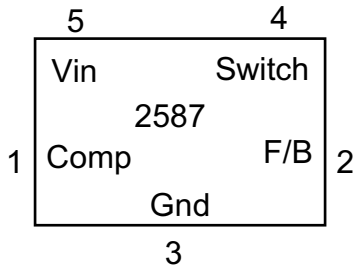
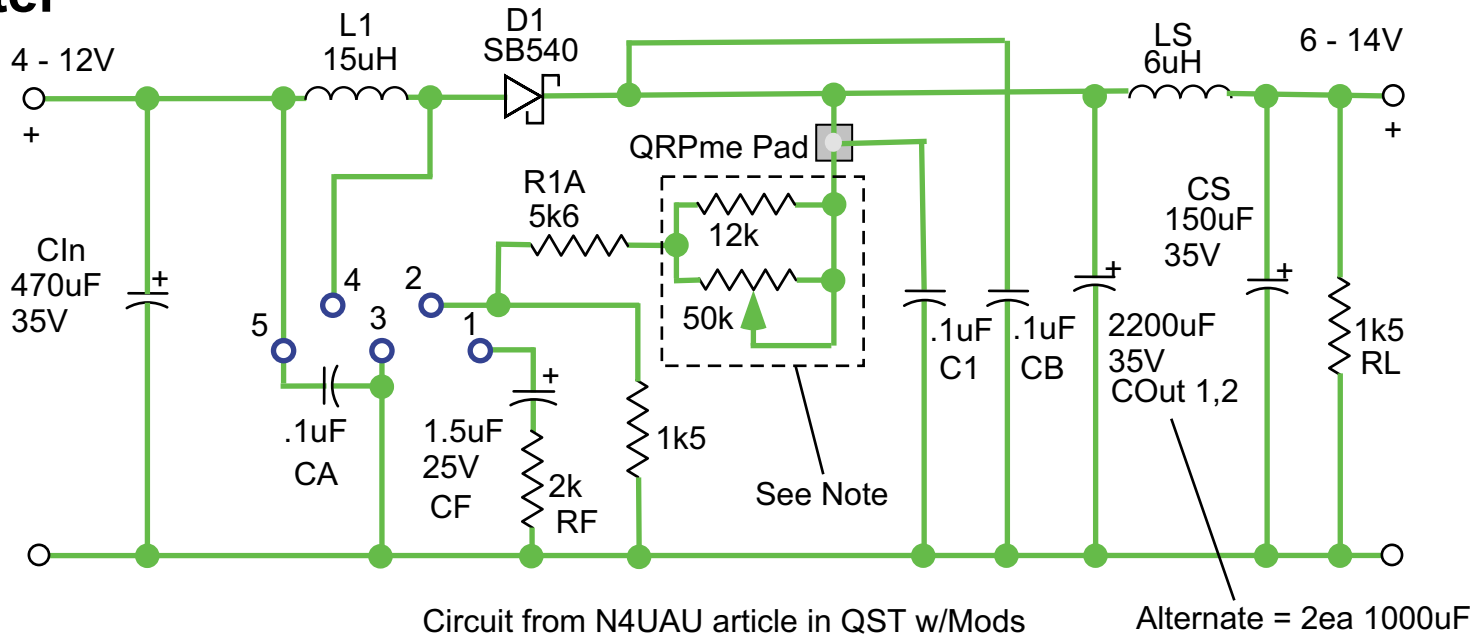


Battery Booster

W5USJ Dwg 4 Jul 09



See assembly mod drawing



List of Materials: Parts Cost = ~ \$28 (+ S&H)

PCB, Far Circuits (N4UAU Article) \$10.00 PCB 4.50 S&H 5.50
 LM2587T-ADJ DigiKey # LM2587T-ADJ-ND \$8.32 + S&H (need another source)
 Toroid T50-3 (2ea) for 6uH filter choke, Kits and Parts \$cost ?? + S&H

Mouser Part Numbers

15uH Coil Miller 542-2100HT-150H-RC \$2.61
 .1uF (3ea) Kemet 80-C315C104M5U \$0.12 x 3
 2200uF Nichicon 647-UHE1V222MHD \$1.38 (ESR = .017 Ohm)
 470uF Nichicon 647-UHE1V471MPD \$0.50
 150uF Nichicon 647-UHE1V151MPD \$0.26
 1.5uF Tantalum AVX 581-TAP155K035SRW \$0.25
 SB540 Schottky Fairchild 512-SB540 \$0.47
 5.6k KOA 660-CF1/4C562J \$0.12
 12k KOA 660-CF1/4C122J \$0.12
 2k 5% KOA 660-CF1/4C202J \$0.12
 1.5k 5% (2ea) KOA 660-CF1/4C152J \$0.12 x 2
 Heat Sink Aavid 532-563002B00 \$0.43
 Alternate 1000uF (2ea) 647-UHE1V102MHD \$0.78 x 2

Note:
 For variable voltage output, connect a 50k Ohm pot or trimmer in parallel with the 12k Resistor

 For a fixed voltage output you can use a fixed value for the voltage needed or use the trimmer as a set point adjustment

Also extra, enclosure, connectors, 5A fuse and holder, wire, hardware, etc