

CERTIFICATE

Certificate registration number: P2P.2307.578.1.B6

Certificate holder: Renesas Electronics Corporation

Platform designation: R9A06G061GNP, Hardware version R9A06G061GNP, Firmware version 4.06.01

Certification date: July 26th, 2023

This P2P-PLC ("Point-to-Point") certificate indicates the above-mentioned platform successfully completed certification testing with regards to the G3-Alliance reference specification 06/2021.

This certificate applies to certification profile ARIB Route B but only covers the PHY and MAC layers of the G3 protocol.

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 2023. 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	JP23VS9E 001

The device tested is a P2P-PLC platform: a solution providing an implementation of the G3 specification. The P2P-PLC certificate is issued for the part of the platform running the PHY/MAC layers.

The certificate is only applicable to the platform described above and permits the use of the P2P-PLC™ logo as laid down in the G3-Alliance 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 P2P-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 26th 2023

For the G3-Alliance:

Marc Delandre Chairman Madeleine Francillard

Chair Certification Program





Annex 1: Protocol Implementation Conformance Statement (PICS)

Feature implementation statement

Name	Value	Description	
BAND_PLAN	ARIB	Indicates the band-plan supported by the device	
FEATURE_COHERENT_ MODULATION	FALSE	Indicates whether coherent modulation is supported	
FEATURE_D8PSK_ MODULATION	FALSE	Indicates whether D8PSK modulation is supported	
FEATURE_SECURITY	F2	Indicates the security implemented by the device. Possible values are: F1, F2	
FEATURE_ACTIVE_SCAN	TRUE	Indicates whether the active scan process is done by the IUT after power-up	
FEATURE_PREAMBLE_ COEXISTENCE_MECHANISM	FALSE	Indicates whether the preamble- based coexistence mechanism is used by the IUT	
FEATURE_P2P_COMMAND_ FRAMES	FALSE	Indicates whether the P2P implementation supports MAC command frames	
FEATURE_P2P_TABLES	FALSE	Indicates whether the P2P implementation supports MAC tables	

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Annex 2: Protocol Implementation Conformance Statement (PICS)

PICS related to performance

The device tested is a P2P-PLC ARIB platform. Testing was performed on phase 1. Operating voltage applied for certification testing was AC100V/50Hz.

Name	Value	Unit	Description
PICS	elat a thro	ed to re av	o performance vailable vendor only.
			11 110

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Annex 3: Copy of test report cover sheet

Test Report - Products



TÜVRheinland®

Prüfbericht - Produkte				momana
Test report no.: Prüfbericht-Nr.:	JP23VS9E 001	Order No.: Auftragsnr.:	150279882 10	Page 1 of 49 Seite 1 von 49
Client reference no.: Kunden-Referenz-Nr.:	IACS-AF-23-0003-1	Order date: Auftragsdatum:	2023-07-07	
Client: Auftraggeber:	Renesas Electronics Cor 5-20-1 Josuihon-cho, 18	BODY TO MERCHANISM AND ADMINISTRATION OF ADMINISTRATION	okyo, Japan	
Test item: Prüfgegenstand:	G3 Platform			
Identification / Type no.: Bezeichnung / Typ-Nr.:	R9A06G061GNP			
Order content: Auftrags-Inhalt:	G3 Certification Test			
Test specification Prüfgrundlage:	G3-Alliance - Conformance Tests Suite Specification - v0.37 G3-Alliance - 1to1-PHY-Interoperability-Tests-Specification-v0.14 G3-Alliance - Performance Test Suite Specification - v0.27			

G3-Certification Test Procedures version 6.02

Date of sample receipt: 2023-07-11 Wareneingangsdatum:

Test sample no: A003514618-003 Prüfmuster-Nr.:

Testing period: 2023-07-11 - 2023-07-20 Prüfzeitraum:

4-25-2 Kita-Yamata, Place of testing: Tsuzuki-ku Yokohama 224-Ort der Prüfung: 0021, Japan

Testing laboratory: TÜV Rheinland Japan Ltd. Prüflaboratorium:

Test result*: Pass Prüfergebnis*:

tested by: geprüft von:

Date: 2023-07-20 Datum:

Martin Zietz Position / Stellung: Tester

authorized by: genehmigt von:

3)

Issue date: 2023-07-21 Ausstellungsdatum:

Position / Stellung:

Shuji Saito Reviewer

Other: Sonstiges:

Condition of the test item at delivery: Zustand des Prüfgegenstandes bei Anlieferung:

Test item complete and undamaged Prüfmuster vollständig und unbeschädigt

P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n)

This test report only relates to the above mentioned 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. 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.

TÜV Rheinland Japan Ltd., Global Technology Assessment Center 4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japa Mail: g3plc@tuv.com · Web: www.tuv.com/

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Annex 4: Additional details of the certified platform

Platform model name:	R9A06G061GNP
Platform hardware version:	R9A06G061GNP
Platform firmware version:	4.06.01
Exact part number of all the chips running G3 stack in the certified platform:	R9A06G061GNP
What each part number runs: lower MAC (incl. CSMA/CA) or PHY or other parts of the stack:	PHY and MAC
Hardware version of this chip:	R9A06G061GNP
Software version running on this chip:	4.06.01
Internal CPU frequency:	92 MHz