



## PRESS RELEASE

### **Dukosi Demonstrates Turnkey Battery Passport Ready Secure Cell-to-Cloud Battery Management Solution at Embedded World 2026**

*Developed in collaboration with STMicroelectronics the 16 Channel Proof-of-Concept Demonstrator Combines the Dukosi Chip-on-Cell Technology with C-SynQ® with ST's STSAFE™ Secure Element*

EDINBURGH, United Kingdom, 10 March, 2026 -- Dukosi Ltd, the technology company revolutionizing the performance, safety and sustainability of high-power battery systems, has collaborated with STMicroelectronics ("ST"), a global semiconductor leader serving customers across the spectrum of electronics applications, on a turnkey end-to-end secure Battery Passport ready battery management solution. Dukosi and ST are demonstrating the 16-channel proof-of-concept (PoC) with integrated cell-to-cloud encryption, secure authentication and lifetime data at Embedded World this week in Nuremberg, Germany.

The PoC represents a comprehensive solution that incorporates 16 cells, which is standard for battery module configurations appropriate for industrial equipment, battery energy storage, and xEV applications. The design utilizes the Dukosi chip-on-cell technology with C-SynQ® proprietary communications with ST's MCU and Secure Element, and demonstrates the potential of authenticated lifetime cell-to-cloud data and tamper-proof Battery Passport in building supply chain trust, improving repairability, and extending battery lifecycle through safer reuse and recycling.

Joseph Notaro, chief revenue officer at Dukosi, said, "collaboration with ST has enabled us to demonstrate the many advantages of Dukosi's chip-on-cell technology when combined with STSAFE™ hardware encryption technology, enabling secure replacement of individual damaged cells for increased sustainability, safety and maintainability, while preserving cell history during the cell's entire lifetime and Battery Passport integrity with cell-to-cloud data encryption and authentication. This turnkey security solution will enable OEMs and Tier 1s to leverage the reference platform to accelerate development of safer, smarter and more secure and reliable batteries that are EU Battery Regulation ready and promote sustainable electrification. With a shared commitment to sustainability, innovation and excellence, ST has been an ideal collaborator on both a technical and strategic level to accelerate adoption of our technologies and building a more sustainable and circular battery supply chain."

"Integrating Dukosi's chip-on-cell technology with STSAFE secure elements provides a significant opportunity for battery passport applications by enabling a secure solution across the entire product life cycle." said Agostino Vanore, Secure Edge & IoT eSIM Business Unit Manager at STMicroelectronics. "The STSAFE-A120 enables this with advanced protection and security by design, supporting authentication, confidentiality, and platform integrity services for the battery management system."

### **About the Battery Passport Ready Secure Cell-to-Cloud BMS Demonstrator**

- EU Battery Passport-ready - DIN DKE SPEC 99100 compliant.
- DKCMS-based battery architecture with STSAFE-A120 upgrades security, maintainability, and full traceability across the cell's lifetime (cell passport).
- A regulatory-ready, multi award-winning battery architecture that enhances the performance, safety, reliability and serviceability of next generation battery systems for wide-ranging electrified applications.
- Best-in-class turnkey Battery Management System (BMS) solution with integrated Cell-to-Cloud encryption, secure authentication and lifetime data protection.

In the live demonstration, one designated cell includes an internal heater that can be user controlled to generate variable temperature conditions. A variable voltage is generated for all cells to simulate charge and discharge cycles and overvoltage events. These events are part of the dynamic data in the battery passport and, together with some static data, are stored in the CMS' non-volatile memory. The unique ID of each Dukosi Cell Monitor is stored in the STSAFE-A120 to ensure data encryption and validation. The graphical user interface (GUI) includes dedicated sections for battery passport management, data encryption, and secure validation processes.

When an individual cell is removed and replaced, the system detects a mismatch in the new cell's unique ID on the network. This flags a potential tampering anomaly and restricts access to data from other cells and system operations. An authorized maintenance procedure can be simulated through a dedicated GUI, where valid credentials allow registration and replacement of the replacement cell by authorized service personnel (PLI).

This demonstration highlights the ultimate flexibility, repairability, safety and security of the DKCMS and STSAFE's cell-to-cloud, Battery Passport ready, BMS solution.

Dukosi is showcasing its award-winning cell monitoring solutions and demonstrating the Battery Passport Ready Secure Solution demonstrator developed in collaboration with STMicroelectronics at [Embedded World](#), 10-12 March, 2026 in Nuremberg. Join Dukosi 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](mailto:info@dukosi.com). To learn more about Dukosi and how DKCMS can assist battery designers and manufacturers in achieving their performance, safety, reliability and sustainability objectives visit [www.dukosi.com](http://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](http://www.dukosi.com)

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