

## Re: Battery pack charging

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*Source:* <http://sci.tech-archive.net/Archive/sci.electronics.design/2006-09/msg00505.html>

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- *From:* legg <legg@xxxxxxxxxxxxxxxxxx>
  - *Date:* Sat, 02 Sep 2006 22:14:23 -0400
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On Sat, 2 Sep 2006 17:08:12 -0400, "James Thompson"  
<Jamesthompson2002@xxxxxxxxxxxx> wrote:

I have been thinking of a design for series battery packs and the charging of them. What I envision is custom wiring of the pack (other than its series connection) with each cell having additional wire (positive and negative terminals) feeding to a charge controller circuit. The charge controller will then charge each cell independent of the pack and stop the charge current when that cell peaks. Also for each cell in the pack, place a reversed biased diode to limit and reverse charging to the diode drop voltage when the pack is discharging or even when each cell gets fully charged and the others are still charging. Has this scheme been tried or is in use now?

I believe there's some emphasis on charge balancing using switched capacitor voltage equalization techniques, but not in commercial products.

Regular series strings tend to balance during charge and float, due to the varying charge efficiency that occurs as full-to-overcharged conditions are approached.

RL

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