OZ890

FEATURES

- High power BMU
- Highly integrated battery pack monitor and protection
 - Lilon/Polymer (Co, Mn and FeP chemistries) and NiMH battery cells
 - 5 ~ 13 cells standalone, and addressable up to 208 cells (16 BMU ICs)
 - 5 $\scriptstyle\sim$ 13 voltage channels, 3 external temperature channels and 1 current channel
 - Fully EEPROM programmable battery protection parameters
 - Built-in protections include: Over-voltage (OV), Under-voltage (UV), Over-current (OC), Short Circuit (SC), Over-temperature (OT), Under-temperature (UT), Cell Unbalance (UB), and Permanent Failure (PF)
- External/Internal cell balancing
- Current measurement for coulomb counting with external uC
- Low power consumption

GENERAL DESCRIPTION

OZ890 is a highly integrated battery pack protection and monitor IC used to manage Lithium Ion (Lilon)/Lithium Polymer (LiPolymer) or Nickel Metal Hydride (NiMH) packs with 5 – 13 series cells battery pack applications.

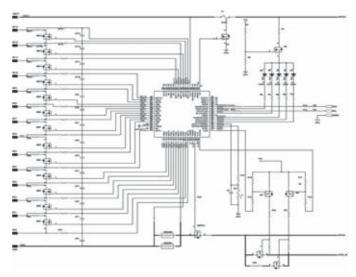
With an integrated, multi-channel, 16-bit Analog to Digital Converter (ADC), OZ890 continuously monitors each cell voltage, charge/discharge current and pack temperature providing maximum battery safety. It also provides a Permanent Failure function that will automatically assert a signal to blow an external fuse to cut off the power line or to issue an alarm to the user in extreme conditions.

OZ890 may be configured to work in standalone "hardware" mode or with a uC in "software" mode by configuring the EEPROM.

APPLICATIONS

- Electric Bicycle
- Electric Motorcycle
- Power Tools
- UPS Backup Battery
- Electric Vehicles (EV/HEV/PHEV)

APPLICATION DIAGRAM



U.S. Patent #'s 6,744,394; 7,081,737; 7,161,520; 7,196,652; 7,352,155; 7,466,104; 7,629,771; 7,642,750; and more patents pending.