

Certificate



Functional
Safety

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No.: 968/FSP 1627.16/23

Product tested	Diagnostic software self-test libraries	Certificate holder	STMicroelectronics (Rousset) SAS 190 Avenue Célestin Coq Z.I de Rousset 13106 Rousset Cedex France
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Type designation	X-CUBE-STL Diagnostic software self-test libraries for STM32 32-bit arm® Cortex® - M microcontrollers as listed in the current Revision List.
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Codes and standards	IEC 61508 Parts 1-7:2010 (in extracts)
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Intended application	The STMicroelectronics X-CUBE-STL Diagnostic software self-test libraries for STM32 32-bit arm® Cortex® - M microcontrollers comply with the requirements of systematic capability 3 (SC 3) acc. to IEC 61508. The claimed diagnostic coverages of medium (90%) for CPU and RAM (Embedded SRAM) tests and high (99%) for ROM (Embedded flash memory) test can be confirmed. As a result of this the software self-test libraries X-CUBE-STL can be used in safety related applications up to SIL 3 acc. to IEC 61508.
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Specific requirements	The software integrator has to obey the assumptions and requirements for the respective self-test libraries described in the Safety Manual, in the User Guide and if applicable the Errata Sheet and also the requirements from the Safety Manual for the respective microcontroller.
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The issue of this certificate is based upon an evaluation in accordance with the Certification Program CERT FSP1 V1.0:2017 in its actual version, whose results are documented in Report No. 968/FSP 1627.16/23 dated 2023-05-30. This certificate is valid only for products, which are identical with the product tested. Issued by the certification body accredited by DAkkS according to DIN EN ISO/IEC 17065. The accreditation is only valid for the scope listed in the annex to the accreditation certificate D-ZE-11052-02-01.

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Köln, 2023-06-01

Certification Body Safety & Security for Automation & Grid

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