

50% faster software development with 30% less effort

Enabling model-based development for drive converters with SIRIUS OS



<p>Client: Control unit developer</p> <p>Industry: Electrical drives</p> <p>Region: Germany</p>	<p>Challenge: Inefficient development and testing with high time expenditure and insufficient capacity for product development.</p> <p>Solution: Installation of SIRIUS OS for model-based development in MATLAB® Simulink®.</p>	<p>Key Benefits:</p> <ul style="list-style-type: none"> • 30% less development effort • 50% faster time to market • Increased software quality • Significant reduction in workload for the development team – more capacity for product development
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Challenge

High development effort, cost and time

Developing drive converter software using traditional programming methods was very time-consuming for the customer's development team. In order to further differentiate itself from the competition in terms of technology, the customer was looking for ways to increase its capacity for developing new features.

Solution

Integration of SIRIUS OS for model-based development

We installed our embedded real-time platform SIRIUS OS on the customer's hardware. SIRIUS OS offers our customer a complete package for a powerful, highly scalable, and expandable development environment. This enables model-based development of all control and regulation software with MATLAB® Simulink® via the software platform. SIRIUS OS provides access to all features important for intelligent field devices, such as real-time communication, IoT connectivity, and remote updateability.

Results

Increased efficiency, quality, and innovation capacity

The use of modern model-based development methods with MATLAB® Simulink® on existing hardware significantly reduces development effort and the workload of the development team, freeing up more capacity for innovation and further product development. In addition, automatic code generation, efficient optimization, and validation reduce the risk of errors and costs while increasing software quality. Faster development cycles enable the customer to operate more efficiently in the market and expand its competitive advantages.

