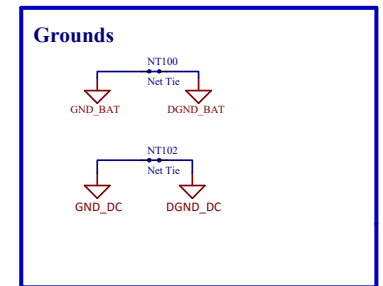
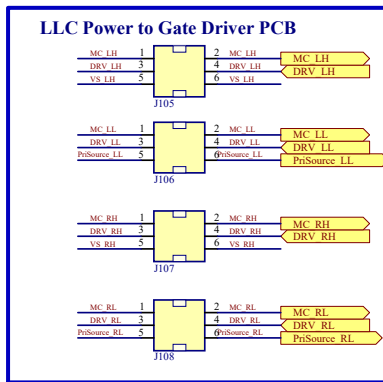
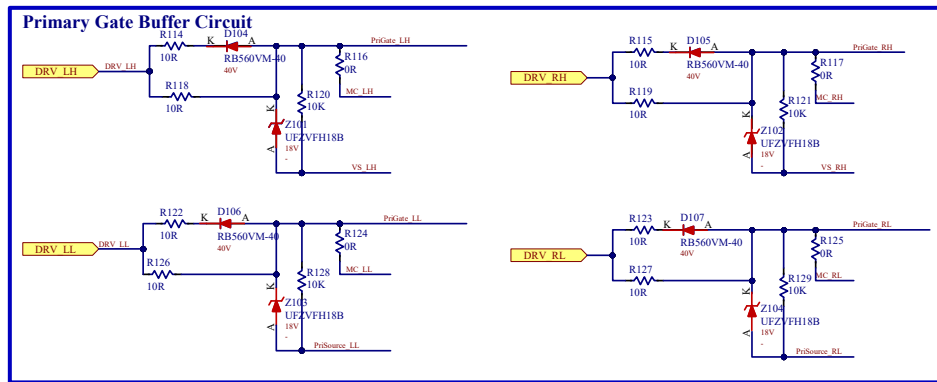
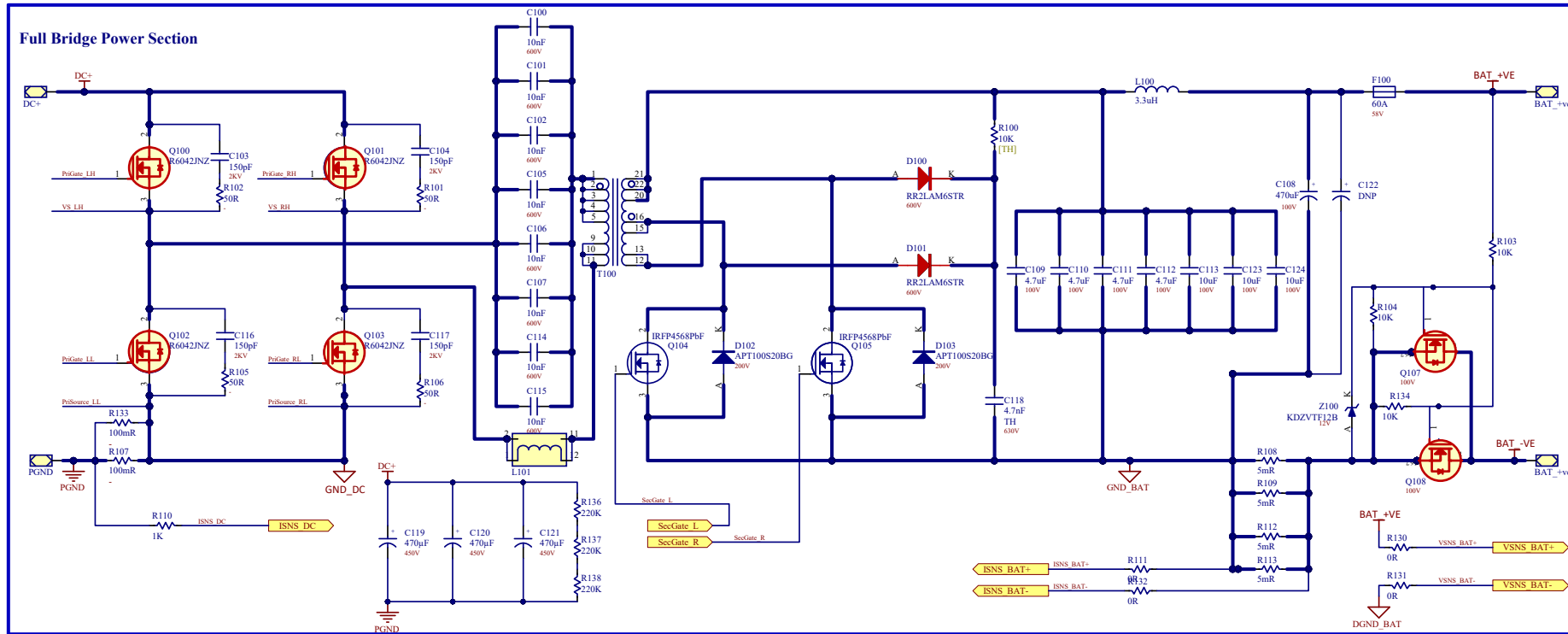
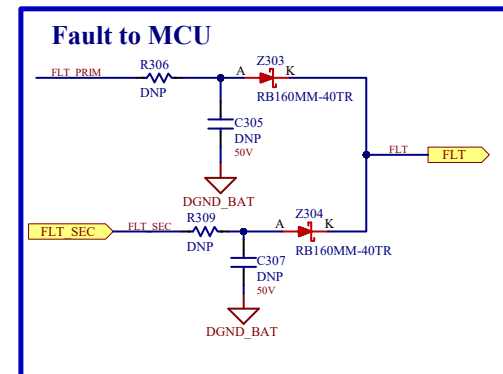
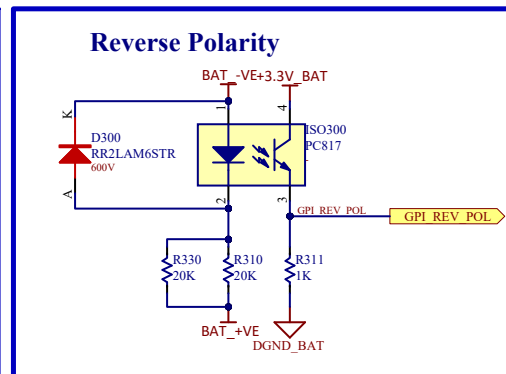
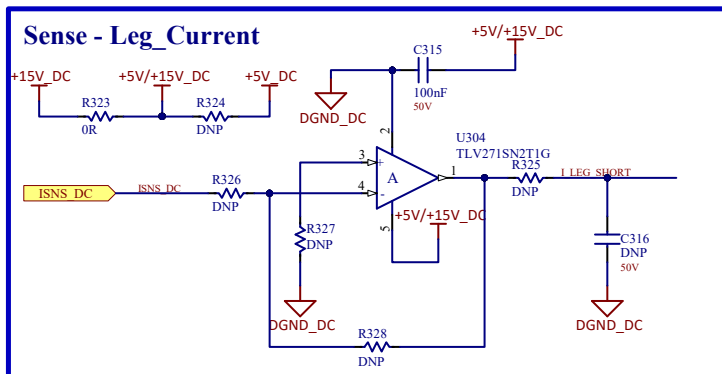
