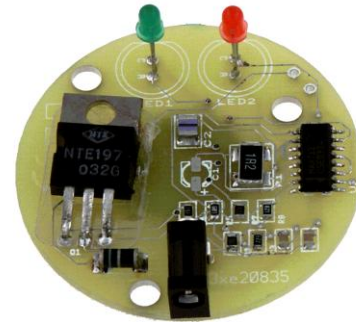


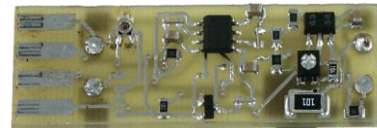
## 10.0 VOLTAGE CUTOFF

- Protects NiMH batteries from over-discharge
- Unaffected by temperature
- Small package that fits inside a battery pack
- 2-Lead output (Pos/Neg)
- Low power consumption
- Latches battery off at low voltage set point
- Reconnects battery by charging



## 10.1 CUSTOM BOARDS

The NiCd/NiMH Gas Gauge IC is intended for battery pack or in-system installation to maintain an accurate record of available battery capacity. The IC monitors a voltage drop across a sense resistor connected in series between the negative battery terminal and ground to determine charge and discharge activity of the battery. Compensations for battery temperature, self-discharge, and rate of discharge are applied to the charge counter to provide available capacity information across a wide range of operating conditions. Battery capacity is automatically recalibrated, or "learned," in the course of a discharge cycle from full to empty.



Nominal available capacity may be directly indicated using a five-segment LED display. The board also supports a simple single-line bidirectional serial link to an external processor (common ground). The bus interface reduces communications overhead in the external microcontroller.



Internal registers include available capacity and energy, temperature, voltage and current, and battery status. The external processor may also overwrite some of the gas



## 10.2 CUSTOM BOARDS

Harding provides custom solutions for every Battery pack need. Whether it is a custom charger designed to fit into your existing package or even specially designed switching techniques. Each design is rigorously tested with your pack to meet every specified environmental consideration.



<sup>1</sup> Contact Harding for listing of current items in stock