



Certificate of Conformity

The products

EUT : 16 Channel CCTV Hub in 1U Rack
Mounting Panel
Trade Name : SC&T
Model No. : TPP0XXXXX, TTP111VPC,
TTP111VPD-RJ45

which produced by

SMART CABLING & TRANSMISSION CORP
10F, No.493, Chung-Cheng Rd., Hsin Tien City,
Taipei County, 231, Taiwan

Has been tested by Electronics Testing Center, Taiwan ETC
And was found to comply with the EMC requirements of Directive 2004/108/EC on the basis of

EN 55013:2001/A1:2003/A2:2006

EN 61000-6-1:2007

IEC 61000-4-2:1995/A1:1998/A2:2000

IEC 61000-4-3:2006/A1:2007, IEC 61000-4-4:2004

IEC 61000-4-5:2005, IEC 61000-4-6:2007

IEC 61000-4-11:2004

Signature

Will Yao

Manager of EMC Testing Department II
Electronics Testing Center, Taiwan



Report Number : 09-05-RBF-080

Date of Issue: Aug. 12, 2009

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EMC

TEST REPORT

Responsible Party : ***SMART CABLING & TRANSMISSION CORP***
Manufacturer : ***SMART CABLING & TRANSMISSION CORP***
Description of Product : ***16 Channel CCTV Hub in 1U Rack Mounting Panel***
Trade Name : ***SC&T***
Model No. : ***TPP0XXXXX, TTP111VPC, TTP111VPD-RJ45***
Test Report File No. : ***09-05-RBF-080***
Date Test Item Received : ***MAY 11, 2009***
Date Test Campaign Completed : ***Aug. 12, 2009***
Date of Issue : ***Aug. 12, 2009***

Test Performed by

ELECTRONICS TESTING CENTER (ETC) , TAIWAN

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1 TEST REPORT CERTIFICATION

Client : SMART CABLING & TRANSMISSION CORP
Address : 10F, No.493, Chung-Cheng Rd., Hsin Tien City, Taipei County, 231,
Taiwan
Manufacturer : SMART CABLING & TRANSMISSION CORP
Address : 10F, No.493, Chung-Cheng Rd., Hsin Tien City, Taipei County, 231,
Taiwan

EUT : 16 Channel CCTV Hub in 1U Rack Mounting Panel
Trade name : SC&T
Model No. : TPP0XXXXX, TTP111VPC, TTP111VPD-RJ45
Serial Model No. : ----

Test specifications :

Emission : EN 55013:2001/A1:2003/A2:2006
Immunity : IEC 61000-4-2:1995/A1:1998/A2:2000
IEC 61000-4-3:2006/A1:2007
IEC 61000-4-4:2004
IEC 61000-4-5:2005
IEC 61000-4-6:2007
IEC 61000-4-11:2004
Regulations applied : EN 55013:2001/A1:2003/A2:2006
EN 61000-6-1:2007

The testing described in this report has been carried out to the best of our knowledge and ability, and our responsibility is limited to the exercise of reasonable care. This certification is not intended to relieve the sellers from their legal and/or contractual obligations. Besides, the "Comment Issues" highlight above is important information for this test report. Responsible must read carefully about the description.

Test Engineer :

Chris Wu, Tien Lu Liao
(Chris Wu, Engineer) (Tien Lu Liao, Engineer)

Check By :

Charles Wang
(Charles Wang, Supervisor)



Approve & Authorized :

Will Yauo
Will Yauo, Manager
EMC Dept. II of ELECTRONICS
TESTING CENTER, TAIWAN

Laboratory Introduction: Electronics Testing Center, Taiwan is recognized, filed and mutual recognition arrangement as following:

- ① ISO9002 : BSMI, TÜV Product Service
- ② ISO/IEC 17025 : BSMI, CNLA, DGT, NVLAP, CCIBLAC, UL, Compliance
- ③ EN45001 : TÜV Rheinland, NEMKO, FIMKO, SGS
- ④ Filing : FCC, Industry Canada, VCCI
- ⑤ MRA : Australia, Hong Kong, New Zealand, Singapore, USA, Japan, Korea, China, APLAC through CNLA

2 GENERAL INFORMATIONS

2.1 Description of EUT

The 16-channel TPP0XXXXX CATV hub is using standard CAT5 & RJ45 structured building wiring to carry video, power and data for simplifying short range installation by centralizing power and reducing installation labor costs. The built in 8AMP AC24V power supply could support at-distance camera loads up to 500mA per channel. Each port built in switch to set the unit to power 2 pair or 3 pair. To use with, TTP111VPC, TTP111VPD-RJ45 at camera side to send video, power or data for cable runs 300 meters(max.)

2.2 Related Information of EUT

Size of EUT : 482mm × 170mm × 44mm

Power Supply : AC 230V/50Hz

Power Adapter : Nonshielded Shielded None, Length: 1.5 m

BNC coaxial cable : Nonshielded Shielded None, Length: 3.0 m X16

2.3 Tested Configuration

The EUT connected with other devices.

Following peripheral devices and interface cables were connected during the measurement:

For Conducted Emission Test and Radiated Emission Test

Device	Manufacturer	Model	Description
Video Distributor & Video Amplifier Series	SMART CABLING & TRANSMISSION CORP	TPP0XXXXX, TTP111VPC, TTP111VPD-RJ45	1.5m Unshielded AC Power Cord 3.0m Shielded BNC coaxial cablex16
DVD Player	Pioneer	DVP-850AVi	1.82m Unshielded AC Power Cord
TV	Kolin	KLT-230	1.82m Unshielded AC Adapter Power Cord
CCD Camera	----	----	1.8m Unshielded AC Adapter Power Cord

2.4 Deviation Record

No deviations were required.

2.5 Modification Record

No modifications were required. (That is the EUT complied with the requirement as tested.)

3 SUMMARY OF TEST RESULTS

3.1 Emissions:

3.1.1 Conducted Emissions

– PASS (Neutral)

Minimum EMI Margin(QP) to the limit: -29.1 dB at 0.282 MHz

– PASS (Line)

Minimum EMI Margin(QP) to the limit: -33.5 dB at 0.263 MHz

3.1.2 Radiated Emissions (Absorbing Clamp)Test Data

– PASS (Coaxial cable input cable)

Minimum EMI Margin to the limit: -14.3 dB at 31.700 MHz

– PASS (AC Power Line)

Minimum EMI Margin to the limit: -15.2 dB at 32.700 MHz

– PASS (Coaxial cable output cable)

Minimum EMI Margin to the limit: -14.3 dB at 31.800 MHz

– PASS (RJ45 Line)

Minimum EMI Margin to the limit: -14.7 dB at 34.200 MHz

3.1.3 Harmonics Current Emissions

– PASS

The harmonics current values were under the limits of the class A equipment of the EN 61000-3-2.

3.1.4 Voltage Fluctuations and Flicker

– PASS

The voltage fluctuations and flicker values were under the limits of the EN 61000-3-3 requirements.

3.2 Immunity

3.2.1 Immunity Criteria

The results of all of the immunity tests performed on the EUT were evaluated according to the following criteria, and according to the manufacturer's specifications for the EUT:

- Performance criterion A :** The EUT continued to operate as intended. No degradation of performance or loss of function was allowed below a performance level specified by the manufacturer, when the EUT was used as intended.
- Performance criterion B :** The EUT continued to operate as intended after the test. No degradation of performance or loss of function was allowed below a performance level specified by the manufacturer, when the EUT was used as intended. During the test, degradation of performance was however allowed. No change of actual operating state or stored data was allowed.
- Performance criterion C:** Temporary loss of function was allowed, provided the function was self recoverable or could be restored by the operation of the controls.

3.2.2 Electrostatic Discharge Immunity

- No Degradation of Function
 - Distortion of Function
 - Error of Function

Requirement :Criterion B (or better)

- Satisfies Criterion A
 - Satisfies Criterion B
 - Satisfies Criterion C

3.2.3 RF Radiated Fields Immunity

- No Degradation of Function
 - Distortion of Function
 - Error of Function

Requirement :Criterion A

- Satisfies Criterion A
 - Satisfies Criterion B
 - Satisfies Criterion C

3.2.4 EFT/Burst Immunity

- No Degradation of Function

- Distortion of Function

- Error of Function

Requirement :Criterion B(or better)

- Satisfies Criterion A

- Satisfies Criterion B

- Satisfies Criterion C

3.2.5 Surge Immunity

- No Degradation of Function

- Distortion of Function

- Error of Function

Requirement :Criterion B (or better)

- Satisfies Criterion A

- Satisfies Criterion B

- Satisfies Criterion C

3.2.6 RF Common Mode Immunity

- No Degradation of Function

- Distortion of Function

- Error of Function

Requirement :Criterion A

- Satisfies Criterion A

- Satisfies Criterion B

- Satisfies Criterion C

3.2.7 Voltage Interruptions and Voltage Dips Immunity

- No Degradation of Function

- Distortion of Function

- Error of Function

Requirement :Criterion A

- Satisfies Criterion A

- Satisfies Criterion B

- Satisfies Criterion C

4 TEST DATA & RELATED INFORMATIONS

4.1 Emissions:

4.1.1 Conducted Emissions Test :

4.1.1.1 Conducted Emissions Test Data:

Operating Conditions of The EUT : Operating

Test Date : MAY 25, 2009

Test Specification	EN 55013:2001/A1:2003/A2:2006			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCI	2009/02/04	2010/02/04
LISN	Kyoritsu	KNW-403D	2008/10/06	2009/10/06
LISN	EMCO	3850/2	2009/05/07	2010/05/07
Climatic Condition	Ambient Temperature: <u>25</u> °C		Relative Humidity: <u>52</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Test data see the next pages.

Mode: Operating

Neutral

Frequency (MHz)	Meter Reading (dB μ V)		Factor (dB)	Result (dB μ V)		Limit (dB μ V)		Margin (dB μ V)	
	Q.P	AVG		Q.P	AVG	Q.P	AVG	Q.P	AVG
0.173	32.5	----	0.2	32.7	----	64.8	54.8	-32.1	----
0.408	37.8	----	0.3	38.1	----	57.7	47.7	-19.6	----
0.517	33.4	----	0.3	33.7	----	56.0	46.0	-22.3	----
1.302	32.5	----	0.4	32.9	----	56.0	46.0	-23.1	----
2.034	34.6	----	0.5	35.1	----	56.0	46.0	-20.9	----
3.728	36.1	----	0.6	36.7	----	56.0	46.0	-19.3	----

Mode: Operating

Line

Frequency (MHz)	Meter Reading (dB μ V)		Factor (dB)	Result (dB μ V)		Limit (dB μ V)		Margin (dB μ V)	
	Q.P	AVG		Q.P	AVG	Q.P	AVG	Q.P	AVG
0.183	33.4	----	0.2	33.6	----	64.3	54.3	-30.7	----
0.456	32.7	----	0.3	33.0	----	56.8	46.8	-23.8	----
0.907	33.6	----	0.3	33.9	----	56.0	46.0	-22.1	----
1.027	34.8	----	0.3	35.1	----	56.0	46.0	-20.9	----
3.747	33.1	----	0.6	33.7	----	56.0	46.0	-22.3	----
6.020	37.5	----	0.7	38.2	----	60.0	50.0	-21.8	----

