600 mA Single-Cell Li-Ion / Li-Polymer Battery Charger

MC34671

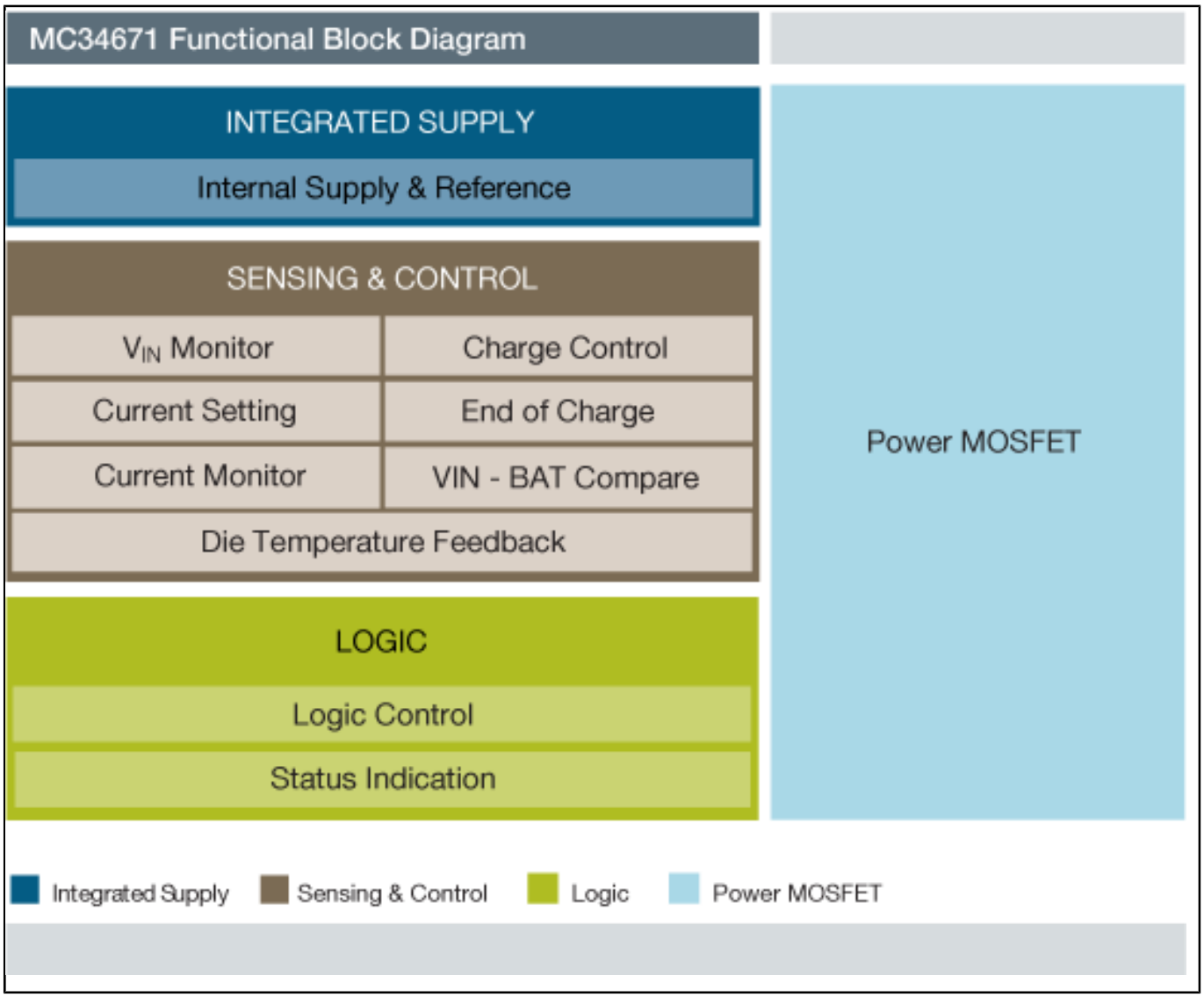
Last Updated: Dec 17, 2024

The MC34671 is a cost-effective fully integrated battery charger for Li-Ion or Li-Polymer batteries. It tolerates an input voltage up to 28 V, which eliminates the input over-voltage protection circuit required in handheld devices. A charge cycle includes trickle, constant-current (CC) and constant-voltage (CV) charge modes.

The constant-current (CC) is programmable up to 600 mA, with an external resistor.The constant voltage is fixed at 4.2 V. The trickle charge current is preset to 20% of the CC current when the battery voltage is lower than the trickle-charge threshold. The end-of-charge (EOC) current threshold is preset to 10% of the CC current to save board space and cost. A charge-current thermal foldback feature limits the charge current when the IC internal temperature rises to a preset threshold.

The MC34671 has a 2.6 V falling power-on-reset (POR) threshold, making it perfect to work with current-limited power supplies. Three indication pins (PPR, CHG, and FAST) can be simply interfaced to a microprocessor or LEDs. When no power supply is connected, or when disabled, the charger draws less than 1.0 µA leakage current from the battery.

NXP MC34671 Battery Management Block Diagram Block Diagram



View additional information for 600 mA Single-Cell Li-Ion / Li-Polymer Battery Charger.

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