



SPORTON LAB.



Certificate No: FD682805-04

CERTIFICATE OF COMPLIANCE

Authorized under Declaration of Conformity
according to

47 CFR, Part 2 and Part 15 of the FCC Rules

● **EQUIPMENT : NAS (Network Attached Storage)**

MODEL NO. : KNR-4 series

APPLICANT : Koukaam a.s.

U Vinnych sklepu 7, 190 00 Praha 9,
Czech Republic



I HEREBY

CERTIFY THAT:

THE MEASUREMENTS SHOWN IN THIS TEST REPORT WERE MADE IN
ACCORDANCE WITH THE PROCEDURES GIVEN IN **ANSI C63.4 - 2003** AND
THE ENERGY EMITTED BY THIS EQUIPMENT WAS **PASSED**
FCC Part 15 Subpart B and Canada Standard ICES-003 in BOTH RADIATED
AND CONDUCTED EMISSIONS **Class B** LIMITS. THE TESTING WAS
COMPLETED ON **Sep. 04, 2006** AT **SPORTON INTERNATIONAL INC. LAB.**

Castries Huang Jan. 17, 2007
Castries Huang
Supervisor



FCC TEST REPORT

Authorized under **D**eclaration of **C**onformity

According to

**47 CFR FCC Rules and Regulations Part 15 Subpart B,
Class B Digital Device and Canada Standard ICES-003**

Equipment : NAS (Network Attached Storage)

Model No. : KNR-4 series

Filing Type : Declaration of Conformity

Applicant : **Koukaam a.s.**
U Vinnych sklepu 7, 190 00 Praha 9,
Czech Republic

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- Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.
- **Certificate or Test Report must not be used by the applicant to claim the product in this test report endorsement by NVLAP or any agency of U.S. government.**

SPORTON International Inc.

6F, No.106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

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History of this test report

Original Report Issue Date: Jan. 17, 2007

No additional attachment.

Additional attachment were issued as following record:

Attachment No.	Issue Date	Description

CERTIFICATE OF COMPLIANCE

Authorized under **D**eclaration of **C**onformity

According to

**47 CFR FCC Rules and Regulations Part 15 Subpart B,
Class B Digital Device and Canada Standard ICES-003**

Equipment : NAS (Network Attached Storage)

Model No. : KNR-4 series

Applicant : **Koukaam a.s.**
U Vinnych sklepu 7, 190 00 Praha 9,
Czech Republic

I **HEREBY** CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4 - 2003** and the energy emitted by this equipment was **passed FCC Part 15 Subpart B and Canada Standard ICES-003** in both radiated and conducted emission **Class B** limits. Testing was carried out on Sep. 04, 2006 at **SPORTON International Inc. LAB.**


Castries Huang
Supervisor

SPORTON International Inc.

6F, No.106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

1. General Description of Equipment under Test

1.1 Applicant

Koukaam a.s.
U Vinnych sklepu 7, 190 00 Praha 9,
Czech Republic

1.2 Manufacturer

Lanner Electronics Inc.
9F, 151, Section 2 Datong Road,
Sijhih City, Taipei 221, Taiwan, R.O.C.

1.3 Basic Description of Equipment under Test

Equipment : NAS (Network Attached Storage)
Model No. : KNR-4 series
Trade Name : Koukaam a.s.
RJ45 Cable : Non-Shielded, 1.0m
RJ45 Cable : Non-Shielded, 10.0m
Power Supply Type : Switching
AC Power Cord : Non-Shielded, 1.8m, 3pin

1.4 Feature of Equipment under Test

- Please refer to user manual.

2. Test Configuration of Equipment under Test

2.1 Test Manner

- a. The EUT has been associated with personal computer and peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner which tended to maximize its emission characteristics in a typical application.
- b. The complete test system included remote workstation, DELL PC, COMPAQ Monitor, BTC USB Keyboard, LOGITECH USB Mouse, HP Printer, ACEEX Modem, SANDISK USB Storage and EUT for EMI test. The remote workstation included COMPAQ PC, VIEWSONIC Monitor, GENUINE PS/2 Keyboard and LOGITECH PS/2 Mouse.
- c. The following test modes were performed for conduction test:
Mode 1. READ 50% WRITE 50%, LAN: 1Gbps/1Gbps
Mode 2. READ 100%, LAN: 100Mbps/100Mbps
Mode 3. WRITE 100%, LAN: 10Mbps/10Mbps
cause "Mode 1" generated the worst test result, it was reported as final data.
- d. The following test modes were performed for radiation test:
Mode 1. READ 50% WRITE 50%, LAN: 1Gbps
Mode 2. READ 50% WRITE 50%, LAN: 100Mbps
cause "Mode 1" generated the worst test result, it was reported as final data.
- e. Frequency range investigated: Conduction 150 kHz to 30 MHz, Radiation 30 MHz to 1000MHz.

2.2 Description of Test System

Support Unit 1. -- Personal Computer (DELL) – for local workstation

FCC ID	: N/A
Model No.	: DCSM
Power Supply Type	: Switching
Power Cord	: Non-Shielded
Serial No.	: SP0017
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity

Support Unit 2. -- Monitor (COMPAQ) – for local workstation

FCC ID	: N/A
Model No.	: S510
Power Supply Type	: Switching
Power Cord	: Non-Shielded
Serial No.	: SP0027
Data Cable	: Shielded, 360 degree via metal backshells, 1.2m
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 3. -- USB Keyboard (BTC) – for local workstation

FCC ID : N/A
Model No. : 7932
Serial No. : SP0039
Data Cable : Shielded, 1.5m
Remark : This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 4. -- USB Mouse (LOGITECH) – for local workstation

FCC ID : N/A
Model No. : M-BE58
Serial No. : SP0044
Data Cable : Shielded, 1.7m
Remark : This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 5. -- Printer (HP) – for local workstation

FCC ID : B94C2642X
Model No. : DJ 400
Power Supply Type : Linear
Power Cord : Non-Shielded
Serial No. : SP0058
Data Cable : Shielded, 360 degree via metal backshells, 1.35m

Support Unit 6. -- Modem (ACEEX) – for local workstation

FCC ID : IFAXDM1414
Model No. : DM1414
Power Supply Type : Linear
Power Cord : Non-Shielded
Serial No. : SP0065
Data Cable : Shielded, 360 degree via metal backshells, 1.15m

Support Unit 7. -- USB Storage (SANDISK) – for local workstation

FCC ID : N/A
Spec. : 256MB
Serial No. : SP0074
Remark : This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 8. -- Personal Computer (COMPAQ) – for remote workstation

FCC ID : N/A
Model No. : Evo D380 mx
Power Supply Type : Switching
Power Cord : Non-Shielded
Serial No. : SP0013
Remark : This support device was tested to comply with FCC standards and authorized under a declaration of conformity

Support Unit 9. -- Monitor (VIEWSONIC) – for remote workstation

FCC ID : N/A
Model No. : E53
Power Supply Type : Switching
Power Cord : Non-Shielded
Serial No. : SP0028
Data Cable : Shielded, 360 degree via metal backshells, 1.15m
Remark : This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

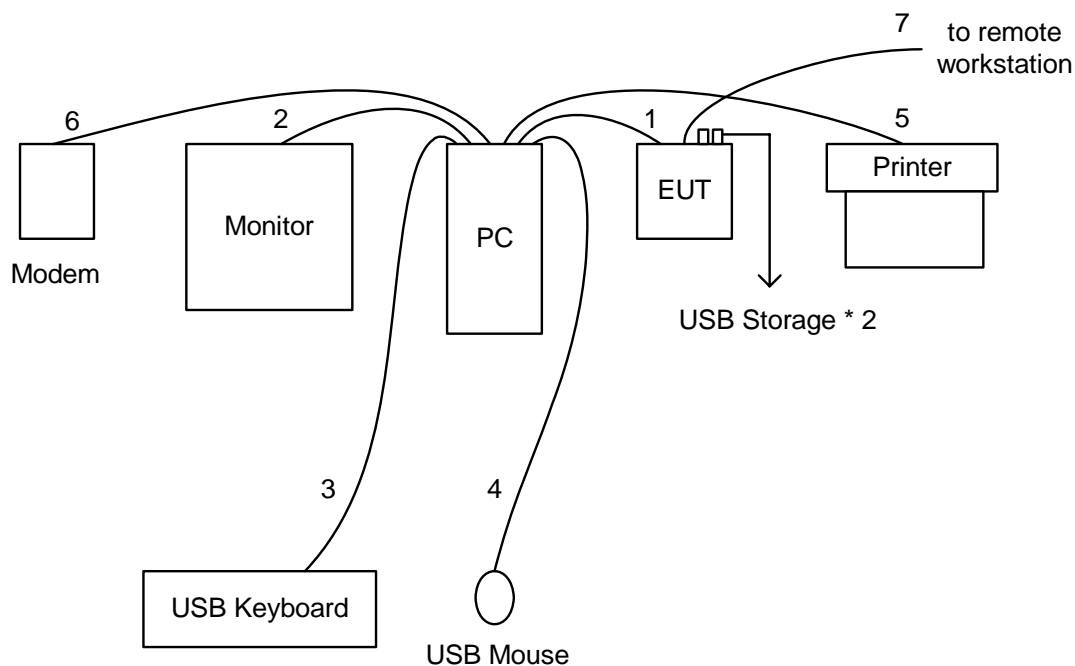
Support Unit 10. -- PS/2 Keyboard (GENUINE) – for remote workstation

FCC ID : N/A
Model No. : K288
Serial No. : SP0035
Data Cable : Shielded, 1.3m
Remark : This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 11. -- PS/2 Mouse (LOGITECH) – for remote workstation

FCC ID : DZL211029
Model No. : M-S34
Serial No. : SP0046
Data Cable : Shielded, 1.7m

2.3 Connection Diagram of Test System



1. The TP cable is connected from the PC to the EUT.
2. The I/O cable is connected from the PC to the support unit 2.
3. The I/O cable is connected from the PC to the support unit 3.
4. The I/O cable is connected from the PC to the support unit 4.
5. The I/O cable is connected from the PC to the support unit 5.
6. The I/O cable is connected from the PC to the support unit 6.
7. The TP cable is connected from the EUT to remote workstation.

