

FMI TOOLBOX

for MATLAB®

► SCOPE

- Dynamic simulation
- Integration of physical models in MATLAB®/Simulink
- Control system development

► KEY FEATURES

- Support for the Functional Mock-up Interface (FMI) for Model Exchange and Co-Simulation
- Import and simulation of Functional Mock-up Units (FMUs) in Simulink
- Import and simulation of FMUs in MATLAB® scripts

► BENEFITS

- Reduced time and cost for development of control systems supported by physical models
- Exploit state of the art physical modeling tools
- Maintain flexibility with the FMI standard

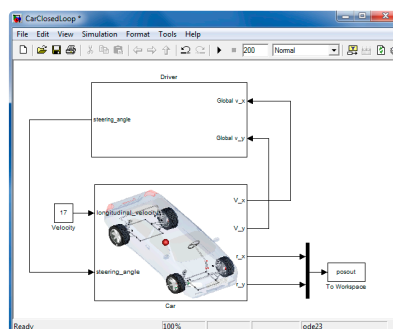
The FMI Toolbox for MATLAB® enables easy to use integration of physical models developed in state of the art modeling tools in the MATLAB®/Simulink environment. The toolbox relies on the open FMI standard and is ideal for control systems development.

High-fidelity physical models are key components in development of control systems, and contribute to increased quality and shorter development cycles. Modeling languages such as Modelica are commonly used to develop accurate simulation models of systems in a wide range of domains, including mechanics, electronics, and thermodynamics.

The FMI toolbox for MATLAB® links state of the art Modelica-compliant tools, including AMESim, Dymola and

SimulationX to the MATLAB®/Simulink environment. Support for the FMI standard ensures flexibility and cross-platform interoperability.

OPTIMICA Studio by Modelon is the perfect companion to the FMI Toolbox. The combination of these tools provides a complete Modelica and FMI-based tool chain that is integrated into MATLAB®/Simulink.



MATLAB version 2007b and later is supported.

THE FUNCTIONAL MOCK-UP INTERFACE

The Functional Mock-up Interface (FMI) is an open standard for exchange of compiled models, targeting tool interoperability and model reuse. The FMI technology is adopted by a large number of open source and commercial tools enabling easy exchange of compiled models. Several tools support export of FMI models and more are following. For a complete list see:

www.functional-mockup-interface.org

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