CE

SPORTON LAB.

Certificate No: ER0N1818AD

CERTIFICATE

TAF
Testing Laboratory
1190

EQUIPMENT : Rugged Tablet Computer
MODEL NO. : RTC-1000xx (xx is D1 or blank)
APPLICANT : AAEON Technology Inc.
5F, No. 135, Lane 235, Pao Chiao Rd., Hsin-Tien City, Taipei, Taiwan, R.O.C.

SPORTON LAB.

I HEREBY **CERTIFY THAT:**

The measurements shown in this test report were made in accordance with the procedures given in **ETSI EN 300 328 V1.7.1 (2006-10)**. Testing was carried out on **Oct. 30, 2009** at SPORTON International Inc. LAB.

2011.1.20

Wayne Hsu

CE RADIO TEST REPORT

according to

ETSI EN 300 328 V1.7.1 (2006-10)

Equipment	:	**Rugged Tablet Computer**
Model No.	:	**RTC-1000xx (xx is D1 or blank)**
Brand Name	:	**AAEON**
Filing Type	:	**New Application**
Applicant	:	**AAEON Technology Inc.** 5F, No. 135, Lane 235, Pao Chiao Rd., Hsin-Tien City, Taipei, Taiwan, R.O.C.
Manufacturer	:	**AAEON Technology Inc.** 5F, No. 135, Lane 235, Pao Chiao Rd., Hsin-Tien City, Taipei, Taiwan, R.O.C.
Received Date	:	Oct. 23, 2009
Final Test Date	:	Oct. 30, 2009

Statement

Test result included in this report is only for the Bluetooth part of the product.

The test result in this report refers exclusively to the presented test model / sample.

Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.

The measurements and test results shown in this test report were made in accordance with the procedures and found in compliance with the limit given in ETSI EN 300 328 V1.7.1 (2006-10).

The test equipment used to perform the test is calibrated and traceable to NML/ROC.

SPORTON International Inc.

No. 52 Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

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History of This Test Report

Original Issue Date: Jan. 12, 2011
Report No.: ER0N1818AD

Attachment No.	Issue Date	Description

CERTIFICATE OF COMPLIANCE

according to

ETSI EN 300 328 V1.7.1 (2006-10)

Equipment : Rugged Tablet Computer
Model No. : RTC-1000xx (xx is D1 or blank)
Brand Name : AAEON
Applicant : AAEON Technology Inc.
5F, No. 135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.

Sporton International as requested by the applicant to evaluate the Radio Spectrum essential requirements of the product sample received on Oct. 23, 2009 would like to declare that the tested sample has been evaluated and found to be in compliance with the tested standard(s). The data recorded as well as the test configuration specified is true and accurate for showing the sample's Radio Spectrum nature.



Wayne Hsu / Vice Manager

SPORTON International Inc.

No. 52 Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

1 SUMMARY OF THE TEST RESULT

Applied Standard: ETSI EN 300 328 V1.7.1 (2006-10)				
Part	**Standard Clause**	**Description of Test**	**Result**	**Under Limit**
3.1	5.7.2	Equivalent Isotropic Radiated Power	Complies	8.47 dB
-	5.7.3	Power Spectral Density	-	-
3.2	5.7.4	Frequency Range	Complies	-
3.3	5.7.5	Transmitter Spurious Emissions	Complies	15.42 dB
3.4	5.7.6	Receiver Spurious Emissions	Complies	3.44 dB

According to EN 300 328 V1.7.1, power spectral density shall not be tested on FHSS modulation.

Test Items	Uncertainty	Remark
Equivalent Isotropic Radiated Power (Conducted)	±0.8dB	Confidence levels of 95%
Power Spectral Density (Conducted)	±1.0dB	Confidence levels of 95%
Frequency Range	$\pm 8.5\times10^{-8}$	Confidence levels of 95%
Spurious Emissions – 30MHz~1000MHz (Radiated)	±2.6dB	Confidence levels of 95%
Spurious Emissions – 1GHz~18GHz (Radiated)	±2.6dB	Confidence levels of 95%
Temperature	±0.7℃	Confidence levels of 95%
Humidity	±3.2%	Confidence levels of 95%
DC / AC Power Source	±1.4%	Confidence levels of 95%

2 GENERAL INFORMATION

2.1 Product Details

Only the radio detail of Bluetooth is shown in the table below. For more detailed features description, please refer to the manufacturer's specifications or user's manual.

Items	Description
Power Type	+20V from adapter
Modulation	FHSS (GFSK / π/4-DQPSK / 8DPSK)
Data Rate (Mbps)	GFSK: 1 ; π/4-DQPSK: 2 ; 8DPSK: 3
Frequency Band	2400 ~ 2483.5MHz
Channel Number	79
EIRP Power	11.53 dBm

2.2 Accessories

Power	Brand	Model	Rating
Switching power supply	LI SHIN	0335A2065	Input: 100-240Vac, 50/60Hz, 1.7A Output: 20Vdc, 3.25A

2.3 Table for Filed Antenna

Ant.	Antenna Type	Connector	Gain (dBi)	Remark
A	PCB Antenna	U.FL	-6.00	TX / RX

2.4 Table for Carrier Frequencies

Frequency Band	Channel No.	Frequency
2400 ~ 2483.5MHz	0	2402 MHz
	1	2403 MHz
	:	:
	38	2440 MHz
	39	2441 MHz
	40	2442 MHz
	:	:
	77	2479 MHz
	78	2480 MHz

2.5 Table for Test Modes

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Data Rate	Channel
Equivalent Isotropic Radiated Power	GFSK/ π/4-DQPSK/ 8DPSK	1 Mbps/ 2 Mbps/ 3 Mbps	0/39/78
Frequency Range	8DPSK	3 Mbps	0/78
TX / RX Spurious Emissions (30MHz~1GHz)	Adapter Mode / USB cable Mode	1 Mbps	78
Transmitter Spurious Emissions (1GHz~12.75GHz)	GFSK	1 Mbps	0/39/78
Receiver Spurious Emissions (1GHz~12.75GHz)	GFSK	1 Mbps	0/78

2.6 Table for Testing Locations

Test Site No.	Site Category	Location	Test Site No.	Site Category	Location
05CH01-HY	FAC	Hwa Ya	TH01-HY	OVEN Room	Hwa Ya

Fully Anechoic Chamber (FAC).

2.7 Table for Supporting Units

The EUT was tasted alone.

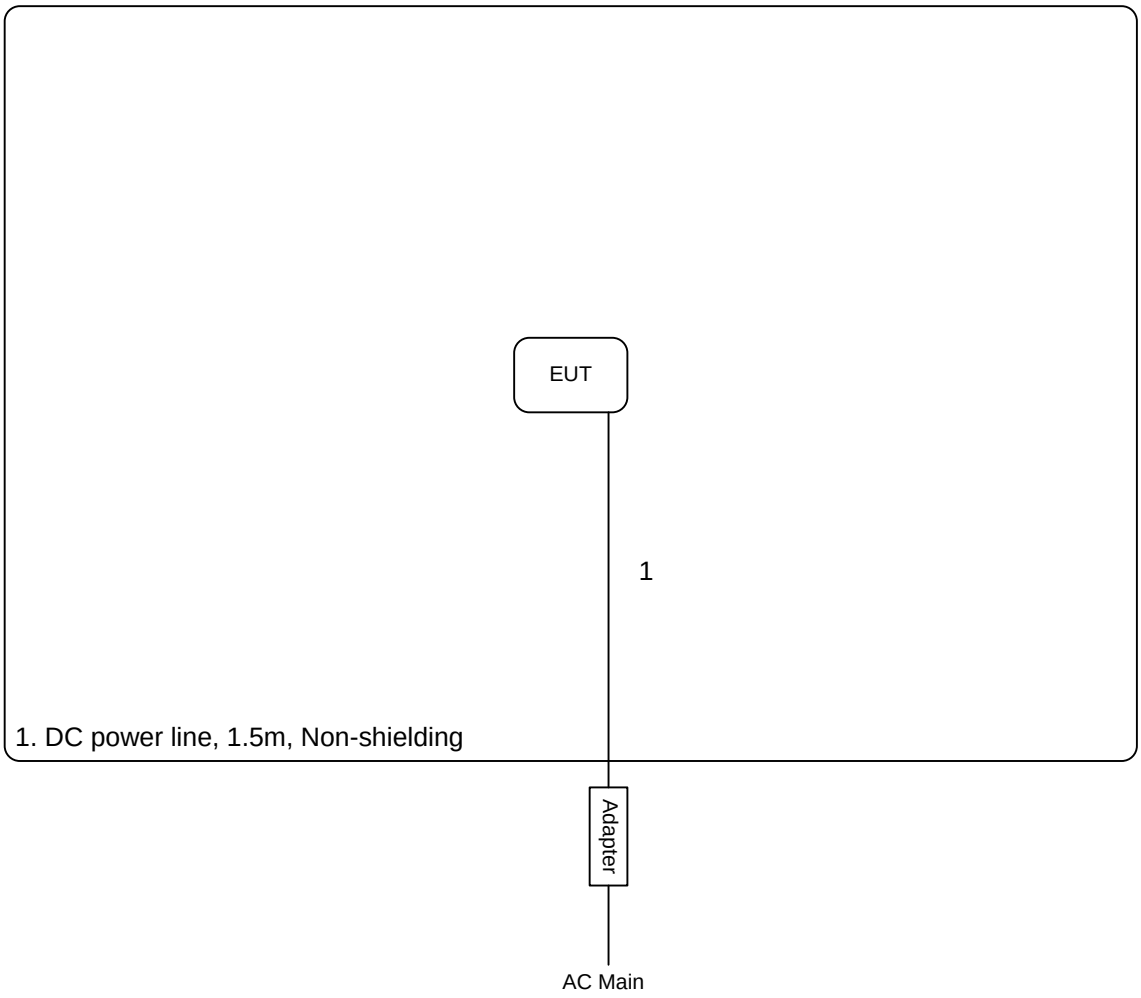
2.8 Table for Parameters of Test Software Setting

