

Electric Vehicle Battery Management System with Charge Monitor and Fire Protection

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Abstract: *This paper outlines the development and execution of an Electric Vehicle Battery Management System (BMS) outfitted with charge surveillance and fire prevention functionalities. As the utilization of electric vehicles (EVs) continues to grow, ensuring the safety and optimal functioning of battery packs becomes increasingly crucial. The suggested BMS merges sophisticated monitoring algorithms with fire suppression systems to alleviate risks linked with overcharging and thermal runaway incidents. Through thorough examination and validation procedures, our findings underscore the efficacy of the implemented BMS in ameliorating battery performance and guarding against potential dangers, thereby fostering the widespread embrace of electric mobility*

Keywords: Battery management system, Charge monitoring, Fire protection