

DE0202 Hardware Development acc. to ISO26262 and Quantitative Evaluation

Who should attend?

- Development Engineers (System, Hardware)
- Safety Managers
- Hardware Project Leaders
- Hardware Quality Responsible

Duration: 1.5 days (or in-house, jointly agreed, please contact us for

more information)

Language: Can be chosen between German or English, training

material will be in English

Location: exida.com GmbH office

Prof.-Messerschmitt-Straße 1
D-85579 Neubiberg / Germany

Certificate: Each participant gets a letter of attendance.

For more information, please contact:

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Agenda and Content

- ISO 26262 lifecycle approach: Product Lifecycle and process requirements
- Where is hardware development in the process model?
 - What are inputs to hardware development?
- Technical Safety Concept
 - Safety Architecture and Architectural Elements
 - Safety Functions and Safety Integrity Function
 - exemplification: typical solutions detailed in a technical safety
 concept
 - Requirements allocation to system and subsystems e.g. by using ASIL Decomposition
 - exemplification: ASIL Decomposition example
- Requirements allocation on HW & SW
- System Safety FMEA and FTA: Planning the Safety Details
- Hardware Development (ISO 26262 Part 5)
 - HW Architecture Evaluation
 - Requirements for the Evaluation: Metrics for Safety Goal
 Violation
 - Fault models, failure rates and target values
 - Presentation of the probabilistic approach
 - qualitative approach with a semi probabilistic argumentation
- How to evaluate the metric for "Safety Goal Violation"
 - exemplification: calculation via FTA based on the results of the quantitative FMEDA



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- How to evaluate the metrics SPFM and LFM
 - o exemplification: exida FMEDA approach for metric calculation
- New to the ISO 26262: Cooperation with the software team
 - o Hardware-software-Interface Specification HIS
- Optional:
 - o ASICs in the scope of the ISO 26262
 - o Communication channels and their evaluation