During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Power Parameters of Bluetooth

Test Software Version	BlueToothTest		
Frequency	2402 MHz	2441 MHz	2480 MHz
Power Parameters (1Mbps)	63	63	63
Power Parameters (2Mbps)	63	63	63
Power Parameters (3Mbps)	45	63	60

2.9 Test Configurations



3 TEST RESULT

3.1 Equivalent Isotropic Radiated Power Measurement

3.1.1 Limit

The equivalent isotropic radiated power is defined as the total power of the transmitter. The equivalent isotropic radiated power shall be equal to or less than -10dBW (100 mW) e.i.r.p. This limit shall apply for any combination of power level and intended antenna assembly.

3.1.2 Measuring Instruments and Setting

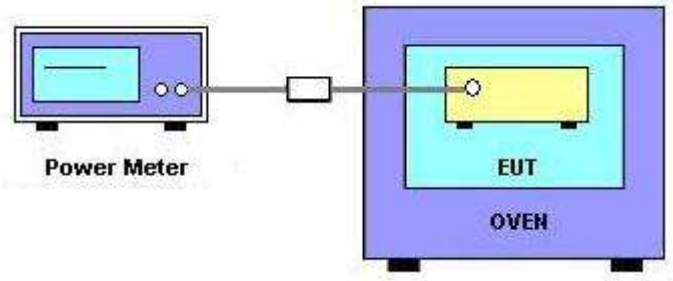
Please refer to section 4 of equipments list in this report. The following table is the setting of the power meter.

Power Meter Parameter	Setting
Filter No.	Auto
Measurement time	0.135 s ~ 26 s
Used Average Sensor	NRV-Z55

3.1.3 Test Procedures

1. Since a temporary antenna connector can be attached on the RF output port, so conducted measurement method was used in this case.
2. A wide band power meter with a matched thermocouple detector was used to directly measure the output power from the RF output port of the EUT in continuously transmitting mode.
3. The EIRP = A+G+10*log(1/x), where A is the power measured in (1), G is the gain of the antenna of the EUT in dBi and x is the duty cycle of the EUT in continuously transmitting mode.
4. The measurement shall be repeated at the lowest, the middle, and the highest channel of the stated frequency range. These measurements shall also be performed at normal and extreme test conditions.

3.1.4 Test Setup Layout



3.1.5 Test Deviation

There is no deviation with the original standard.

3.1.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

3.1.7 Test Result

Final Test Date	Oct. 30, 2009	Test Site No.	TH01-HY
Temperature	28℃	Humidity	58%
Test Engineer	Duncan	Configurations	GFSK / π/4-DQPSK / 8DPSK

1MBPS

Test Conditions				Average EIRP mean power (dBm)		
				Ch. 0	Ch. 39	Ch. 78
T nom (°C)	20	V nom (V)	230	10.06	10.04	9.96
T min (°C)	-20	V max (V)	253	11.14	11.53	11.16
		V min (V)	207	11.14	11.53	11.16
T max (°C)	60	V max (V)	253	8.86	9.03	8.83
		V min (V)	207	8.86	9.03	8.83
Max mean Power				11.53		
Limits				20 dBm (-10 dBW)		
Result				**Complies**		

2MBPS

Test Conditions				Average EIRP mean power (dBm)		
				Ch. 0	Ch. 39	Ch. 78
T nom (°C)	20	V nom (V)	230	7.76	7.93	8.01
T min (°C)	-20	V max (V)	253	8.91	9.02	9.09
		V min (V)	207	8.91	9.02	9.09
T max (°C)	60	V max (V)	253	6.71	6.92	6.97
		V min (V)	207	6.71	6.92	6.97
Max mean Power				9.09		
Limits				20 dBm (-10 dBW)		
Result				**Complies**		

3MBPS

Test Conditions				Average EIRP mean power (dBm)		
				Ch. 0	Ch. 39	Ch. 78
T nom (°C)	20	V nom (V)	230	1.21	7.93	6.77
T min (°C)	-20	V max (V)	253	2.15	9.16	7.77
		V min (V)	207	2.15	9.16	7.77
T max (°C)	60	V max (V)	253	0.31	7.14	5.94
		V min (V)	207	0.31	7.14	5.94
Max mean Power				9.16		
Limits				20 dBm (-10 dBW)		
Result				**Complies**		

3.2 Frequency Range Measurement

3.2.1 Limit

The frequency range of the equipment is determined by the lowest and highest frequencies occupied by the power envelope. f_H is the highest frequency of the power envelope: it is the frequency furthest above the frequency of maximum power where the output power drops below the level of -80 dBm/Hz e.i.r.p. spectral power density (-30 dBm if measured in a 100 kHz bandwidth). f_L is the lowest frequency of the power envelope; it is the frequency furthest below the frequency of maximum power where the output power drops below the level equivalent to -80 dBm/Hz e.i.r.p. spectral power density (or -30 dBm if measured in a 100 kHz bandwidth). The frequency range is determined by the lowest value of f_L and the highest value of f_H resulting from the adjustment of the equipment to the lowest and highest operating frequencies.

For all equipment, the frequency range shall lie within the band 2.4 GHz to 2.4835 GHz (f_L > 2.4 GHz and f_H < 2.4835 GHz).

3.2.2 Measuring Instruments and Setting

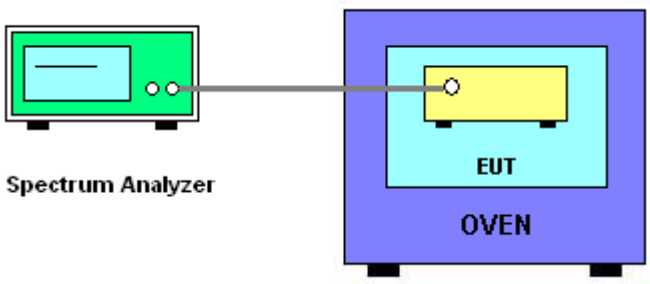
Please refer to section 4 of equipments list in this report. The following table is the setting of spectrum analyzer.

Spectrum Analyzer	Setting
Attenuation	20~30dB
Span Frequency	40MHz
RB	100 kHz
VB	100 kHz
Detector	Average
Trace	Average 50 sweeps

3.2.3 Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. Added [x] dBi of antenna gain was on the spectrum analyzer.
3. Place the spectrum analyzer in detector averaging mode with a minimum of 50 sweeps selected and activate transmitter with modulation applied.
4. Select lowest operating frequency of the equipment under test.
5. Find lowest frequency below the operating frequency at which spectral power density drops below -80 dBm/Hz e.i.r.p. (-30 dBm if measured in a 100 kHz bandwidth). This frequency shall be recorded (f_L).
6. Select the highest operating frequency of the equipment under test.
7. Find the highest frequency at which the spectral power density drops below-80 dBm/Hz e.i.r.p. (-30 dBm if measured in a 100 kHz bandwidth). This frequency shall be recorded (f_H).
8. These measurements shall also be performed at normal and extreme test conditions.