Notes: 1) Place of measurement: EMC LAB. of the ETC

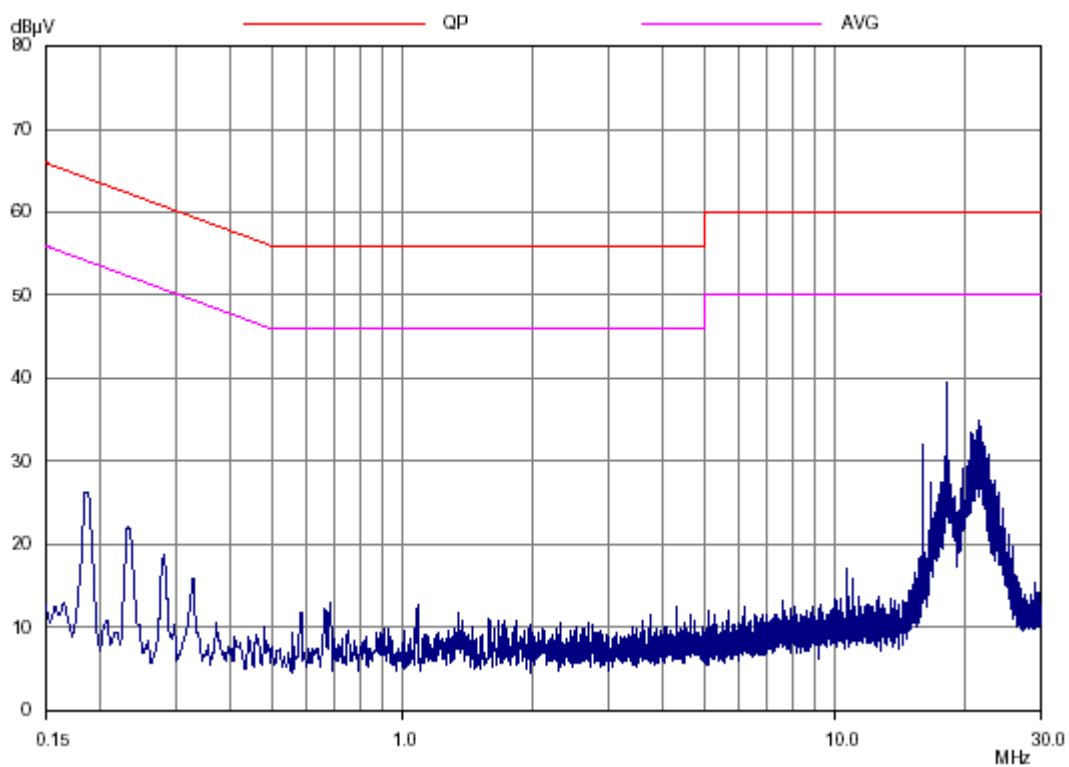
2) The EUT was placed 0.8m above reference ground plane.

3) The symbol of "----" means the Q.P. value is under the limit for AVG. so, the AVG. value doesn't need to be measured.

4) The expanded uncertainty of the conducted emission tests is 2.45 dB.

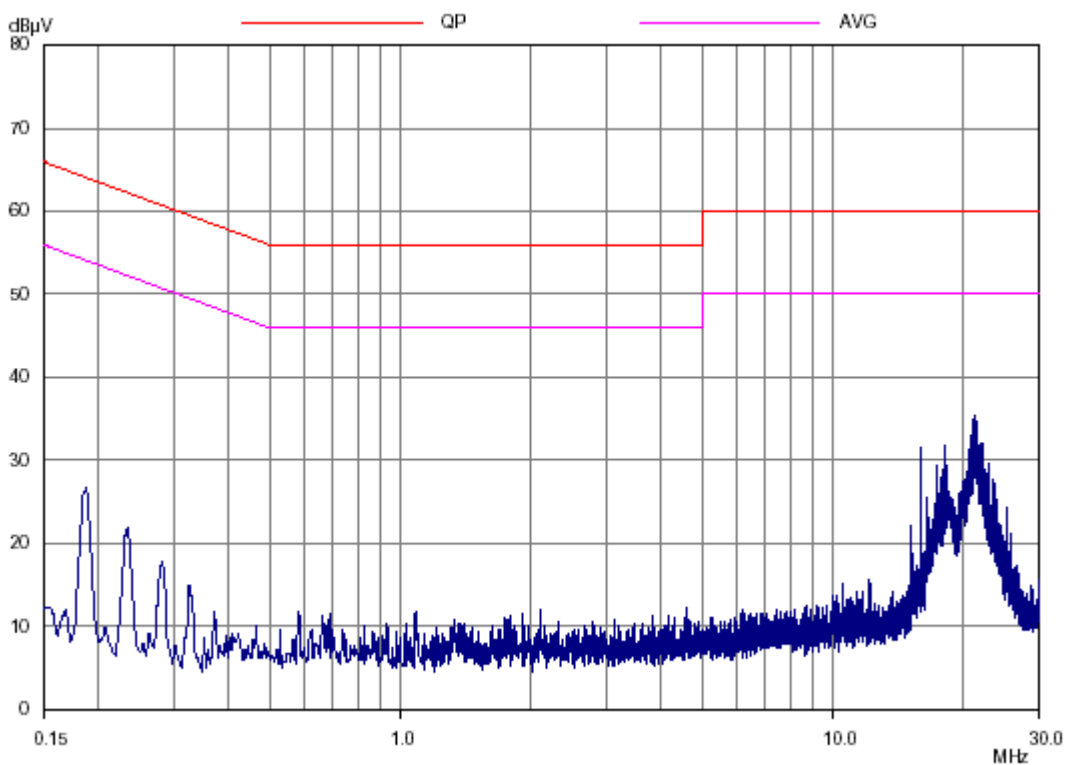
Mode: Operating

Neutral

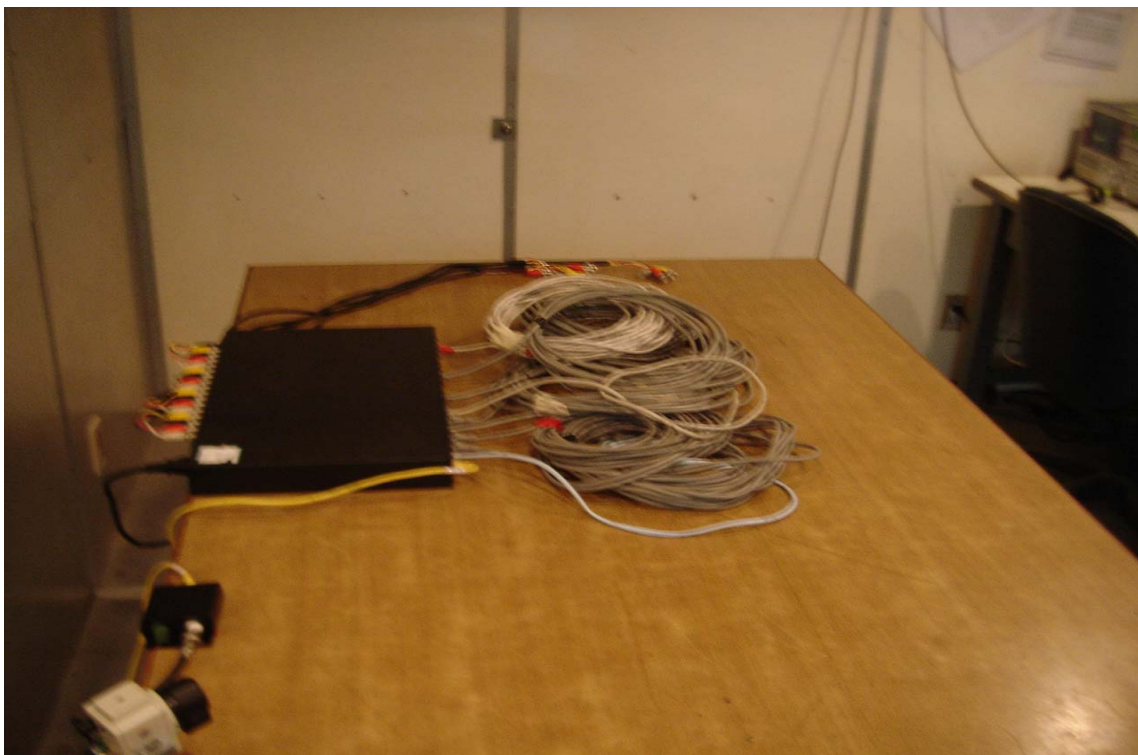


Mode: Operating

Line



4.1.1.2 Conducted Emissions Test Setup Photos :



4.1.2 Radiated Emission Data(Absorbing Clamp)
4.1.2.1 Radiated Emissions (Absorbing Clamp) Test Date:

 1. Operating Conditions of The EUT : Coaxial cable input cable

Test Date : MAY 25, 2009

Test Specification	EN 55013:2001/A1:2003/A2:2006			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCI	2009/02/04	2010/02/04
LISN	Kyoritsu	KNW-403D	2008/10/06	2009/10/06
LISN	EMCO	3850/2	2009/05/07	2010/05/07
Asorbing Clamp	Rohde & Schwarz	MDS-21	2009/05/15	2010/05/15
Climatic Condition	Ambient Temperature: <u>25</u> °C		Relative Humidity: <u>67</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Emission Frequency (MHz)	Meter Reading (dBuV)		CORR'd Factor (dB)	Results (dBpW)		Limit (dBpW)		Margins (dB)	
	Q.P	AVG.		Q.P	AVG.	Q.P	AVG.	Q.P	AVG.
33.800	27.5	----	3.4	30.9	----	45.1	35.1	-14.2	----
42.500	29.3	----	0.8	30.1	----	45.5	35.5	-15.4	----
62.400	24.3	----	0.2	24.5	----	46.2	36.2	-21.7	----
90.700	25.6	----	-0.3	25.3	----	47.2	37.2	-21.9	----
150.200	26.1	----	-1.2	24.9	----	49.5	39.5	-24.6	----
183.400	25.3	----	-2.1	23.2	----	50.7	40.7	-27.5	----
220.400	29.1	----	-2.3	26.8	----	52.1	42.1	-25.3	----
297.600	24.2	----	-2.3	21.9	----	54.9	44.9	-33.0	----

 Notes: 1) Place of Measurement: Measuring site of the ETC

2) Remark "----" means that the emissions level is too low to be measured.

3) The expanded uncertainty of the radiated emission tests is 3.53 dB.

2. Operating Conditions of The EUT : AC Power Line

Test Date : MAY 25, 2009

Test Specification	EN 55013:2001/A1:2003/A2:2006			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCI	2009/02/04	2010/02/04
LISN	Kyoritsu	KNW-403D	2008/10/06	2009/10/06
LISN	EMCO	3850/2	2009/05/07	2010/05/07
Asorbing Clamp	Rohde & Schwarz	MDS-21	2009/05/15	2010/05/15
Climatic Condition	Ambient Temperature: <u>25</u> °C		Relative Humidity: <u>56</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Emission Frequency (MHz)	Meter Reading (dBuV)		CORR'd Factor (dB)	Results (dBpW)		Limit (dBpW)		Margins (dB)	
	Q.P	AVG.		Q.P	AVG.	Q.P	AVG.	Q.P	AVG.
34.200	27.8	----	3.4	31.2	----	45.2	35.2	-14.0	----
47.500	28.9	----	0.3	29.2	----	45.6	35.6	-16.4	----
65.300	26.1	----	-0.1	26.0	----	46.3	36.3	-20.3	----
91.300	27.2	----	-0.3	26.9	----	47.3	37.3	-20.4	----
151.300	24.2	----	-1.2	23.0	----	49.5	39.5	-26.5	----
183.500	23.2	----	-2.2	21.0	----	50.7	40.7	-29.7	----
219.300	27.6	----	-2.3	25.3	----	52.0	42.0	-26.7	----
293.600	28.1	----	-2.4	25.7	----	54.8	44.8	-29.1	----

- Notes: 1) Place of Measurement: Measuring site of the ETC
- 2) Remark “----” means that the emissions level is too low to be measured.
- 3) The expanded uncertainty of the radiated emission tests is 3.53 dB.

