

## Powering the Future of Energy Storage with Udoka Electronics

### How Acculon Uses Acam, Sumac, and Sumac Agent to Accelerate Battery Innovation

At the forefront of modular battery systems, **Acculon Energy** develops cutting-edge energy storage solutions for mobility, datacenter, and grid applications. With rapid development cycles and complex system integration at its core, Acculon relies on **Udoka Electronics** to meet the demanding requirements of **data acquisition, calibration, and validation**.

Acculon has integrated **Acam, Sumac, and Sumac Agent** into its daily toolchain to streamline engineering workflows, ensuring consistency across its development processes.

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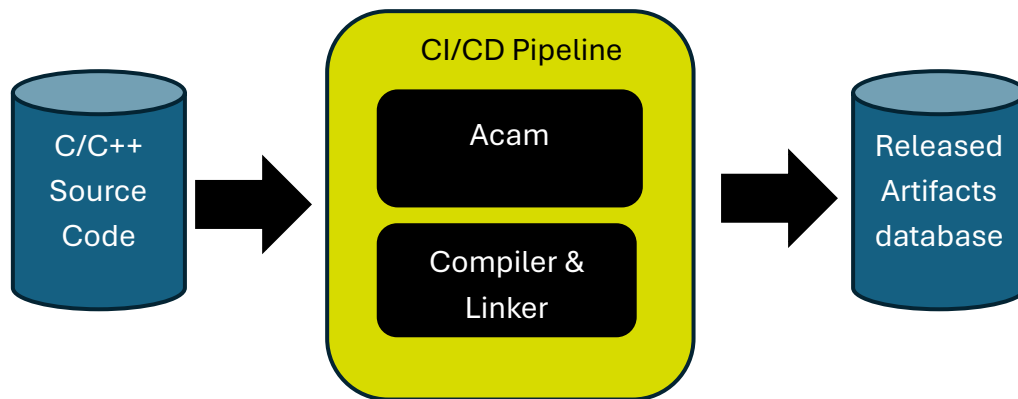
#### Automating A2L Workflows with Acam

Acculon uses **Acam**, Udoka's powerful A2L automation suite, to generate, merge, update, and filter A2L files directly from source code. By embedding Acam into their CI/CD pipeline, Acculon ensures **reliable traceability, consistent calibration artifacts, and seamless handoff between software and test teams**.

Acculon's battery management system is designed with modularity in mind, scaling from a single battery module to as many as 60 in a rack, and supporting many different voltage ranges and communication protocols. Acam enables Acculon to **calibrate software across hardware platforms without requiring software changes or recompilation**, enabling flexible reuse of the same BMS software across all platforms.

*"Acam helps us maintain a single source of truth across platforms—freeing our engineers to focus on tuning and performance, rather than maintaining metadata,"* says Justin Terrien, Principal Engineer at Acculon.

This automated workflow is illustrated in the diagram below.




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### Real-Time Visibility with Sumac and Sumac Agent

Acculon deploys **Sumac Agent** directly on its BMS devices to gain **real-time visibility, control, and calibration capability** during development and testing. Engineers can monitor signal fidelity, log high-resolution data, modify configurations, and fine-tune parameters—all while observing system behavior live.

Paired with **Sumac**, Udoka’s orchestration platform, Acculon can script, manage, and replay test routines across multiple devices and testbenches from a unified interface.

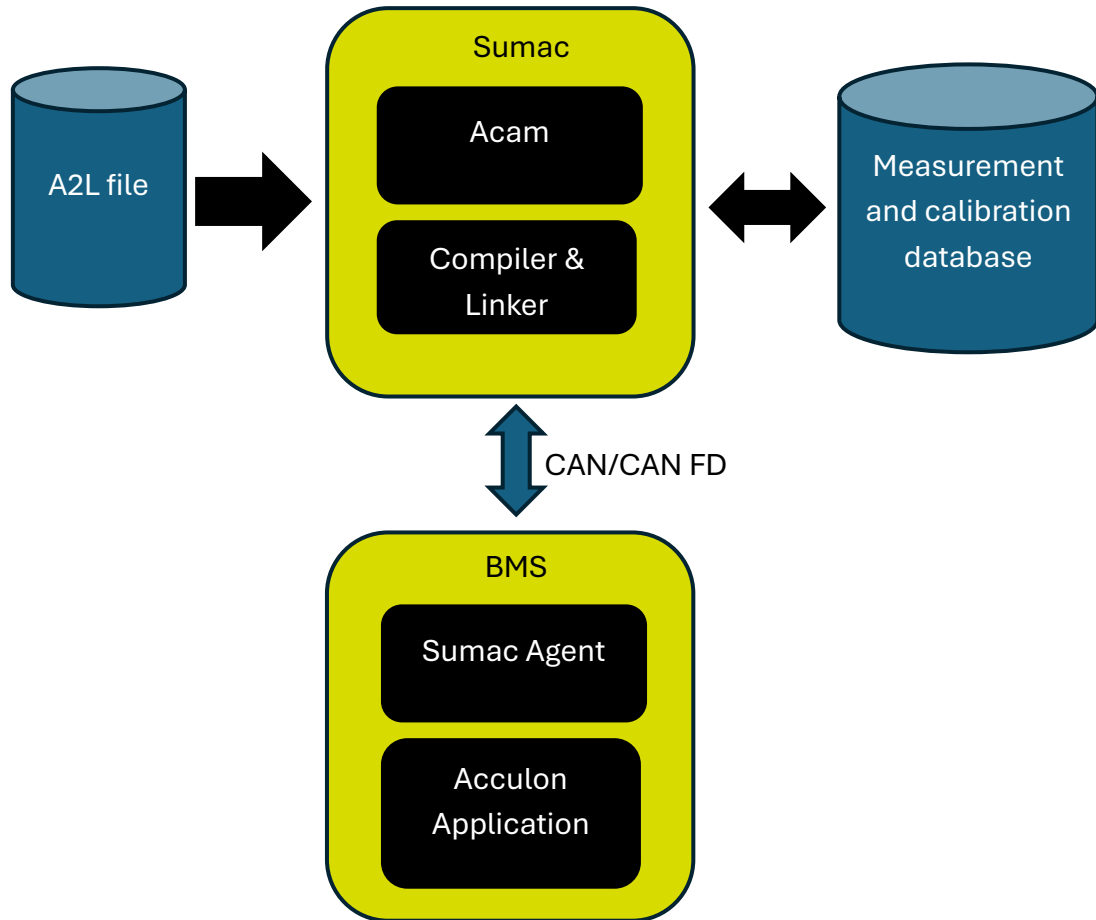
*“Sumac Agent combined with Sumac gives us the real-time data acquisition and control we need to validate communication protocols, thermal models and safety logic. We can capture data, update calibrations, and retest in seconds instead of hours”* says **Andrew Huster**, Technical Program Manager at Acculon.

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### Building Better Batteries, Faster

By combining **Acam’s automation, Sumac’s orchestration capabilities, and Sumac Agent’s real-time insights**, Acculon has **accelerated its calibration, integration, and validation workflows** while improving system quality and test coverage.

The full integration is illustrated in the diagram below.



[Learn more about Sumac and how this tool can help you with calibration, measurement and visualization of embedded control systems or ECUs >>](#)