Certificate

No.: 968/FSP 2747.00/24

Product tested	Diagnostic software test library	**Certificate holder**	GigaDevice Semiconductor Inc. 101, 1ST TO 5TH FLOOR, BUILDING 8, NO. 9 FENGHAO EAST ROAD, HAIDIAN DISTRICT, 100094 BEIJING P.R. China

Type designation GD32H7xx_STL Diagnostic software test library for GD32H7xx 32-bit Arm® Cortex® - M7 microcontrollers as listed in the current "Revision List".

Codes and standards
IEC 61508-1:2010
IEC 61508-2:2010, Annex A
IEC 61508-3:2010

Intended application The GigaDevice GD32H7xx_STL diagnostic software test library for GD32H7xx semiconductor devices based on Arm® Cortex® - M7 complies with the requirements of systematic capability 3 (SC3) according to IEC 61508.
A diagnostic coverage (DC) of medium (90%) for CPU, SRAM and a diagnostic coverage (DC) of high (99%) for FLASH is achievable. Therefore, the software test library (STL) can be used in safety-related applications up to SIL 3 in accordance with IEC 61508.

Specific requirements The instructions of the Safety Manual shall be considered.

The issue of this certificate is based upon an evaluation in accordance with the Certification Program CERT FSP1 V3.0:2020 in its actual version, whose results are documented in Report No. 968/FSP 2747.00/24 dated 2024-07-03. 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–11052–02–00.

TÜV Rheinland Industrie Service GmbH
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Köln, 2024-07-03

Certification Body Safety & Security for Automation & Grid

Dipl.-Ing. Thomas Steffens