3. Operating Conditions of The EUT : Coaxial cable output cable

Test Date : MAY 25, 2009

Test Specification	EN 55013:2001/A1:2003/A2:2006			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCI	2009/02/04	2010/02/04
LISN	Kyoritsu	KNW-403D	2008/10/06	2009/10/06
LISN	EMCO	3850/2	2009/05/07	2010/05/07
Asorbing Clamp	Rohde & Schwarz	MDS-21	2009/05/15	2010/05/15
Climatic Condition	Ambient Temperature: <u>23</u> °C		Relative Humidity: <u>51</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Emission Frequency (MHz)	Meter Reading (dBuV)		CORR'd Factor (dB)	Results (dBpW)		Limit (dBpW)		Margins (dB)	
	Q.P	AVG.		Q.P	AVG.	Q.P	AVG.	Q.P	AVG.
32.400	26.6	----	3.6	30.2	----	45.1	35.1	-14.9	----
43.100	27.7	----	0.8	28.5	----	45.5	35.5	-17.0	----
69.500	28.4	----	0.0	28.4	----	46.5	36.5	-18.1	----
90.100	29.4	----	-0.4	29.0	----	47.2	37.2	-18.2	----
147.300	30.1	----	-1.0	29.1	----	49.3	39.3	-20.2	----
182.400	30.5	----	-2.1	28.4	----	50.6	40.6	-22.2	----
217.800	30.6	----	-2.3	28.3	----	52.0	42.0	-23.7	----
297.700	28.1	----	-2.2	25.9	----	54.9	44.9	-29.0	----

 Notes: 1) Place of Measurement: Measuring site of the ETC

2) Remark “----“ means that the emissions level is too low to be measured.

3) The expanded uncertainty of the radiated emission tests is 3.53 dB.

4. Operating Conditions of The EUT : RJ45 Line

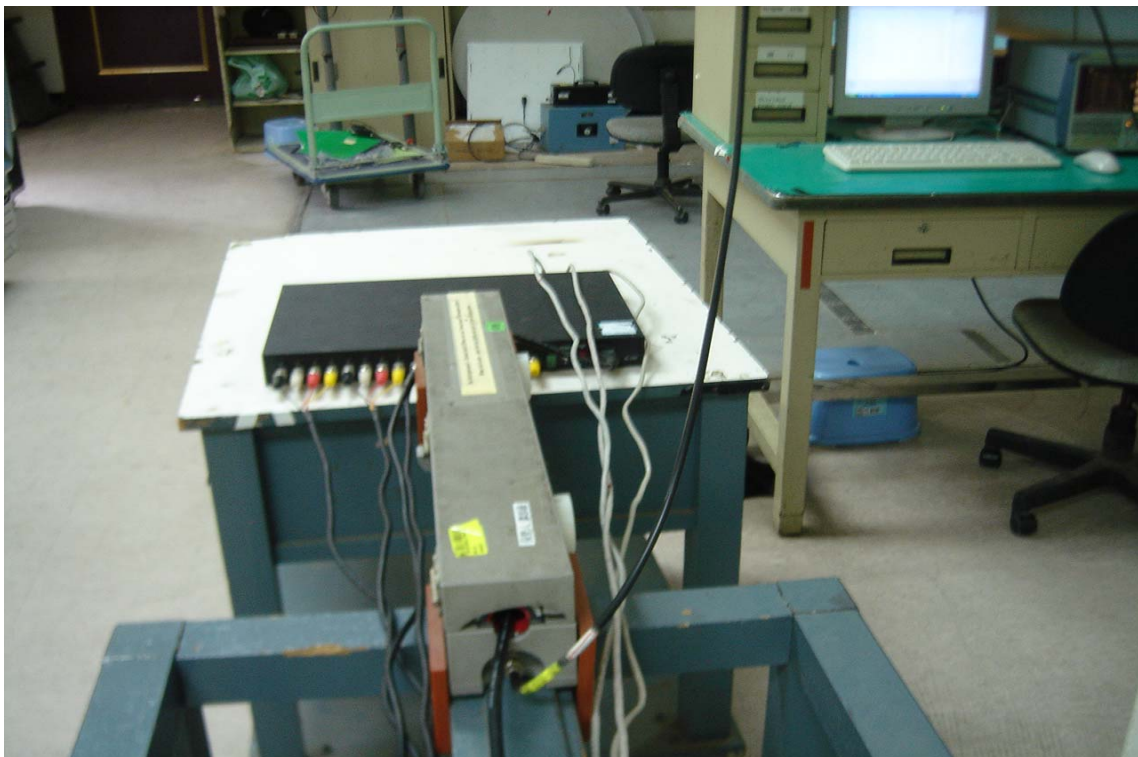
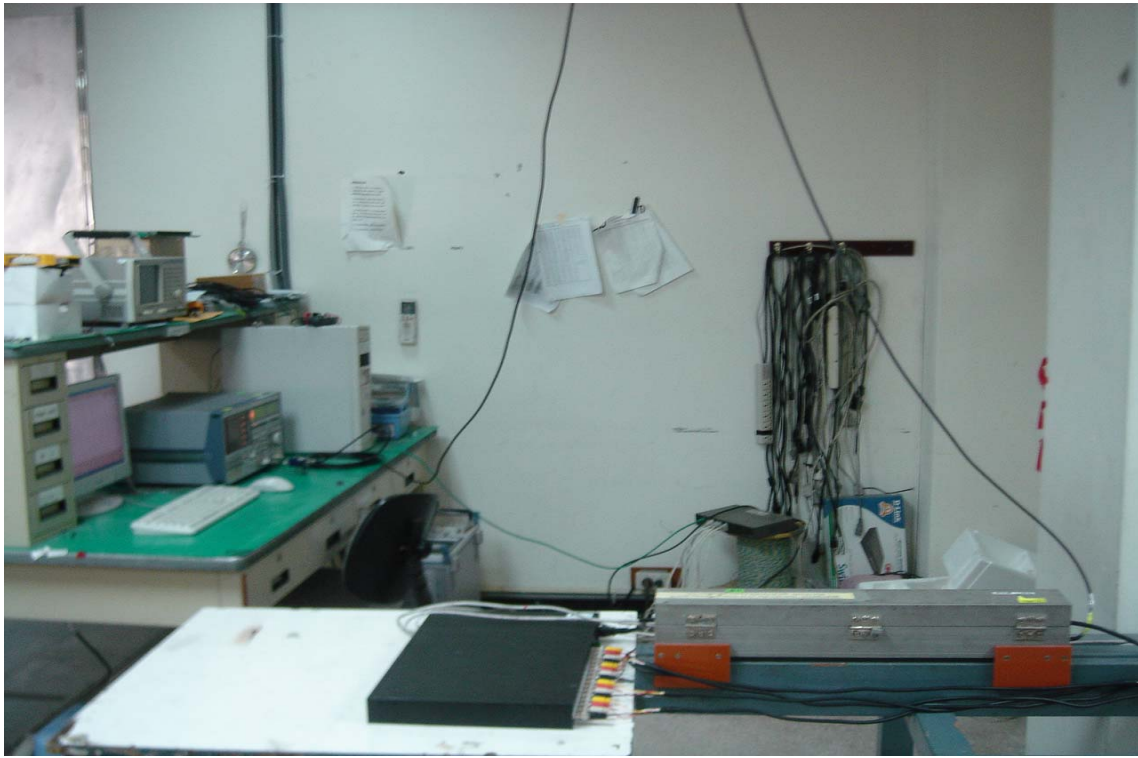
Test Date : MAY 25, 2009

Test Specification	EN 55013:2001/A1:2003/A2:2006			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCI	2009/02/04	2010/02/04
LISN	Kyoritsu	KNW-403D	2008/10/06	2009/10/06
LISN	EMCO	3850/2	2009/05/07	2010/05/07
Asorbing Clamp	Rohde & Schwarz	MDS-21	2009/05/15	2010/05/15
Climatic Condition	Ambient Temperature: <u>23</u> °C		Relative Humidity: <u>51</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Emission Frequency (MHz)	Meter Reading (dBuV)		CORR'd Factor (dB)	Results (dBpW)		Limit (dBpW)		Margins (dB)	
	Q.P	AVG.		Q.P	AVG.	Q.P	AVG.	Q.P	AVG.
34.200	27.1	----	3.4	30.5	----	45.2	35.2	-14.7	----
44.600	28.2	----	0.0	28.2	----	45.5	35.5	-17.3	----
60.600	25.1	----	0.3	25.4	----	46.1	36.1	-20.7	----
93.500	26.6	----	0.2	26.8	----	47.4	37.4	-20.6	----
152.300	27.6	----	-1.3	26.3	----	49.5	39.5	-23.2	----
182.700	26.5	----	-2.1	24.4	----	50.7	40.7	-26.3	----
219.400	30.6	----	-2.3	28.3	----	52.0	42.0	-23.7	----
292.700	30.1	----	-2.4	27.7	----	54.7	44.7	-27.0	----

- Notes: 1) Place of Measurement: Measuring site of the ETC
- 2) Remark “----“ means that the emissions level is too low to be measured.
- 3) The expanded uncertainty of the radiated emission tests is 3.53 dB.

4.1.2.2 Radiated Emissions (Absorbing Clamp) Test Setup Photos :



4.1.3 Harmonics Current Emissions Test :

4.1.3.1 Harmonics Current Emissions Test Data:

Operating Conditions of The EUT : Operation Mode

Model: TPP0XXXX

Test Date : MAY 24, 2009

Test Specification	EN 61000-3-2:2006			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity tester	EMC-Partner	Harmonics-1000	2008/12/10	2009/12/10
Climatic Condition	Ambient Temperature: <u>24</u> °C		Relative Humidity: <u>51</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Test data see the next pages.

