



C E R T I F I C A T E

Certificate registration number: G3.1808.227.1.D

Certificate holder: Renesas Electronics Corporation

Platform designation: REL-G3PLC-CPX3,
Hardware version R9A06G037GNP, Firmware version 3.03.00

Certification date: August 22nd, 2018

This certificate indicates the above mentioned platform successfully completed certification testing with regards to the reference specification ITU G.9903 (08-2017) plus the changes listed in an annex to this certificate. The optional feature coherent mode of the G3-PLC protocol is also covered by this certification.

The certificate applies to certification profile CENELEC B and the device was configured as a PAN-Device.

Test cases have been performed as described in the test report referred to below. This certificate is granted on account of tests conducted by TÜV Rheinland in Yokohama, Japan in July 2018. The results and remarks can be found in the complete test report.

Applied tests	Performed by	Document evidence
Conformance and interoperability testing according to the test specification referenced by the test report	TÜV Rheinland Japan	50146681 002

The device tested is a G3-PLC platform: a solution providing an implementation of the G3-PLC specification. This certificate is valid from August 22nd, 2018.

The certificate is only applicable to the platform described above and permits the use of the G3-PLC™ logo as laid down in the G3-PLC logo license agreement.

This certificate does not imply assessment of the production. This certificate shall not be defined, or used as a guarantee covering quality of a product which includes G3-PLC. The liability of the Alliance and the test laboratory or any of her representatives is excluded for any damages or losses of the certified company.

Paris, August 22nd, 2018

For the G3-PLC Alliance:


Bernard Lassus
Chairman


Madeleine Francillard
Chair Certification Program





Annex 1: Reference Version for Certification

- The reference version for this certification is ITU-T G.9903 (08-2017)
- + CCTT #210: Number of tones per sub-band for CENELEC B
 - + CCTT #211: Clarification and corrections for CENELEC-B band

Handwritten signature



Annex 2: Protocol Implementation Conformance Statement (PICS)

Feature implementation statement

Name	Value	Description
BAND_PLAN	CENELEC B	Indicate the band-plan supported by the device.
FEATURE_PAN_COORDINATOR	FALSE	Indicate if the device is a PAN-Coordinator (true) or a normal device (false).
FEATURE_COHERENT_MODULATION	TRUE	Indicate if coherent modulation is supported.
FEATURE_EAP_SERVER	FALSE	Indicate if an EAP-PASK server is implemented by the DUT. Apply only if FEATURE_PAN_COORDINATOR = true.
FEATURE_D8PSK_MODULATION	TRUE	True / False
FEATURE_ROUTING	TRUE	Indicate if the routing is implemented by the IUT.
FEATURE_SECURITY	F1	Indicate the security implemented by the device. Possible values are: F1, F2.
FEATURE_ACTIVE_SCAN	TRUE	Indicate if the active scan process is done by the IUT after power-up.
FEATURE_PREAMBLE_COEXISTENCE_MECHANISM	FALSE	Indicate if the preamble-based coexistence mechanism is used by the IUT.

H 2

Annex 3: Copy of test report cover sheet

Produkte
Products



Prüfbericht-Nr.: <i>Test Report No.:</i>	50146681 002	Auftrags-Nr.: <i>Order No.:</i>	214099710	Seite 1 von of 19 Page 1 von of 19	
Kunden Referenz-Nr.: <i>Client Reference No.:</i>	ICEM3-AE-18-0014-01	Auftragsdatum: <i>Order date:</i>	2018-05-14		
Auftraggeber: <i>Client:</i>	Renesas Electronics Corporation				
Gegenstand der Prüfung: <i>Test item:</i>	G3-PLC CENELEC-B Platform (PAN Device)				
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	REL-G3PLC-CPX3				
Auftrags-Inhalt: <i>Order content:</i>	G3-PLC Certification Test				
Prüfgrundlage: <i>Test specification:</i>	G3-PLC Conformance L1-L2 Tests Suite Specification v0.27 G3-PLC 1-to-1 Interoperability Tests Suite Specification v0.12 G3-PLC Certification Test Procedures v1.12				
Wareneingangsdatum: <i>Date of receipt:</i>	2018-06-04				
Prüfmuster-Nr.: <i>Test sample No.:</i>	A000752017				
Prüfzeitraum: <i>Testing period:</i>	2018-06-04 - 2018-07-30				
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland Japan Ltd. Global Technology Assessment Center 4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japan				
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland Japan Ltd.				
Prüfresultat: <i>Test results:</i>	The test item passed the test specification(s).				
Geprüft von: <i>Tested by:</i>			Kontrolliert von: <i>Reviewed by:</i>		
2018-08-06, Tam Tran Thanh			2018-08-10, Endo Atsuhiko		
Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>	Unterschrift <i>Signature</i>
Sonstiges / Other Aspects:					
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>			Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
<p>*Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested</p>					
<p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark</i></p>					

Handwritten mark



Annex 4: Additional details of the certified platform

Platform model name:	REL-G3PLC-CPX3
Platform hardware version:	R9A06G037GNP
Platform firmware version:	3.03.00
Exact part number of all the chips running G3-PLC stack in the certified platform:	R9A06G037GNP#AA0
What each part number runs: lower MAC (incl. CSMA/CA) or PHY or other parts of the stack:	PHY, Lower MAC and 6LowPAN
Hardware version of this chip:	R9A06G037GNP
Software version running on this chip:	v0300
Internal CPU frequency:	92 MHz

Handwritten signature