3.2.4 Test Setup Layout



3.2.5 Test Deviation

There is no deviation with the original standard.

3.2.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

3.2.7 Test Result

Final Test Date	Oct. 30, 2009	**Test Site No.**	TH01-HY
Temperature	28℃	**Humidity**	58%
Test Engineer	Duncan	**Configurations**	8DPSK

3MBPS

Test Conditions				**Frequency range (MHz)**	
				f_L Ch. 0	**f_H Ch. 78**
T nom (°C)	20	V nom (V)	230	2400.4663	2482.4433
T min (°C)	-20	V max (V)	253	2400.2534	2483.0443
		V min (V)	207	2400.2534	2483.0443
T max (°C)	60	V max (V)	253	2400.6434	2482.3554
		V min (V)	207	2400.6434	2482.3554
Min. f_L / Max. f_H Band Edges				2400.2534	2483.0443
Limits				f_L > 2400.0 MHz	f_H < 2483.5 MHz
Result				**Complies**	

3.3 Transmitter Spurious Emissions Measurement

3.3.1 Limit

Transmitter spurious emissions are emissions outside the frequency range(s) of the equipment as defined in 2.4~2.4835GHz when the equipment is in Transmit mode and/or in Standby mode.

The spurious emissions of the transmitter shall not exceed the values in tables 1 and 2 in the indicated bands.

Table 1 Transmitter limits for narrowband spurious emissions

Frequency Range (MHz)	Transmit Mode (dBm)	Standby Mode (dBm)
30~1000	-36	-57
1000~127500	-30	-47
1800~1900 / 5150~5300	-47	-47

Table 2 Transmitter limits for wideband spurious emissions

Frequency Range (MHz)	Transmit Mode (dBm/Hz)	Standby Mode (dBm/Hz)
30~1000	-86	-107
1000~12750	-80	-97
1800~1900 / 5150~5300	-97	-97

3.3.2 Measuring Instruments and Setting

Please refer to section 4 of equipments list in this report. The following table is the setting of the spectrum analyzer.

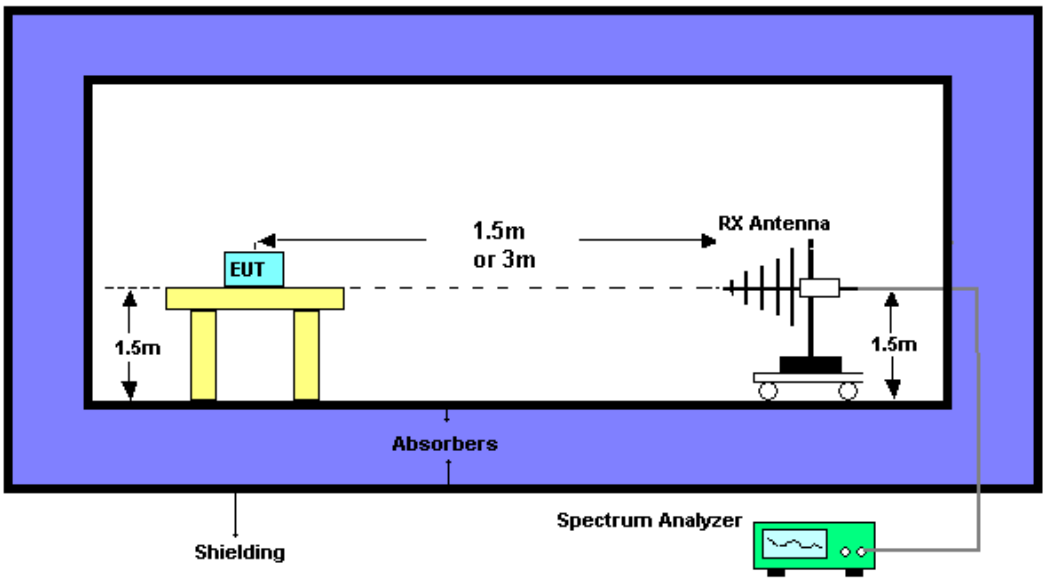
Spectrum Analyzer	Setting
Attenuation	Auto
Start Frequency	30 MHz
Stop Frequency	12750 MHz
Detector	Positive Peak
Span	100 MHz
Sweep Time	1s
RB / VB	100 kHz / 30 kHz

3.3.3 Test Procedures

1. The EUT was placed on the top of the turntable in fully anechoic chamber.
2. The test shall be made in the transmitting mode. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. This measurement shall be repeated with the transmitter in standby mode where applicable.
4. For 30~1000MHz spurious emissions measurement, the broad band bi-log receiving antenna was placed 3 meters far away from the turntable. For 1~12.75GHz measurement, the receiving Horn antenna was placed 1.5 meters far away from the turntable.
5. The broadband receiving antenna was fixed on the same height with the EUT to find each suspected emissions of both horizontal and vertical polarization. Each recorded suspected value is indicated as Read Level (Raw).
6. Replace the EUT by standard antenna and feed the RF port by signal generator.
7. Adjust the frequency of the signal generator to the suspected emission and slightly rotate the turntable to locate the position with maximum reading.
8. Adjust the power level of the signal generator to reach the same reading with Read Level (Raw).

9. The level of the spurious emission is the power level of (8) plus the gain of the standard antenna in dBi and minus the loss of the cable used between the signal generator and the standard antenna.
10. If the level calculated in (9) is higher than limit by more than 6dB, then lower the RBW of the spectrum analyzer to 30KHz. If the level of this emission does not change by more than 2dB, then it is taken as narrowband emission, otherwise, wideband emission.
11. The measurement shall be repeated at the lowest and the highest channel of the stated frequency range.

3.3.4 Test Setup Layout



3.3.5 Test Deviation

There is no deviation with the original standard.

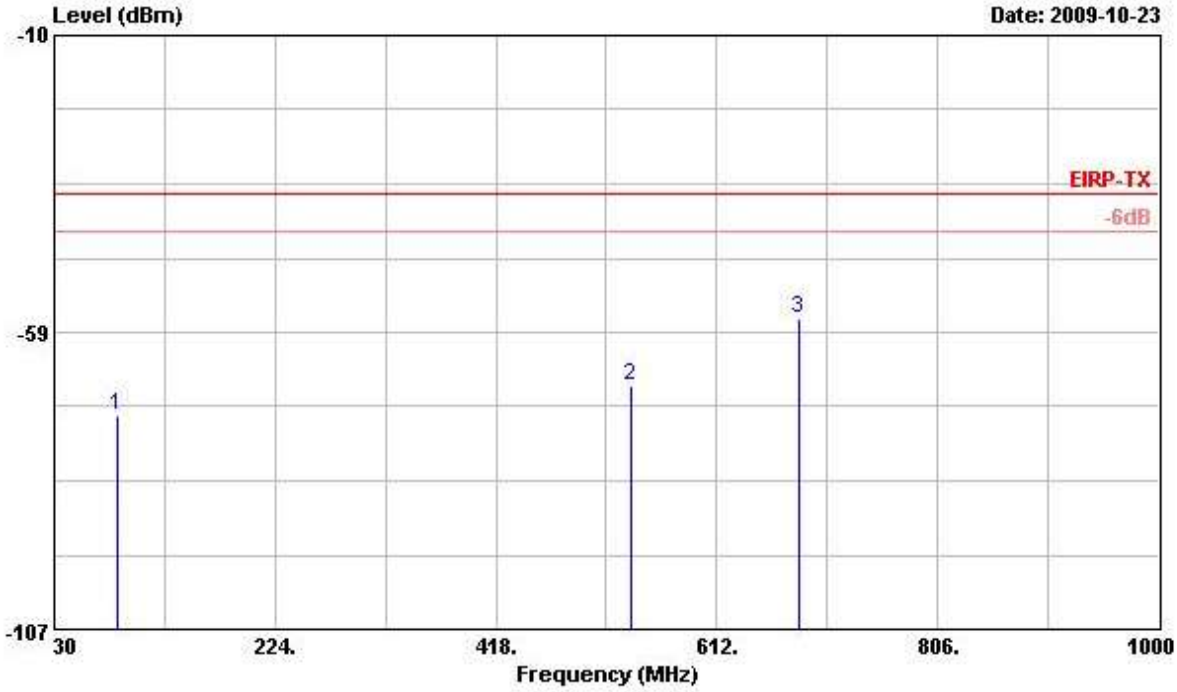
3.3.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

