Abstract

Battery management system (BMS) forms a crucial system component in various applications like electric vehicles (EV), hybrid electric vehicles (HEV), uninterrupted power supplies (UPS), telecommunications and so on. The accuracy of these systems has always been a point of discussion as they generally give an error of maximum 10% considering all the parameters.
together. In this paper a system is presented which is developed using low cost microcontrollers for measurement of electrolyte temperature, electrolyte level and no. of backup hours parameters of lead-acid batteries. Since the batteries, which would be used in the hybrid electric vehicle (HEV), are lead-acid batteries, they will be the focus of this project. While the present prototype system accounts only for measuring backup hours of a car in a stationary as well as in a running mode. With the help of this, we are able to know the battery life span and its efficiency. Data backup is also provided to save the all records of battery.

Reference


Index Terms

Computer Science
Embedded Systems

Key words

Batteries
Battery monitoring System
Electric Vehicles
Battery Management System