Urms = 229.9V Freq = 49.987 Range: 0.25 A
 Irms = 0.003A Ipk = 0.018A cf = 6
 P = 0.607W S = 0.702VA pf = 0.866
 THDi = 48.50% THDu = 0.10% Class A

Test - Time : 3min -100%

Test completed, Result: PASSED

Order	Freq. [Hz]	Iavg [A]	Imax [A]	Limit [A]	Order	Freq. [Hz]	Iavg [A]	Imax [A]	Limit [A]
1	50	0	0.0027		21	1050	0	0.0002	0.1071
2	100	0	0.0002	1.08	22	1100	0	0.0002	0.0836
3	150	0	0.0003	2.3	23	1150	0	0.0002	0.0978
4	200	0	0.0002	0.43	24	1200	0	0.0002	0.0767
5	250	0	0.0003	1.14	25	1250	0	0.0002	0.09
6	300	0	0.0002	0.3	26	1300	0	0.0002	0.0708
7	350	0	0.0003	0.77	27	1350	0	0.0002	0.0833
8	400	0	0.0002	0.23	28	1400	0	0.0002	0.0657
9	450	0	0.0003	0.4	29	1450	0	0.0002	0.0776
10	500	0	0.0002	0.184	30	1500	0	0.0002	0.0613
11	550	0	0.0003	0.33	31	1550	0	0.0002	0.0726
12	600	0	0.0002	0.1533	32	1600	0	0.0002	0.0575
13	650	0	0.0003	0.21	33	1650	0	0.0002	0.0682
14	700	0	0.0002	0.1314	34	1700	0	0.0002	0.0541
15	750	0	0.0003	0.15	35	1750	0	0.0002	0.0643
16	800	0	0.0002	0.115	36	1800	0	0.0002	0.0511
17	850	0	0.0003	0.1324	37	1850	0	0.0002	0.0608
18	900	0	0.0002	0.1022	38	1900	0	0.0002	0.0484
19	950	0	0.0002	0.1184	39	1950	0	0.0002	0.0577
20	1000	0	0.0002	0.092	40	2000	0	0.0002	0.046

Operating Conditions of The EUT : Operation Mode

Model: TTP111VPD-RJ45

Test Date : MAY 24, 2009

Test Specification	EN 61000-3-2:2006			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity tester	EMC-Partner	Hormonics-1000	2008/12/10	2009/12/10
Climatic Condition	Ambient Temperature: <u>24</u> °C		Relative Humidity: <u>51</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Test data see the next pages.

Urms = 229.9V Freq = 49.987 Range: 1A
 Irms = 0.140A Ipk = 0.636A cf = 4.556
 P = 6.062W S = 32.11VA pf = 0.189
 THDi = 87.80% THDu = 0.10% Class A

Test - Time : 3min -100%

Test completed, Result: PASSED

Order	Freq. [Hz]	Iavg [A]	I _{max} [A]	Limit [A]	Order	Freq. [Hz]	Iavg [A]	I _{max} [A]	Limit [A]
1	50	0.0619	0.0624		21	1050	0	0.0009	0.1071
2	100	0.0545	0.0547	1.08	22	1100	0	0.0008	0.0836
3	150	0.0544	0.0546	2.3	23	1150	0	0.0009	0.0978
4	200	0.0465	0.0468	0.43	24	1200	0	0.0005	0.0767
5	250	0.0411	0.0413	1.14	25	1250	0	0.0002	0.09
6	300	0.0337	0.0339	0.3	26	1300	0	0.0003	0.0708
7	350	0.0286	0.0287	0.77	27	1350	0	0.0004	0.0833
8	400	0.0221	0.0223	0.23	28	1400	0	0.0002	0.0657
9	450	0.0173	0.0175	0.4	29	1450	0	0.0002	0.0776
10	500	0.0137	0.0138	0.184	30	1500	0	0.0002	0.0613
11	550	0.0119	0.012	0.33	31	1550	0	0.0002	0.0726
12	600	0.0083	0.0083	0.1533	32	1600	0	0.0001	0.0575
13	650	0.006	0.006	0.21	33	1650	0	0.0003	0.0682
14	700	0.005	0.0051	0.1314	34	1700	0	0.0001	0.0541
15	750	0	0.0049	0.15	35	1750	0	0.0001	0.0643
16	800	0	0.0031	0.115	36	1800	0	0.0001	0.0511
17	850	0	0.0023	0.1324	37	1850	0	0.0002	0.0608
18	900	0	0.002	0.1022	38	1900	0	0.0001	0.0484
19	950	0	0.0021	0.1184	39	1950	0	0.0001	0.0577
20	1000	0	0.0012	0.092	40	2000	0	0.0001	0.046

**4.1.3.2 Harmonics Current Emissions Test Setup Photos :
Test Model: TPP0XXXXX**



Test Model: TTP111VPD-RJ45



4.1.4 Voltage Fluctuations and Flicker Test :
4.1.4.1 Voltage Fluctuations and Flicker Test Data:

 Operating Conditions of The EUT : Operation

Model: TPP0XXXXXX

Test Date : Aug. 05, 2009

Test Specification	EN 61000-3-3:1995/A1:2001/A2:2005			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity tester	EMC-Partner	Hormonics-1000	2008/12/10	2009/12/10
Climatic Condition	Ambient Temperature: <u>29</u> °C		Relative Humidity: <u>51</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

	Test Data	Limit	Pass or Fail
Plt	0.072	0.65	Pass
Pst	0.072	1.00	Pass
dt	0.00ms	500 ms	Pass
dmax	0.00%	4.0 %	Pass
dc	0.00%	3.3 %	Pass

Operating Conditions of The EUT : Operation

Model: TTP111VPD-RJ45

Test Date : Aug. 05, 2009

Test Specification	EN 61000-3-3:1995/A1:2001/A2:2005			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity tester	EMC-Partner	Hormonics-1000	2008/12/10	2009/12/10
Climatic Condition	Ambient Temperature: <u>29</u> °C		Relative Humidity: <u>51</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

	Test Data	Limit	Pass or Fail
Plt	0.072	0.65	Pass
Pst	0.072	1.00	Pass
dt	0.00ms	500 ms	Pass
dmax	0.00%	4.0 %	Pass
dc	0.00%	3.3 %	Pass

**4.1.4.2 Voltage Fluctuations and Flicker Test Setup Photos :
Test Model: TPP0XXXXX**



Test Model: TTP111VPD-RJ45



4.2 Immunity:

4.2.1 Electrostatic Discharge Immunity Test :

4.2.1.1 Electrostatic Discharge Immunity Test Data:

Operating Conditions of The EUT : Operation

Model: TPP0XXXXX

Test Date : Aug. 05, 2009

Test Specification	IEC 61000-4-2:2008			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Noise Ken	ESD Tester	ESS-2002	2008/09/18	2009/09/18
Climatic Condition	Ambient Temperature: <u>29</u> °C		Relative Humidity: <u>51</u> %RH	
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Energy-Storage Capacitor : <u>150</u> pF	Contact Discharge Times : <u>10</u> times/each condition															
Discharge Resistor : <u>330</u> Ω	Air Discharge Times : <u>10</u> times/each condition															
\ Discharge Mode	Contact Discharge								Air Discharge							
\ESD Voltage	<u>2</u> kV		<u>4</u> kV		___ kV		___ kV		<u>2</u> kV		<u>4</u> kV		<u>8</u> kV		___ kV	
\Points\Result\Polarity	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
VCP	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
HCP	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
P ₁ ,P ₁₀	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
P ₂ -P ₉	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---

Note : “---“means the test could not be carrier out.

“ A ” means the EUT function was correct during the test

TEST POINTS



Operating Conditions of The EUT : Operation

Model: TTPVPD-RJ45

Test Date : Aug. 05, 2009

Test Specification	IEC 61000-4-2:2008			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Noise Ken	ESD Tester	ESS-2002	2008/09/18	2009/09/18
Climatic Condition	Ambient Temperature: <u>29</u> °C		Relative Humidity: <u>51</u> %RH	
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Energy-Storage Capacitor : <u>150</u> pF	Contact Discharge Times : <u>10</u> times/each condition															
Discharge Resistor : <u>330</u> Ω	Air Discharge Times : <u>10</u> times/each condition															
\ Discharge Mode	Contact Discharge								Air Discharge							
\ESD Voltage	<u>2</u> kV		<u>4</u> kV		___ kV		___ kV		<u>2</u> kV		<u>4</u> kV		<u>8</u> kV		___ kV	
\Points\Result\Polarity	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
VCP	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
HCP	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
P ₁ ,P ₉ -P ₁₀	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
P ₂ -P ₈	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---

Note : “---“means the test could not be carrier out.

“A ” means the EUT function was correct during the test

TEST POINTS



4.2.1.2 Electrostatic Discharge Immunity Test Setup Photos :

4.2.2 RF Radiated Fields Immunity Test :

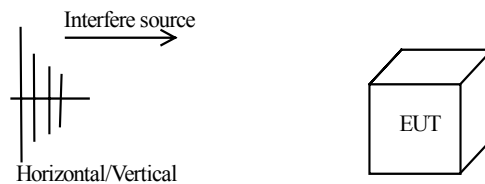
4.2.2.1 RF Radiated Fields Immunity Test Data:

Operating Conditions of The EUT : Operation

Model: TPP0XXXXX

Test Date : Aug. 05, 2009

Test Specification	IEC 61000-4-3:2006/A1:2007			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Antenna	AR	AT5080	N/A	N/A
signal Generator	Aglient	E4421B	2008/08/07	2009/08/06
Amplifier	Ophir	5172	N/A	N/A
Amplifier	Ophir	5127	N/A	N/A
POWER METER	Booton	4232A	2008/08/08	2009/08/07
Climatic Condition	Ambient Temperature: <u>29</u> °C		Relative Humidity: <u>51</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			



Frequency Range: <u>80</u> MHz ~ <u>1000</u> MHz	Field Strength: <u>3</u> V/m	Modulation (AM 1kHz 80%)	
Sweep Rate : $\leq 1.5 \times 10^{-3}$ decades/s	Step Size : $\leq 1\%$ of preceding frequency value	Dwell time : <u>2.9</u> s	
Frequency Range (MHz)	Antenna-Polarization	Direction of Device	Test Result
80-1000	Horizontal	front	A
		rear	A
		left	A
		right	A
80-1000	Vertical	front	A
		rear	A
		left	A
		right	A

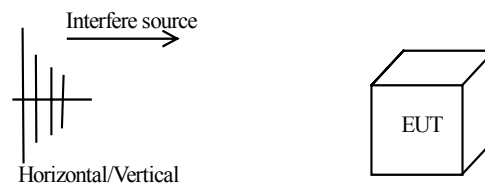
Note : "A" means the EUT function was correct during the test .

Operating Conditions of The EUT : Operation

Model: TPP0XXXXX

Test Date : Jul. 20, 2009

Test Specification	IEC 61000-4-3:2006/A1:2007			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Antenna	AR	AT5080	N/A	N/A
signal Generator	Aglient	E4421B	2008/08/07	2009/08/06
Amplifier	Ophir	5172	N/A	N/A
Amplifier	Ophir	5127	N/A	N/A
POWER METER	Booton	4232A	2008/08/08	2009/08/07
Climatic Condition	Ambient Temperature: <u>28</u> °C		Relative Humidity: <u>51</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			



Frequency Range: <u>1400</u> MHz ~ <u>2000</u> MHz	Field Strength: <u>3</u> V/m	Modulation (AM 1kHz 80%)	
Sweep Rate : $\leq 1.5 \times 10^{-3}$ decades/s	Step Size : ≤ 1 % of preceding frequency value	Dwell time : <u>2.9</u> s	
Frequency Range (MHz)	Antenna-Polarization	Direction of Device	Test Result
1400-2000	Horizontal	front	A
		rear	A
		left	A
		right	A
1400-2000	Vertical	front	A
		rear	A
		left	A
		right	A

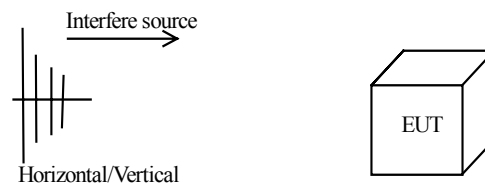
Note : "A" means the EUT function was correct during the test .

