

MOTIX™ Software

Accelerate your innovation with MOTIX™ Software – the platform for embedded automotive motor control solutions from Infineon.

MOTIX™ Software is a modular and highly scalable platform of SW and tools reducing efforts for automotive motor control system development. It features a unique combination of common motor control middleware components and low-level device drivers, all optimized for the use across Infineon device families and designed to meet most stringent system safety requirements.

MOTIX™ Software customization and integration with application or 3rd party software is supported by APIs, leveraging best Infineon device features. Our tools in particular support you in device configuration, evaluation and MOTIX™ motor control software parametrization to accelerate your success.

Target applications

- Pumps, fans, compressors and valves of thermal management systems
- Drives in body, comfort and ASIL D braking and steering systems

MOTIX™ Software key building blocks

MOTIX™ Motor Control Library

- High scalability and re-use-ability with MOTIX™ MCU device family by unique modular and layered architecture
- Optimized for single-leg-shunt FOC solutions
- Automotive SPICE assessed, MISRA C:2012 compliant
- Unit and integration tested
- Configurable with static and dynamic (runtime) motor parameters, enabled by MOTIX™ Solution Designer GUI tool

MOTIX™ Complex Device Driver

- Hardware abstraction for MOTIX™ Driver and EiceDRIVER™
- Support HW safety mechanisms, optimized for integration with AURIX™ MCAL
- APIs for device initialization and configuration
- ISO 26262 ASIL D, AUTOSAR compliant, Automotive SPICE assessed
- EB tresos Studio support for device configuration

MOTIX™ Device Driver

- Hardware abstraction for MOTIX™ Driver, Bridge, SBC and EiceDRIVER™
- APIs for device initialization and configuration

MOTIX™ Low-level Driver (LLD/ PDL)

- Low-level/ Peripheral driver for MOTIX™ MCUs, optimized for MOTIX™ motor control middleware
- GUI tool for device initialization and configuration, supported by KEIL μVision and IAR Embedded Workbench

Key features

- High scalability and re-use-ability across devices by unique architecture and platform approach
- Right fit low-level SW and motor control middleware for industry leading HW from Infineon
- Unit and integration tested SW building blocks incl. quality reports and safety documentation for eased system integration according to industry standards up to ASIL D

Key benefits

- Significant reduction of development efforts related to common or non-differentiating functions
- Easy initial device evaluation
- One-stop-shop SW/ HW incl. MOTIX™, EiceDRIVER™ and AURIX™ key system components
- Premium support partner MOTEON

PRODUCT BRIEF

MOTEON motor control design-house

MOTEON is an Infineon Preferred Design House (PDH) and your global design house partner for motor control software and system solutions. End-to-end solutions and services for auxiliary motor control applications, from software and engineering to testing and tools include:

- Motor analysis, SW parametrization and tuning services
- MOTIX™ Motor Control Library, LLD/ PDL resell and customization
- Application software development
- Mechatronic simulation and development
- Testing as a service
- Validation and data tracing tool
- Test automatization with mobile motor test bench (mMTB)



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

Availability

We offer various free evaluation and payable license models for development and productive use as well as maintenance and support contracts. For more information, please contact your local Infineon sales partner and check out Infineon Developer Center (IDC), www.infineon.com/idc.

Software	Description	License models
SDK	Software Development Kit for MOTIX™ MCUs incl. LLD/ PDL, Example code and tool config files, IDE support KEIL μVision and IAR Embedded Workbench	Free evaluation
LLD/ PDL	Low-level driver/ Peripheral driver libraries for MOTIX™ MCUs	Payable
Motor Control Library	Modular library of motor control middleware for FOC solutions	Free evaluation Payable
Complex Device Driver	AUTOSAR compliant ASIL D Complex Device Driver, optimized for integration in AURIX™	Free evaluation Payable
Device Driver	HW abstraction and API for MOTIX™ Driver, Bridge, SBC and EiceDRIVER™	Free evaluation
Tools & Utilities	PC tools for device configuration and SW parametrization Motor control application examples, adaptive MOSFET control, etc.	Free evaluation

Published by
Infineon Technologies AG
Am Campeon 1-15, 85579 Neubiberg
Germany

© 2024 Infineon Technologies AG
All rights reserved.

Public

Version: V1.0_EN
Date: 09/2024

Please note!

This Document is for information purposes only and any information given herein shall in no event be regarded as a warranty, guarantee or description of any functionality, conditions and/or quality of our products or any suitability for a particular purpose. With regard to the technical specifications of our products, we kindly ask you to refer to the relevant product data sheets provided by us. Our customers and their technical departments are required to evaluate the suitability of our products for the intended application.

We reserve the right to change this document and/or the information given herein at any time.

Additional information

For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your nearest Infineon Technologies office (www.infineon.com).

Warnings

Due to technical requirements, our products may contain dangerous substances. For information on the types in question, please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by us in a written document signed by authorized representatives of Infineon Technologies, our products may not be used in any life-endangering applications, including but not limited to medical, nuclear, military, life-critical or any other applications where a failure of the product or any consequences of the use thereof can result in personal injury.



Scan QR code and explore offering
www.infineon.com/motix-software