3. Test Software

An executive program, EMITEST.EXE under WIN XP, which generates a complete line of continuously repeating “ H “ pattern was used as the test software.

The program was executed as follows :

- a. Turn on the power of all equipment.
- b. The PC reads the test program from the hard disk drive and runs it.
- c. The PC sends “ H “ messages to the monitor, and the monitor displays “ H “ patterns on the screen.
- d. The PC sends “ H “ messages to the printer, then the printer prints them on the paper.
- e. The PC sends “ H “ messages to the modem.
- f. The PC sends “ H ” messages to the internal Hard Disk, and the Hard Disk reads and writes the message.
- g. Repeat the steps from c to f.

At the same time, the following programs were executed:

- Executed “ Ping.exe ” to link with the remote workstation to receive and transmit data by RJ45 cable.
- Executed “ Iometer.exe ” to read and write data from EUT.
- Executed “ Winthrax.exe ” to read and write data from external USB Storage.

4. General Information of Test

4.1 Test Facility

This test was carried out by SPORTON International Inc.

Test Site Location : No. 30-2, Lin 6, Diing-Fwu Tsuen, Lin-Kou-Hsiang,
Taipei Hsien, Taiwan, R.O.C.

TEL : 886-2-2601-1640

FAX : 886-2-2601-1695

Test Site No. : CO01-LK, OS02-LK

4.2 Test Voltage

120V / 60Hz

4.3 Standard for Methods of Measurement

ANSI C63.4-2003

4.4 Test in Compliance with

FCC Rules, Regulations Part 15 Subpart B and Canada Standard ICES-003

4.5 Frequency Range Investigated

a. Conduction: from 150 kHz to 30 MHz

b. Radiation: from 30 MHz to 1000 MHz

4.6 Test Distance

The test distance of radiated emission from antenna to EUT is 10 M.

5. Test of Conducted Powerline

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 kHz and return leads of the EUT according to the methods defined in ANSI C63.4-2003 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 5.3. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

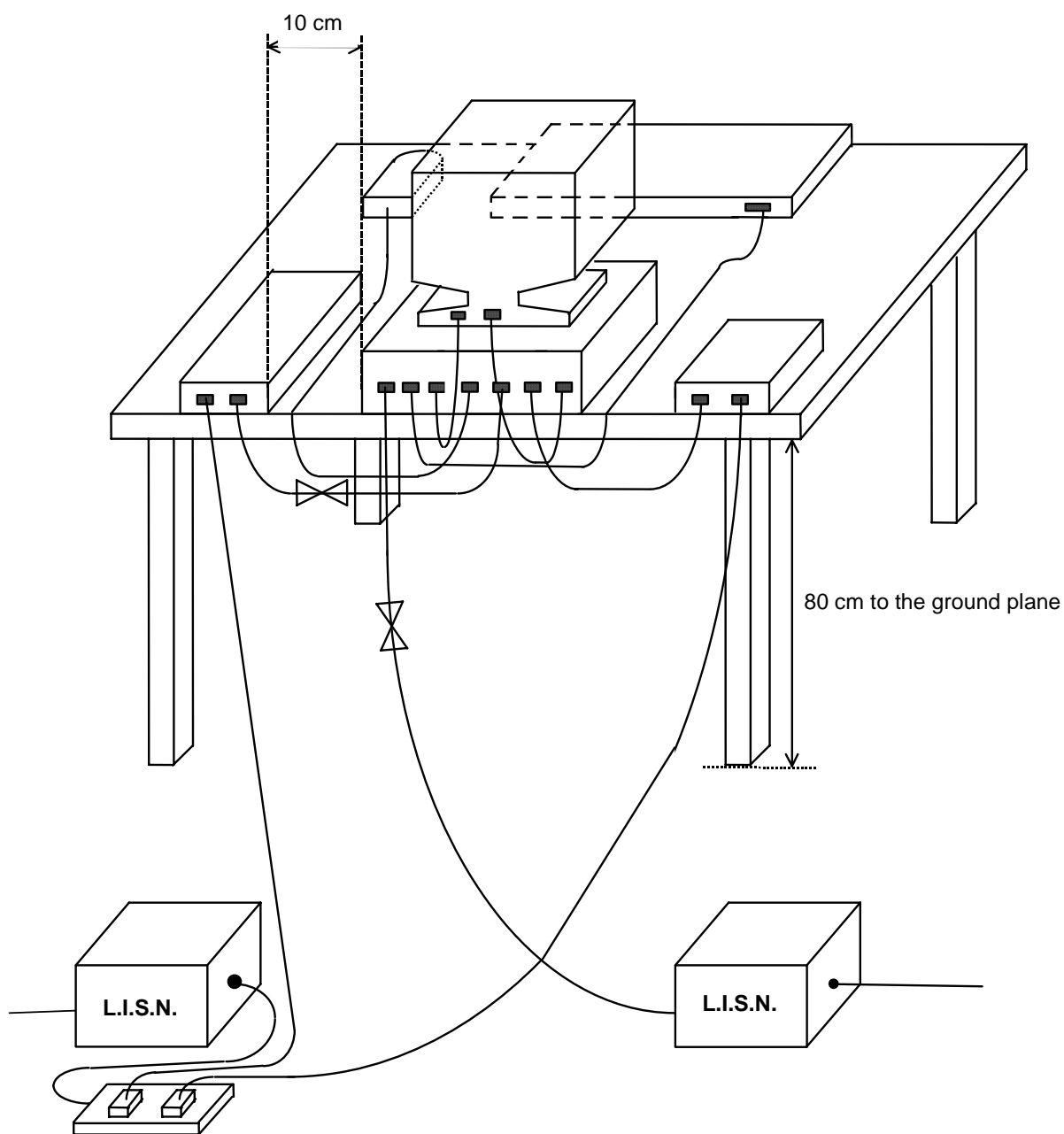
5.1 Description of Major Test Instruments

- Test Receiver (R&S ESCS 30)
 - Attenuation 10 dB
 - Start Frequency 0.15 MHz
 - Stop Frequency 30 MHz
 - IF Bandwidth 9 kHz

5.2 Test Procedures

- a. The EUT was placed on a desk 0.8 meters height from the metal ground plane and 0.4 meter from the conducting wall of the shielding room and it was kept at least 0.8 meters from any other grounded conducting surface.
- b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- c. All the support units are connect to the other LISN.
- d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- e. The CISPR states that a 50 ohm, 50 microhenry LISN should be used.
- f. Both sides of AC line were checked for maximum conducted interference.
- g. The frequency range from 150 kHz to 30 MHz was searched.
- h. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

