



Battery Junction Box Monitor IC with EIS Capability

BMA8420

Preproduction

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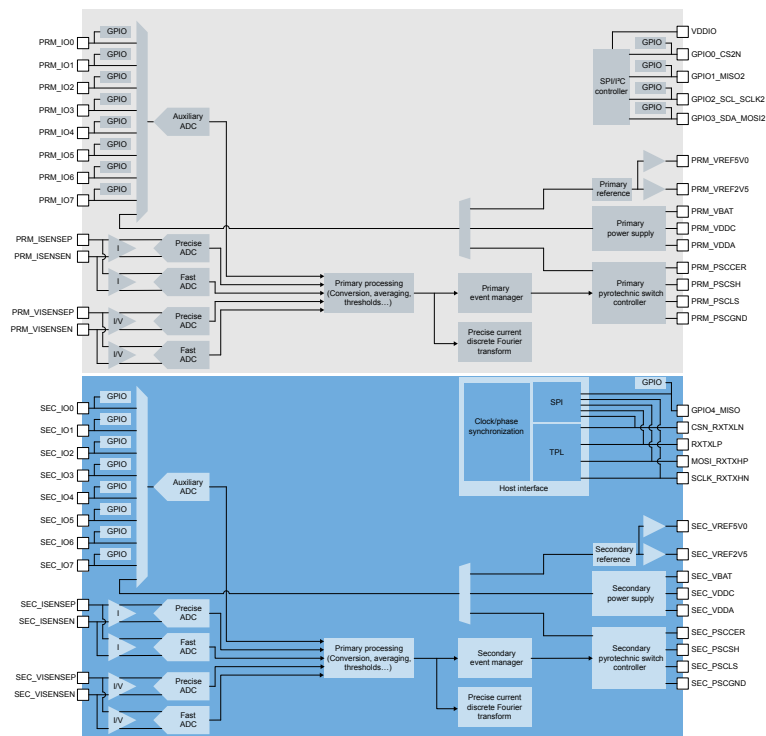
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The BMA8420 is a battery junction box controller integrated circuit (IC) with electrochemical impedance spectroscopy (EIS) capability designed for automotive applications such as hybrid electric vehicles (HEV), electric vehicles (EV) and industrial applications (ESS).

The device measures redundant currents, voltages and temperatures. It processes the results and detects fault events such as short circuit, system overload, crash signals, etc. These events can be combined and used to trigger reactions without a microcontroller (MCU) including general-purpose inputs/outputs (GPIOs) or a pyrotechnic switch.

The device offers an isolated daisy chain (TPL3) or a serial peripheral interface (SPI) for communication with the MCU. The BMA8420 delivers the features needed for applications to achieve the maximum ASIL D standards.

BMA8420 Block Diagram



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