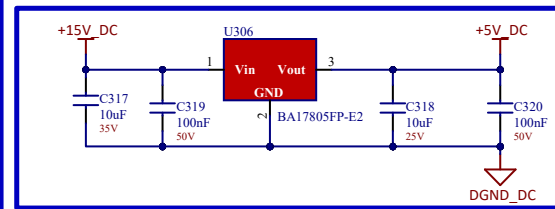
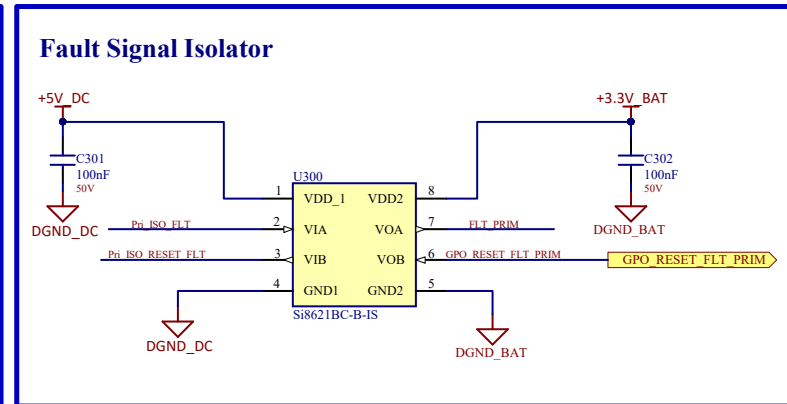
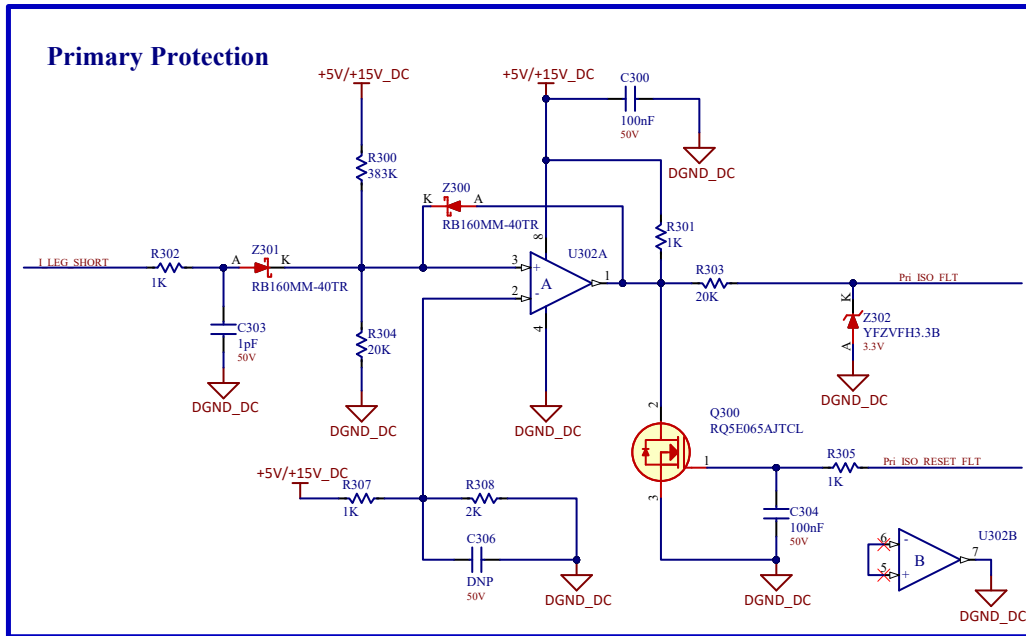


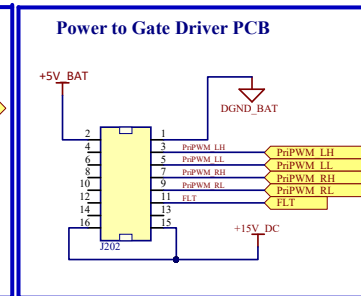
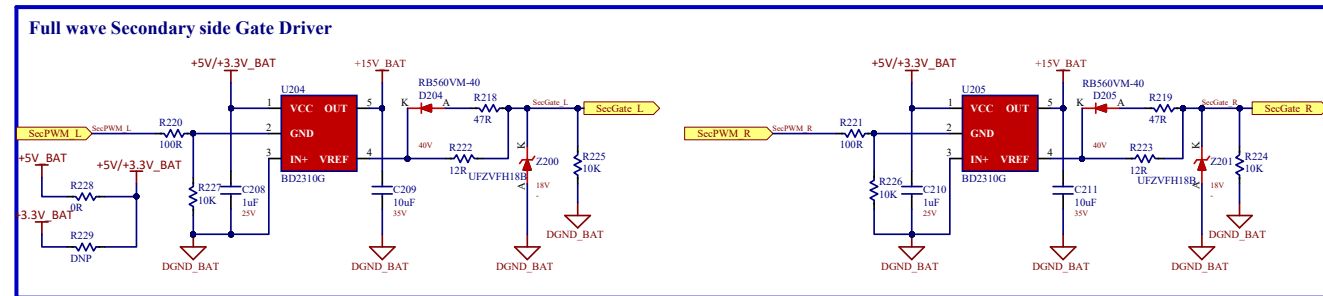
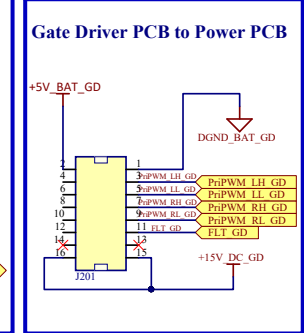
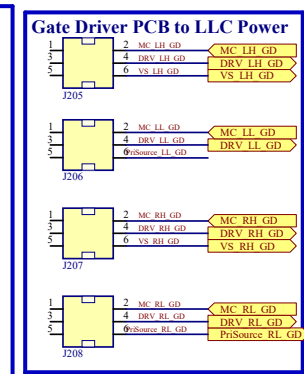