5.3 Typical Test Setup Layout of Conducted Powerline

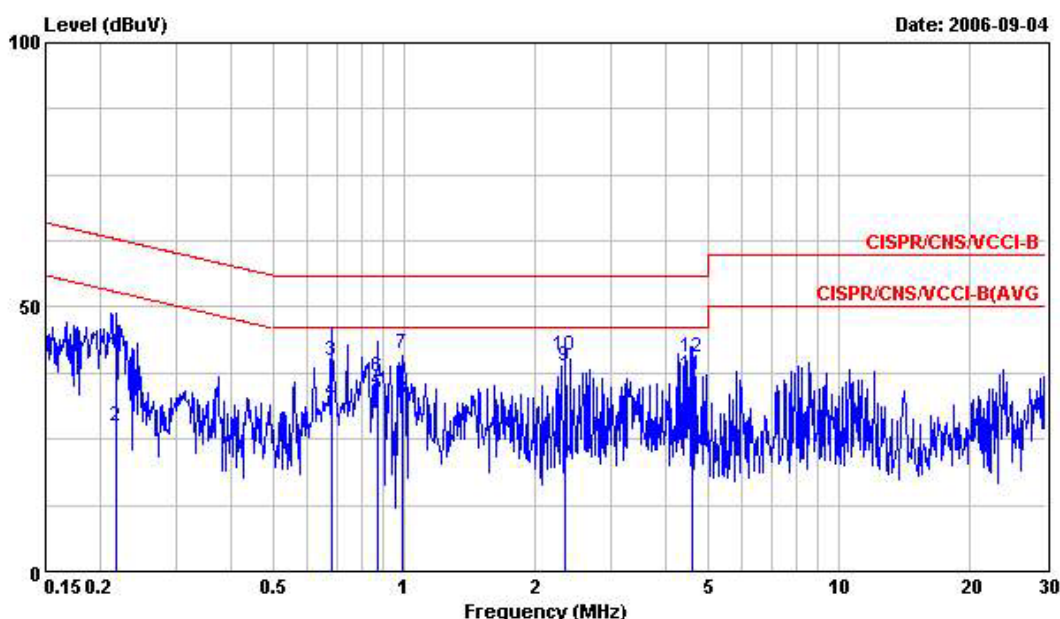


5.4 Test Result of AC Powerline Conducted Emission

5.4.1 Test Mode: Mode 1

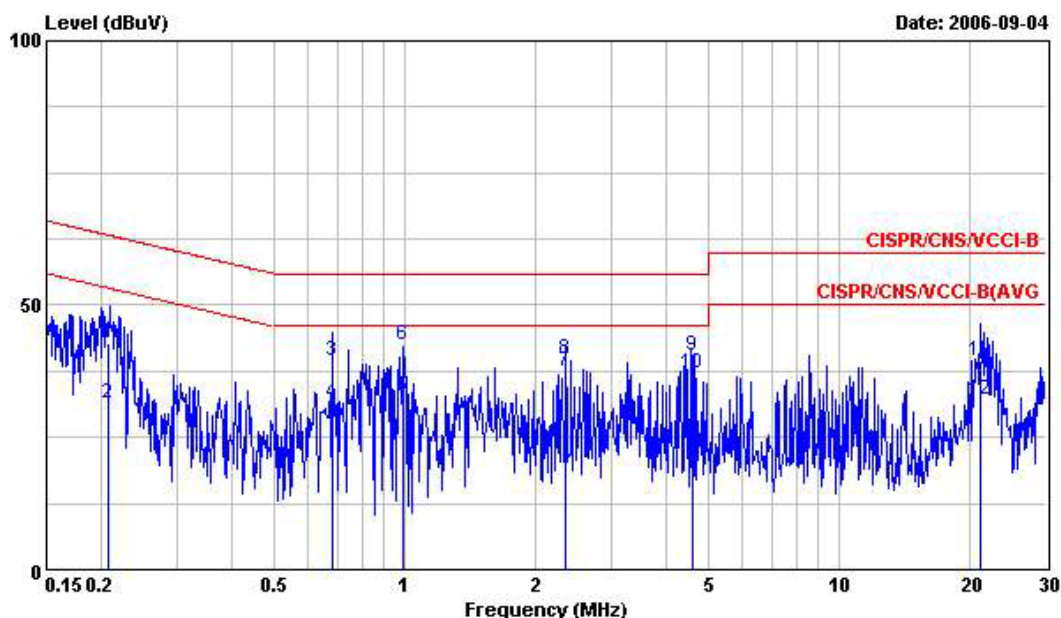
- Frequency Range of Test: from 0.15 MHz to 30 MHz
- Temperature: 24 °C
- Relative Humidity: 48 %
- Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level
- All emissions not reported here are more than 10 dB below the prescribed limit.

The test was passed at the minimum margin that marked by the frame in the following table.



Site : CO01-LK
 Condition : CISPR/CNS/VCCI-B LISN-2005-0912 LINE
 EUT : NAS
 MODEL :
 POWER : 120V 60Hz
 MEMO : LAN:1G/1G
 MEMO : READ 50% WIRTER 50%

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.219	41.29	-21.57	62.86	40.95	0.10	0.24	QP
2	0.219	27.54	-25.32	52.86	27.20	0.10	0.24	Average
3	0.683	39.78	-16.22	56.00	39.40	0.10	0.28	QP
4	0.683	32.13	-13.87	46.00	31.75	0.10	0.28	Average
5	0.871	33.31	-12.69	46.00	32.92	0.10	0.29	Average
6	0.871	36.62	-19.38	56.00	36.23	0.10	0.29	QP
7	0.994	41.18	-14.82	56.00	40.78	0.10	0.30	QP
8	0.994	32.35	-13.65	46.00	31.95	0.10	0.30	Average
9	2.358	38.74	-7.26	46.00	38.11	0.20	0.43	Average
10	2.358	40.83	-15.17	56.00	40.20	0.20	0.43	QP
11	4.609	37.12	-8.88	46.00	36.44	0.23	0.45	Average
12	4.609	40.44	-15.56	56.00	39.76	0.23	0.45	QP



Site : CO01-LK
 Condition : CISPR/CNS/VCCI-B LISN-2005-0912 NEUTRAL
 EUT : NAS
 MODEL :
 POWER : 120V 60Hz
 MEMO : LAN:1G/1G
 MEMO : READ 50% WIRTER 50%

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.209	42.87	-20.37	63.24	42.53	0.10	0.24	QP
2	0.209	31.41	-21.83	53.24	31.07	0.10	0.24	Average
3	0.683	39.58	-16.42	56.00	39.20	0.10	0.28	QP
4	0.683	31.58	-14.42	46.00	31.20	0.10	0.28	Average
5	0.994	32.74	-13.26	46.00	32.34	0.10	0.30	Average
6	0.994	42.34	-13.66	56.00	41.94	0.10	0.30	QP
7	2.356	37.60	-8.40	46.00	36.97	0.20	0.43	Average
8	2.356	39.84	-16.16	56.00	39.21	0.20	0.43	QP
9	4.610	40.32	-15.68	56.00	39.64	0.23	0.45	QP
10	4.610	36.99	-9.01	46.00	36.31	0.23	0.45	Average
11	21.169	39.51	-20.49	60.00	37.98	0.95	0.58	QP
12	21.169	32.06	-17.94	50.00	30.53	0.95	0.58	Average

Test Engineer : Peter Lin
 Peter Lin

5.5 Photographs of Conducted Powerline Test Configuration

- The photographs show the configuration that generates the maximum emission.

FRONT VIEW



REAR VIEW



6. Test of Radiated Emission

Radiated emissions from 30 MHz to 1,000 MHz were measured with a bandwidth of 120 kHz according to the methods defines in ANSI C63.4-2003. The EUT was placed on a nonmetallic stand, 0.8 meter above the ground plane, as shown in section 6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions.

6.1 Major Measuring Instruments

- Amplifier (HP 87405A)
 - RF Gain 25 dB
 - Signal Input 10 MHz - 3 GHz

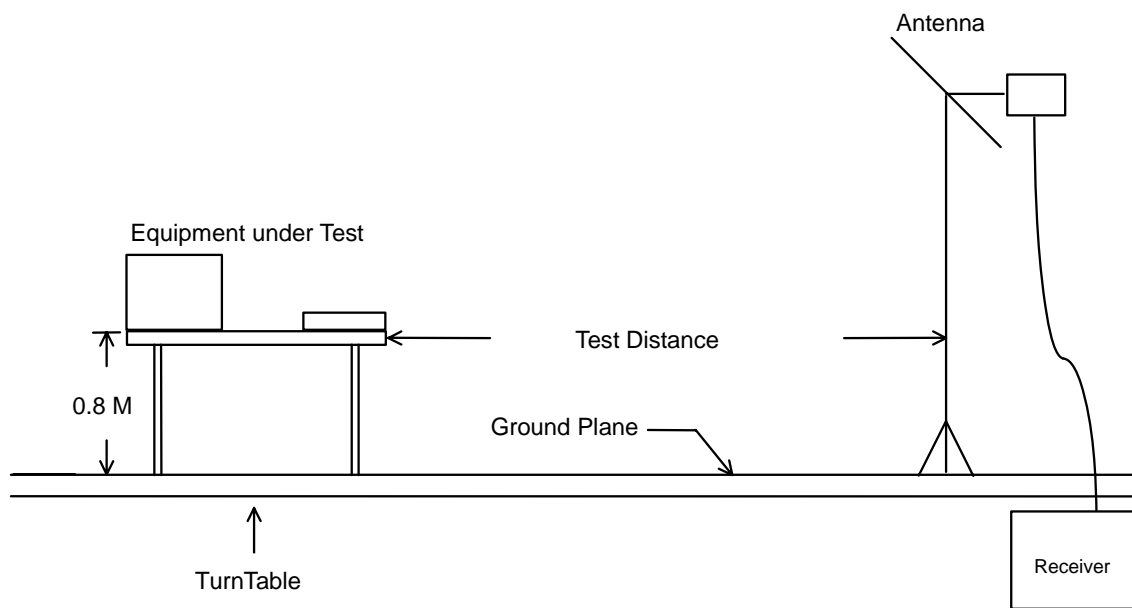
- Spectrum Analyzer (HP 8560E)
 - Attenuation 10 dB
 - Start Frequency 30 MHz
 - Stop Frequency 1000 MHz
 - Resolution Bandwidth 120 kHz
 - Signal Input 9 kHz - 2.9 GHz

- Test Receiver (R&S ESCS 30)
 - Resolution Bandwidth 120 kHz
 - Frequency Band 9 kHz - 2.75 GHz
 - Quasi-Peak Detector ON for Quasi-Peak Mode
OFF for Peak Mode

6.2 Test Procedures

- a. The EUT was placed on a rotatable table top 0.8 meter above ground.
- b. The EUT was set 10 meters from the interference-receiving antenna which was mounted on the top of a variable height antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest radiation.
- d. The antenna is a half wave dipole and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- e. For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- f. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.

