Battery Junction Box Monitor IC

MC33777

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The MC33777A is not recommended for new designs. We recommend using the MC33777B

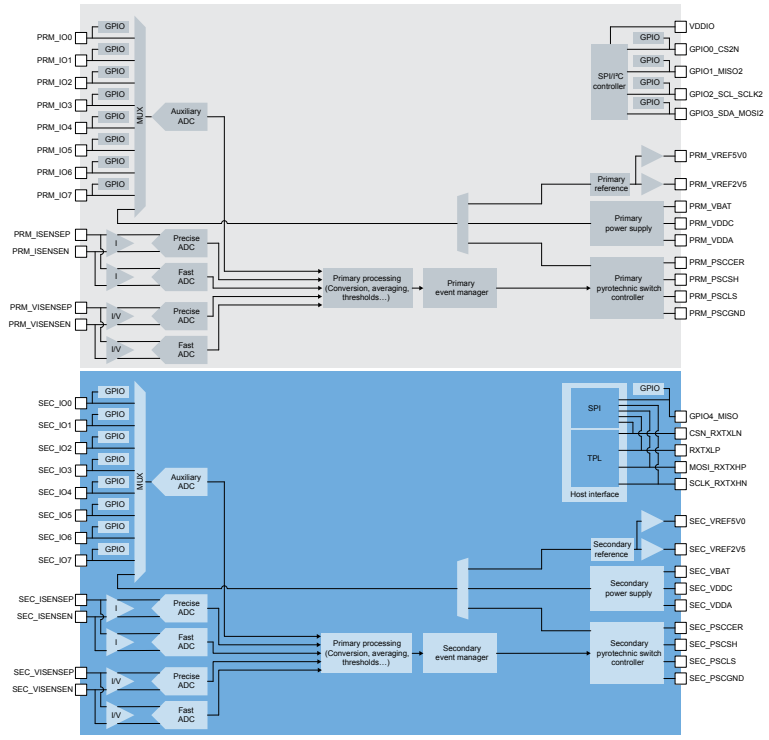
The MC33777 is a battery junction box controller IC designed for automotive applications such as hybrid electric vehicles (HEV), electric vehicles (EV), and industrial applications (ESS).

The device can drive two pyrotechnic switches independently and includes an extensive set of diagnostics.

The device measures redundantly currents, voltages, and temperatures. It processes the results and detects fault events (short circuit, system overload, crash signals...). These events can be combined and used to trigger reactions without a microcontroller (GPIOs, pyrotechnic switch).

The device offers an isolated daisy chain (TPL3) or a Serial Peripheral Interface (SPI) for communication with the MCU. The MC33777 allows reaching the highest automotive safety integrity level (ASIL D) with all its features.

MC33777 Block Diagram



View additional information for Battery Junction Box Monitor IC.

Note: The information on this document is subject to change without notice.

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