Certificate





Functional Safety

www.tuv.com ID 0600000000

No.: 968/FSP 2448.00/22

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 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 SIL3 according to 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 evaluation in accordance with the Certification Programs CERT FSP1 V1.0:2017, CERT FSP2 V1.0:2017 in their actual version, whose results are documented in Report No. 968/FSP 2448.00/22 dated 2022-11-07. 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.

TÜV Rheinland Industrie Service GmbH

Bereich Automation

Funktionale Sicherheit

Köln, 2022-11-07

Am Grauen Stein, 51105 Köin
Certification Body Safety & Security for Automation & Grid

Dipl.-Ing. Thomas Steffens