6.3 Typical Test Setup Layout of Radiated Emission

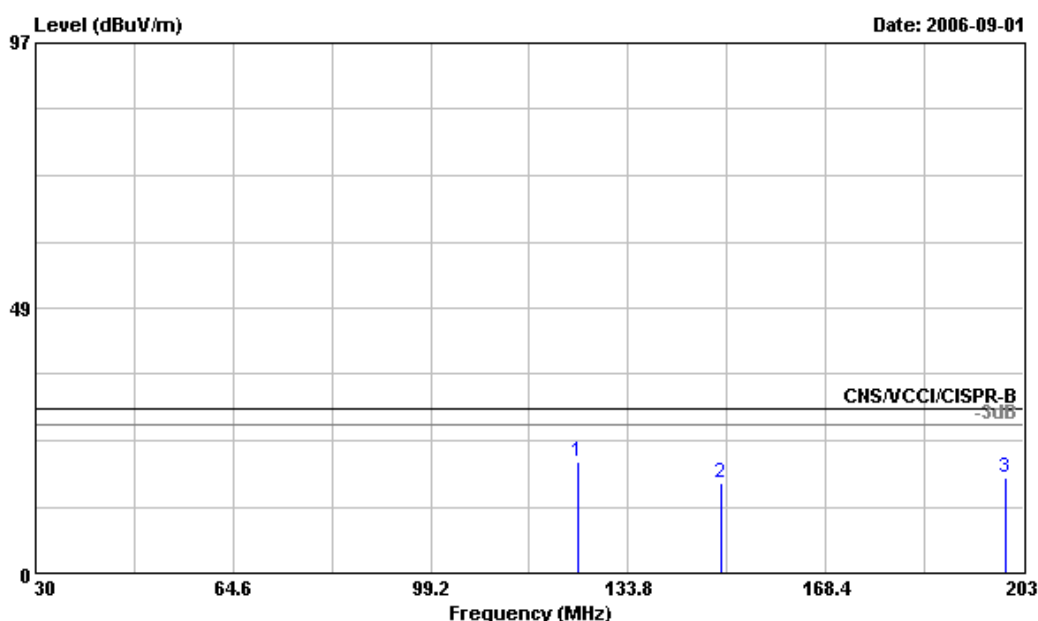


6.4 Test Result of Radiated Emission

6.4.1 Test Mode: Mode 1

- Frequency Range of Test: from 30 MHz to 1000 MHz
- Temperature : 34 °C
- Relative Humidity : 47 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

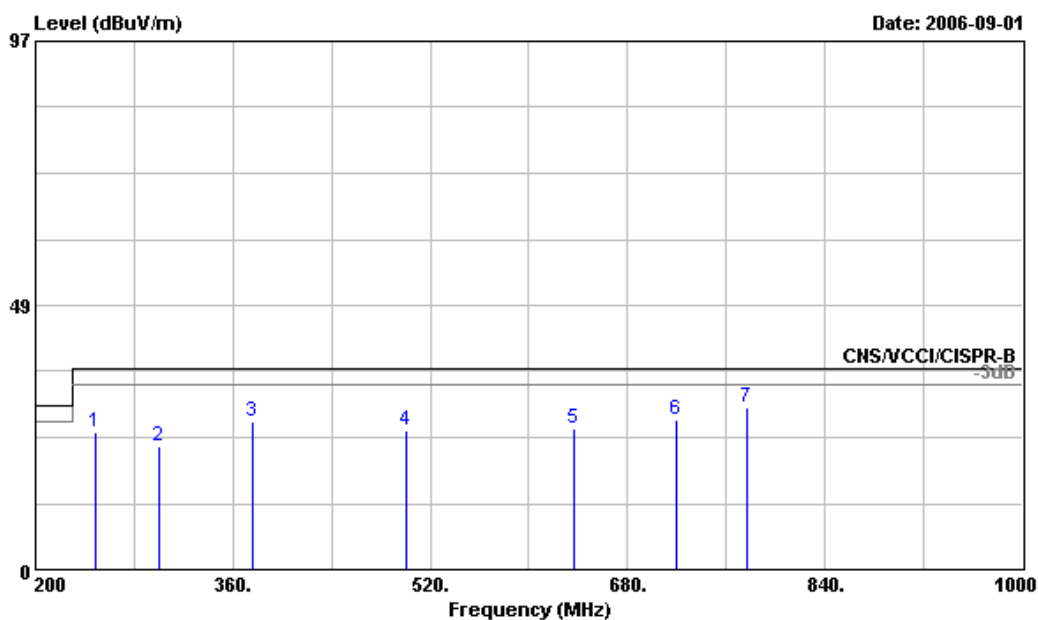
The test was passed at the minimum margin that marked by the frame in the following test record



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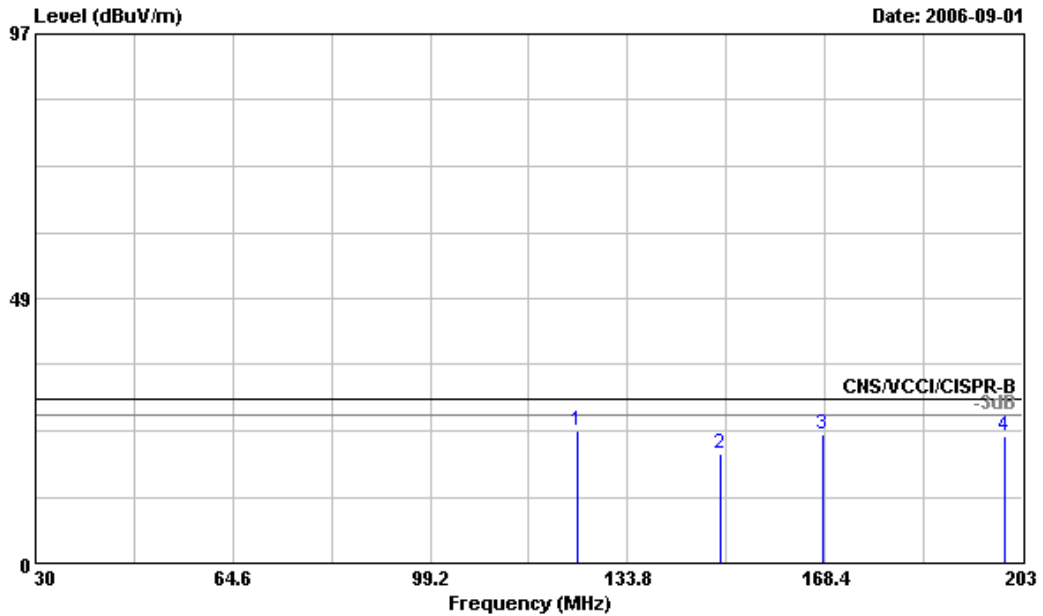
Site      : OS02-LK
Condition : CNS/VCCI/CISPR-B 10m CBL6111C.2715.940924 HORIZONTAL
EUT       : NAS
POWER     :
MEMO      : 50% READ/50% WRITE
           : LAN:1G
    
