

Product Overview

LC709203F: Battery Fuel Gauge for 1-Cell Lithium-Ion/Polymer

For complete documentation, see the data sheet.



LC709203F is a Fuel Gauge for a single lithium ion battery. It is part of our "Smart LiB Gauge" family of Fuel Gauges which measure the battery RSOC (Relative State Of Charge) using its unique algorithm called "HG-CVR". The "HG-CVR" algorithm eliminates the use of a sense resistor and provides accurate RSOC information even under unstable conditions (e.g. changes of battery; temperature, loading, aging and selfdischarge). An accurate RSOC contributes to the operating time of portable devices. LC709203F is available in two small packages realizing the industries smallest PCB footprint for the complete solution. It has minimal parameters to be set by the user enabling simple, quick setup and operation.

Features

- "HG-CVR" algorithm technology :No external sense resistor2.8% accuracy of RSOC
Accurate RSOC of aging batteryAutomatic convergence of errorAdjustment for the parasitic impedance around the batterySimple and Quick Setup
- Low power consumption : 3 μ A Operational mode
- Precision Voltage measurement : ± 7.5 mV
- Precision Timer : $\pm 3.5\%$
- Alerts for Low RSOC and / or Low Voltage
- Temperature compensation :Sense Thermistor inputVia I2C
- Detect Battery insertion
- I2C Interface (up to 400 kHz supported)

Applications

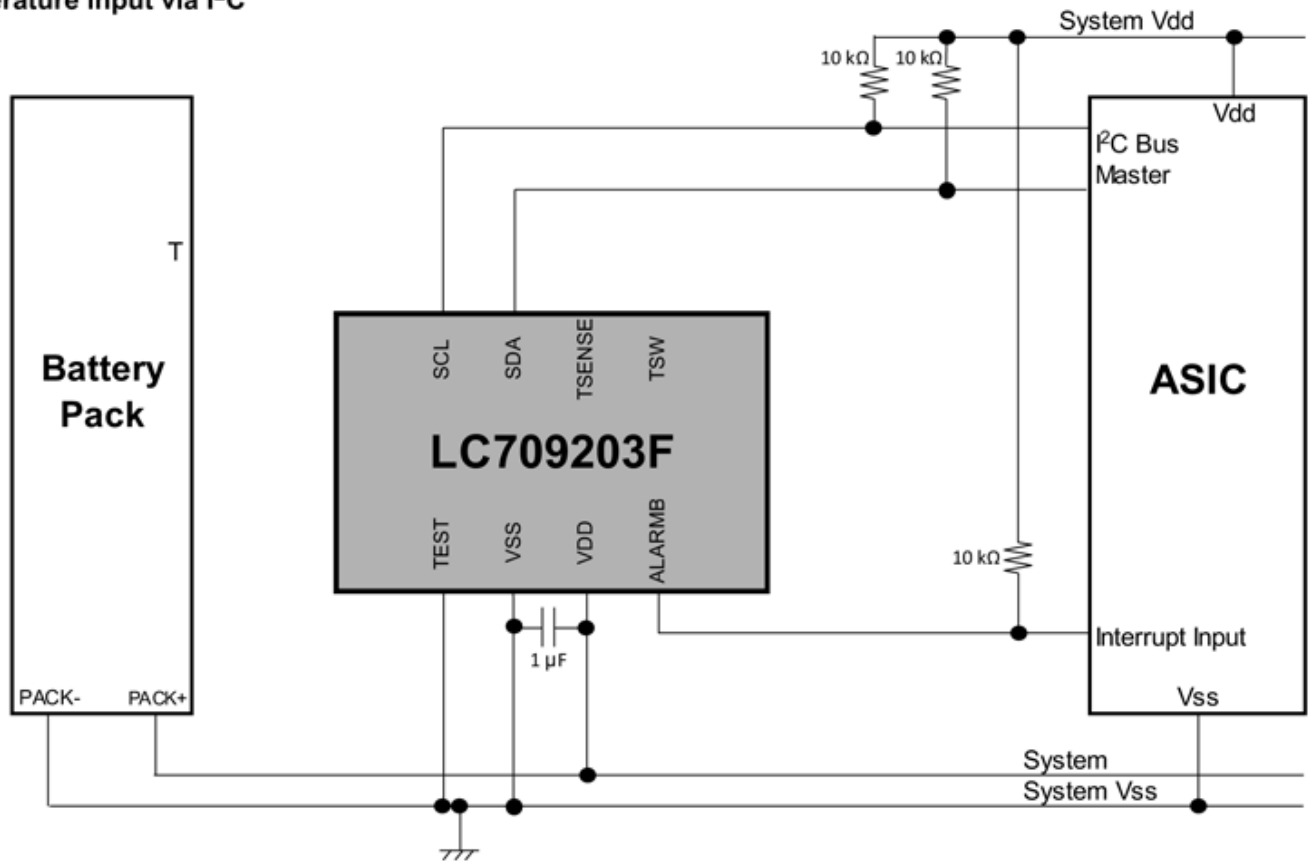
- Battery Management for Portable & Wireless Applications