Operating Conditions of The EUT : Operation

Model: TPP0XXXXX

Test Date : Jul. 20, 2009

Test Specification	IEC 61000-4-3:2006/A1:2007			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Antenna	AR	AT5080	N/A	N/A
signal Generator	Aglient	E4421B	2008/08/07	2009/08/06
Amplifier	Ophir	5172	N/A	N/A
Amplifier	Ophir	5127	N/A	N/A
POWER METER	Booton	4232A	2008/08/08	2009/08/07
Climatic Condition	Ambient Temperature: <u>28</u> °C		Relative Humidity: <u>51</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			



Frequency Range: <u>2000</u> MHz ~ <u>2700</u> MHz	Field Strength: <u>1</u> V/m	Modulation (AM 1kHz 80%)	
Sweep Rate : $\leq 1.5 \times 10^{-3}$ decades/s	Step Size : ≤ 1 % of preceding frequency value	Dwell time : <u>2.9</u> s	
Frequency Range (MHz)	Antenna-Polarization	Direction of Device	Test Result
2000-2700	Horizontal	front	A
		rear	A
		left	A
		right	A
2000-2700	Vertical	front	A
		rear	A
		left	A
		right	A

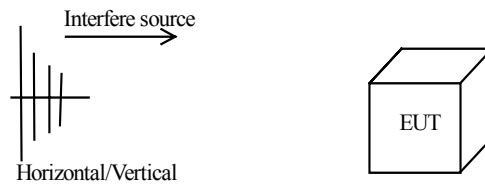
Note : "A" means the EUT function was correct during the test .

Operating Conditions of The EUT : Operation

Model: TTP111VPD-RJ45

Test Date : Aug. 05, 2009

Test Specification	IEC 61000-4-3:2006/A1:2007			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Antenna	AR	AT5080	N/A	N/A
signal Generator	Aglient	E4421B	2008/08/07	2009/08/06
Amplifier	Ophir	5172	N/A	N/A
Amplifier	Ophir	5127	N/A	N/A
POWER METER	Booton	4232A	2008/08/08	2009/08/07
Climatic Condition	Ambient Temperature: <u>29</u> °C		Relative Humidity: <u>51</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			



Frequency Range: <u>80</u> MHz ~ <u>1000</u> MHz	Field Strength: <u>3</u> V/m	Modulation (AM 1kHz 80%)	
Sweep Rate : $\leq 1.5 \times 10^{-3}$ decades/s	Step Size : ≤ 1 % of preceding frequency value	Dwell time : <u>2.9</u> s	
Frequency Range (MHz)	Antenna-Polarization	Direction of Device	Test Result
80-1000	Horizontal	front	A
		rear	A
		left	A
		right	A
80-1000	Vertical	front	A
		rear	A
		left	A
		right	A

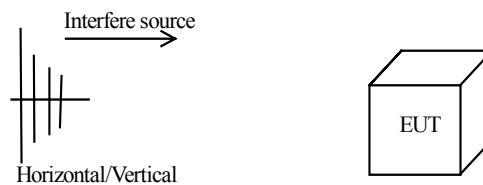
Note : "A" means the EUT function was correct during the test .

Operating Conditions of The EUT : Operation

Model: TTP111VPD-RJ45

Test Date : Jul. 20, 2009

Test Specification	IEC 61000-4-3:2006/A1:2007			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Antenna	AR	AT5080	N/A	N/A
signal Generator	Aglient	E4421B	2008/08/07	2009/08/06
Amplifier	Ophir	5172	N/A	N/A
Amplifier	Ophir	5127	N/A	N/A
POWER METER	Booton	4232A	2008/08/08	2009/08/07
Climatic Condition	Ambient Temperature: <u>28</u> °C		Relative Humidity: <u>51</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			



Frequency Range: <u>1400</u> MHz ~ <u>2000</u> MHz	Field Strength: <u>3</u> V/m	Modulation (AM 1kHz 80%)	
Sweep Rate : $\leq 1.5 \times 10^{-3}$ decades/s	Step Size : ≤ 1 % of preceding frequency value	Dwell time : <u>2.9</u> s	
Frequency Range (MHz)	Antenna-Polarization	Direction of Device	Test Result
1400-2000	Horizontal	front	A
		rear	A
		left	A
		right	A
1400-2000	Vertical	front	A
		rear	A
		left	A
		right	A

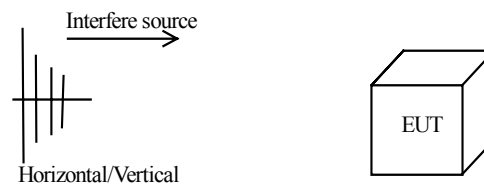
Note : "A" means the EUT function was correct during the test .

Operating Conditions of The EUT : Operation

Model: TTP111VPD-RJ45

Test Date : Jul. 20, 2009

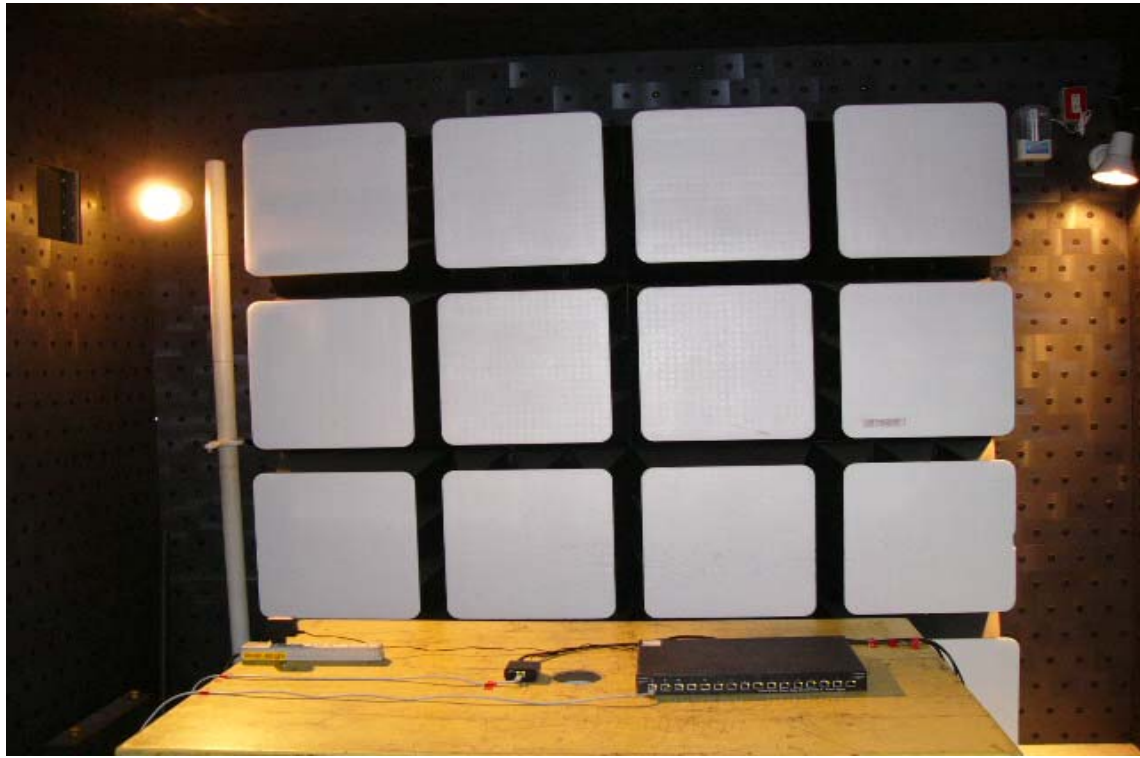
Test Specification	IEC 61000-4-3:2006/A1:2007			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Antenna	AR	AT5080	N/A	N/A
signal Generator	Aglient	E4421B	2008/08/07	2009/08/06
Amplifier	Ophir	5172	N/A	N/A
Amplifier	Ophir	5127	N/A	N/A
POWER METER	Boonton	4232A	2008/08/08	2009/08/07
Climatic Condition	Ambient Temperature: <u>28</u> °C		Relative Humidity: <u>51</u> %RH	
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			



Frequency Range: <u>2000</u> MHz ~ <u>2700</u> MHz	Field Strength: <u>1</u> V/m	Modulation (AM 1kHz 80%)	
Sweep Rate : $\leq 1.5 \times 10^{-3}$ decades/s	Step Size : ≤ 1 % of preceding frequency value	Dwell time : <u>2.9</u> s	
Frequency Range (MHz)	Antenna-Polarization	Direction of Device	Test Result
2000-2700	Horizontal	front	A
		rear	A
		left	A
		right	A
2000-2700	Vertical	front	A
		rear	A
		left	A
		right	A

Note : "A" means the EUT function was correct during the test .

4.2.2.2 RF Radiated Fields Immunity Test Setup Photos :



4.2.3 EFT/Burst Immunity Test :
4.2.3.1 EFT/Burst Immunity Test Data:

 Operating Conditions of The EUT : Operation

Model: TPP0XXXXX

Test Date : Aug. 05, 2009

Test Specification	IEC 61000-4-4:2004			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/23
Climatic Condition	Ambient Temperature: <u>29</u> °C		Relative Humidity: <u>51</u> %RH	
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Pulse :5/50ns Burst :15m/300ms		Repetition Rate: <u>5kHz</u>	Test time: <u>1</u> min/each condition
\Voltage\Polarity\ \Test Point\Mode\Result\		<u>1.0kV</u>	
		+	-
Power Line	L	A	A
	N	A	A
	L-N	A	A
	PE	A	A
	L-PE	A	A
	N-PE	A	A
	L-N-PE	A	A
\Voltage\Polarity\ \Test Point\Mode\Result\		<u>0.5kV</u>	
		+	-
RJ45		A	A

 Note : "A" means the EUT function was correct during the test .

Operating Conditions of The EUT : Operation

Model: TTP111VPD-RJ45

Test Date : Aug. 05, 2009

Test Specification	IEC 61000-4-4:2004			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/23
Climatic Condition	Ambient Temperature: <u>29</u> °C		Relative Humidity: <u>51</u> %RH	
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Pulse :5/50ns Burst :15m/300ms		Repetition Rate: <u>5kHz</u>	Test time: <u>1</u> min/each condition
\Voltage\Polarity\ \Test Point\Mode\Result\		<u>1.0kV</u>	
		+	-
Power Line	L	A	A
	N	A	A
	L-N	A	A
\Voltage\Polarity\ \Test Point\Mode\Result\		<u>0.5kV</u>	
		+	-
Video input cable		A	A
RJ45		A	A

Note : "A" means the EUT function was correct during the test .

4.2.3.2 EFT/Burst Immunity Test Setup Photos :

Test Model: TPP0XXXXX



Test Model: TPP0XXXXX/ RJ45



Test Model: TPP111VPJ-RJ45



Test Model: TPP111VPJ-RJ45/ Test Mode: RJ45



Test Model: TPP111VPJ-RJ45/ Test Mode: Video in



4.2.4 Surge Immunity Test :

4.2.4.1 Surge Immunity Test Data:

Operating Conditions of The EUT : Operation

Model: TPP0XXXXX

Test Date : Aug. 05, 2009

Test Specification	IEC 61000-4-5:2005			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/23
Climatic Condition	Ambient Temperature: <u>29</u> °C		Relative Humidity: <u>51</u> %RH	
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Waveform : 1.2/50µs(8/20µs)			Repetition rate : <u>60</u> sec		Times : <u>5</u> time/each condition	
\Voltage \Mode \Polarity \Phase \Result			0°	90°	180°	270°
0.5kV	L-N	+	A	A	A	A
		-	A	A	A	A
1.0kV	L-N	+	A	A	A	A
		-	A	A	A	A
0.5kV	L-PE	+	A	A	A	A
		-	A	A	A	A
	N-PE	+	A	A	A	A
		-	A	A	A	A
1.0kV	L-PE	+	A	A	A	A
		-	A	A	A	A
	N-PE	+	A	A	A	A
		-	A	A	A	A
2.0kV	L-PE	+	A	A	A	A
		-	A	A	A	A
	N-PE	+	A	A	A	A
		-	A	A	A	A

Note : "A" means the EUT function was correct during the test .

