Certificate

Functional Safety

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No.: 968/FSP 1923.01/21

Product tested	General purpose microprocessor IP including safety features	**Certificate holder**	ARM Ltd. 110 Fulbourn Road Cherry Hinton Cambridge CB1 9NJ United Kingdom

Type designation
ARM Cortex-R52 Processor IP Core
Approved versions, see current Revision List

Codes and standards
IEC 61508 Parts 1-7:2010 (in extracts)   ISO 26262 Parts 1-12:2018 (excl. parts 7, 10, 12)

Intended application
The ARM Cortex-R52 Processor IP Core complies with the requirements of IEC 61508 for SIL 3 regarding the avoidance of systematic faults for a Compliant Item and complies with the requirements of ISO 26262 for ASIL D regarding the avoidance of systematic faults for a Safety Element out of Context (SEooC).

Based on an exemplary configuration, ARM showed that the target values for the random hardware fault metrics according to ISO 26262-5, Clauses 8 and 9 for ASIL D can be met. As a result, the Cortex-R52 Processor can be used in safety-related applications up to SIL 3 according IEC 61508 and up to ASIL D according to ISO 26262.

Specific requirements
The requirements and constraints mentioned in the Cortex-R52 Safety Manual have to be taken into account by the user.

The issue of this certificate is based upon an examination, whose results are documented in Report No. 968/FSP 1923.01/21 dated 2021-12-10.
This certificate is valid only for products which are identical with the product tested.

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Köln, 2021-12-10

Certification Body Safety & Security for Automation & Grid

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