



# Competence in Safety

The faster way to your safety compliant product



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## ISH Safety Evaluation Board



For a short-term project start we provide you with our Safety Evaluation Board an universal and flexible development environment.

Whether you make your first steps in the field of functional safety or you have focused a certain product: With the ISH Safety Evaluation Board you have all the options of a safety development.

## ISH Safety Evaluation Board <sup>■</sup>

Based on a 2-channel microcontroller architecture with interfaces to a communication processor that provides a flexible black channel in the fieldbus world, you immediately start your software development without waiting for your specific hardware development.

With the  $\mu$ C-structure we rely on the proven Cortex-M architecture. The recommended development of ISH around Keil/ARM is fully supported. The programming of the controller is carried out via JTAG interfaces.

### Features

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2-channel processor architecture with cross communication

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monitoring of the board voltage

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16 testable digital inputs with isolation, 24 VDC

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8 testable two-channel digital outputs (ser. Redundant) with electrical isolation, 24 VDC

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8 testable single-channel outputs, 24 VDC

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8 test pulse outputs for the connection of passive circuit elements

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2 two-channel analog inputs for the connection of E.g. sine cosine encoders

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One of the controllers has an integrated Ethernet interface is connected via an optional PHY adapter. So, for example, the integrated safety PLC programming is possible.

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Optional module extension for communication processor, such as ProfiNET, EtherCAT

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Optional programming extension of the communication processor about IEC61131 (Multiprog)

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Extensive software libraries for CPU and memory test for IEC61508 available

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Please ask us for further software solutions for secure communication to IEC 61784-3 or the safe drive technology according to EN 61800-5-2. Also possible is the partitioning of one of the two controllers in a safe and one non-safe area for the integration of E.g. standard-fieldbus-stacks.

We also offer training courses for a quick start into your project. Even with the further specification and integration, we are pleased to advise you. As an expert in the development of safety-related electronic products according to DIN EN ISO 13849, DIN EN 62061 and IEC 61508, we support you in all stages of development of your product and accompany you up to the examinations and tests.