

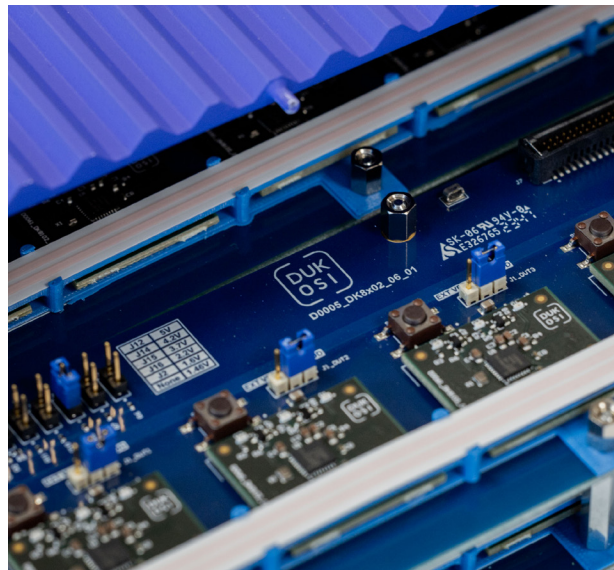
54 Channel Reference Design for Battery Energy Storage Systems (BESS)



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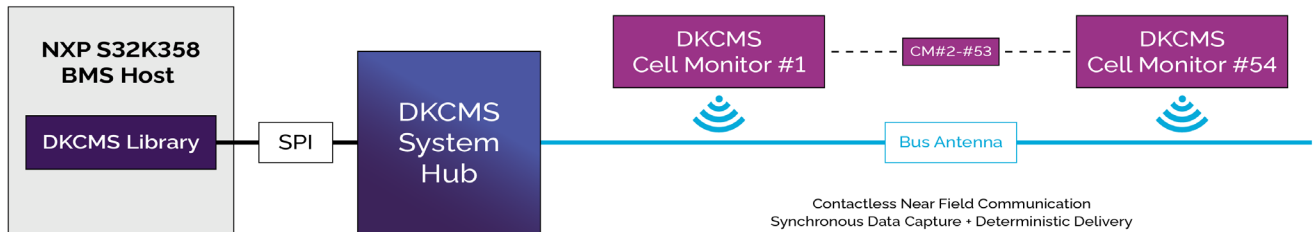
54 Cell Monitor 'BESS Container' Demonstration System

Modeled after a Battery Energy Storage System (BESS) container, our live demonstration exhibits the [Dukosi Cell Monitoring System \(DKCMS™\)](#) reference design in application. In this example, the 4 layers of Cell Monitors are not attached to live cells but still send data via contactless near field communications using [Dukosi C-SynQ®](#) proprietary protocol to the Dukosi System Hub, which is connected via USB to a laptop (not pictured).



DOWNLOAD DESIGN BRIEF (PDF)

54 Channel Reference Design for BESS Modules



The Dukosi 54 channel reference design represents an end-to-end BMS using DKCMS, ready for one module in a full-size [BESS application](#). It reflects a typical battery module configuration suitable for a 900-1500V rack, based on a choice of BMS host system that uses 3 x 18 channel AFE's. DKCMS is adaptable to work with various BMS host processors via SPI interface, while [its capabilities exceed that of other battery architectures](#) as its Cell Monitors provide best-in-class voltage accuracy and temperature datapoints from every cell.

During their evaluation stage, our customers can easily setup the Dukosi solution in their own proof of concept (PoC) designs, aided by the [Dukosi EVK GUI](#) running on a laptop. The DK8102 GUI is an intuitive software environment that enables system designers to functionally evaluate the DKCMS. It visualizes the battery with real-time data streamed from connected Cell Monitors, which helps to diagnose and optimize settings quickly and easily during early development stages. The simplicity of DKCMS is echoed in the fact that the Dukosi EVK can be set up, and the GUI running in under 5 minutes.

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Dukosi Ltd 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® communication protocol for electric vehicles (EV), industrial transportation and stationary battery energy storage markets.

For more information, email info@dukosi.com or visit www.dukosi.com.