

Circuit Board: Bridge Board

This board houses the FETs that accomplish the high-voltage switching to achieve the boost feature. Although simple in concept, there are challenges here to design and lay this out in a manner that controls EMI and has the transistors only switching when they are commanded. In addition to the bridge FETs, this board includes the large boost capacitor, the load dump transistor and connections to the load dump resistor (off-board).

This circuit has been prototyped and is operational, although the layout can be improved significantly to better control the FET switching.

Documentation Included:

- Schematic
- Datasheet for FETS/Diodes/Capacitor/Load-Dump Resistor