

MotoHawk Suite Software

"Your Rapid Controls Development Software"



MotoHawk[®] is a controls system application development tool that allows the user to create Simulink[®] diagrams that run on the MotoHawk Control Solutions rugged, automotive-quality embedded control modules.

MotoHawk is a powerful development and prototyping system for Simulink/Stateflow users. Control models prototyped with MotoHawk move seamlessly from development into production.

MotoHawk follows the work flow and benefits of Model-Based design using the Mathworks tool chain.

The MotoHawk library includes precompiled blocs immediately usable like:

- The target ECU to use for the application
- The inputs and outputs available in the chosen ECU
- Communication protocols
- Ready to use engine control library
- Real time data measurement
- Real time calibration
- OS, software and hardware management

In your Simulink strategy, MotoHawk acts as an interface between your own model and the ability of the chosen ECU. It means that these blocs:

- Analog/digital inputs
- PWM, H-bridge, LSO and HSO outputs
- Communication (CAN, CCP, Serial)
- Engine configuration
- Knock detection
- Fault and error management
- Debug and diagnostic blocs

are ready to use. You just drag and drop it in your model depending on the control you need to perform.



Features include:

- Auto-code generation of Simulink/Stateflow models using Embedded Coder/Stateflow Coder
- Rugged controllers for prototyping and production
- ControlCore enabled software
- Off-the-shelf engine control libraries
- Calibration using MotoTune® or CCP based tools
- Responsive engineering and support services for a wide-range of applications
- Electronic control modules available for development, fleet and production

Benefits include:

- Simpler, faster development
- Better testing using real ECM hardware
- Quickly develop and enhance software features in Simulink
- Analyze and control real-time OS from Simulink/Stateflow
- Direct access to the production controller's I/O from Simulink
- Readable documentation of system design automatically created from models
- Lower cost for fleet testing; outfit an entire test fleet with rapid prototyping capability
- Custom block-set allows for integration of both handwritten and auto-code