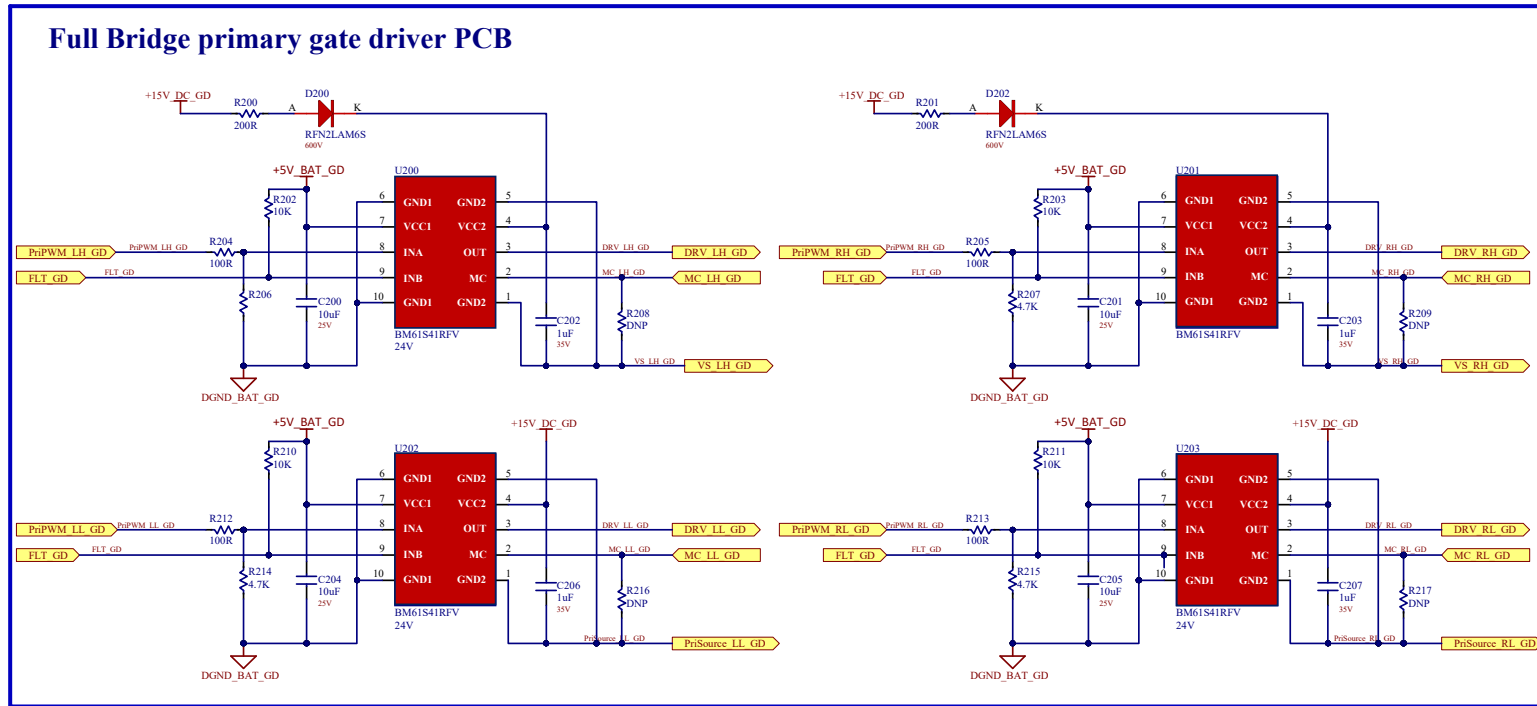
# Main Board : LLC Power Stage



# Main Board : Protections



# Driver Board : Gate Driver Section

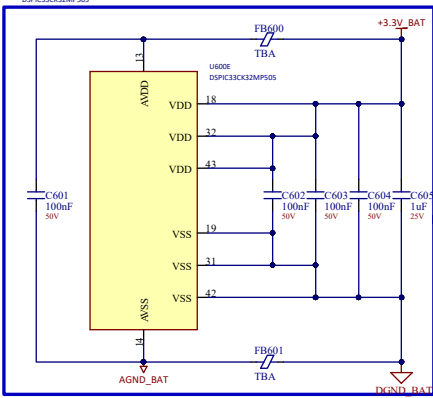
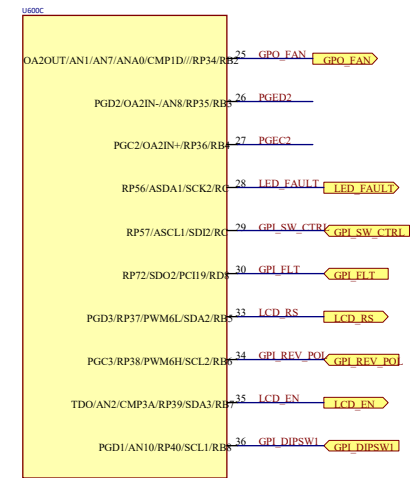
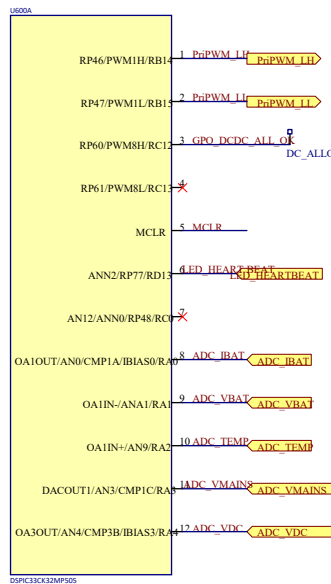


