G3-PLC CERTIFIED CEN B

C E R T I F I C A T E

Certificate registration number: G3.1905.294.1.D4

Certificate holder: Microchip Technology

Platform designation: PL360G55CB,
Hardware version PL360G55CB-EK v2, Firmware version G3_v.1.4.0

Certification date: May 24th, 2019

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 Laboratoire des Applications Numériques (LAN) in Tauxigny, France in May 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	Laboratoire des Applications Numériques (LAN)	LAN19AF025

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 May 24th, 2019.

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, May 24th, 2019

For the G3-PLC Alliance:

Marc Delandre
Chairman

Madeleine Francillard
Chair Certification Program

G3-PLC Alliance

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

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.

Annex 2: Protocol Implementation Conformance Statement (PICS)

PICS related to performance

The device tested is a G3-PLC CENELEC B platform. Operating voltage applied for certification testing was 230V / 50Hz.

Name	Value	Unit	Description

PICS related to performance
are available
through vendor only.

Annex 3:
Copy of test report cover sheet

G3-PLC Certification Test Report

Microchip Technology	PL360G55CB HW:PL360G55CB-EK v2 FW: G3_v.1.4.0
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LAN — Your digital lab

G3-PLC Alliance
G3-PLC Platform Certification Test Report

Vendor Name	**Microchip Technology**
Model Name	**PL360G55CB**
Serial N°	**181213109015**
HW version	**PL360G55CB-EK v2**
FW version	**G3_v.1.4.0**
Test Report #	**TR_LAN19AF025 Ed.00**
Date	**May 20, 2019**

CONF Tests Specification	version 0.30.	03/12/2018
CONF Tests Suite	version 2.9.	03/2019
IOT Tests Specification	version 0.13.	28/12/2018
IOT Tests Suite	version 2.6.	03/2019
PERF Tests Specification	version 0.27.	05/03/2019
PERF Tests Suite	version 2.9.	03/2019
Test Tool	version 2.3	
Tester Modem	version 2.0	
Certification Test Procedures	version 1.13	03/06/2019

Certification Profile	**A (CENELEC B)**
Role	**PAND**
Overall Verdict	**PASS**

Initiation	Date	Description of modification	Ed.
Omar DIOUF	May 20, 2019	Creation	00

	Realised by	Checked by	Approved by
Name	Omar DIOUF	Vincent BUCHOUX	Thierry DOLIGEZ
Date	May 20, 2019	May 20, 2019	May 20, 2019
Sign			

Annex 4: Additional details of the certified platform

Platform model name:	PL360G55CF	
Platform hardware version:	PL360G55CB-EK v2	
Platform firmware version:	G3_v.1.4.0	
Exact part number of all the chips running G3-PLC stack in the certified platform:	Chip #1: PL360B	Chip #2: ATSAMG55J19-MU
What each part number runs: lower MAC (incl. CSMA/CA) or PHY or other parts of the stack:	PHY + Lower MAC	MAC & 6LowPAN
Hardware version of this chip:	B	B
Software version running on this chip:	36.04.04	G3_v.1.4.0
Internal CPU frequency:	216 MHz	120 MHz