3.3.7 Results of Transmitter Spurious Emissions Below 1GHz

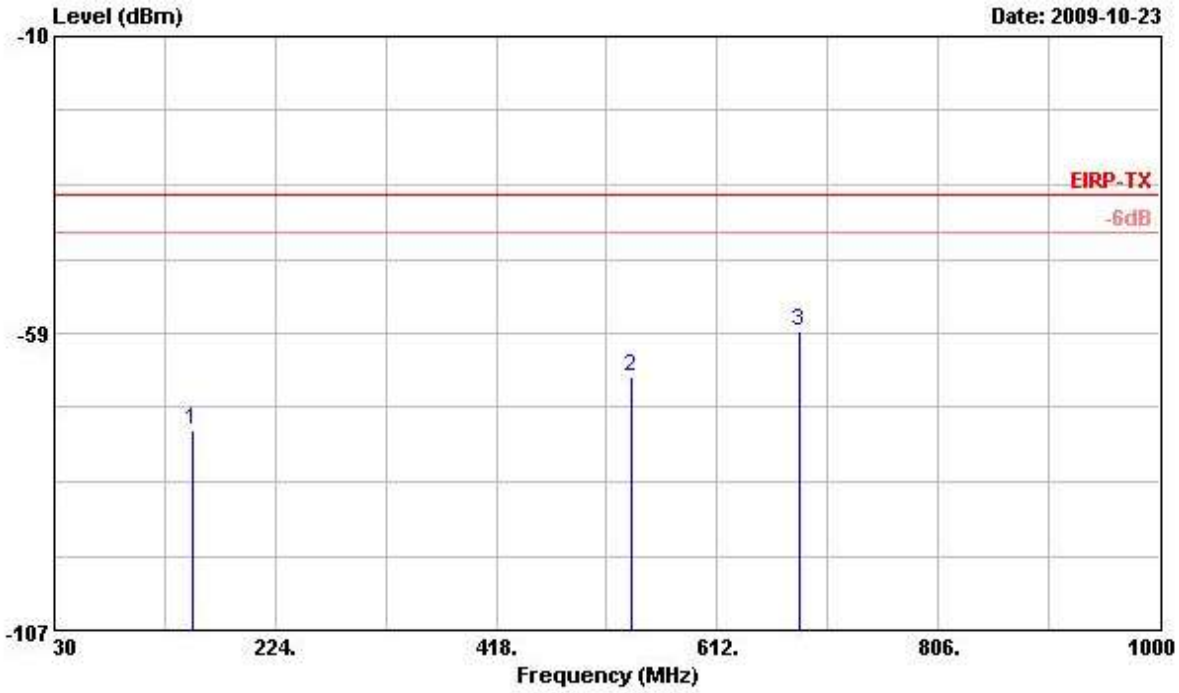
Final Test Date	Oct. 23, 2009	Test Site No.	05CH01-HY
Temperature	22℃	Humidity	52%
Test Engineer	Josh	Configuration	Bluetooth Ch. 78

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1	85.290	-72.07	-36.07	-36.00	-66.78	-5.29	---	HORIZONTAL
2	536.340	-67.24	-31.24	-36.00	-73.89	6.65	---	HORIZONTAL
3 @	683.780	-56.10	-20.10	-36.00	-63.58	7.48	---	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1	151.250	-74.49	-38.49	-36.00	-73.90	-0.59	---	VERTICAL
2	536.340	-65.55	-29.55	-36.00	-72.08	6.53	---	VERTICAL
3	683.780	-58.11	-22.11	-36.00	-65.62	7.51	---	VERTICAL

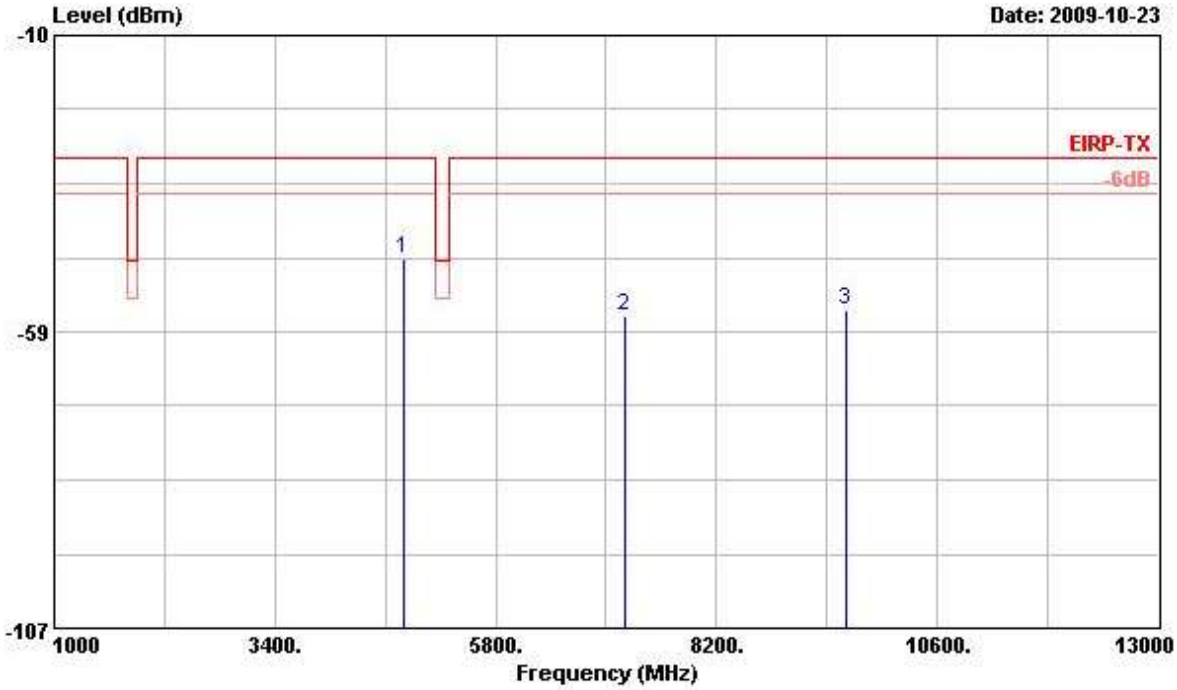
Note:

The amplitude of spurious emissions that is lower by more than 6dB below the permissible value need not to be reported. Except fundamental harmonic emissions, other emissions listed have been verified as narrow band spurious emissions.

3.3.8 Results of Transmitter Spurious Emissions Above 1GHz

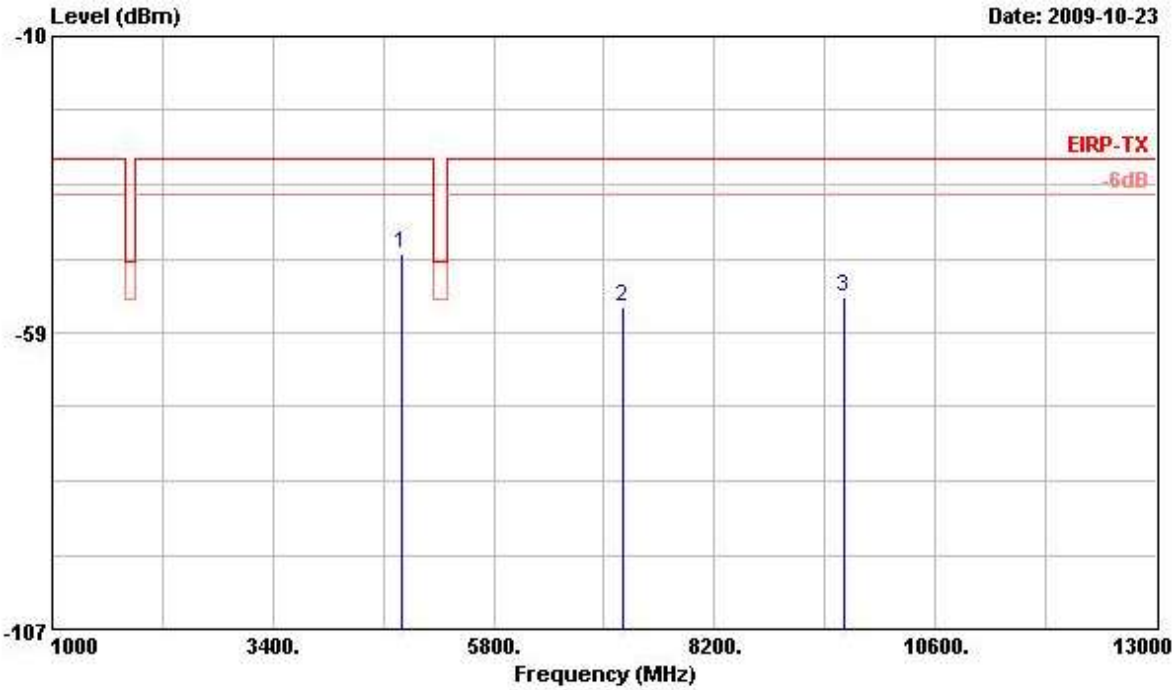
Final Test Date	Oct. 23, 2009	Test Site No.	05CH01-HY
Temperature	22℃	Humidity	52%
Test Engineer	Josh	Configuration	Bluetooth Ch. 0