# Digital Board : Microcontroller



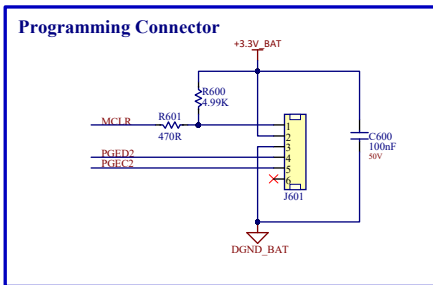
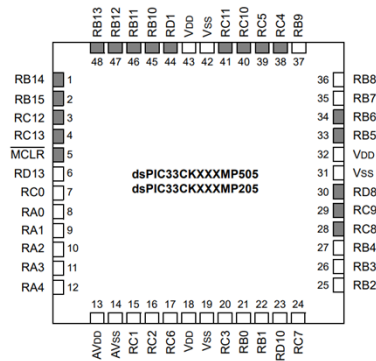
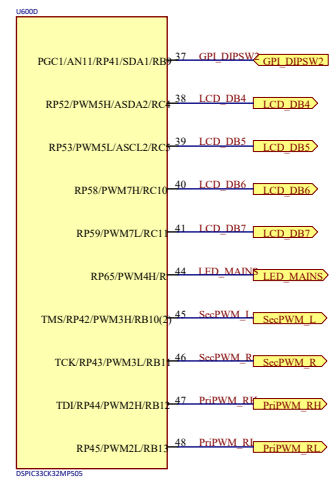
## DSPIC33CK32MP505

- 100Mips, 16-Bit dsPIC33CK CPU
- 32 Kbytes of Program Flash
- 8K RAM