Operating Conditions of The EUT : Operation

Model: TTP111VPD-RJ45

Test Date : Aug. 05, 2009

Test Specification	IEC 61000-4-5:2005			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/02/23	2010/02/23
Climatic Condition	Ambient Temperature: <u>29</u> °C		Relative Humidity: <u>51</u> %RH	
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Waveform : 1.2/50µs(8/20µs)			Repetition rate : <u>60</u> sec		Times : <u>5</u> time/each condition	
\Voltage \Mode \Polarity \Phase \Result			0°	90°	180°	270°
0.5kV	L-N	+	A	A	A	A
		-	A	A	A	A
1.0kV	L-N	+	A	A	A	A
		-	A	A	A	A

Note : "A" means the EUT function was correct during the test .

4.2.4.2 Surge Immunity Test Setup Photos :

Test Model: TPP0XXXXX



Test Model: TPP111VPJ-RJ45



4.2.5 RF Common Mode Immunity Test :
4.2.5.1 RF Common Mode Immunity Test Data:

 Operating Conditions of The EUT : Operation

Model: TPP0XXXXX

Test Date : Aug. 05, 2009

Test Specification	IEC 61000-4-6:2007			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
CS Tester M2+3 CDN-KIT	FRANKONIA	CIT-10	2008/09/24	2009/09/24
	FRANKONIA	M2+3	2008/09/19	2009/09/19
Climatic Condition	Ambient Temperature: <u>29</u> °C		Relative Humidity: <u>51</u> %RH	
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Frequency Range	: <u>0.15</u> MHz ~ <u>80</u> MHz	Test Level	: <u>3</u> Vrms	Modulation (AM 1kHz 80%)
Sweep Rate	: $\leq 1.5 \times 10^{-3}$ decades/s	Step Size	: ≤ 1 % of preceding frequency value	Dwell Time : <u>2.9</u> s
Frequency Range (MHz)	Tested Line		Test Result	
0.15~80	Power Line(M2)		A	
0.15~80	RJ45(CDN)		A	

Note : "A" means the EUT function was correct during the test .

Operating Conditions of The EUT : Operation

Model: TTP111VPD-RJ45

Test Date : Aug. 05, 2009

Test Specification	IEC 61000-4-6:2007			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
CS Tester M2+3 CDN-KIT	FRANKONIA	CIT-10	2008/09/24	2009/09/24
	FRANKONIA	M2+3	2008/09/19	2009/09/19
Climatic Condition	Ambient Temperature: <u>29</u> °C		Relative Humidity: <u>51</u> %RH	
	Atmospheric Pressure : 990 mbar			
Power Supply System	AC Power : <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Frequency Range : <u>0.15</u> MHz ~ <u>80</u> MHz	Test Level : <u>3</u> Vrms	Modulation (AM 1kHz 80%)
Sweep Rate : $\leq 1.5 \times 10^{-3}$ decades/s	Step Size : ≤ 1 % of preceding frequency value	Dwell Time : <u>2.9</u> s
Frequency Range (MHz)	Tested Line	Test Result
0.15~80	Power Line(M2)	A
0.15~80	Video input cable(S1)	A
0.15~80	RJ45(CDN)	A

Note : "A" means the EUT function was correct during the test .

4.2.5.2 RF Common Mode Immunity Test Setup Photos :

Test Model: TPP0XXXXX



Test Model: TPP111VPJ-RJ45



4.2.6 Voltage Interruptions and Voltage Dips Immunity Test

4.2.6.1 Voltage Interruptions and Voltage Dips Immunity Test Data

Operating Conditions of The EUT : Operation Mode

Model: TPP0XXXXX

Test Date : Aug. 05, 2009

Test Specification	IEC 61000-4-11:2004			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/01/17	2010/01/16
Climatic Condition	Ambient Temperature: <u>29</u> °C		Relative Humidity: <u>51</u> %RH	
Power Supply System	AC Power: <u>230</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Test mode	Voltage dips	Durations (periods)	Interval(s)	Times	Phase	Result
Voltage interruptions	100%	250	10	12	0°/180°	A
Voltage dips in %U _T	100%	(1) 1.0	10	12	0°/180°	(1) A
		(2) 0.5				(2) A
	30%	25	10	12	0°/180°	A
		10				

Note : "A" means the EUT function was correct during the test.

Operating Conditions of The EUT : Operation Mode

Model: TTP111VPD-RJ45

Test Date : Aug. 05, 2009

Test Specification	IEC 61000-4-11:2004			
Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMC Immunity Tester	EMC-PARTNER	TRANSIENT-1000	2009/01/17	2010/01/16
Climatic Condition	Ambient Temperature: <u>29</u> °C Relative Humidity: <u>51</u> %RH			
Power Supply System	AC Power: <u>100</u> Vac <u>50</u> Hz; AC Power: <u>240</u> Vac <u>50</u> Hz			
Test Set-up	Table-top Equipment			

Test mode	Voltage dips	Durations (periods)	Interval(s)	Times	Phase	Result
Voltage interruptions	100%	250	10	12	0°/180°	A
	100%	300				A
Voltage dips in %U _T	100%	1.0	10	12	0°/180°	A
	100%	0.5	10	12		A
	30%	25	10	12	0°/180°	A
	30%	30				A

Note : “A” means the EUT function was correct during the test.

4.2.6.2 Voltage Interruptions and Voltage Dips Immunity Test Setup Photos**Test Model: TPP0XXXXX****Test Model: TTP111VPD-RJ45**

