



C E R T I F I C A T E

Certificate registration number: G3.1608.095.1.B

Certificate holder: Renesas Electronics Corporation

Platform designation: REL-G3PLC-CPX1-RX2,
Hardware version: UPD809504K8-712-BAA-A,
Firmware version ARIB 1.06

Certification date: August 5th, 2016

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-Device.

Test cases have been performed as described in the test reports referred to below. This certificate is granted on account of tests conducted by TÜV Rheinland in Yokohama, Japan in July 2016. The results and remarks can be found in the complete test reports.

Applied tests	Performed by	Document evidence
Conformance and interoperability testing according to the test specification referenced by the test report	TÜV Rheinland Japan	Test report # 5005 1239 001

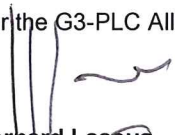
The device tested is a G3-PLC platform: a solution providing an implementation of the G3-PLC specification. This certificate is valid from August 5th, 2016.

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 5th, 2016

For the G3-PLC Alliance:


Bernard Lassus
Chairman


Madeleine Francillard
Chair Certification Program

G3-PLC
Alliance



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

A handwritten signature in blue ink, consisting of a stylized 'H' followed by a flourish.

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	FALSE	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	FALSE	Indicate if an EAP-PASK server is implemented by the DUT. Apply only if FEATURE_PAN_COORDINATOR=true
FEATURE_D8PSK_MODULATION	FALSE	True / False
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	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.

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Annex 3: Copy of test report cover sheet

Produkte
Products



Prüfbericht - Nr.: 50051239 001 <i>Test Report No.</i>		Seite Page		1	von of	19
Auftraggeber: <i>Client:</i>		Renesas Electronics Corporation 5-20-1, Josuihon-cho, Kodaira-shi, Tokyo, 187-8588, Japan				
Gegenstand der Prüfung: <i>Test item:</i>		G3-PLC ARIB Platform REL-G3PLC-CPX1-RX2				
Bezeichnung: <i>Identification:</i>		REL-G3PLC-CPX1-RX2		Serien-Nr.: <i>Serial No.</i>		F20454
Wareneingangs-Nr.: <i>Receipt No.:</i>		A000401825		Eingangsdatum: 2016-07-28 <i>Date of receipt:</i>		
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 L1-L2 Tests Suite Specification v0.19 G3-PLC 1-to-1 Interoperability Tests Suite Specification v0.7 G3-PLC Certification Test Procedures v1.7				
Prüfergebnis: <i>Test Result:</i>		Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). <i>The test item passed the test specification(s).</i>				
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:				
2016-08-01, Tam Tran Thanh		2016-08-02, Olga Kozeruk				
Datum Date	Name/Stellung Name/Position	Unterschrift Signature	Datum Date	Name/Stellung Name/Position	Unterschrift Signature	
Sonstiges / Other Aspects:						
Abkürzungen: OK, Pass = entspricht Prüfgrundlage Fail = entspricht nicht Prüfgrundlage N/A = nicht anwendbar						
Abbreviations: OK, Pass = passed Fail = failed N/A = 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 4: Additional details of the certified platform

Platform model name:	REL-G3PLC-CPX1-RX2	
Platform hardware version:	UPD809504K8-712-BAA-A	
Platform firmware version:	ARIB 1.06	
Exact part number of all the chips running G3-PLC stack in the certified platform:	Chip #1: UPD809504K8	Chip #2: R5F5210BBDFP
What each part number runs: lower MAC (incl. CSMA/CA) or PHY or other parts of the stack:	PHY+Lower Mac	6LowPAN + UDP/ICMP responders
Hardware version of this chip:	UPD809504K8-712-BAA-A	R5F5210BBDFP#30
Software version running on this chip:	ARIB 1.05	ARIB 1.06
Internal CPU frequency:	60 MHz	30 MHz

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