

All-In-One Analog Front End



Cell voltage monitoring (up to 17 cells)



Pack current measurement via external shunt



Multiple temperature sensing inputs



Integrated CHG / DIS FET drivers

- Low-side: KA49701A
- High-side: KA49702A



Internal voltage and current ADC diagnostic

Hardware ADC Self-Diagnostics

Verifies the measurement chain itself — not just thresholds. Detects ADC malfunction, reference drift, and internal faults so protection decisions are based on confirmed data.

Ultra-Low Standby Current

Minimal quiescent draw in standby, sleep, and shutdown. Protects pack health through shipping, warehousing, and seasonal idle. Fewer dead packs. Fewer returns.

Voltage Averaging

On-chip 4x/8x/16x averaging cuts noise from motor transients and switching di/dt. Stable SOC/ SOH inputs without heavy MCU filtering.



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FAIL-SAFE BMIC WITH HARDWARE DIAGNOSTICS



WHY THIS IC?

Designed for cordless power tools and outdoor equipment running >20V Li-ion packs — up to 17S — gives your BMS team a complete analog front end in one IC.

Most BMICs protect against threshold breaches. These parts go further: they verify the ADC measuring those thresholds is working correctly — catching faults before they escalate into thermal events or pack failures.