CONSTRUCTED PHOTOS of EUT

Test Model: TPP0XXXXX

1. Top View of EUT



2. Bottom View of EUT



CONSTRUCTED PHOTOS of EUT

3. Front View of EUT



4. Rear View of EUT



CONSTRUCTED PHOTOS of EUT

5. Side View of EUT

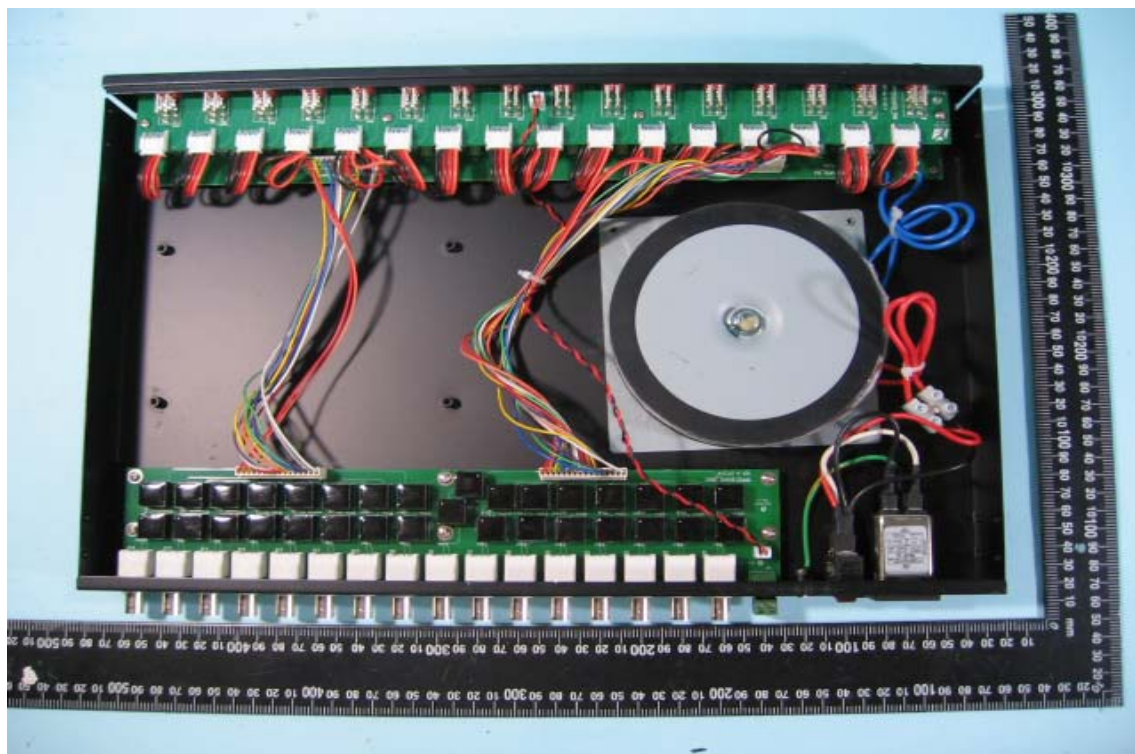


6. Side View of EUT



CONSTRUCTED PHOTOS of EUT

7. Internal View of EUT



CONSTRUCTED PHOTOS of EUT

8. Component View of PCB

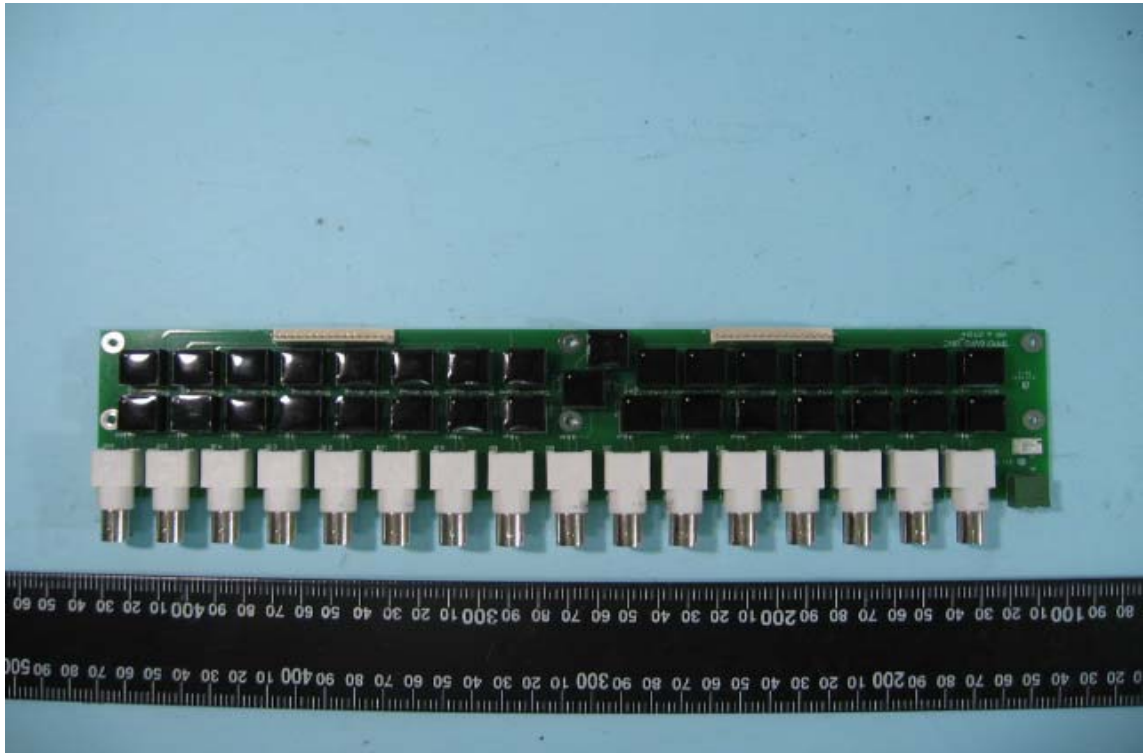


9. Solder View of PCB

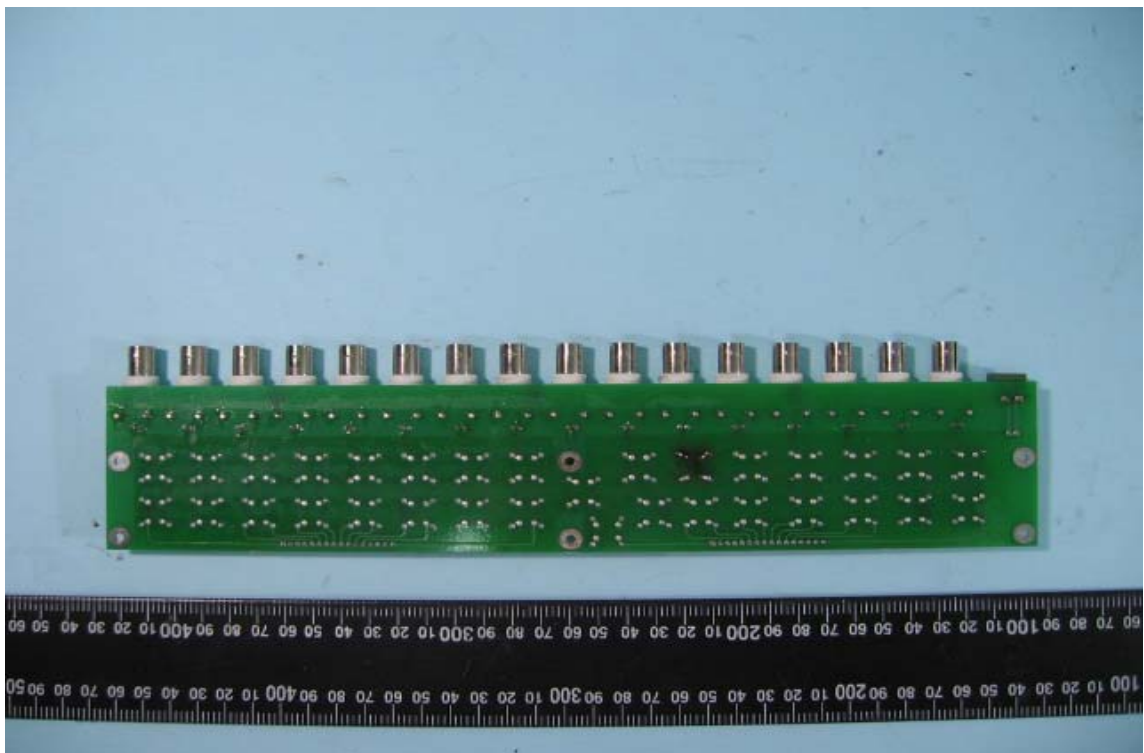


CONSTRUCTED PHOTOS of EUT

10. Component View of PCB

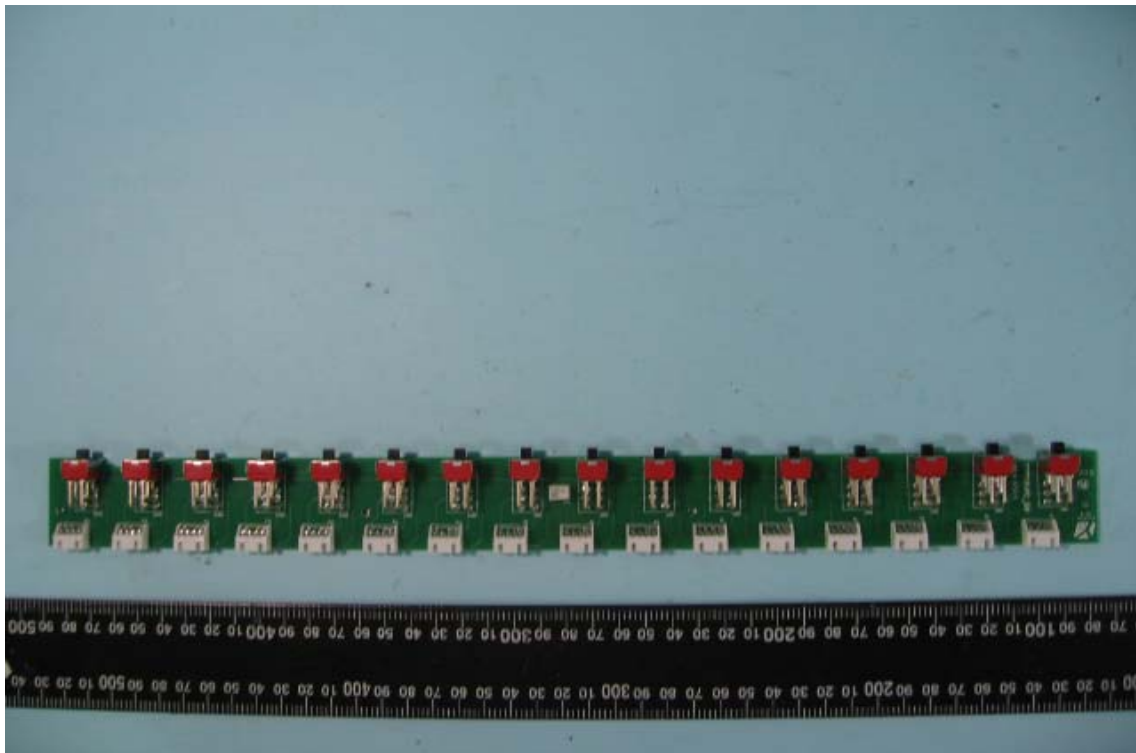


11. Solder View of PCB



CONSTRUCTED PHOTOS of EUT

12. Component View of PCB