- Hardware Divide & 32-Bit Multiply Support
- High-Speed PWM
  - Eight PWM Pairs
  - Up to 250 ps PWM Resolution
- High-Speed ADC module:
  - 12-bit with two dedicated SAR ADC cores and one shared SAR ADC core
  - Configurable resolution (up to 12-bit) for each
  - Up to 3.5 Msp/s conversion rate per channel

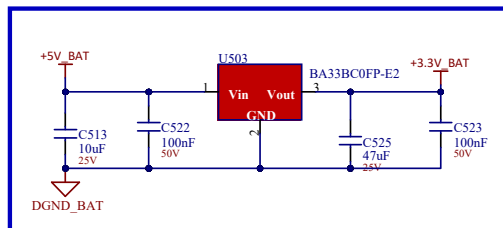
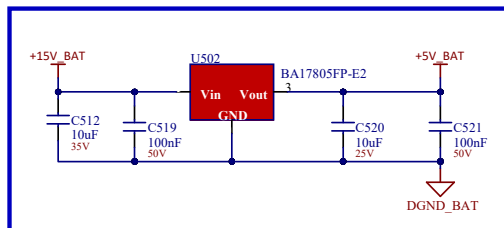
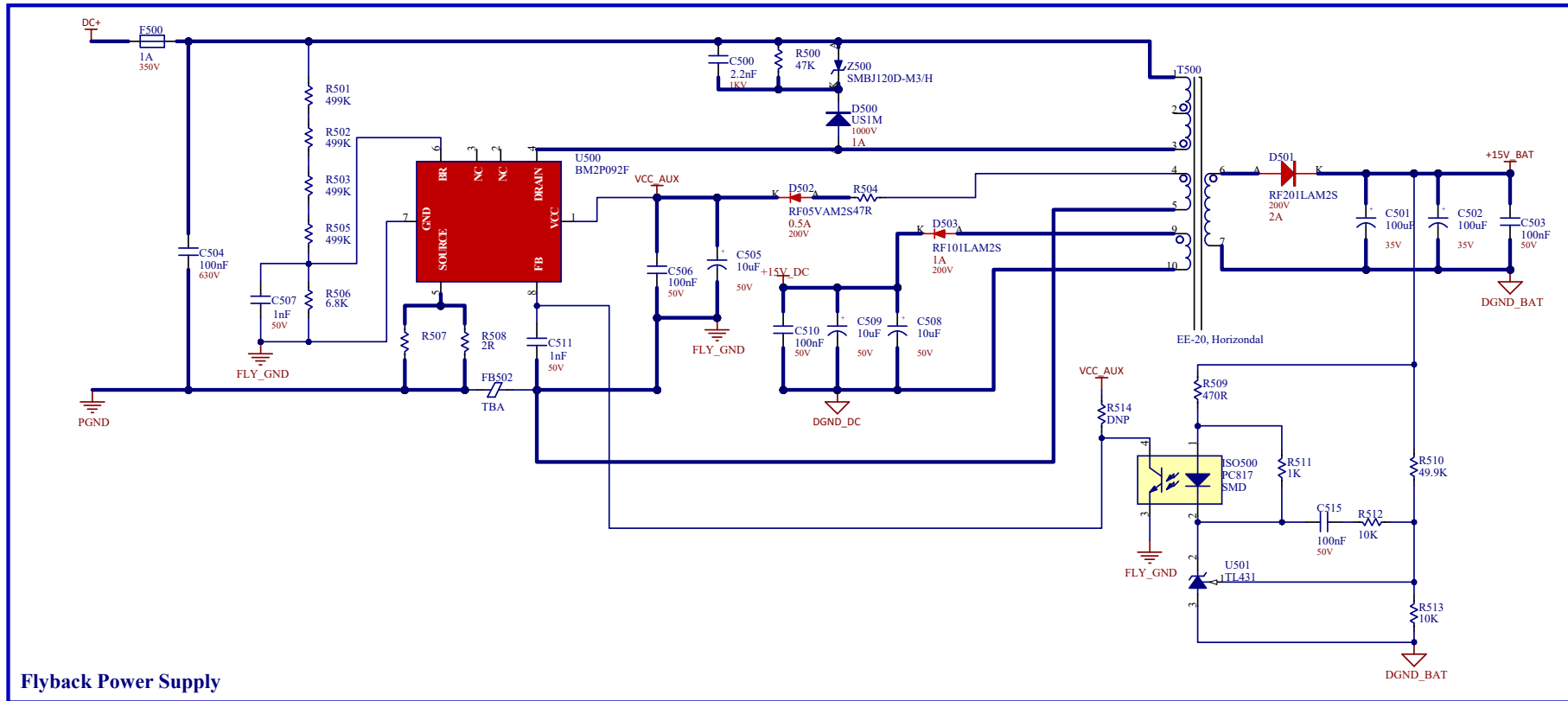


## Digital Approach

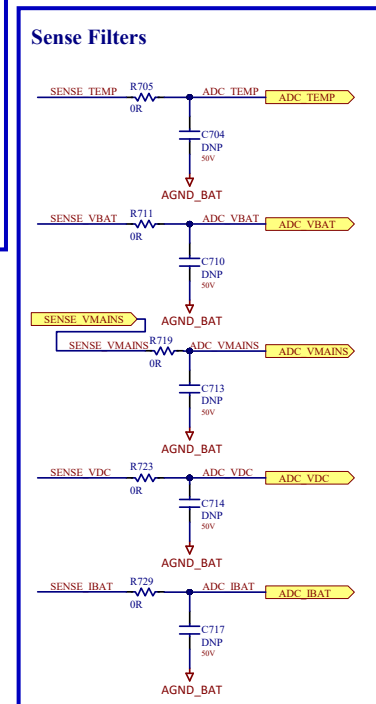
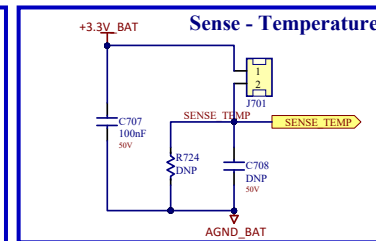
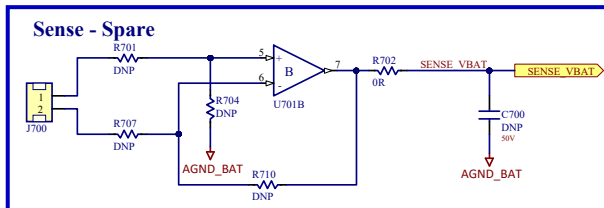
