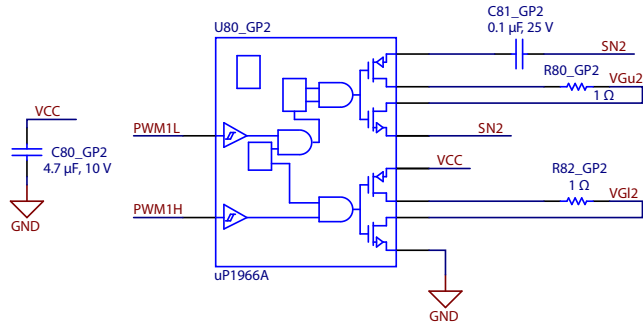
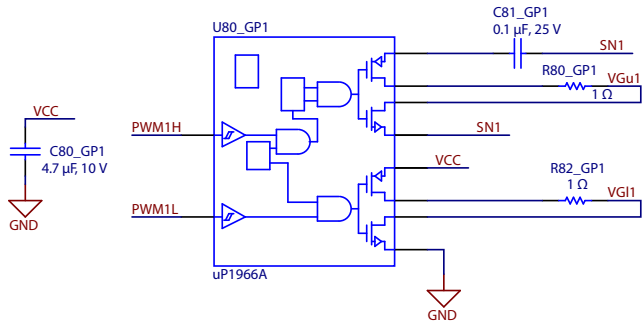
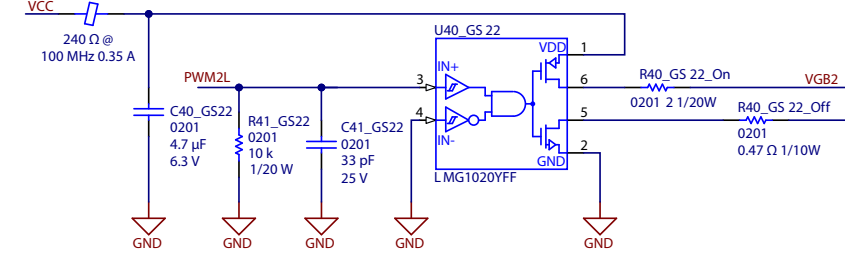
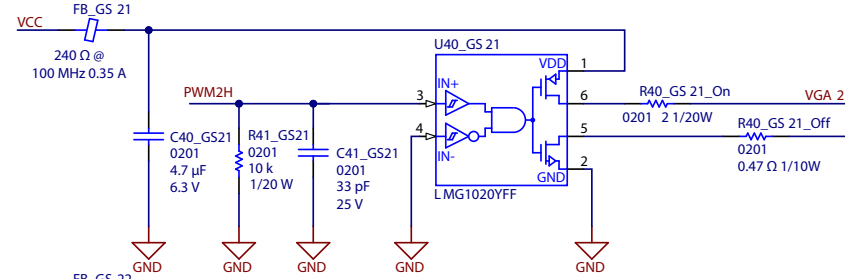
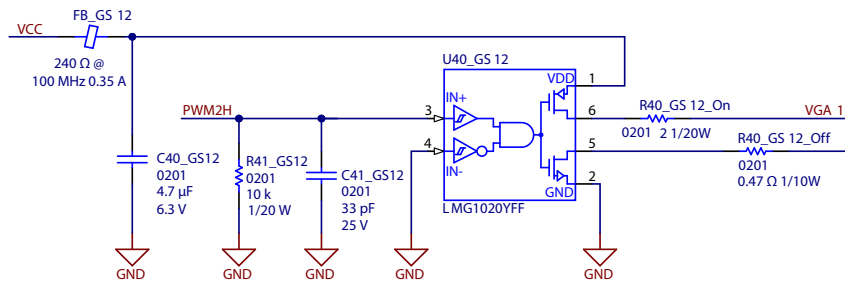
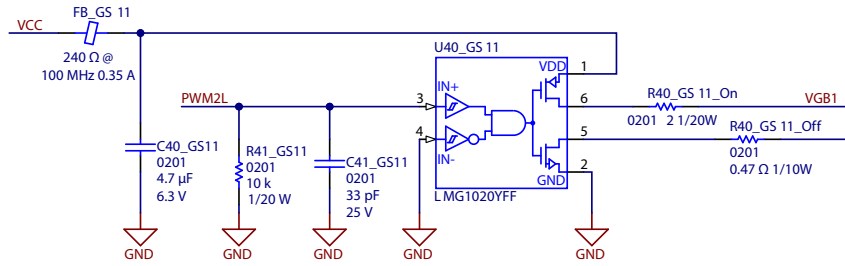


