**bluewind**

# iMCAL
### industrial MicroController Abstraction Layer

# iMCAL LIBRARY FOR AURIX™ MICROCONTROLLER

Bluewind iMCAL is a Software Framework specifically designed for Industrial applications, serving as the foundation for developments with Functional Safety requirements aligned with IEC 61508 up to SIL-3 and derived standards.



## iMCAL SOFTWARE FRAMEWORK

- iMCAL Software Framework is based on a set of device drivers available as a software package (e.g. I/O Port, SPI, Flash, UART, ADC and CAN).

- iMCAL drivers combined with a Safety qualified real-time operating system allow to reduce the Safety process complexity and development time.

- Products related to the IEC 61508 and ISO 13849 benefit of iMCAL drivers such as Off-Highway Vehicles, Construction Equipment, Industrial Plants, Stationary BMS and Marine Systems, and more.

## iMCAL SPECIFICATION

- The iMCAL package is written in C and RUST, as preferred safety programming languages.

- The iMCAL software package includes
  - Safety Drivers in Source code
  - API test suite source code
  - Software Requirements (ReqIF)
  - Architectural description (UML)
  - Safety Concept description docs

- iMCAL Software Framework is currently available for Infineon AURIX TC2xx and TC3xx.

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