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1 @	4804.000	-46.59	-16.59	-30.00	-56.66	10.07	---	HORIZONTAL
2	7206.000	-56.03	-26.03	-30.00	-71.85	15.82	---	HORIZONTAL
3	9608.000	-55.03	-25.03	-30.00	-69.73	14.70	---	HORIZONTAL

Vertical



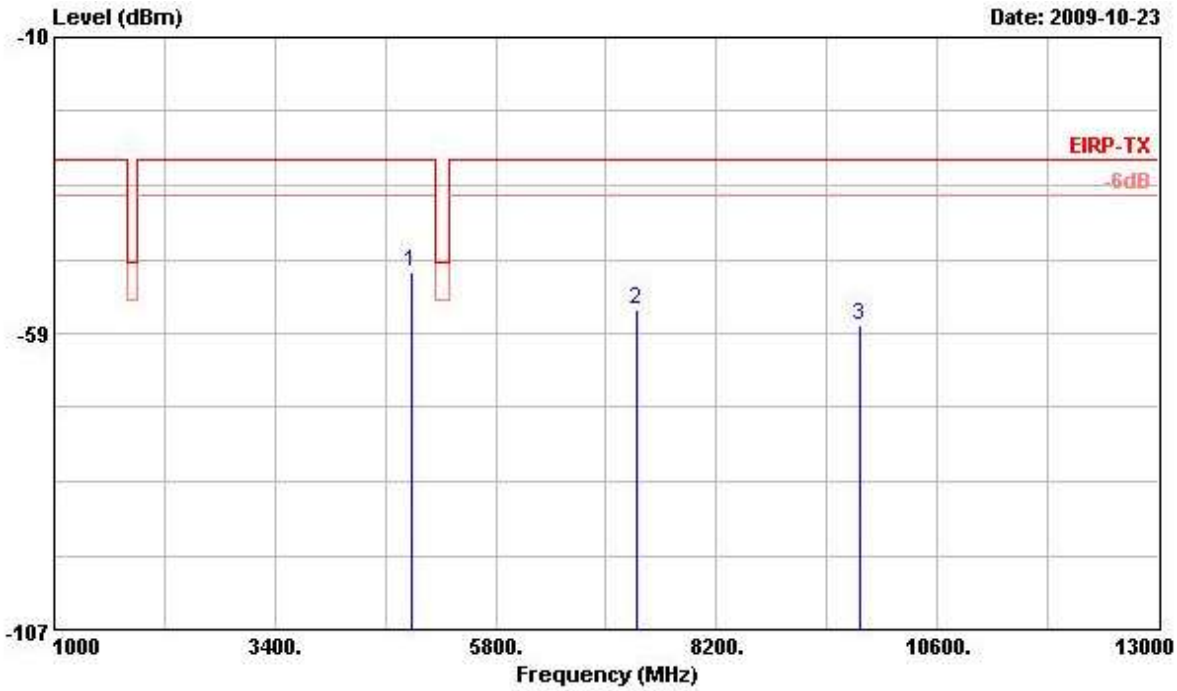
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1 @	4804.000	-45.42	-15.42	-30.00	-56.68	11.26	---	VERTICAL
2	7206.000	-54.38	-24.38	-30.00	-71.57	17.19	---	VERTICAL
3	9608.000	-52.58	-22.58	-30.00	-69.96	17.38	---	VERTICAL

Note:

The amplitude of spurious emissions that is lower by more than 6dB below the permissible value need not to be reported. Except fundamental harmonic emissions, other emissions listed have been verified as narrow band spurious emissions.

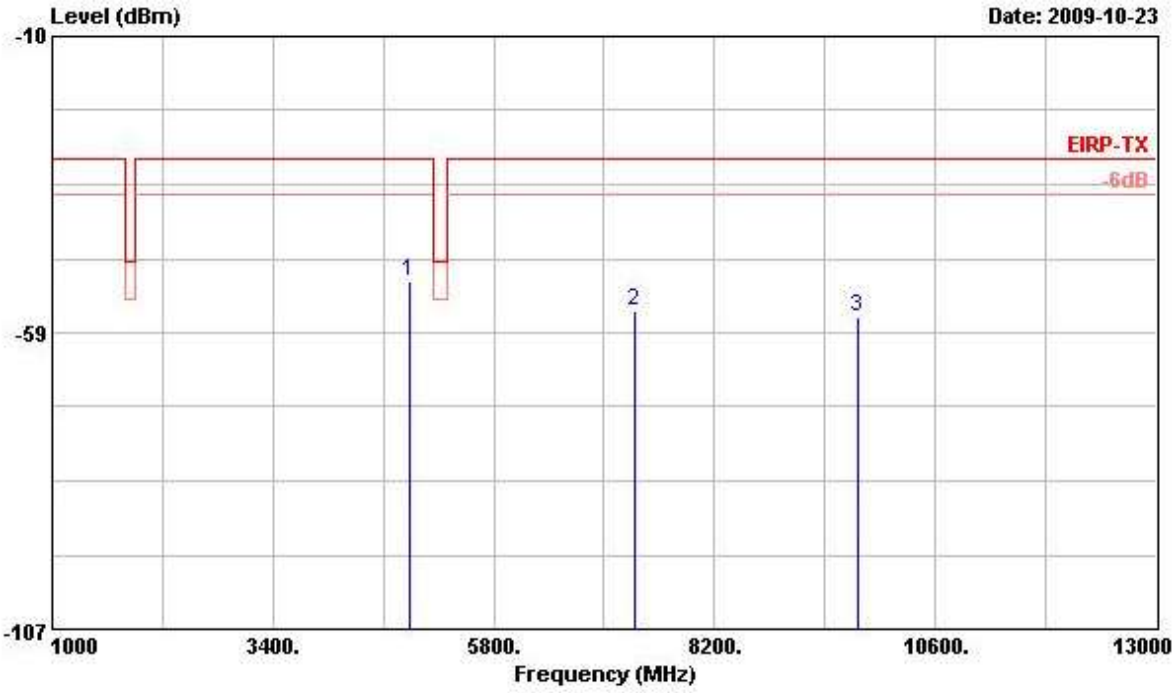
Final Test Date	Oct. 23, 2009	Test Site No.	05CH01-HY
Temperature	22℃	Humidity	52%
Test Engineer	Josh	Configuration	Bluetooth Ch. 39

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1 @	4882.000	-48.48	-18.48	-30.00	-58.90	10.42	---	HORIZONTAL
2	7323.000	-54.51	-24.51	-30.00	-70.80	16.29	---	HORIZONTAL
3	9764.000	-57.21	-27.21	-30.00	-71.52	14.31	---	HORIZONTAL

