

Battery Equalizer (shunt-reg) for Li-Ion and LiFePO4 batteries

Mount centrally located to see all leds and include a 2A fuse at each battery connection

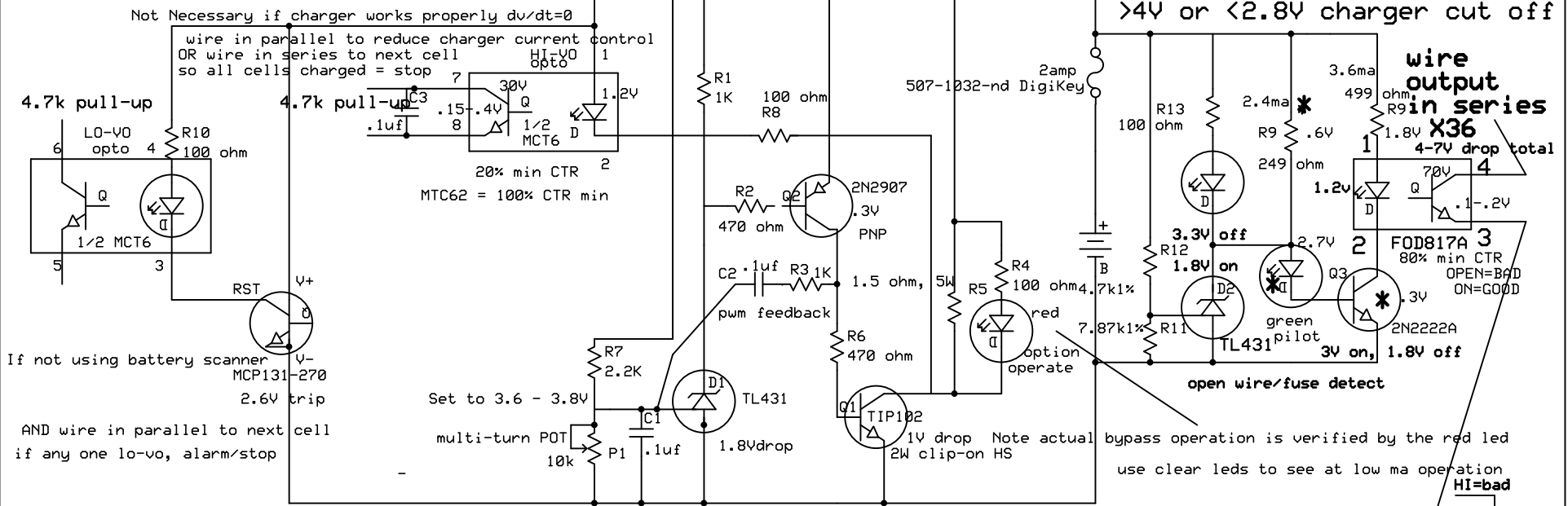
Make sure charger inherently go to <1A current when batts are 3.8V + X cells

Also charger inherently shuts off at $dv/dt=0$ & safety timeout

PWM's from .2V setting to full on at approx 1kHz
so a small clip on heat sink can be used for the TIP102 shunting 2A max
into the 5W power resistor

Vdrops measured with 3.3V cellV

optimum charger taper should be 1A final (remove secondary windings accordingly)



If not using battery scanner MCP131-270 2.6V trip
AND wire in parallel to next cell if any one lo-vo, alarm/stop

For 130ah = 13k hours to deplete charge or 1.5 years. at 11 ma total leakage

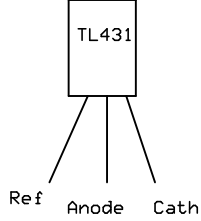
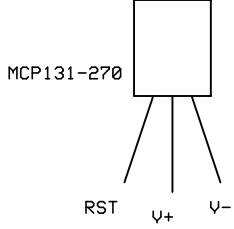
LiFePO4 5ma self discharge leakage typical
Circuit is 6ma leakage

Note: at max full power, 2A resistor will dissipate 4W and TIP102 2W

It's best to mount all regs in a central visible location for viewing and safety

2.5 min 3.6-3.8V max typical

Note: If 3.6V shunt reg ckt fails to shut off charger (bad opto etc) at 2 amps, 4.0V failsafe closed loop will shut down charger



* Revision to invert & series outputs for popped fuse detect and wire opening detection

Not responsible for screw-ups

Solectrol		
BattEq2.sch		
Mark E. Hanson	Rev 2.1	(prev 9/8/2009)
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