```

Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Table Pos	Ant Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm
1	125.000	20.35	-9.65	30.00	30.19	12.26	1.39	23.49 Peak	---	---
2	150.000	16.42	-13.58	30.00	30.64	7.75	1.49	23.46 Peak	---	---
3	200.000	17.50	-12.50	30.00	29.86	9.30	1.70	23.36 Peak	---	---



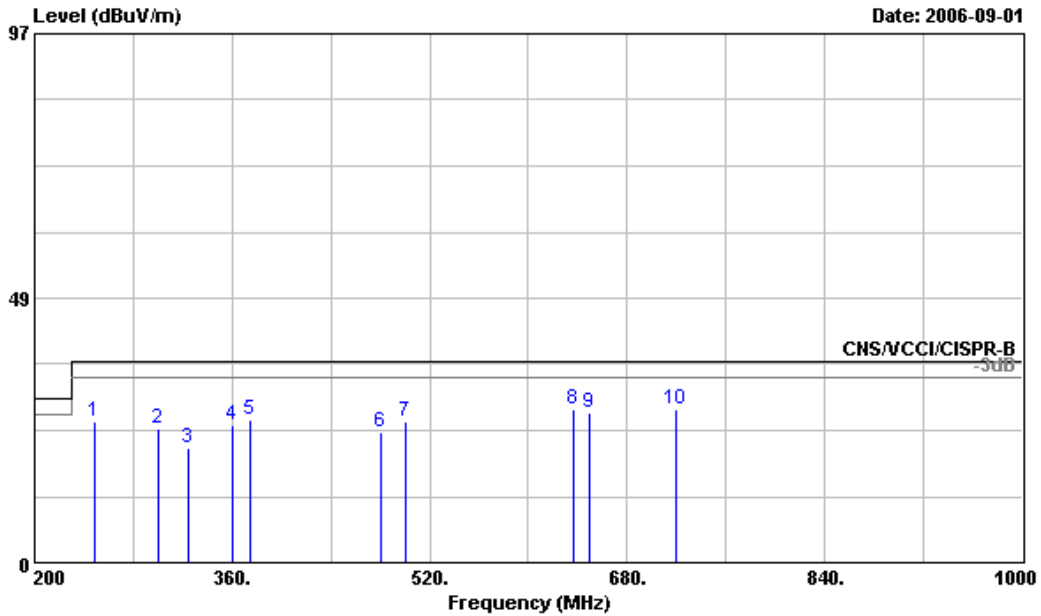
Site : OS02-LK
 Condition : CNS/VCCI/CISPR-B 10m CBL6111C.2715.940924 HORIZONTAL
 EUT : NAS
 POWER :
 MEMO : 50% READ/50% WRITE
 : LAN:IG

Peak	Freq MHz	Level dBuV/m	Over Limit dB	Limit Line dBuV/m	Read Level dBuV	Antenna Factor dB/m	Cable Loss dB	Preamp Factor dB	Remark	Table Pos deg	Ant Pos cm
1	248.800	25.28	-11.72	37.00	35.50	11.23	1.90	23.35	Peak	---	---
2	300.000	22.64	-14.36	37.00	30.36	13.36	2.20	23.28	Peak	---	---
3	376.000	27.29	-9.71	37.00	31.17	16.93	2.45	23.26	Peak	---	---
4	500.000	25.59	-11.41	37.00	28.50	17.48	2.90	23.29	Peak	---	---
5	636.800	26.01	-10.99	37.00	26.33	19.39	3.52	23.23	Peak	---	---
6	720.000	27.51	-9.49	37.00	27.01	19.92	3.76	23.18	Peak	---	---
7	776.800	29.75	-7.25	37.00	27.00	21.91	4.00	23.16	Peak	---	---



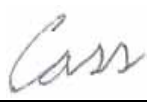
Site : OS02-LK
 Condition : CNS/VCCI/CISPR-B 10m CBL6111C.2715.940924 VERTICAL
 EUT : NAS
 POWER :
 MEMO : 50% READ/50% WRITE
 : LAN:1G

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp		Table	Ant
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	deg	cm
1 @	125.000	24.18	-5.82	30.00	34.02	12.26	1.39	23.49	Peak	159 100
