Design Goals

- ≥150W into 8 ohm load
- 100Vpp output swing
- Reasonable efficiency
- Output ruggedness (short circuit protection)
- Excellent thermal stability.
Basic Three Stage Amplifier
Preamplifier

- Input signal (VIND) connected to the inverting input of U201A.
- Capacitor C201 (2.2μF) is connected from the inverting input to ground.
- Resistor R201 (20kΩ) is connected from VOUT to the non-inverting input of U201A.
- Resistor RV201 (10kΩ) is connected from the inverting input to the non-inverting input.
- Capacitor C202 (32pF) is connected from the output to the non-inverting input.
- The output (VOUT) is connected to the output of U201A.
Differential Stage
Gain Stage
Output Stage
Power Supply (6.332 Project)
Built and working by 5/8...

- Finalize a (flexible) PCB by Monday Morning (4/21)
- Order a couple barebones PCBs (cheap, 1 day turn)
- Begin power supply PCB design (using LM5046 Phase-Shifted Full-Bridge PWM Controller)
- Finish or give up on power board by 4/25
- Amp boards arrive by 4/25: Build, test, rework...
- If time and inclination allow, reorder full-spec PCBs and build a nice final product.