Vertical



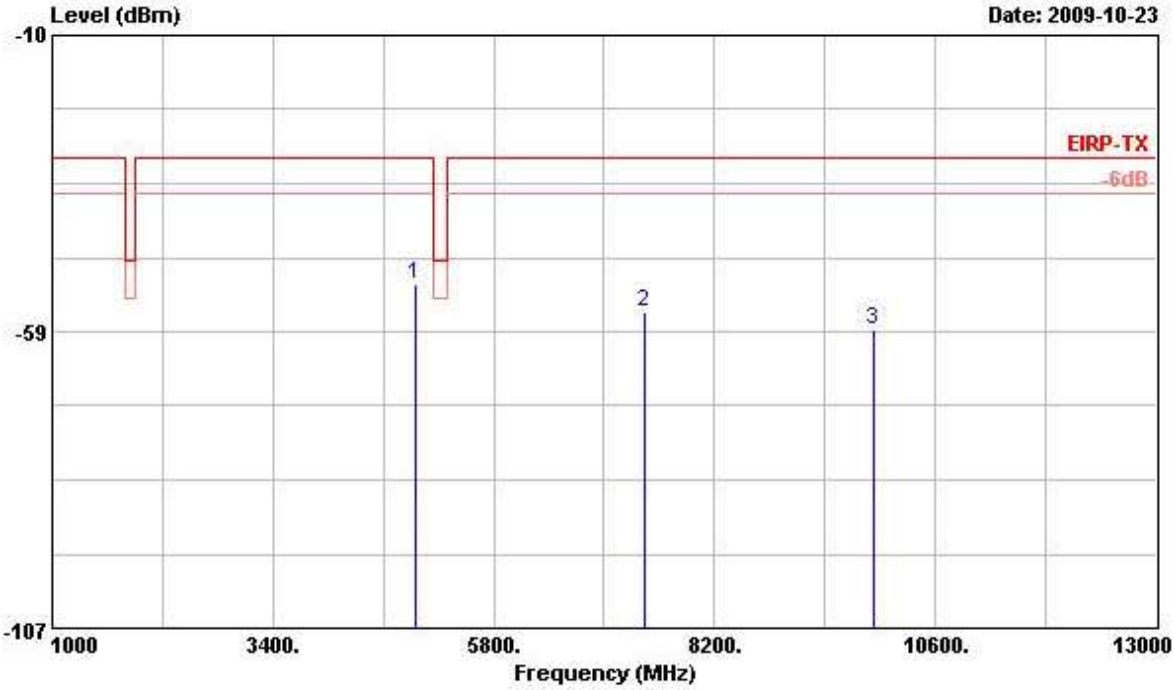
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1 @	4882.000	-50.21	-20.21	-30.00	-61.90	11.69	---	VERTICAL
2	7323.000	-54.84	-24.84	-30.00	-71.58	16.74	---	VERTICAL
3	9764.000	-55.81	-25.81	-30.00	-72.70	16.89	---	VERTICAL

Note:

The amplitude of spurious emissions that is lower by more than 6dB below the permissible value need not to be reported. Except fundamental harmonic emissions, other emissions listed have been verified as narrow band spurious emissions.

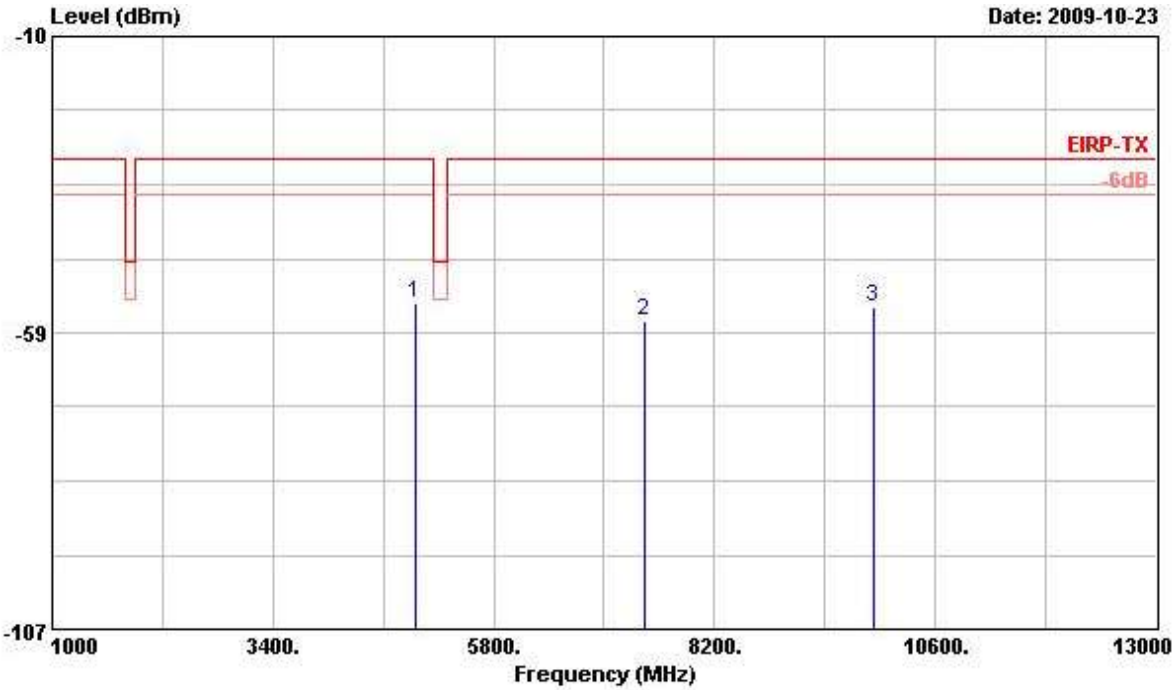
Final Test Date	Oct. 23, 2009	Test Site No.	05CH01-HY
Temperature	22℃	Humidity	52%
Test Engineer	Josh	Configuration	Bluetooth Ch. 78

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1 @	4960.000	-50.74	-20.74	-30.00	-61.50	10.76	---	HORIZONTAL
2	7441.000	-55.12	-25.12	-30.00	-71.87	16.75	---	HORIZONTAL
3	9920.000	-58.03	-28.03	-30.00	-71.95	13.92	---	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1	4960.000	-53.62	-23.62	-30.00	-65.74	12.12	---	VERTICAL
2	7440.000	-56.63	-26.63	-30.00	-72.93	16.30	---	VERTICAL
3	9920.000	-54.34	-24.34	-30.00	-70.75	16.41	---	VERTICAL

Note:

The amplitude of spurious emissions that is lower by more than 6dB below the permissible value need not to be reported. Except fundamental harmonic emissions, other emissions listed have been verified as narrow band spurious emissions.

3.4 Receiver Spurious Emissions Measurement

3.4.1 Limit

Receiver spurious emissions are emissions at any frequency when the equipment is in received mode. The spurious emissions of the receiver shall not exceed the values in tables 1 and 2 in the indicated bands.

Table 1 Receiver limits for narrowband spurious emissions

Frequency Range (MHz)	Limit (dBm)
30~1000	-57
1000~127500	-47

Table 2 Receiver limits for wideband spurious emissions

Frequency Range (MHz)	Limit (dBm)
30~1000	-107
1000~12750	-97

3.4.2 Measuring Instruments and Setting

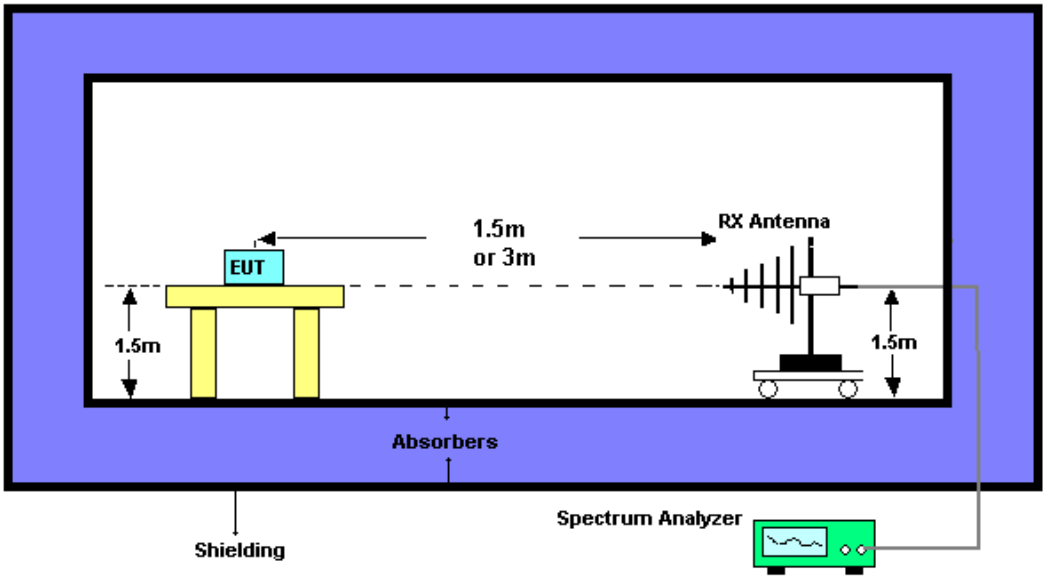
Please refer to section 4 of equipments list in this report. The following table is the setting of the Spectrum Analyzer.