End Products

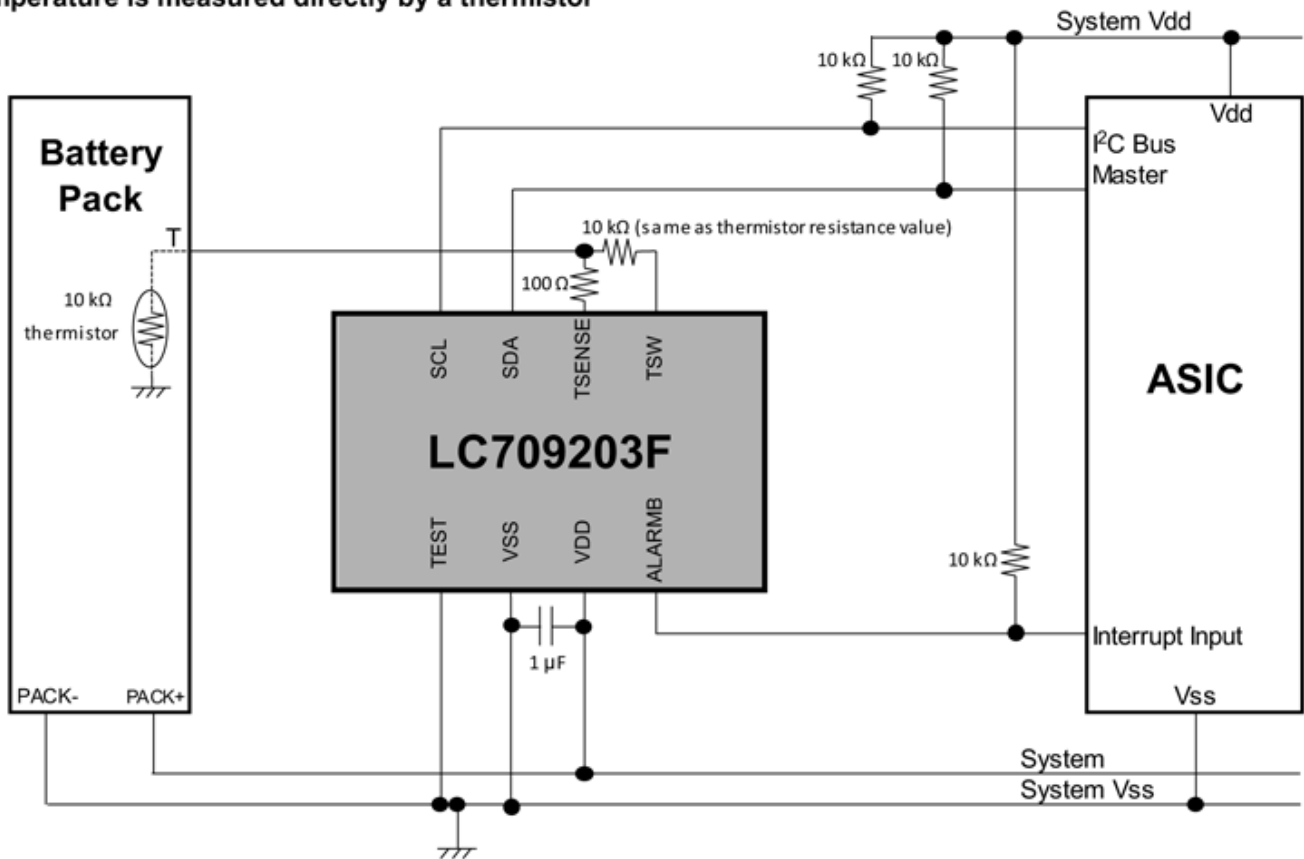
- Wireless Handsets
- Smartphones / PDA devices
- MP3 players
- Digital cameras
- Portable Game Players

Application Diagram

Application Circuit Example Temperature input via I²C



The temperature is measured directly by a thermistor



For more information please contact your local sales support at www.onsemi.com.

Created on: 4/18/2021