Certificate

Functional Safety

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No.: 968/FSP 1782.02/20

Product tested	Software component for temporal and spatial separation of applications	**Certificate holder**	Renesas Electronics Corporation 3-2-24 Toyosu Koto-ku Tokyo 135-0061 Japan

Type designation
Functional Safety Platform Software supporting non-safety applications as listed in the current revision list.

Codes and standards
IEC 61508 Parts 1-7:2010 (in extracts)

Intended application
The Renesas Functional Safety Platform Software complies with the requirements of SC 3 according to IEC 61508. Hence this product can be used to support the integrator to achieve a freedom from interference between multiple safety and non-safety applications up to SIL 3 according to IEC 61508.
The claimed diagnostic coverage of 99% (high) for RAM error detection by block replication, 90% (medium) for the memory fault detection for control registers of on-chip peripherals and 99% (high) for the combination of logical and temporal monitoring can be confirmed.
These diagnostic measures can therefore also be used to cover the diagnostic measures which are required by Table R.1 / R.2 of IEC 60335-1 and Table H.1 of IEC 60730-1 for software class B / C.

Specific requirements
The instructions of the associated user manuals as listed in the current revision list shall be considered.

The integrator must implement further diagnostic measures, required by Table R.1 / R.2 of IEC 60335-1 and Table H.1 of IEC 60730-1 for software classes B / C, which are not covered by the product. In addition, the integrator has to verify whether the diagnostic test interval of each safety function is suitable to fulfil the requirements of IEC 60335-1 and IEC 60730-1, mentioned in the corresponding part 2-xxx of the standards. The detection of a fault/error shall occur before compliance with the safety functions is impaired.

Valid until 2025-06-15

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 1782.02/20 dated 2020-06-15. This certificate is valid only for products, which are identical with the product tested.

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Köln, 2020-06-15

Certification Body Safety & Security for Automation & Grid

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