

Certificate registration number: G3.1907.306.1.C4

Certificate holder: Renesas Electronics Corporation

**Platform designation:** REL-G3PLC-CPX3, Hardware version R9A06G037GNP, Firmware version 3.04.00

#### Certification date: July 10<sup>th</sup>, 2019

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

The certificate applies to certification profile FCC Multipurpose Worldwide 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 June 2019. The results and remarks can be found in the complete test report.

Applied tests	Performed by	Document evidence
Conformance, interoperability and performance testing according to the test specification referenced by the test report	TÜV Rheinland Japan	50256747 002

The device tested is a G3-PLC platform: a solution providing an implementation of the G3-PLC specification. The Protocol Implementation Conformance Statement in the Annex includes the PICS related to performance and is an integral part of this certificate. This certificate is valid from July 10<sup>th</sup>, 2019.

The certificate is only applicable to the platform described above and permits the use of the G3-PLC<sup>™</sup> 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, July 10th, 2019

For the G3-PLC Alliance:

Marc Delandre Chairman

Madeleine Francillard Chair Certification Program



Authenticity of this certificate can be verified at http://www.g3-plc.com/certified-products-platforms/ Pag

Page 1 of 5

## Annex 1: Protocol Implementation Conformance Statement (PICS)

G3-PLC FCC

#### Feature implementation statement

Name	Value	Description	
BAND_PLAN	FCC	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_MODULAT	TRUE	Indicate if coherent modulation is supported.	
		Indicate if an EAP-PASK server is implemented by the DUT.	
FEATURE_EAP_SERVER	FALSE	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_COEXISTE NCE_MECHANISM	FALSE	Indicate if the preamble-based coexistence mechanism is used by the IUT.	
		I Ma	

Certificate registration number: G3.1907.306.1.C4

Page 2 of 5



## Annex 2: Protocol Implementation Conformance Statement (PICS)

### **PICS related to performance**

The device tested is a G3-PLC FCC platform. Operating voltage applied for certification testing was 100V / 50Hz.

	Name	Value	Unit	De	escription		
	pics r t	elat a thro	ed to re av ugh '	o performa vailable vendor onl	ince y.		
C	Certificate registra	tion num!	per: G3.1	907.306.1.C4		MD of 5	
C	Certificate registra	tion numl	oer: G3.1	907.306.1.C4	Page 3		

# Annex 3:

G3-PLC FCC

Copy of test report cover sheet

Produkte Products 🛕 TÜVRheinland®

Producis			
Prüfbericht-Nr.: Test Report No.:	50256747 002	Auftrags-Nr.: Order No.: 1501120	Seite 1 von of 42 53 Page 1 von of 42
Kunden Referenz-Nr.: Client Reference No.:	EGEM3-AE-19-0006-0	01 Auftragsdatum: 2 Order date: 2	019-05-24
Auftraggeber:	Renesas Electronics	Corporation	
Client:	5-20-1,Josuihon-cho	, Kodaira-shi, Tokyo, 187-8	588, Japan
Gegenstand der Prüfung Test item:	: G3-PLC FCC Platform	n (PAN Device)	
Bezeichnung / Typ-Nr.: Identification / Type No.:	REL-G3PLC-CPX3		
Auftrags-Inhalt: Order content:	G3-PLC Certification	Test	
Prüfgrundlage: Test specification:	G3-PLC 1-to-1 Intero G3-PLC Performance	e L1-L2 Test Suite Specific perability Test Suite Specif e Test Suite Specification v Test Procedures v1.13	fication v0.13
Wareneingangsdatum: Date of receipt:	2019-06-07		
Prüfmuster-Nr.: Test sample No.:	A000949042		
Prüfzeitraum: Testing period:	2019-06-10 – 2019-06	-12	
Ort der Prüfung:	TÜV Rheinland Japar	n Ltd.	
Place of testing:	Global Technology Assessment Center 4-	25-2	
	Kita-Yamata, Tsuzuki-		CPX3 6
	Yokohama 224-0021,		MALE & MORE
Prüflaboratorium: Testing laboratory:	TÜV Rheinland Japan	Ltd.	
Prüfergebnis: Test results:	The test item passed test specification(s).	the CE	
Geprüft von		Kontrolliert von	
Tested by:	Alme	Reviewed by:	Adurating
2010 06 21 Tam Tran Th	D	2010 0C 2E Atoubirg	Endo
2019-06-21, Tam Tran Tha Datum Name /	Stellung Unterschrift	2019-06-25, Atsuhiro Datum Name /	Stellung Unterschrift
Date Name /	Position Signature		Position Signature
Sonstiges / Other Aspects			
Zustand des Prüfgegens Condition of the test item a		Prüfmuster vollständ Test item complete an	l <b>ig und unbeschädigt</b> d undamaged
*Legende: 1 = sehr gut P(ass) = entspricht o.g. Prüfgru Legend: 1 = very good P(ass) = passed a.m. test specifi	2 = gut 3 = befriedigend indlage(n) F(ail) = entspricht nicht $2 = good$ 3 = satisfactory sotiop(a) F(ail) = failed a m tot tot	4 = sufficient	5 = poor
	eht sich nur auf das o.g. Prüfm	ecification(s) N/A = not applicable uster und darf ohne Genehmid	
auszugsweise vervielt This test report only relates to	fältigt werden. Dieser Bericht b o the a. m. test sample. Without p	erechtigt nicht zur Verwendun bermission of the test center this	ng eines Prüfzeichens. stest report is not permitted to
be dup	licated in extracts. This test repo	τ does not entitle to carry any te	IST MARK MA
Certificate registr	ation number: G3.190	7.306.1.C4	Page 4 of 5