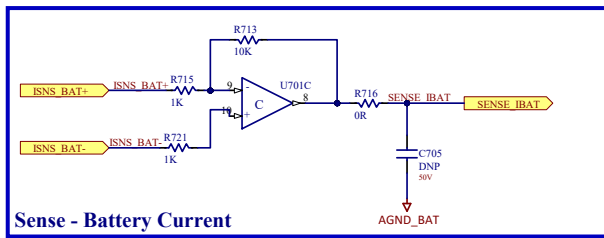
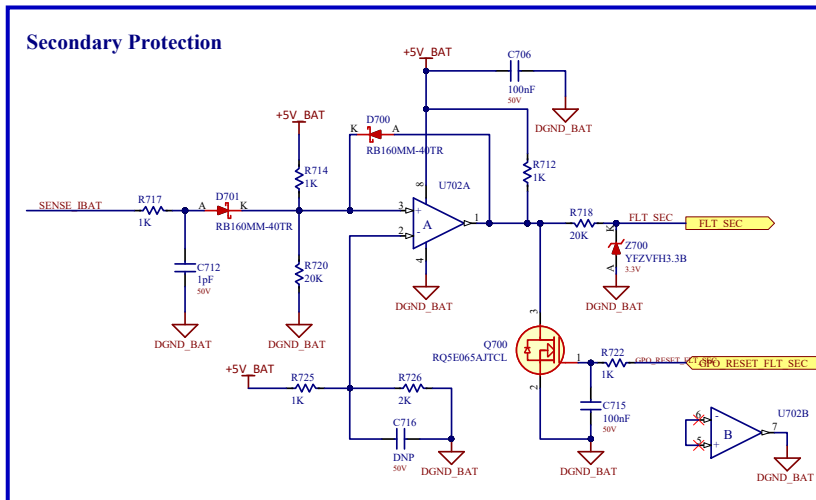
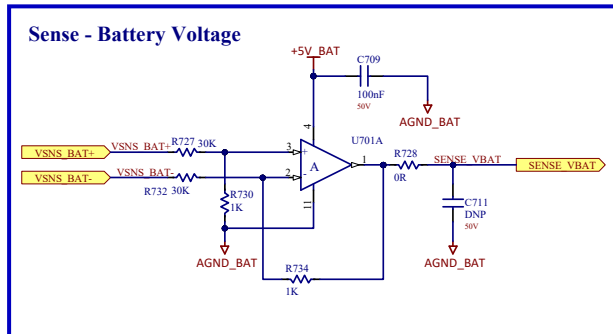
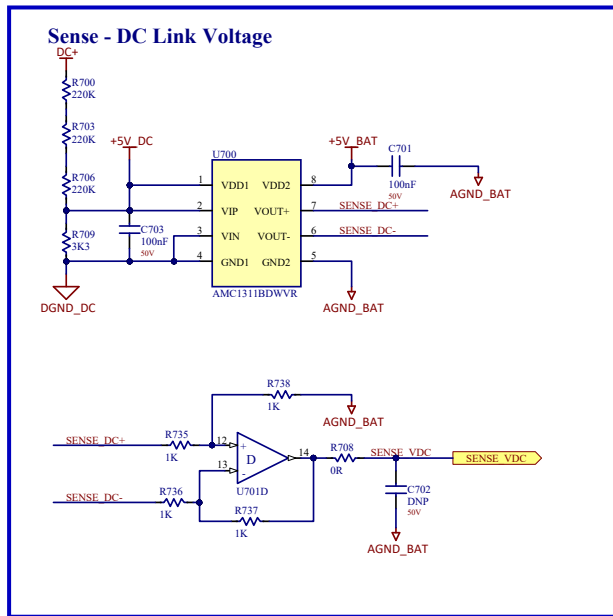
- Battery CV and CC points can be easily updated
- Control loop compensators are within MCU