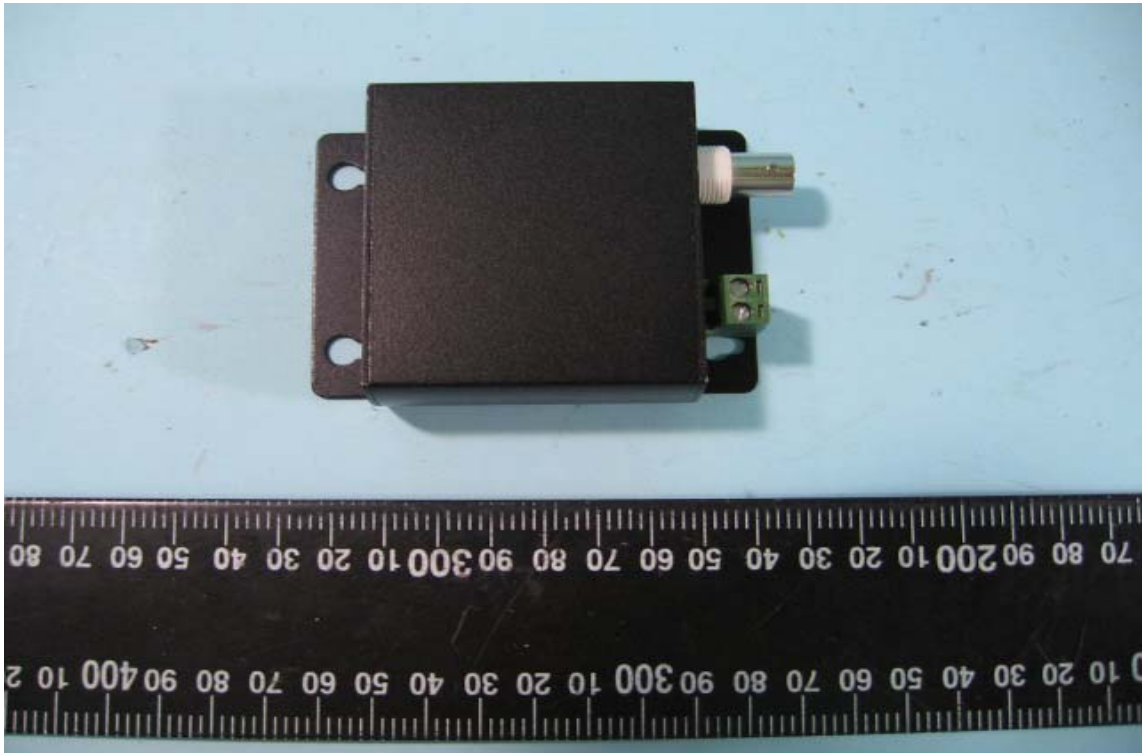


13. Solder View of PCB

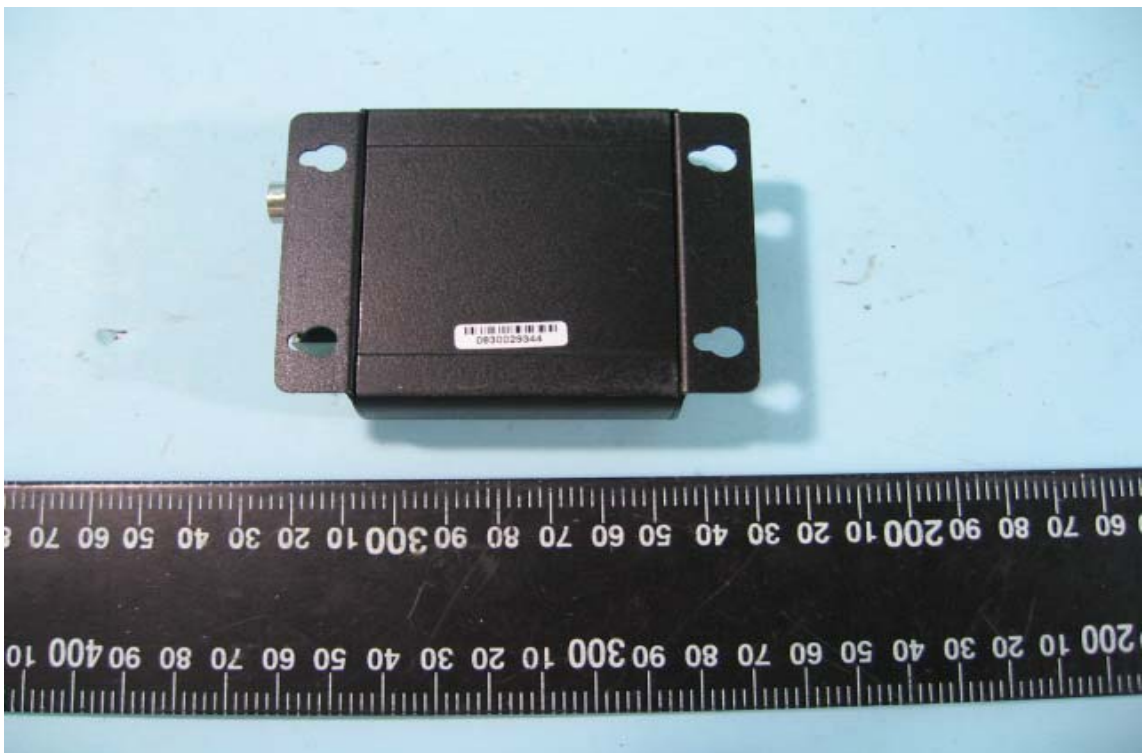


CONSTRUCTED PHOTOS of EUT**Test Model: TTP1111VPD-RJ45**

1. Top View of EUT

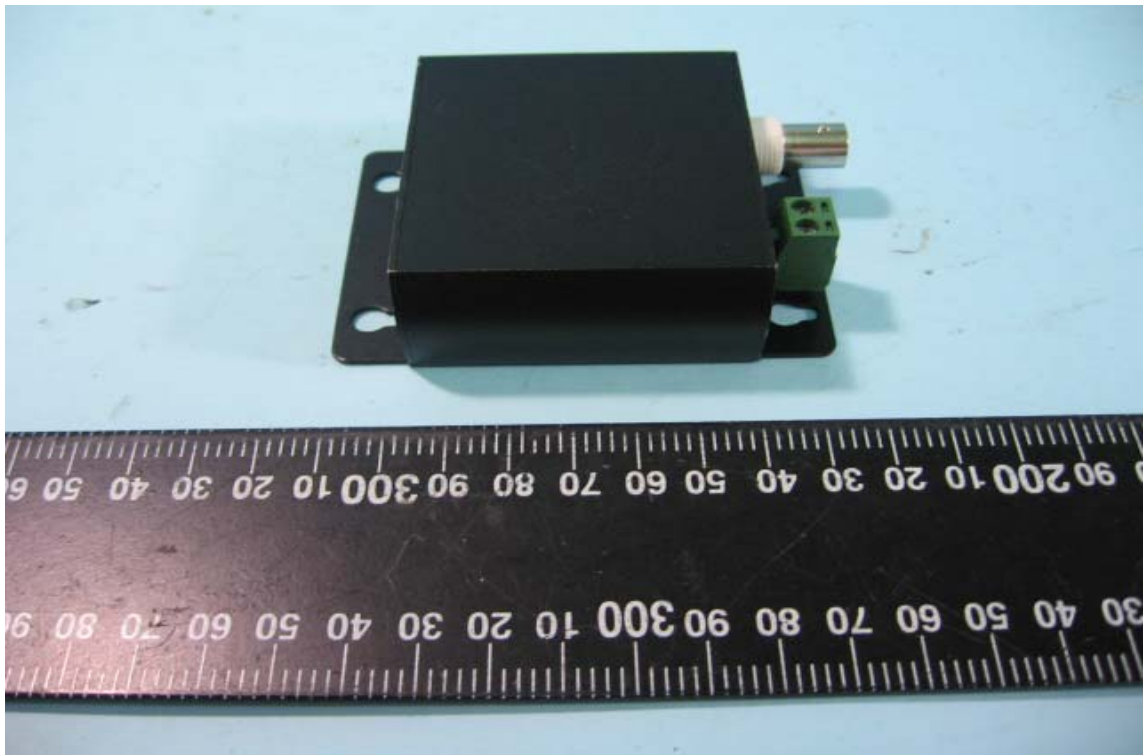


2. Bottom View of EUT

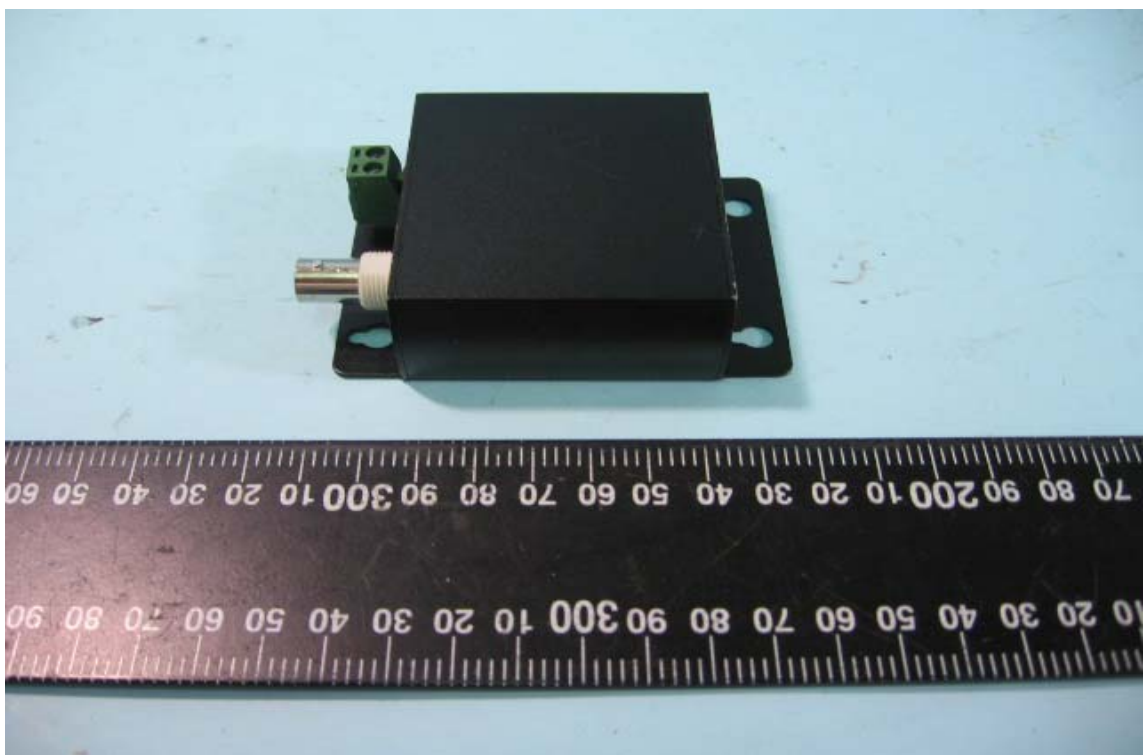


CONSTRUCTED PHOTOS of EUT

3. Side View of EUT



4. Side View of EUT



CONSTRUCTED PHOTOS of EUT

5. Front View of EUT

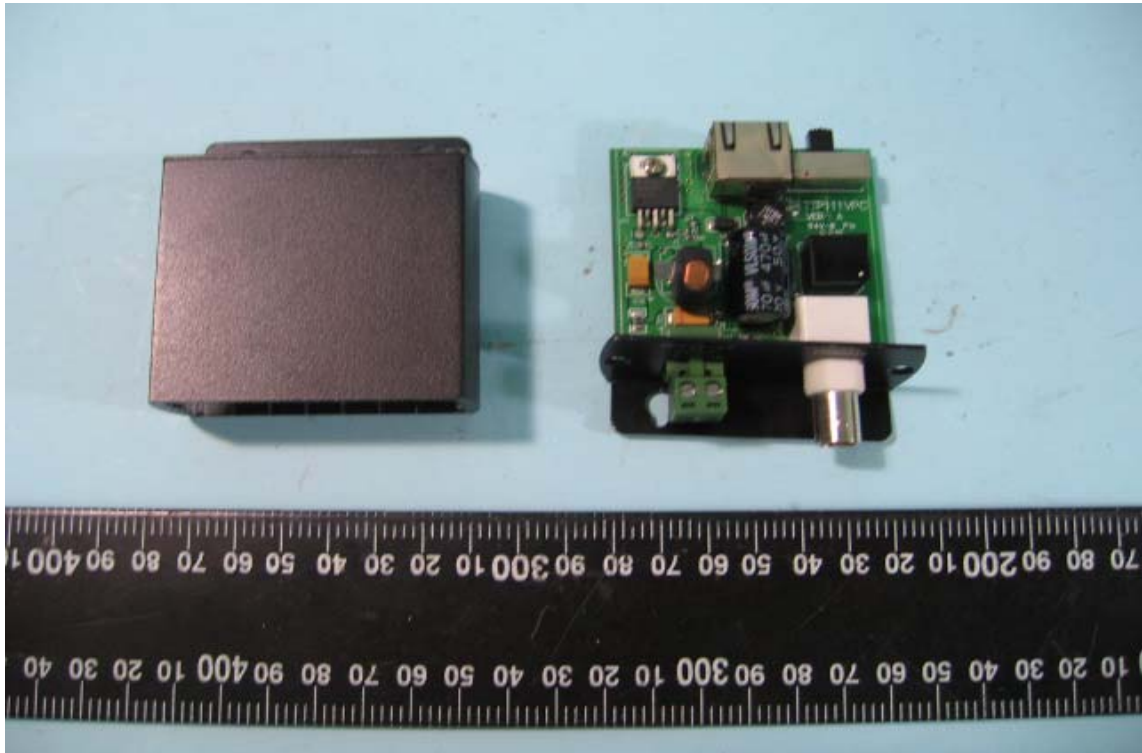


6. Rear View of EUT



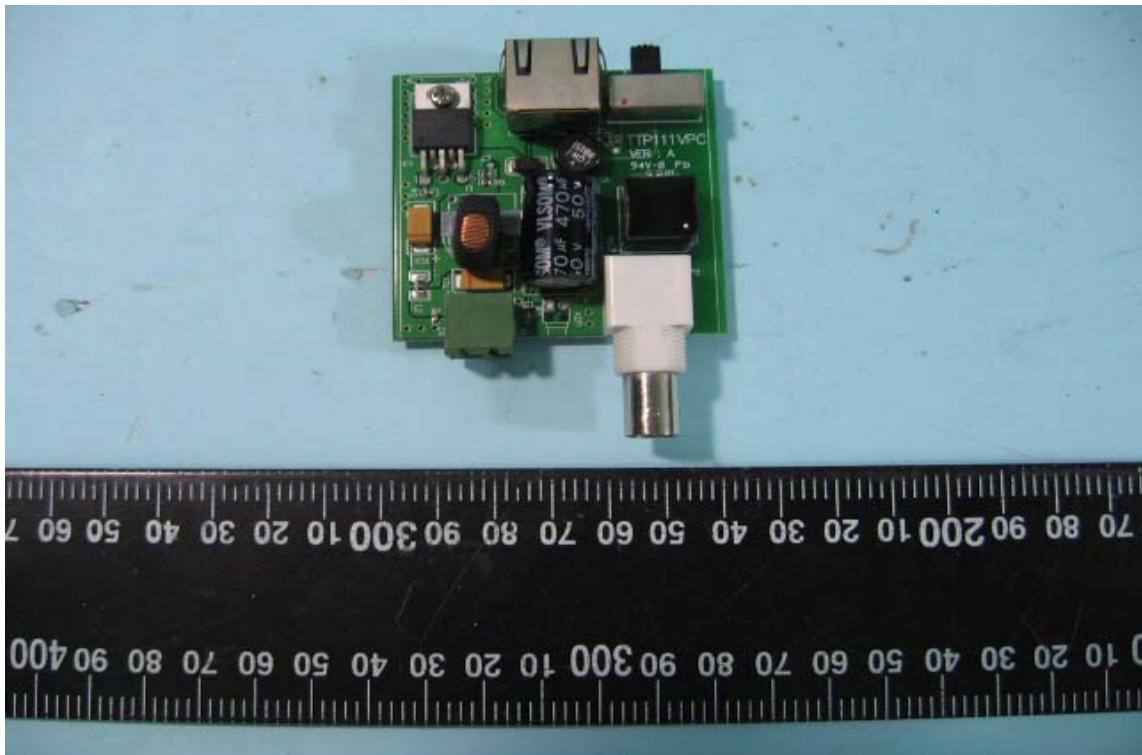
CONSTRUCTED PHOTOS of EUT

7. Internal View of EUT



CONSTRUCTED PHOTOS of EUT

8. Component View of PCB



9. Solder View of PCB