2	150.000	20.08	-9.92	30.00	34.30	7.75	1.49	23.46	Peak	--- ---
3	168.050	23.76	-6.24	30.00	35.29	10.35	1.54	23.42	Peak	--- ---
4	200.000	23.33	-6.67	30.00	35.69	9.30	1.70	23.36	Peak	--- ---



Site : OSD2-LK
 Condition : CNS/VCCI/CISPR-B 10m CBL6111C.2715.940924 VERTICAL
 EUT : NAS
 POWER :
 MEMO : 50% READ/50% WRITE
 : LAN:1G

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark	Table	Ant
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor		Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm
1	248.800	25.78	-11.22	37.00	36.00	11.23	1.90	23.35	Peak	---	---
2	300.000	24.47	-12.53	37.00	32.19	13.36	2.20	23.28	Peak	---	---
3	324.800	20.89	-16.11	37.00	27.33	14.53	2.30	23.27	Peak	---	---
4	360.000	25.15	-11.85	37.00	29.83	16.16	2.42	23.26	Peak	---	---
5	375.000	26.24	-10.76	37.00	30.17	16.88	2.45	23.26	Peak	---	---
6	480.000	23.83	-13.17	37.00	26.66	17.59	2.86	23.28	Peak	---	---
7	500.000	25.76	-11.24	37.00	28.67	17.48	2.90	23.29	Peak	---	---
8	636.800	28.17	-8.83	37.00	28.49	19.39	3.52	23.23	Peak	---	---
9	648.800	27.39	-9.61	37.00	27.67	19.36	3.59	23.23	Peak	---	---
10	720.000	28.01	-8.99	37.00	27.51	19.92	3.76	23.18	Peak	---	---

Test Engineer : 
 Carr Chuang

6.5 Photographs of Radiated Emission Test Configuration

- The photographs show the configuration that generates the maximum emission.

FRONT VIEW



REAR VIEW



7. List of Measuring Equipment Used

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Receiver	R&S	ESCS 30	838251/003	9 kHz - 2.75 GHz	Mar. 13, 2006	Conduction (CO01-LK)