Spectrum Analyzer	Setting
Attenuation	Auto
Start Frequency	30 MHz
Stop Frequency	12750 MHz
Detector	Positive Peak
Span	100 MHz
Sweep Time	1s
RB / VB	100 kHz / 30 kHz

3.4.3 Test Procedures

1. The EUT was placed on the top of the turntable in fully anechoic chamber.
2. The test shall be made in the transmitting mode. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. For 30~1000MHz spurious emissions measurement, the broad band bi-log receiving antenna was placed 3 meters far away from the turntable. For 1~12.75GHz measurement, the receiving Horn antenna was placed 1.5 meters far away from the turntable.
4. The broadband receiving antenna was fixed on the same height with the EUT to find each suspected emissions of both horizontal and vertical polarization. Each recorded suspected value is indicated as Read Level (Raw).
5. Replace the EUT by standard antenna and feed the RF port by signal generator.
6. Adjust the frequency of the signal generator to the suspected emission and slightly rotate the turntable to locate the position with maximum reading.
7. Adjust the power level of the signal generator to reach the same reading with Read Level (Raw).
8. The level of the spurious emission is the power level of (7) plus the gain of the standard antenna in dBi and minus the loss of the cable used between the signal generator and the standard antenna.
9. The measurement shall be repeated at the lowest and the highest channel of the stated frequency range.

3.4.4 Test Setup Layout



3.4.5 Test Deviation

There is no deviation with the original standard.

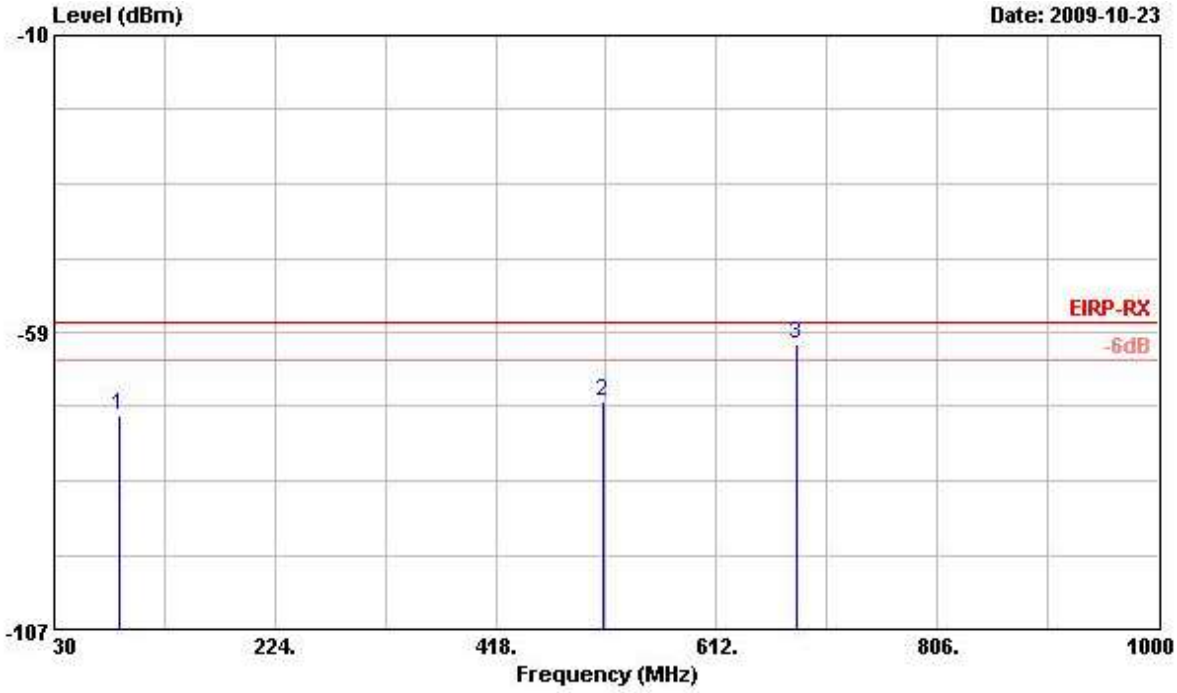
3.4.6 EUT Operation during Test

The EUT was programmed to be in continuously receiving mode.

3.4.7 Results of Receiver Spurious Emissions Below 1GHz

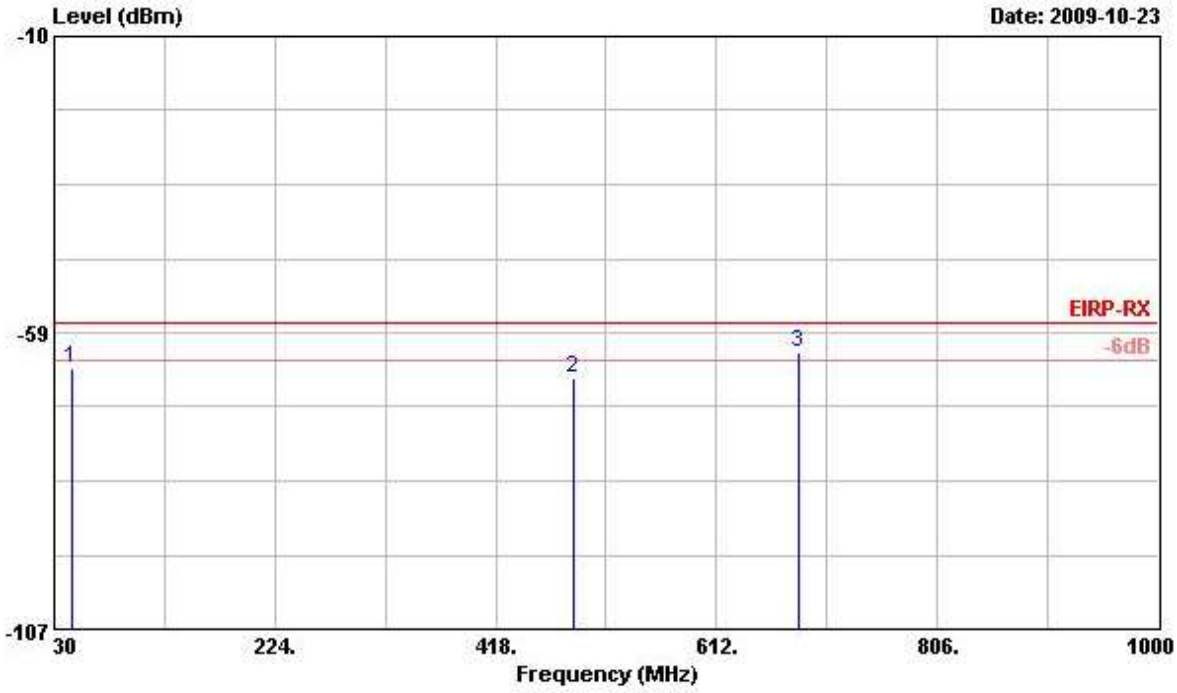
Final Test Date	Oct. 23, 2009	Test Site No.	05CH01-HY
Temperature	22℃	Humidity	52%
Test Engineer	Josh	Configuration	Bluetooth Ch. 78

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1 @	87.230	-71.97	-14.97	-57.00	-66.69	-5.28	---	HORIZONTAL
2 @	513.060	-69.82	-12.82	-57.00	-75.09	5.27	---	HORIZONTAL
3 @	682.810	-60.44	-3.44	-57.00	-67.91	7.47	---	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1 @	45.520	-64.40	-7.40	-57.00	-59.10	-5.30	---	VERTICAL
2 @	486.870	-66.07	-9.07	-57.00	-70.24	4.17	---	VERTICAL
3 @	683.780	-61.78	-4.78	-57.00	-69.29	7.51	---	VERTICAL