- Interfacing with CAN/UART is possible
- Scalability for high power design is possible



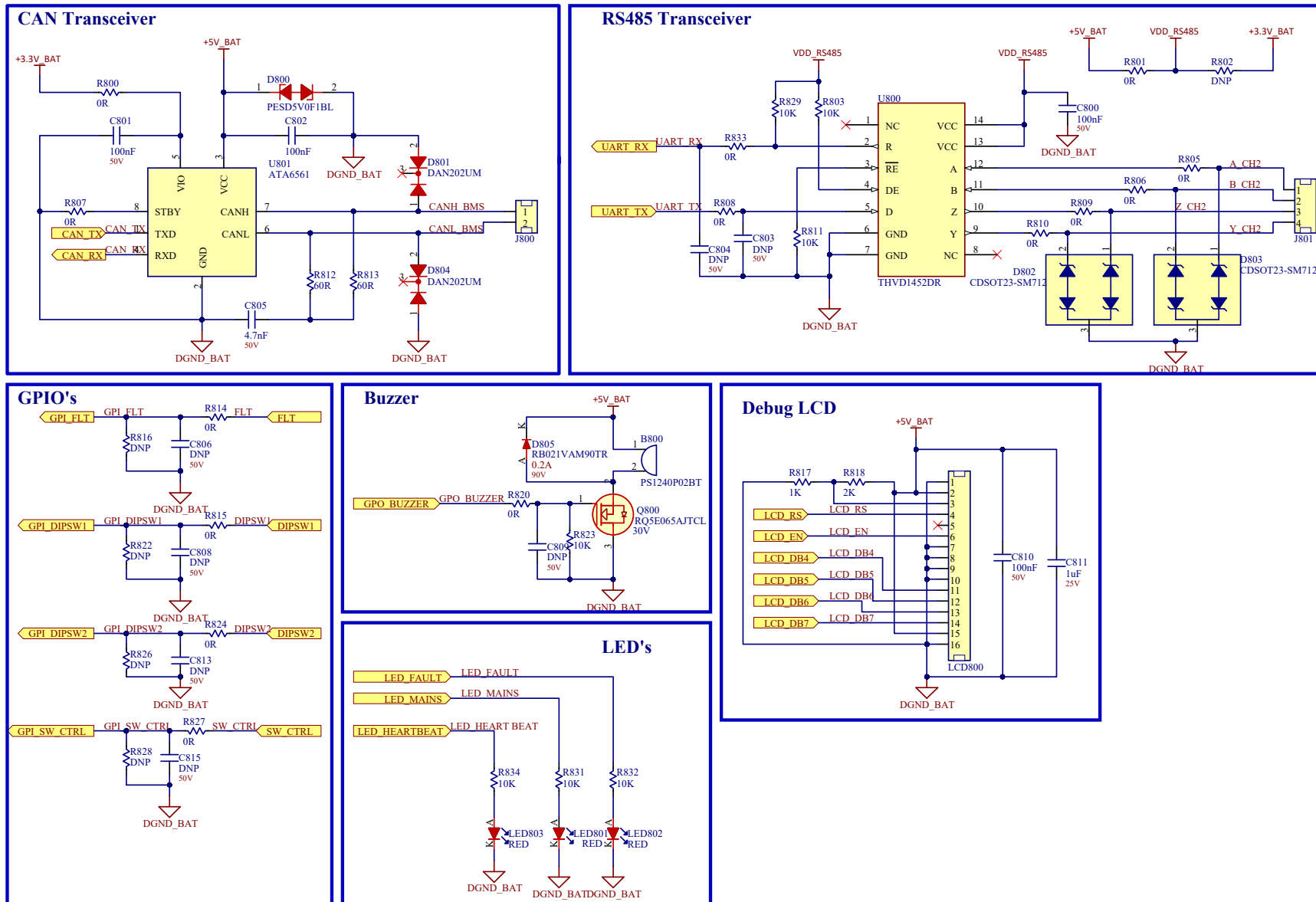
# Digital Board : Auxiliary Supply



# Digital Board : Sensing & Protection



# Digital Board : Application



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