

Battery Monitoring IC Quantifying Internal Battery States with **EIS**

～自動車、蓄電システムにおけるバッテリーの安全性向上に貢献～

26セル対応 EIS機能搭載バッテリー監視ICのサンプル提供開始

ヌヴォトン テクノロジーは、EIS機能を搭載した26セル対応バッテリー監視IC「KA85010UA」のサンプル提供を2027年1月より開始します。

独自のインダクタ方式によりEIS測定時の基板温度上昇を従来方式比で約93%低減し、バッテリーの劣化診断や寿命予測、セル異常の予兆検知を実現します。さらに、EIS解析アルゴリズムの提供を通じてアプリケーションへの搭載を支援します。



プレスリリースはこちら



製品詳細はこちら

本製品による効果

01 EIS機能をバッテリー監視ICに搭載し、バッテリー内部状態を定量化

劣化診断・寿命予測・セル異常の予兆検知を可能にし、自動車や蓄電システムの安全性向上に貢献

02 独自のインダクタ方式EISにより低消費電力でのインピーダンス測定を実現

測定時の基板温度上昇を従来方式比で約93%低減し、自動車や蓄電システムへのEIS機能実装を容易化

03 EIS解析アルゴリズムを提供し、EIS測定環境の構築から製品実装までを一貫して支援

EISを活用したバッテリー診断の早期立ち上げで開発期間の短縮に貢献

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- Contributing to Safer Batteries in Automotive and Energy Storage Systems -

Introducing 26-Cell EIS-Enabled Battery Monitoring IC Samples

Nuvoton Technology will begin providing samples of the KA85010UA, a 26-cell battery monitoring IC equipped with EIS functionality, in January 2027.

Our proprietary inductor method reduces the PCB temperature rise during EIS measurements by approximately 93% compared with conventional methods, enabling battery degradation diagnosis, lifetime prediction, and early detection of signs of cell abnormalities. We also support integration into applications by providing EIS analysis algorithms.



Press release



Product detail

Achievement

01 EIS is integrated into the BM-IC, enabling quantification of internal battery conditions

Enables degradation diagnosis, lifetime prediction, and early detection of signs of cell abnormalities, contributing to improved safety in vehicles and energy storage systems

02 Proprietary inductor method enables low-power-consumption impedance measurement

Reduces PCB temperature rise during measurement by approximately 93% compared with conventional methods, facilitating implementation of EIS functionality in automotive and energy storage systems

03 Provides EIS analysis algorithms and end-to-end support, from setting up the EIS measurement environment to product implementation

Shortens the development cycle by supporting rapid implementation of EIS-based battery diagnostics