

# 18 Channel Li-Ion Battery Cell Controller IC ASIL D

# **BMA7118**

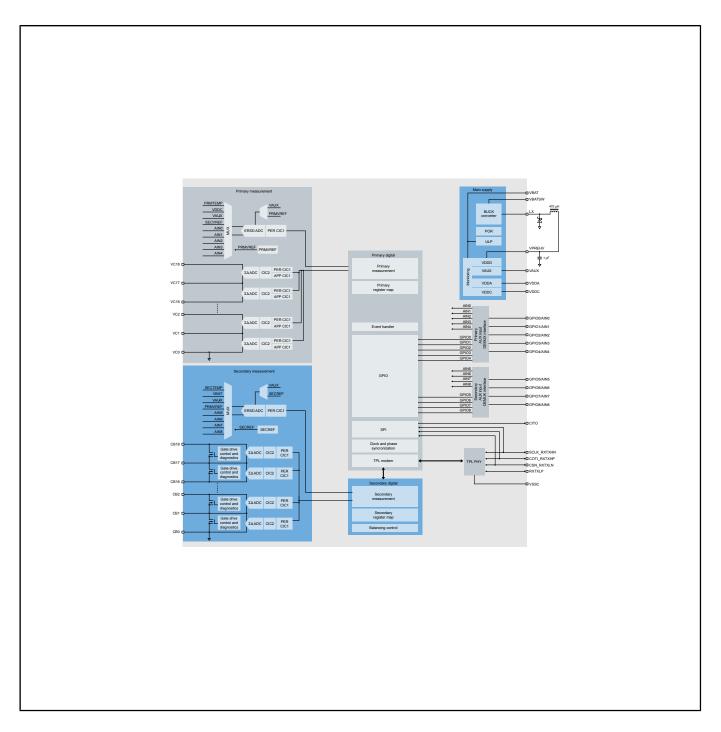
### Active

Last Updated: Dec 23, 2025

The BMA7118 is an automotive lithium-ion (Li-ion) battery cell controller integrated circuit (IC) with a dedicated, high-accuracy analog-to-digital converter (ADC) per voltage measurement channel with high synchronization capability—a requirement for electrochemical impedance spectroscopy (EIS).

Upgrading to EIS is lower in cost, due to pin compatibility and shared software across the product family. BMA7118 offers low 5 mA current consumption due to its integrated DC-to-DC converter. As a fully redundant and independent internal architecture, it achieves automotive safety integrity level ASIL D functional safety.

## **BMA7118 Block Diagram**



View additional information for 18 Channel Li-Ion Battery Cell Controller IC ASIL D.

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

**www.nxp.com**NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2025 NXP B.V.