

Prüfbericht-Nr.: Test Report No.:		50221744 001		Auftrags-Nr.: Order No.:		150106667		Seite 1 von of 12 Page 1 von of 12	
Kunden Referenz-Nr.: Client Reference No.:		EMPF19012810		Auftragsdatum: Order date:		2019-01-28			
Auftraggeber: Client:		Panasonic Corporation 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501, Japan							
Gegenstand der Prüfung: Test item:		Panasonic VPP Service							
Bezeichnung / Typ-Nr.: Identification / Type No.:		Panasonic VPP Service							
Auftrags-Inhalt: Order content:		OpenADR Certification Test							
Prüfgrundlage: Test specification:		OpenADR 2.0b Certification Test Specification Version 1.1.2							
Wareneingangsdatum: Date of receipt:		2019-03-04							
Prüfmuster-Nr.: Test sample No.:		A000888272							
Prüfzeitraum: Testing period:		2019-03-04 - 2019-03-11							
Ort der Prüfung: Place of testing:		TÜV Rheinland Japan Ltd. Global Technology Assessment Center 4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japan							
Prüflaboratorium: Testing laboratory:		TÜV Rheinland Japan Ltd.							
Prüfergebnis: Test results:		The test item passed the test specification(s).							
Geprüft von Tested by:				Kontrolliert von Reviewed by:					
2019-03-13		Atsuhiko Endo		2019-03-14		Tam Tran Thanh			
Datum Date	Name / Stellung Name / Position	Unterschrift Signature		Datum Date	Name / Stellung Name / Position	Unterschrift Signature			
Sonstiges / Other Aspects:									
The March 11 test was conducted at the other place. (TÜV Rheinland Japan Ltd. Head Office 3-19-5 Shin Yokohama, Kohoku-ku, Yokohama 222-0033, Japan)									
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:				Prüfmuster vollständig und unbeschädigt Test item complete and undamaged					
*Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested									
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. This test report only relates to the a. m. 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									

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1 General Product Information

1.1 Client Information

Company Name:	see page 1
Address:	see page 1
Contact Person:	Shuji Murakami
Phone:	080-3692-4283
E-mail:	murakami.shuji@jp.panasonic.com

1.2 General SUT Information

The system under test is software implementation of OpenADR protocol installed on laptop.

Serial Number:	N/A
Hardware Version:	N/A
Firmware version:	1.0.0

1.3 General EUT Description

Equipment under test:	see page 1
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1.4 Profile

Product type:	VEN
OpenADR profile:	2.0b
Mode:	Pull
Transport:	Simple HTTP
Security:	Standard Security

2 Testing Laboratory

Company name:

TÜV Rheinland Japan Ltd.

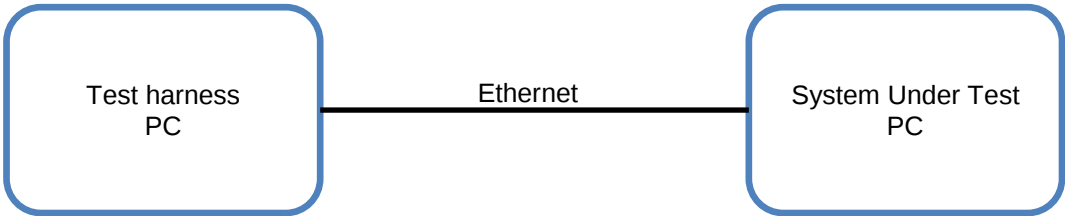
Address:

see page 1

2.1 Test Equipment

Equipment ID	Model Product name	Manufacture	Category	Version
1800528	OpenADR Test Harness for 2.0b	QualityLogic	Software	1.1.2

2.2 Test Setup



3 Information about Test Results

3.1 General

Documentation of tested devices and results:

The complete set of measurement results is stored at the TÜV Rheinland Japan Ltd. test laboratory and is available on demand.

Interpretation of test results:

The results of the inspection are described on the following pages. "Pass" in the test result list of this test report means the performed test according to the test specification was verified and that the tested device is conformant to the specification. "Fail" means that the performed test according to the test specification was verified and the tested device is not conformant to the specification or that test didn't run to completion because the tested device is not conformant to the specification. "N/A" means the test cases are optional and/or not applicable to the tested device.

4 Test Results

4.1 Profile 2.0b

4.1.1 VEN Pull Tests

4.1.1.1 EiRegisterParty Service

No.	Test Case Name	Date	Result	Log
01	N1_0010_TH_VTN_1	Mar 04 2019	PASS	TraceLog_030419_131559_706.txt
02	N1_0015_TH_VTN_1	Mar 04 2019	PASS	TraceLog_030419_132750_594.txt
03	N1_0020_TH_VTN_1	Mar 04 2019	PASS	TraceLog_030419_131736_155.txt
04	N1_0025_TH_VTN_1	Mar 04 2019	PASS	TraceLog_030419_132428_166.txt
05	N1_0030_TH_VTN_1	Mar 04 2019	PASS	TraceLog_030419_132218_200.txt
06	N1_0040_TH_VTN_1	Mar 04 2019	PASS	TraceLog_030419_133435_873.txt
07	N1_0050_TH_VTN_1	Mar 04 2019	PASS	TraceLog_030419_133826_720.txt
08	N1_0060_TH_VTN_1	Mar 04 2019	PASS	TraceLog_030419_134033_805.txt
09	N1_0065_TH_VTN_1	Mar 04 2019	PASS	TraceLog_030419_134319_350.txt
10	N1_0070_TH_VTN_1	Mar 04 2019	PASS	TraceLog_030419_134555_039.txt
11	N1_0080_TH_VTN_1	N/A	N/A	N/A

