

MM8118G01

2023/07/20

Outline

MM8118G is a high accuracy battery monitoring IC for Li-ion battery and Li-polymer battery. This IC measures temperature, voltage, and current with high-precision delta-sigma AD converter, integrates current value both at discharging and charging, and performs capacitance correction based on the measurement value and specific battery characteristics parameter. Thus the IC achieves excellent management ability for battery power.

MM8118G provides several features to make battery use safe and secure. Battery degradation detection which is based on capacitance change is available. And this IC has features for notification of these information.

MM8118G can be implemented at both of host-side and battery-side.

Function

Coulomb Counting type

Features

- High accuracy current/voltage measurement

Current and voltage value are measured by high accuracy 16bit delta-sigma AD converter.

- High accuracy battery power management

Battery power is based on integration of periodically-measured current and the value is corrected with open voltage(OCV) and battery characteristics parameters. The battery power is managed so as to minimize the error constantly.

- Battery degradation monitor

Battery total capacitance is measured periodically and status of capacitance change is monitored.

Specification

MM8118G01

2023/07/20

Operating temperature [deg.C]	-20~85
Operation voltage [V]	2.5~5.5
Current consumption [μA]	30.5(Normal mode)
Voltage sensing accuracy [mV]	1800~5000
Current sensing accuracy [mV]	-48~48
Temperature sensing accuracy [deg.C]	-20~85
Communication I/F	I2C(Max 400kHz)

Package

PLP-12A