



C E R T I F I C A T E

Certificate registration number: G3.1410.002.1.2

Certificate holder: Renesas Electronics Corporation

Platform designation: REL-G3PLC-CPX1,
Hardware version UPD809504K8-712-BAA-A, Firmware version ARIB 1.0.1

Certification date: October 24th, 2014

This certificate indicates the above mentioned platform successfully completed certification testing with regards to the reference specification ITU G.9903 (05-2013) plus the changes listed in the annex to this certificate.

The certificate applies to certification profile Japan Route B and the device was configured as a PAN Coordinator.

Test cases have been performed as described in the test reports referred to below. This certificate is granted on account of tests conducted by TÜVRheinland in Yokohama, Japan in September 2014. The results and remarks can be found in the complete test reports.

Table with 3 columns: Applied tests, Performed by, Document evidence. Row 1: Conformance and interoperability testing according to the test specification referenced by the test report, TÜVRheinland, Test report # 5001 5657 006, Test report # 5001 5657 009

The device tested is a G3-PLC platform: a solution providing an implementation of the G3-PLC specification. This certificate is valid from October 24th, 2014.

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. The certificate may only be reproduced in full.

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, October 24th, 2014

For the G3-PLC Alliance:

Marc Boillot
Chairman

Lonneke Driessen
Chair Certification Program





Annex 1: Reference Version for Certification

The reference version for this certificate is:

Recommendation ITU-T G.9903 (05-2013)

- + CCTT_121: Correction of Beacon payload encoding
- + CCTT_122: Japan HEMS requirements for ID_S and ID_P
- + ETT_DLL30 and ETT_DLL32: Routing disabling
- + ETT_PHY14: Interleaver fix (conditional swapping)
- + CCTT_171: Implementation of MAC security solution F2



Annex 2: Protocol Implementation Conformance Statement (PICS)

Feature implementation statement

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



Annex 3: Copy of test report cover sheet (1/2)

Produkte
Products



Prüfbericht - Nr.: 5001 5657 006 <i>Test Report No.</i>		Seite 1 von 13 <i>Page of</i>	
Auftraggeber: Renesas Electronics Corporation <i>Client:</i>		1753 Shimonumabe, Nakahara-Ku, Kawasaki, Kanagawa 211-8566, Japan	
Gegenstand der Prüfung: REL-G3PLC-CPX1 <i>Test item:</i>			
Bezeichnung: REL-G3PLC-CPX1 <i>Identification:</i>		Serien-Nr.: F0190 <i>Serial No.</i>	
Wareneingangs-Nr.: A000113934 <i>Receipt No.:</i>		Eingangsdatum: 2014-09-17 <i>Date of receipt:</i>	
Zustand des Prüfgegenstandes bei Anlieferung: Test item complete and undamaged <i>Condition of test item at delivery:</i>			
Prüfort: TÜV Rheinland Japan Ltd. <i>Testing location:</i>		Global Technology Assessment Center 4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japan	
Prüfgrundlage: G3-PLC Alliance - 1to1 PHY Interoperability Tests Suite Specification - v0.4 <i>Test specification:</i>		G3-PLC Certification Test Procedures version 1.0	
Prüfergebnis: Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). <i>Test Result:</i>		The test item passed the test specification(s).	
Prüflaboratorium: TÜV Rheinland Japan Ltd. <i>Testing Laboratory:</i>		Global Technology Assessment Center 4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japan	
geprüft/ tested by:		kontrolliert/ reviewed by:	
2014-10-02, Olga Kozeruk <i>Datum Name/Stellung</i>	 <i>Unterschrift</i>	2014-10-02, Tran Thanh Tam <i>Datum Name/Stellung</i>	 <i>Unterschrift</i>
Sonstiges / Other Aspects:			
Correction report for report "5001 5657 002". List of corrections: removed photo of reference devices, removed IUT additional parameters.			
Abkürzungen: OK, Pass = entspricht Prüfgrundlage Fail = entspricht nicht Prüfgrundlage NA = nicht anwendbar		Abkürzungen: OK, Pass = passed Fail = failed NA = not applicable	
Dieser Prüfbericht bezieht sich nur auf den o.g. Prüfgegenstand und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report relates to the a. m. test item. 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 on this or similar products.			



Annex 3: Copy of test report cover sheet (2/2)

Produkte
Products



Prüfbericht - Nr.: 5001 5657 009 <i>Test Report No.</i>		Seite Page		1	von of		16
Auftraggeber: <i>Client:</i>	Renesas Electronics Corporation 1753 Shimonumabe, Nakahara-Ku, Kawasaki, Kanagawa 211-8668, Japan						
Gegenstand der Prüfung: <i>Test item:</i>	REL-G3PLC-CPX1						
Bezeichnung: <i>Identification:</i>	REL-G3PLC-CPX1	Serien-Nr.: <i>Serial No.:</i>	F0190				
Wareneingangs-Nr.: <i>Receipt No.:</i>	A000113934		Eingangsdatum: <i>Date of receipt:</i>	2014-09-17			
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of test item at delivery:</i>	Test item complete and undamaged						
Prüfart: <i>Testing location:</i>	TÜV Rheinland Japan Ltd. Global Technology Assessment Center 4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japan						
Prüfgrundlage: <i>Test specification:</i>	G3-PLC Conformance Tests Suite Specification v0.12 G3-PLC Certification Test Procedures version 1.1						
Prüfresultat: <i>Test Result:</i>	Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). The test item passed the test specification(s).						
Prüflaboratorium: <i>Testing Laboratory:</i>	TÜV Rheinland Japan Ltd. Global Technology Assessment Center 4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japan						
geprüft/ tested by:		kontrolliert/ reviewed by:					
2014-10-06, <i>Datum</i> Date	Olga Kozeruk <i>Name/Stellung</i> Name/Position		2014-10-06, <i>Datum</i> Date	Tran Thanh Tam <i>Name/Stellung</i> Name/Position		<i>Unterschrift</i> Signature	
Sonstiges / Other Aspects:							
The above mentioned product has been tested according to the G3-PLC Certification Test Procedures version 1.0 as documented in the test report 6001 5657 005. The tests which status has changed from "n/a" to "mandatory" in G3-PLC Certification Test Procedures version 1.1 had been executed as well, but not listed in the test report.							
Hence the following test item was added as passed to this test report: CONF_GLOWPAN_FRAGMENTATION_VB_003_FRAGMENTATION_OUT_OF_ORDER.							
Abkürzungen:	OK, Pass = entspricht Prüfgrundlage Fail = entspricht nicht Prüfgrundlage NA = nicht anwendbar	Abbreviations:	OK, Pass = passed Fail = failed NA = not applicable				

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