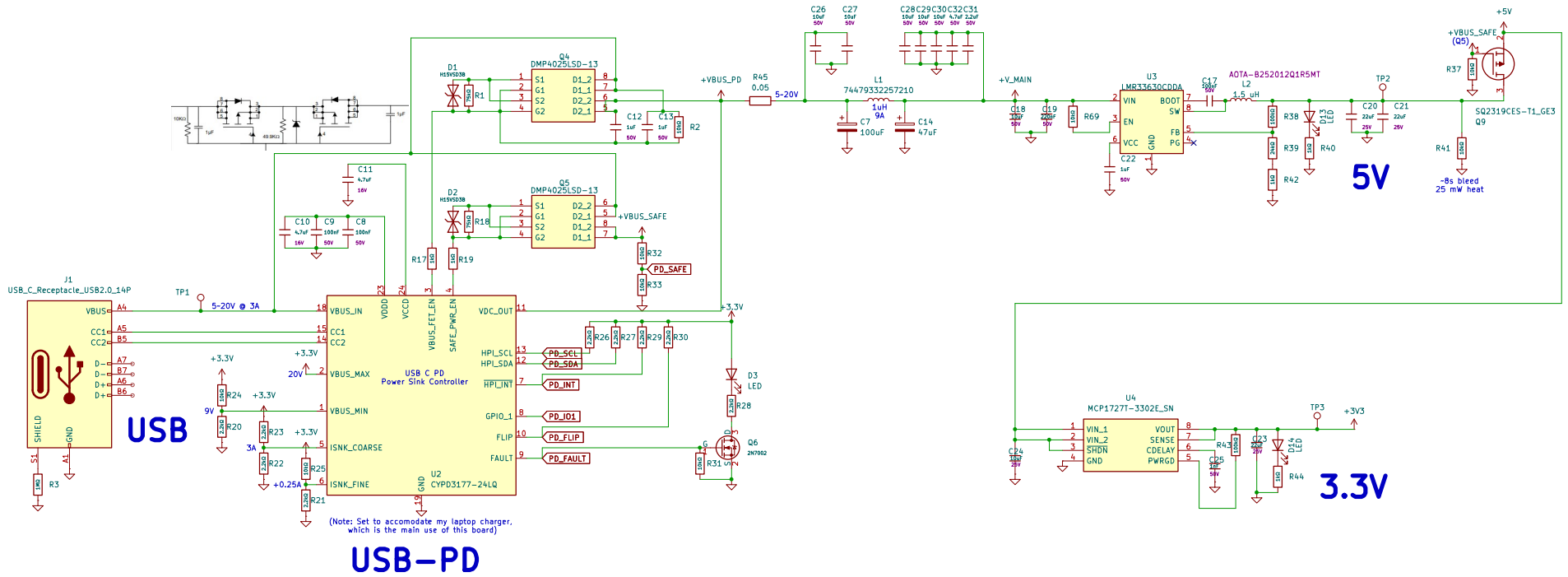


V\_MAIN - 2nd-Order RLC Output Filter

Design Parameters (Nominal):  
 - Damping Factor ( $\zeta$ ): ~2.17 (Overdamped)  
 - Natural Frequency ( $f_n$ ): ~17.3 kHz

Design Notes:  
 - The filter is intentionally overdamped to guarantee stability and prevent any voltage overshoot during power-on or transient load events.  
 - Damping is dominated by the ESR of C14, C7 and the series resistor R45.



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 File: Power.kicad\_sch

**Title:**

Size: A3

Date:

**Rev:**

KiCad E.D.A. 9.0.2

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