



PRODUCT OUTLINE

CM1712ff – Linear Li-Ion Battery Charger
 $\pm 1\%$ Accuracy (4.2V) / Up to 1.1A Fast Charge

Part Number

■ CM1712ff

Features

- Programmable 0.1–1.1A charge current
- USB 100mA/500mA compliant
- Over voltage protection at the input
- Under voltage lock-out at the input
- Integrated temperature shutdown
- Power and charging status pin indicator
- Integrated power FET and sensing
- Integrated LDO for external loads
- 30V tolerant input

Applications

- Portable devices SoC / PMIC

Technology

- SiTerra 0.18 μ m BCD (D18V)

Deliverables

- Datasheet/Integration Guide
- HDL Model
- Flat GDSII database/LVS netlist
- Customer Support

Status

- Silicon Proven

Overview

This USB/AC Li-Ion battery charger is targeted for portable applications. The full current charge can be set from 100mA to 1.1A. It provides a regulated voltage of 4.2V for powering external loads up to 2.3A in the absence of the battery. The recommended supply input voltage range is 4.5V to 6.9V, however the battery charger can support from 3.3V up to 30V in idle mode. A reverse current protection is available in order to avoid current flowing from the battery back to the charger when the voltage at V_{in} is lower than V_{batt} ($V_{in} < V_{batt}$). An under/over input voltage lock-out sensor and a die over temperature sensor are also available to ensure safe battery charge conditions.

Functional Diagram

