

Dukosi Launches Reference Design for BESS Applications at Embedded World 2025

The 54 Cell Reference Design Demonstrates the Flexibility of Dukosi Cell Monitoring System (DKCMS™) with C-SynQ® to Integrate with Leading BMS Host Processors, Creating Simpler, Safer and more Sustainable Battery Systems

EDINBURGH, United Kingdom, 11 March, 2025 -- Dukosi Ltd, the technology company revolutionizing the performance, safety and sustainability of high-power battery systems, has introduced a reference design for battery energy storage systems (BESS), which is being demonstrated on the Arrow Electronics booth at Embedded World this week in Nuremberg, Germany.

This proof of concept (PoC) represents a comprehensive solution that incorporates 54 cells, which is standard for battery module configurations appropriate in a 900-1500V BESS rack. The design utilizes the Dukosi Cell Monitoring System (DKCMS) with C-SynQ® proprietary communications, and an industry standard battery management system (BMS) host processor.

Developed in collaboration with [elinfochips](#), an Arrow Electronics Company and a leading provider of product engineering services, this reference design represents an end-to-end BMS using DKCMS, ready for full-size BESS applications. Arrow Electronics' customers can leverage this PoC to accelerate development of DKCMS-based designs, driving further adoption of Dukosi's innovative contactless battery cell monitoring solutions.

DKCMS helps deliver the performance, reliability, and safety requirements needed for next-generation, large-scale battery storage systems. DKCMS with C-SynQ provides best-in-class voltage accuracy and granular temperature measurements from every cell, synchronously capturing data from all Cell Monitors and delivering it with deterministic latency to the System Hub, which interfaces with the BMS host processor. DKCMS is adaptable to work with various leading BMS host processors, while exceeding the capabilities of other battery architectures. Dukosi's flexible architecture provides benefits for grid management, load shifting, peak shaving, behind-the-meter, and other energy storage applications.

Joseph Notaro, vice president global sales and marketing at Dukosi, said, "kickstarting our partnership with Arrow, this new reference design will allow BESS developers to streamline the design of new batteries, accelerate time to market, and easily scale to meet operational demand, while benefiting from DKCMS's inherent advantages in cell data accuracy, battery safety and reliability, and long-term sustainability."

Dukosi's new 54 cell module reference design for BESS applications is being showcased at [Embedded World](#), 11-13 March, 2025 in Nuremberg, on the [Arrow Electronics booth](#), in **Hall 4A on booth #4A-342**. To arrange a meeting and view a demonstration at the show, please email info@dukosi.com. To learn more about Dukosi and award-winning DKCMS with C-SynQ, visit www.dukosi.com.

About Dukosi

Dukosi develops revolutionary technologies that dramatically improve the performance, safety, and efficiency of battery systems, and enable a more sustainable battery value chain. The company provides a unique cell monitoring solution based on chip-on-cell technology and C-SynQ® communications protocol for electric vehicles (EV), industrial transportation and stationary energy storage markets. Headquartered in Edinburgh, UK, Dukosi has a global footprint with locations in USA, Asia and Europe.

For more information, please visit www.dukosi.com

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