G3-PLC CERTIFIED FCC

C E R T I F I C A T E

Certificate registration number: G3.1911.355.1.C4

Certificate holder: STMicroelectronics

Platform designation: ST8500,
Hardware version EVALMODSTST8500-1,
Firmware version 4.4.9 - v1390B5EC - r1.6

Certification date: November 22nd, 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 Laboratoire des Applications Numériques (LAN) in Tauxigny, France in November 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)	LAN19AF081

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 November 22nd, 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, November 22nd, 2019

For the G3-PLC Alliance:

Marc Delandre
Chairman

Madeleine Francillard
Chair Certification Program

G3-PLC Alliance

Annex 1: Protocol Implementation Conformance Statement (PICS)

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_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 FCC 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

LAN — Your digital lab

STMICROELECTRONIC	ST8500 HW:EVALMODSTST8500-1 FW: 4.4.9 - v1390B5EC - r1.6		
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G3-PLC Alliance

G3-PLC Platform Certification
Test Report

Vendor Name	**STMICROELECTRONICS**
Model Name	**ST8500**
Serial N°	**CL036**
HW version	**EVALMODSTST8500-1**
FW version	**4.4.9 - v1390B5EC - r1.6**

Test Report #	**TR_LAN19AF081 Ed.00**
Date	**November 21, 2019**

CONF Tests Specification	version 0.30.	03/12/2018
CONF Tests Suite	version 2.9.p1.	09/2019
IOT Tests Specification	version 0.13.	28/12/2018
IOT Tests Suite	version 2.6.p1.	09/2019
PERF Tests Specification	version 0.27.	05/03/2019
PERF Tests Suite	version 2.9.p1.	09/2019

Test Tool	version 2.3	
Tester Modem	version 2.0	
Certification Test Procedures	version 1.19	21/09/2019

Certification Profile	**C (FCC)**
Role	**PAND**
Overall Verdict	**PASS**

EVALKITST8500-1

Initiation	Date	Description of modification	Ed.
Omar DIOUF	November 21, 2019	Creation	00

	Realised by	Checked by	Approved by
Name	Omar DIOUF	Vincent BUCHOUX	Thierry DOLIGEZ
Date	November 21, 2019	November 21, 2019	November 21, 2019
Sign			

Annex 4: Additional details of the certified platform

Platform model name:	ST8500
Platform hardware version:	EVALMODSTST8500-1
Platform firmware version:	4.4.9 - v1390B5EC - r1.6
Exact part number of all the chips running G3-PLC stack in the certified platform:	ST8500
What each part number runs: lower MAC (incl. CSMA/CA) or PHY or other parts of the stack:	PHY, MAC and 6LowPAN
Hardware version of this chip:	revBB
Software version running on this chip:	4.4.9 - v1390B5EC - r1.6
Internal CPU frequency:	100MHz for Cortex core and 400 MHz for RTE