LISN	Rolf Hoine	NNB-2/16Z	98087	9 kHz - 30 MHz	Sep. 12, 2005	Conduction (CO01-LK)
LISN	Rolf Hoine	NNB-2/16Z	98009	9 kHz - 30 MHz	Sep. 21, 2005	Conduction (CO01-LK)
RF Cable-CON	Suhner Switzerland	RG223/U	CB017	9 kHz - 30 MHz	Dec. 15, 2005	Conduction (CO01-LK)
Open Area Test Site	SPORTON	OATS-10	OS02-LK	30 MHz - 1 GHz 10m, 3m	Aug. 25, 2006	Radiation (OS02-LK)
Amplifier	HP	87405A	3590M00135	10 MHz - 3 GHz	Feb. 08, 2006	Radiation (OS02-LK)
Spectrum Analyzer	HP	8560E	3728A03185	9 kHz - 2.9 GHz	Oct. 19, 2005	Radiation (OS02-LK)
Receiver	R&S	ESCS 30	100169	9 kHz - 2.75 GHz	Dec. 26, 2005	Radiation (OS02-LK)
Bilog Antenna	CHASE	CBL6111C	2715	30 MHz - 1 GHz	Sep. 24, 2005	Radiation (OS02-LK)
Turn Table	EMCO	2080	9711-1090	0 - 360 degree	N/A	Radiation (OS02-LK)
Antenna Mast	EMCO	2075	9711-2114	1 m - 4 m	N/A	Radiation (OS02-LK)
RF Cable-R10m	BELDEN	RG8/U	CB007	30 MHz - 1 GHz	Jan. 27, 2006	Radiation (OS02-LK)

Calibration Interval of instruments listed above is one year.

8. Uncertainty of Test Site

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.15	Normal(k=2)	0.08
Cable loss	0.21	Normal(k=2)	0.11
AMN insertion loss	2.50	Rectangular	0.63
Receiver Spec	1.50	Rectangular	0.43
Site imperfection	1.56	Rectangular	0.90
Mismatch	+0.34/-0.35	U-shape	0.24
combined standard uncertainty Uc(y)	1.21		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	2.42		

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.18	Normal(k=2)	0.09
Antenna factor calibration	1.20	Normal(k=2)	0.60