4.1.1.2 EiOpt Service

No.	Test Case Name	Date	Result	Log
01	P1_2010_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_100831_627.txt
02	P1_2015_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_101054_738.txt
03	P1_2020_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_104808_010.txt
04	P1_2030_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_105332_498.txt
05	P1_2040_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_105623_151.txt
06	P1_2050_TH_VTN_1	N/A	N/A	N/A

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4.1.1.3 EiReport Service

No.	Test Case Name	Date	Result	Log
01	R1_3010_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_111251_782.txt
02	R1_3020_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_111603_411.txt
03	R1_3025_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_115358_729.txt
04	R1_3027_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_121838_928.txt
05	R1_3030_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_141707_390.txt
06	R1_3040_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_142504_975.txt
07	R1_3045_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_145004_877.txt
08	R1_3050_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_145606_398.txt
09	R1_3060_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_150045_216.txt
10	R1_3070_TH_VTN_1	N/A	N/A	N/A
11	R1_3080_TH_VTN_1	N/A	N/A	N/A
12	R1_3090_TH_VTN_1	N/A	N/A	N/A
13	R1_3100_TH_VTN_1	N/A	N/A	N/A
14	R1_3120_TH_VTN_1	N/A	N/A	N/A
15	R1_3130_TH_VTN_1	N/A	N/A	N/A
16	R1_3140_TH_VTN_1	N/A	N/A	N/A
17	R1_3150_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_151400_104.txt
18	R1_3160_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_164258_736.txt
19	R1_3170_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_170050_897.txt
20	R1_3180_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_170814_661.txt
21	R1_3190_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_173117_007.txt

4.1.1.4 EiEvent Service

No.	Test Case Name	Date	Result	Log
01	E1_1010_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_174711_122.txt
02	E1_1020_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_174830_896.txt
03	E1_1025_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_175050_523.txt
04	E1_1027_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030519_175226_143.txt
05	E1_1030_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_093736_426.txt
06	E1_1040_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_095317_494.txt
07	E1_1050_TH_VTN_1	N/A	N/A	N/A
08	E1_1055_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030619_095630_355.txt
09	E1_1060_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030619_095942_886.txt
10	E1_1065_TH_VTN_1	N/A	N/A	N/A
11	E1_1070_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030619_100249_394.txt
12	E1_1080_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030619_100444_419.txt
13	E1_1090_TH_VTN_1	Mar 05 2019	PASS	TraceLog_030619_100645_830.txt

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4.1.1.5 EiEvent Ported A Profile

No.	Test Case Name	Date	Result	Log
01	A_E1_0020_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_101254_492.txt
02	A_E1_0040_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_101711_971.txt
03	A_E1_0060_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_101850_653.txt
04	A_E1_0070_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_102147_185.txt
05	A_E1_0082_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_102540_957.txt
06	A_E1_0086_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_102815_874.txt
07	A_E1_0090_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_103221_394.txt
08	A_E1_0092_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_103442_378.txt
09	A_E1_0094_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_103823_979.txt
10	A_E1_0096_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_103955_485.txt
11	A_E1_0098_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_104115_746.txt
12	A_E1_0100_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_104323_314.txt
13	A_E1_0102_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_104553_963.txt
14	A_E1_0104_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_104805_784.txt
15	A_E1_0110_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_105047_078.txt
16	A_E1_0130_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_105211_095.txt
17	A_E1_0180_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_105434_847.txt
18	A_E1_0190_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_105751_152.txt
19	A_E1_0200_TH_VTN_1	Mar 06 2019	PASS	TraceLog_030619_110214_738.txt
20	A_E1_0210_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_100947_859.txt
21	A_E1_0220_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_101658_453.txt
22	A_E1_0230_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_102524_297.txt
23	A_E1_0240_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_103414_270.txt
24	A_E1_0250_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_103841_943.txt
25	A_E1_0260_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_105849_248.txt
26	A_E1_0262_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_112052_788.txt
27	A_E1_0267_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_114159_893.txt
28	A_E1_0268_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_120034_592.txt
29	A_E1_0270_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_120848_405.txt
30	A_E1_0280_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_121721_117.txt
31	A_E1_0285_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_123019_904.txt
32	A_E1_0300_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_124210_188.txt
33	A_E1_0310_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_124428_491.txt
34	A_E1_0340_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_125014_142.txt
35	A_E1_0345_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_125238_845.txt
36	A_E1_0360_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_125429_200.txt
37	A_E1_0370_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_125649_153.txt
38	A_E1_0390_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_130120_436.txt
39	A_E1_0392_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_130318_788.txt

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4.1.1.6 General Tests

No.	Test Case Name	Date	Result	Log
01	G1_4005_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_145025_023.txt
02	G1_4007_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_145310_459.txt
03	G1_4010_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_150526_178.txt
04	G1_4011_TH_VTN_1	N/A	N/A	N/A
05	G1_4012_TH_VTN_1	N/A	N/A	N/A
06	G1_4015_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_151002_990.txt
07	G1_4030_TH_VTN_1	Mar 11 2019	PASS	TraceLog_031119_152659_405.txt

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5 Remarks and References

Log files for the executed test cases are provided in the electronic format.

List of all executed tests with links to the log files is located in the "logfile.html" which could be opened in any web-browser (Internet Explorer is recommended).

6 Photos

```
Manifest-Version: 1.0
Created-By: Panasonic Corporation
Specification-Title: Panasonic VPP Service
Specification-Version: 1.0
Specification-Vendor: Panasonic Corporation
Implementation-Title: Panasonic VPP Service
Implementation-Version: 1.0.0
Implementation-Vendor: Panasonic Corporation
```

Photo 1: FW Version



Photo 2: Test Sample



Photo 3: Test Setup