Figure 14: **Control stage:** Microcontroller, input and output voltage sensing, 5V bias supply for the drivers and 3.3V regulator for the dSPIC supply



Primary-side Gate Drivers



Secondary-side Gate Drivers

Figure 15: **Driver stage:** For the primary and secondary side FETs

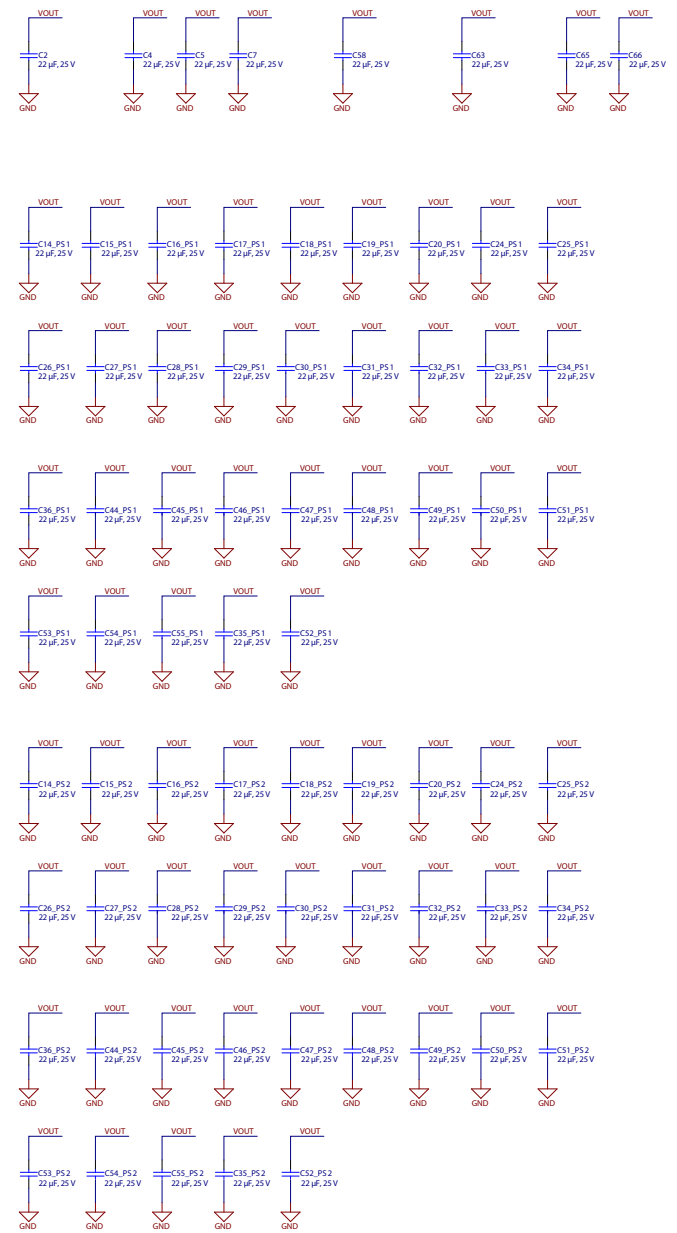
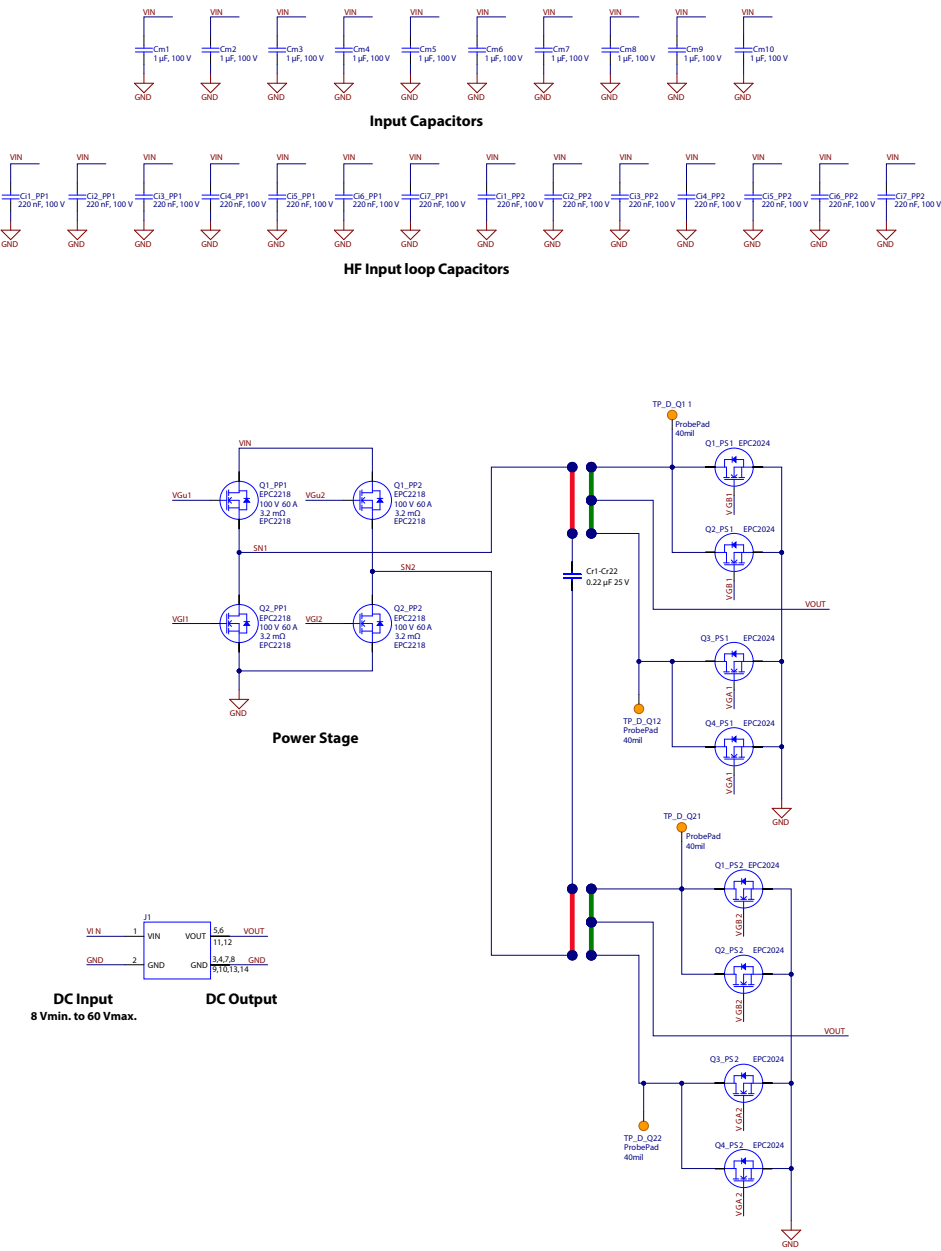
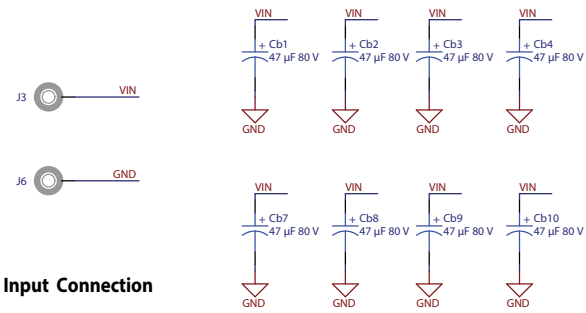
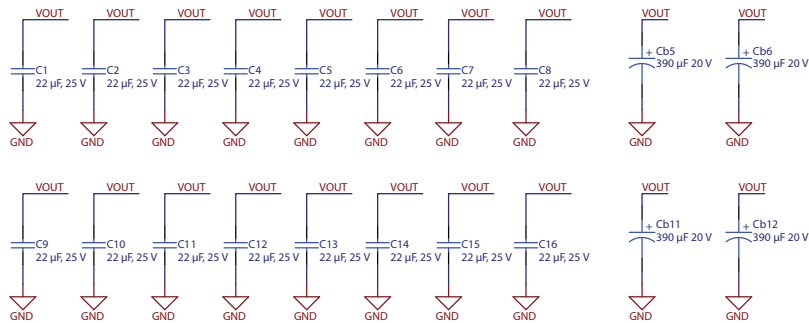


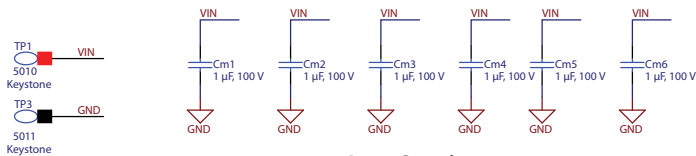
Figure 16: Power stage: Topology including FETs, transformer and input, output and resonant capacitors