Cable loss calibration	0.78	Normal(k=2)	0.39
Pre Amplifier Gain calibration	0.17	Normal(k=2)	0.09
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.84	Rectangular	1.06
Mismatch	+0.39/-0.41	U-shaped	0.28
combined standard uncertainty Uc(y)	1.53		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	3.06		

9. Certificate of NVLAP Accreditation

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200079-0

Sporton International, Inc. Hwa Ya EMC Laboratory
Tao Yuan Hsien 333
TAIWAN

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communique dated 18 June 2005).*

2007-01-01 through 2007-12-31
Effective dates



Sally S. Bruce
For the National Institute of Standards and Technology

NVLAP-01C (REV. 2005-09-13)



APPENDIX A. Photographs of EUT







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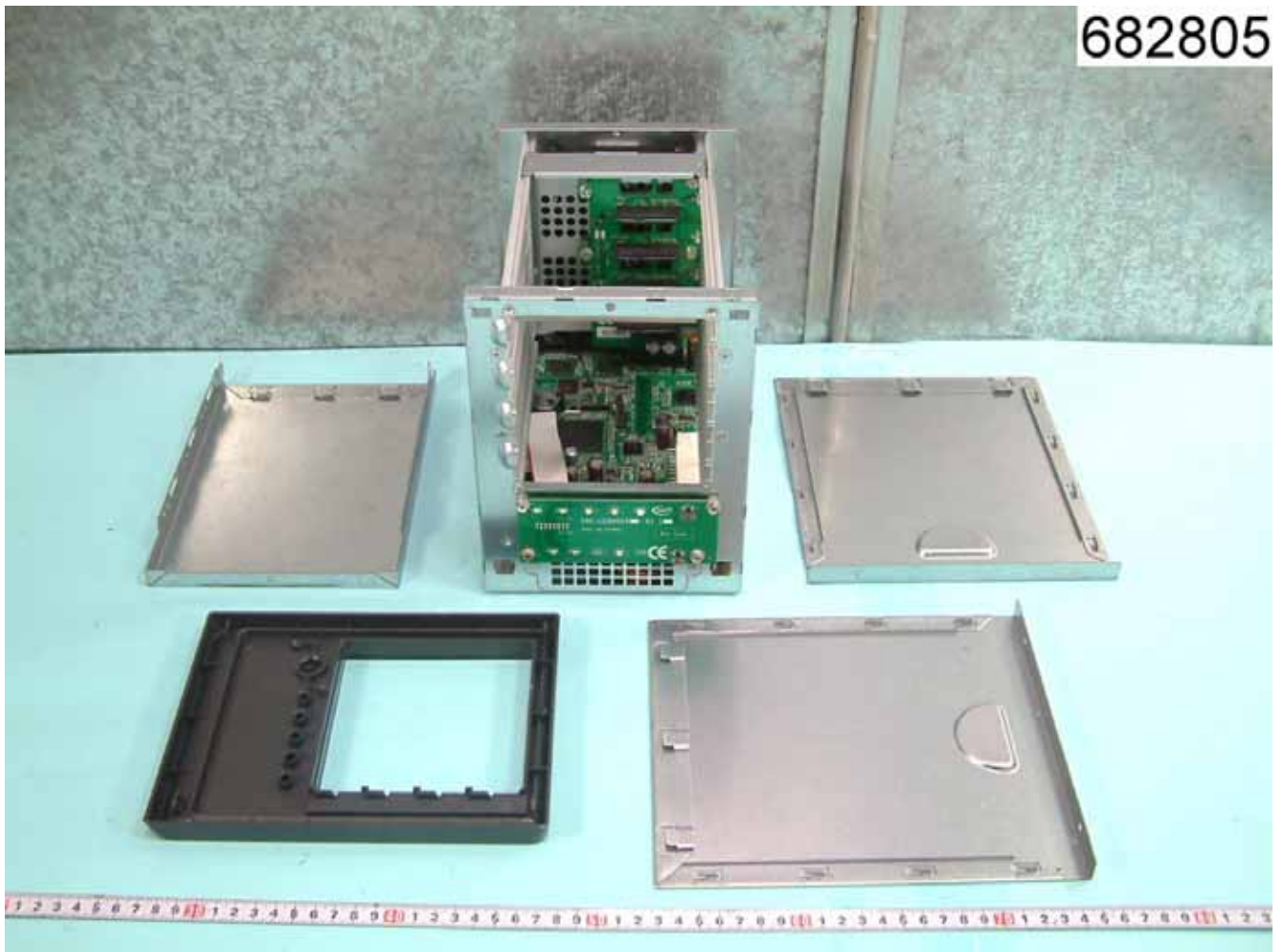
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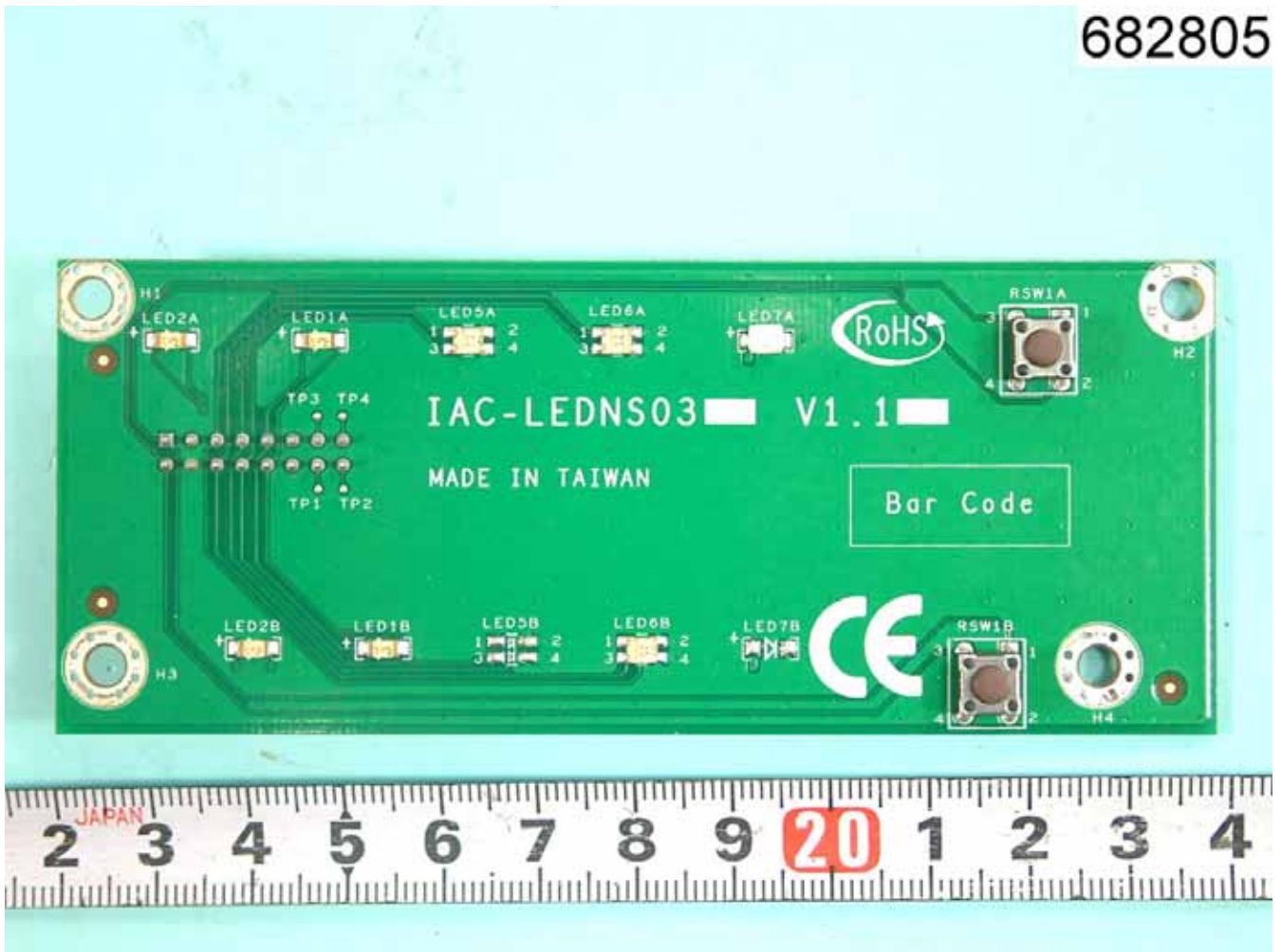






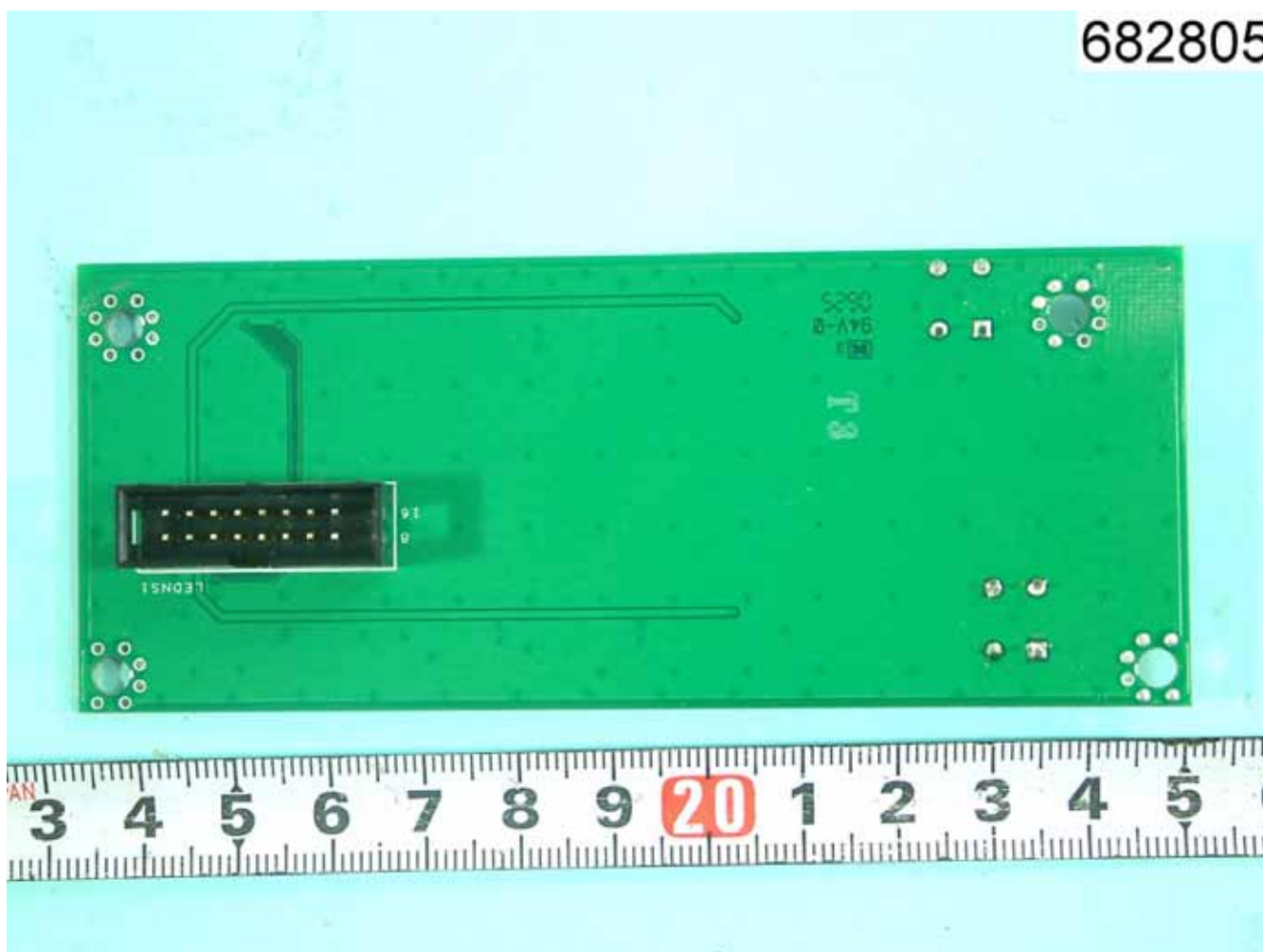


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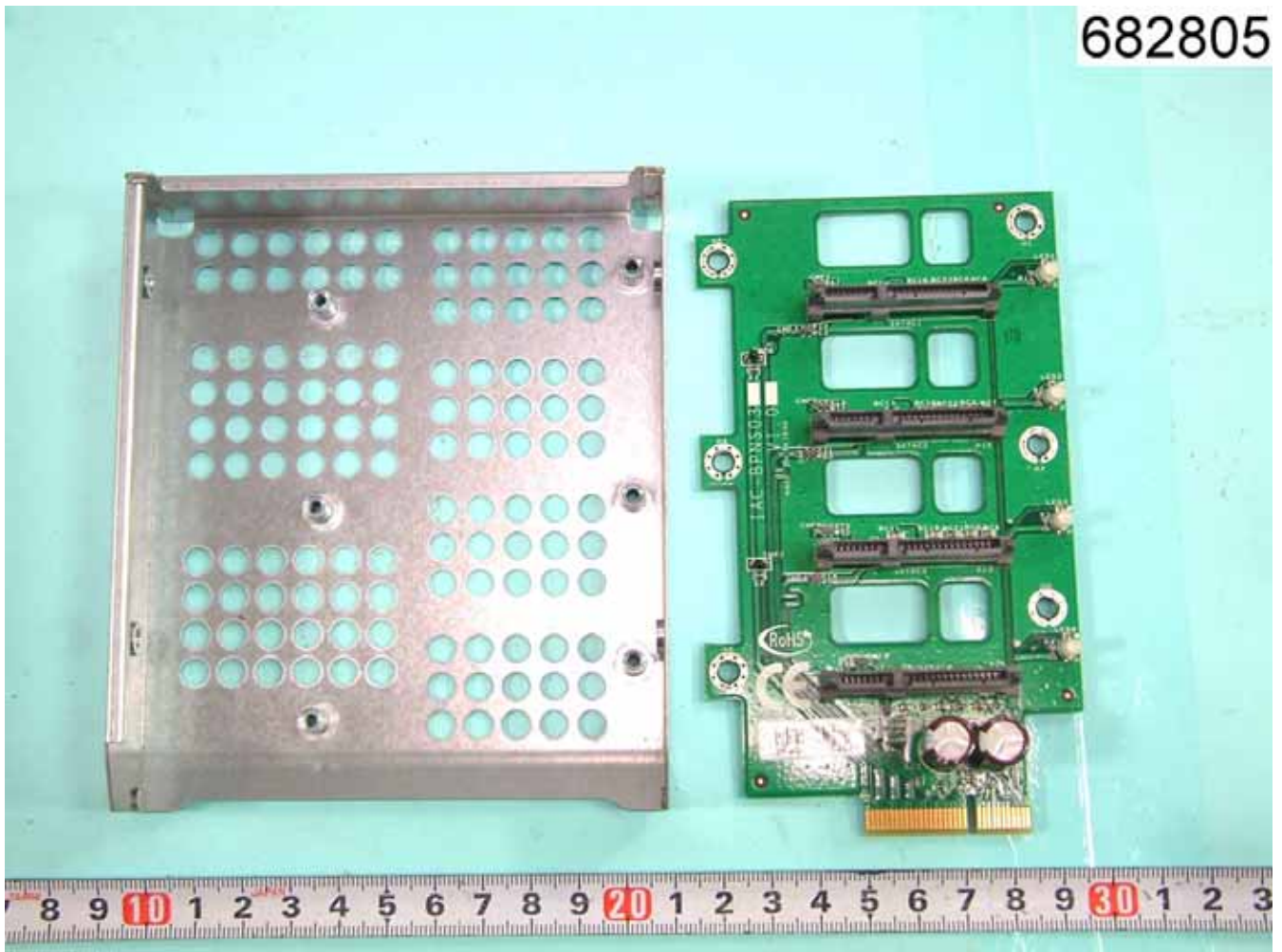


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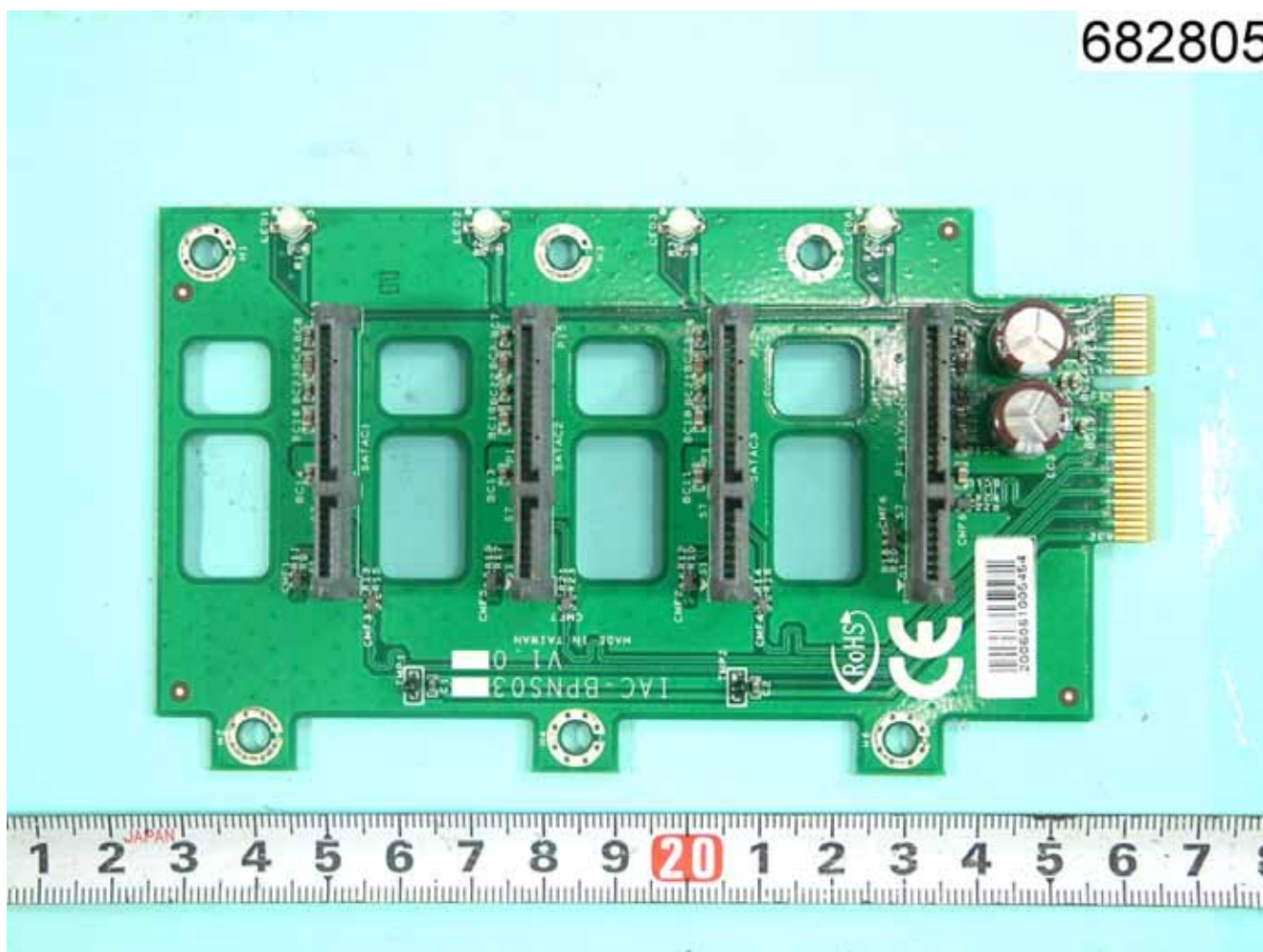


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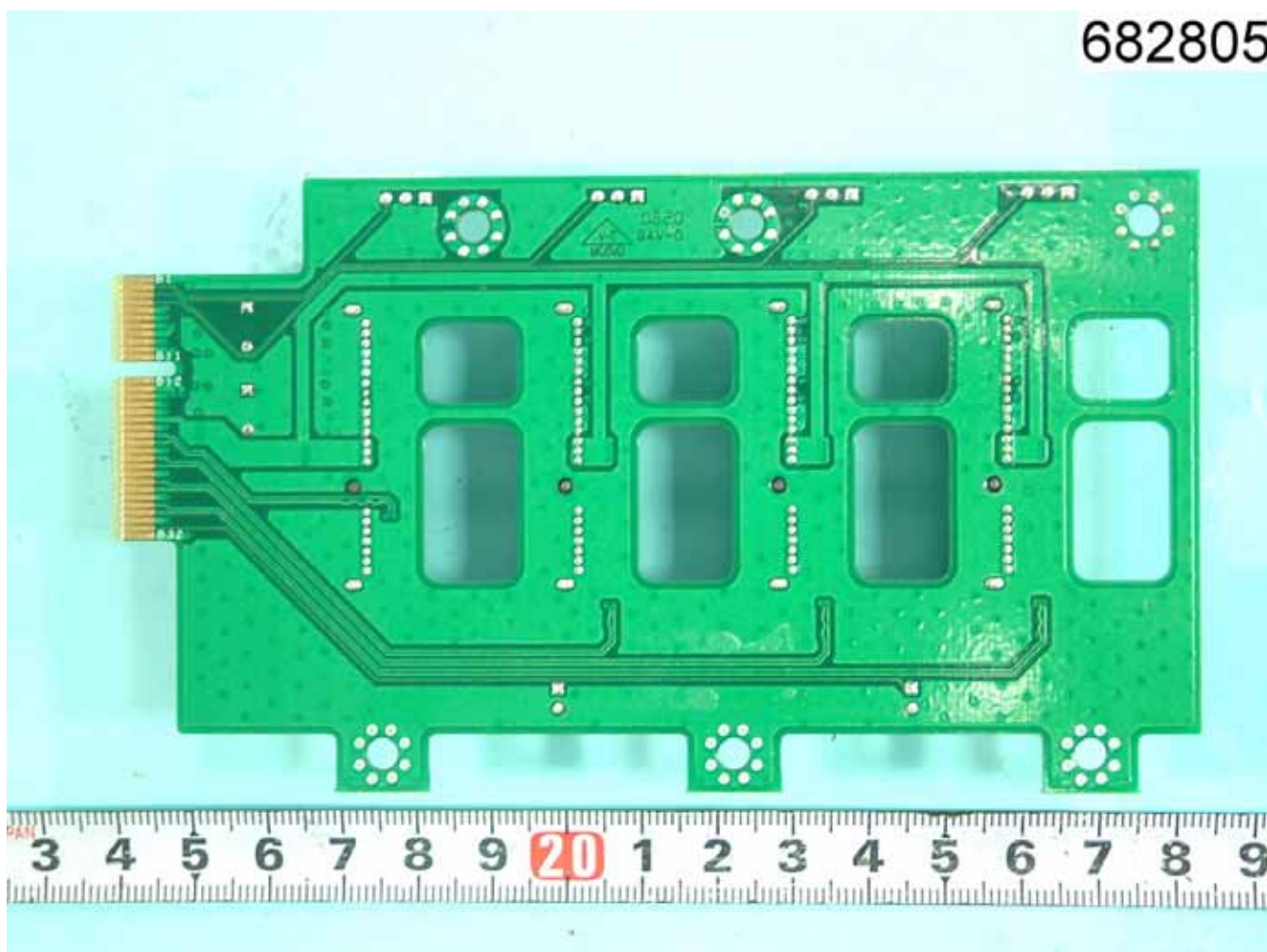


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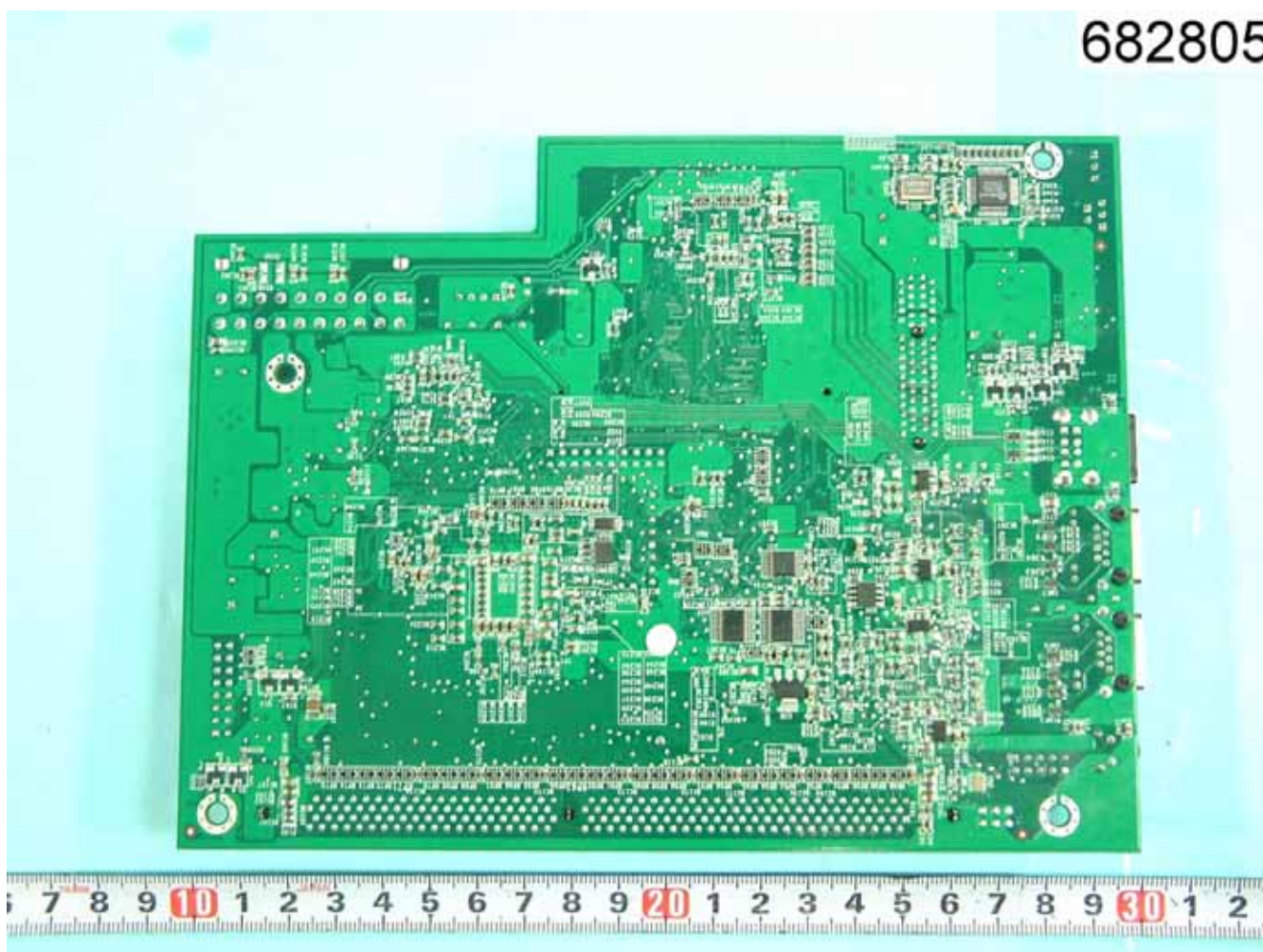


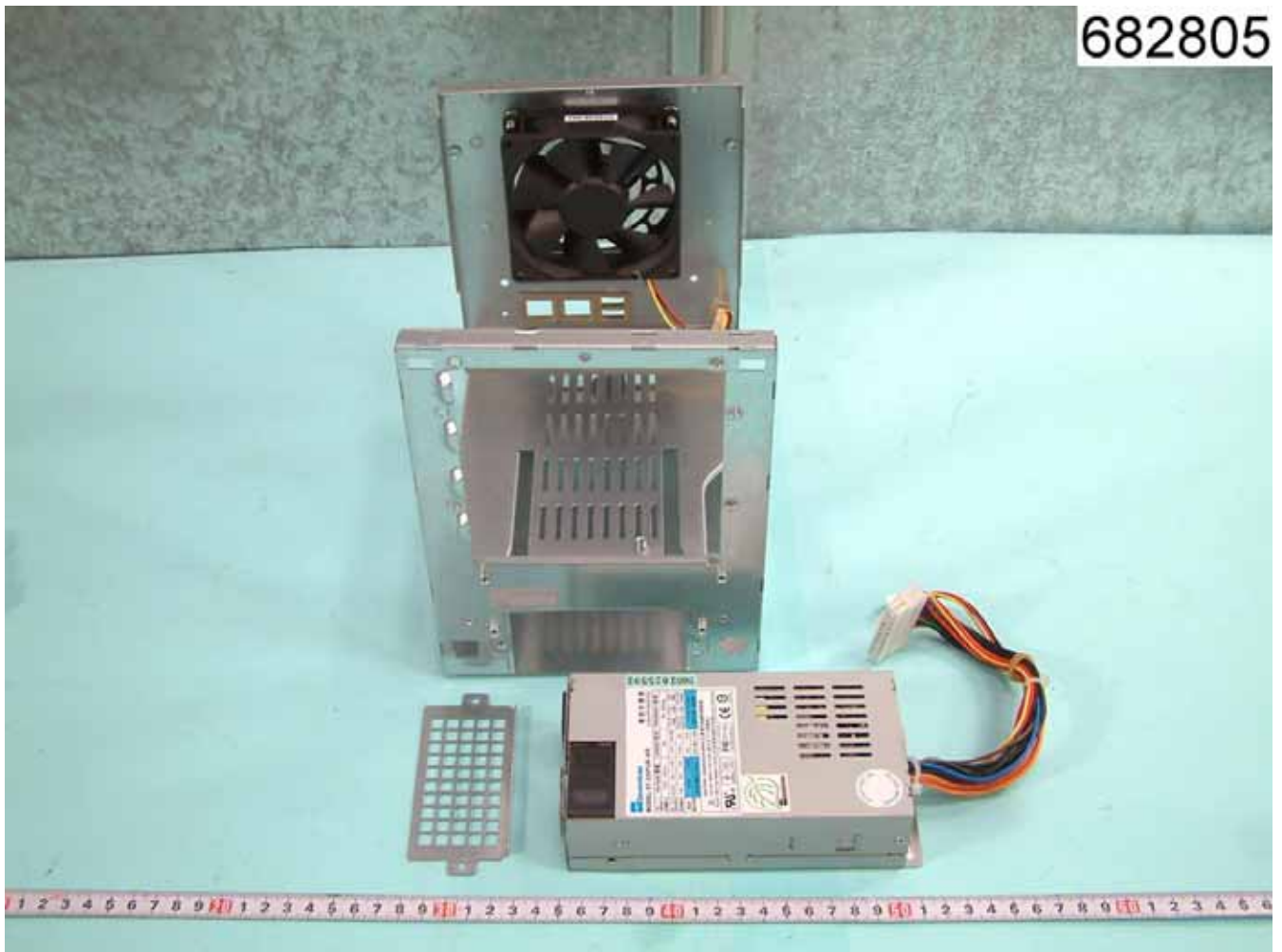
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