Input Connection

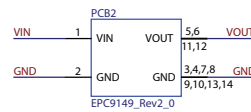


Output Connection

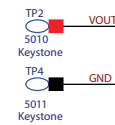


Input Capacitors

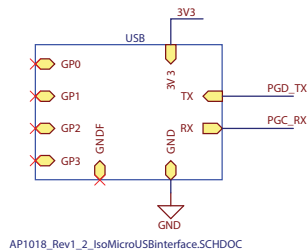
Input Voltage Measurement



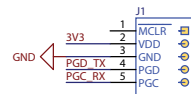
EPC9149 Rev2_0 LLC resonant converter



Output Voltage Measurement



AP1018_Rev1_2_IsoMicroUSBInterface.SCHDOC



Communications header



Nylon standoffs

Figure 17: EPC9533 power circuit schematic

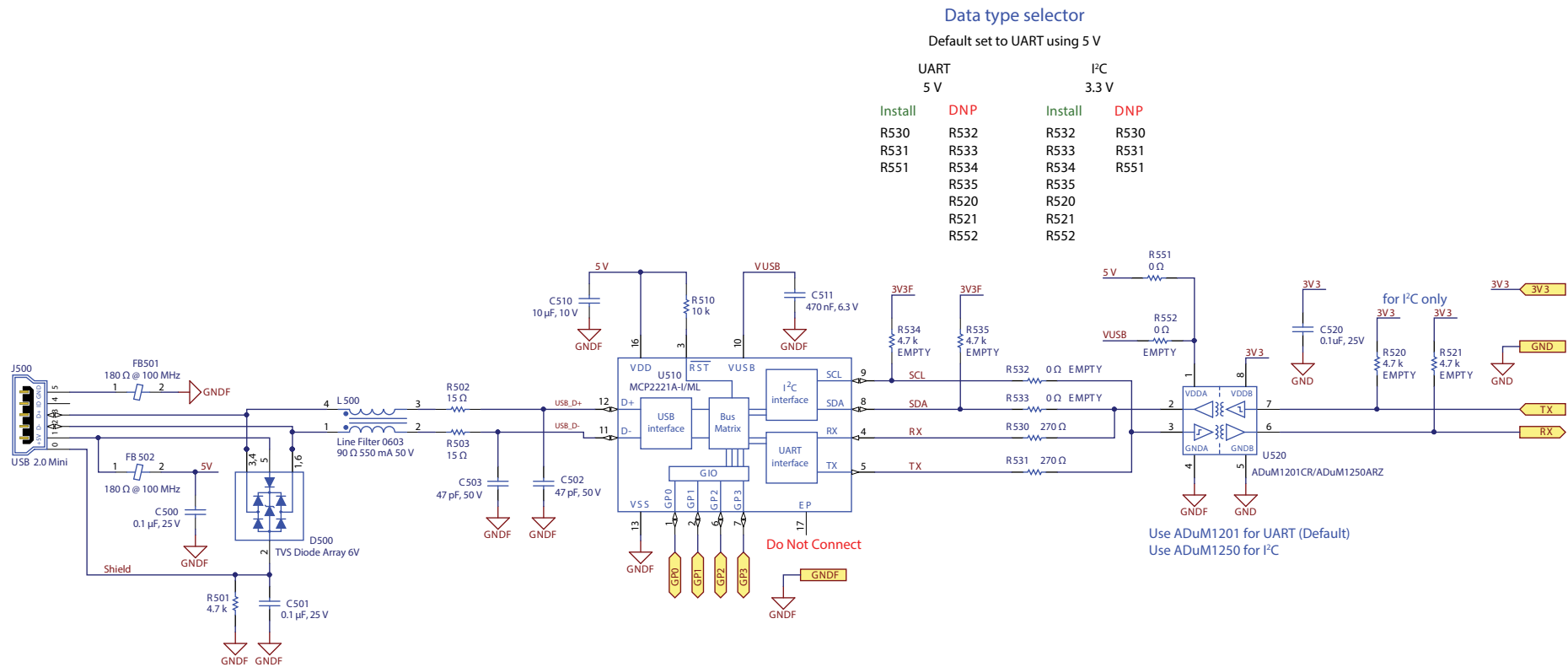


Figure 18: Isolated USB circuit on the EPC9533 motherboard