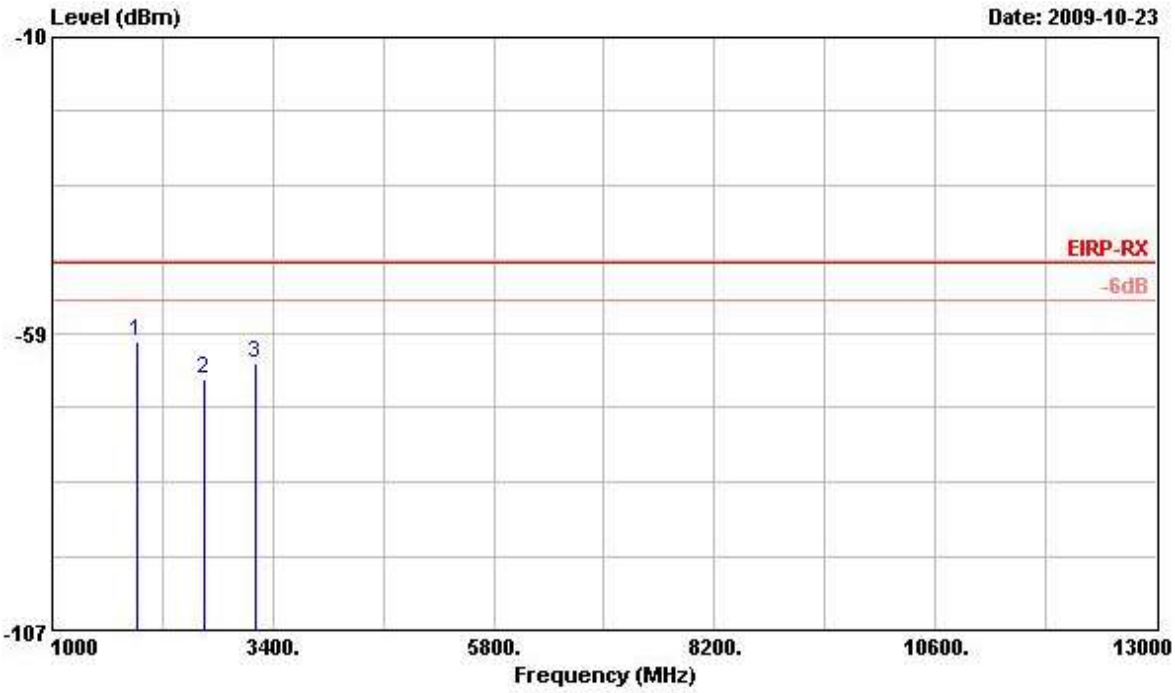
Note:

The amplitude of spurious emissions that is lower by more than 6dB below the permissible value need not to be reported. Except fundamental harmonic emissions, other emissions listed have been verified as narrow band spurious emissions.

3.4.8 Results of Receiver Spurious Emissions Above 1GHz

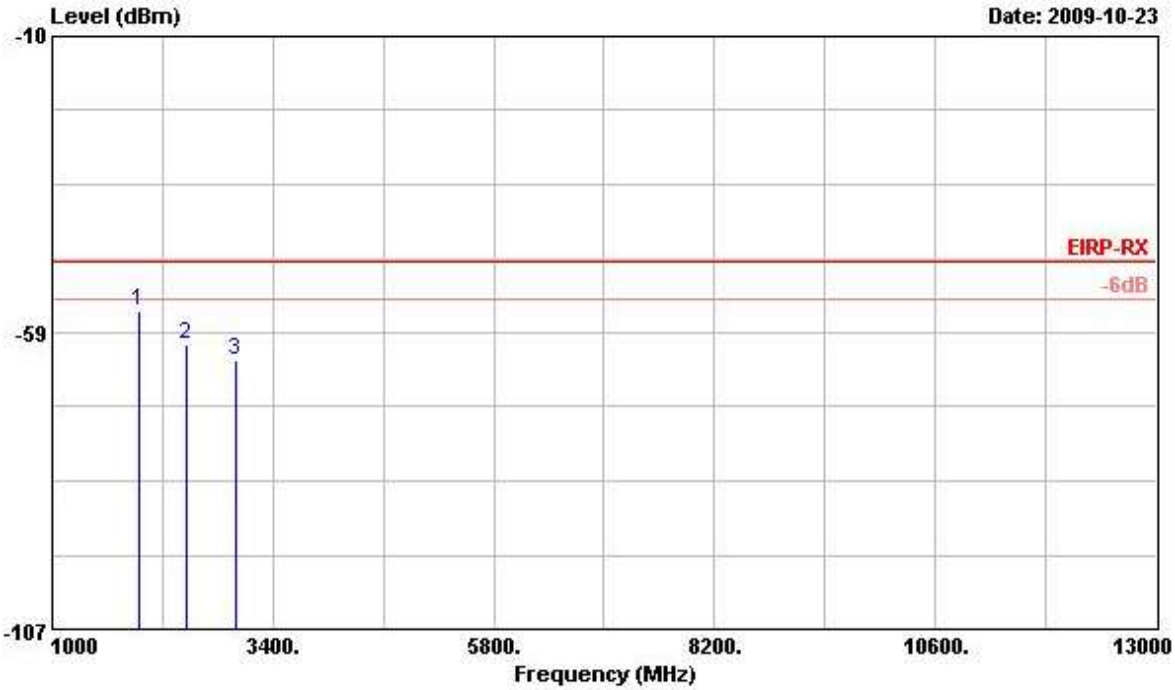
Final Test Date	Oct. 23, 2009	Test Site No.	05CH01-HY
Temperature	22℃	Humidity	52%
Test Engineer	Josh	Configurations	Bluetooth Ch. 0

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1 @	1923.000	-59.90	-12.90	-47.00	-64.12	4.22	---	HORIZONTAL
2 @	2660.000	-65.93	-18.93	-47.00	-70.90	4.97	---	HORIZONTAL
3 @	3220.000	-63.20	-16.20	-47.00	-68.90	5.70	---	HORIZONTAL

Vertical



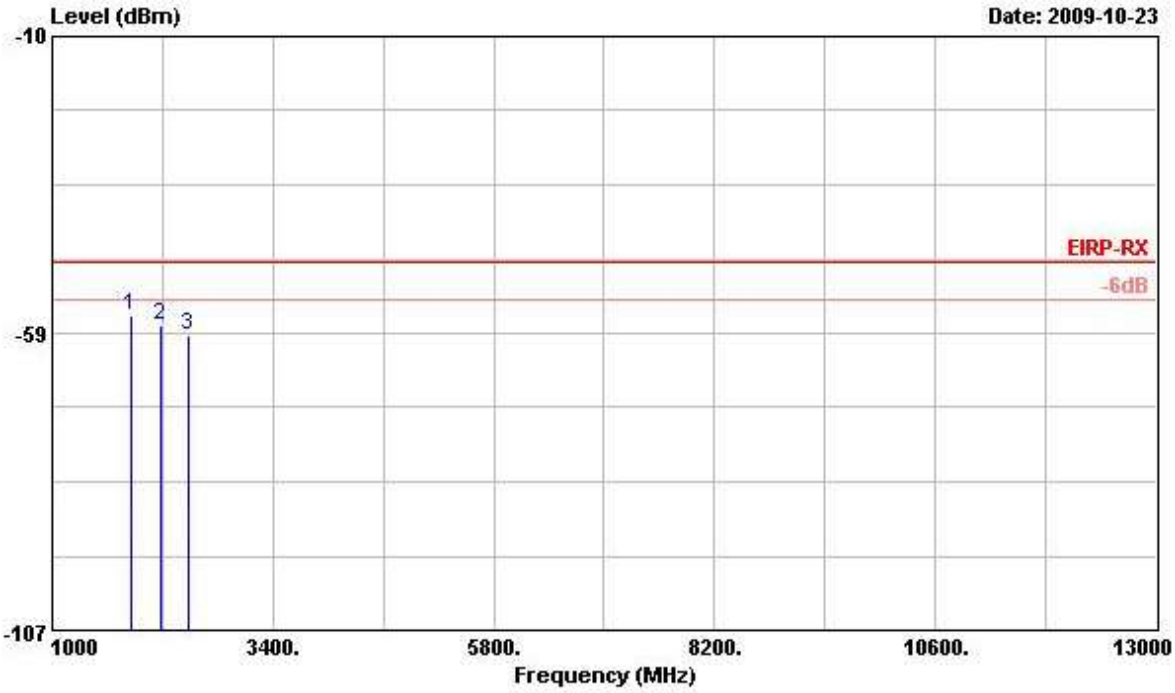
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1 @	1950.000	-55.00	-8.00	-47.00	-59.44	4.44	---	VERTICAL
2 @	2470.000	-60.46	-13.46	-47.00	-65.36	4.90	---	VERTICAL
3 @	2990.000	-62.90	-15.90	-47.00	-68.36	5.46	---	VERTICAL

Note:

The amplitude of spurious emissions that is lower by more than 6dB below the permissible value need not to be reported. Except fundamental harmonic emissions, other emissions listed have been verified as narrow band spurious emissions.

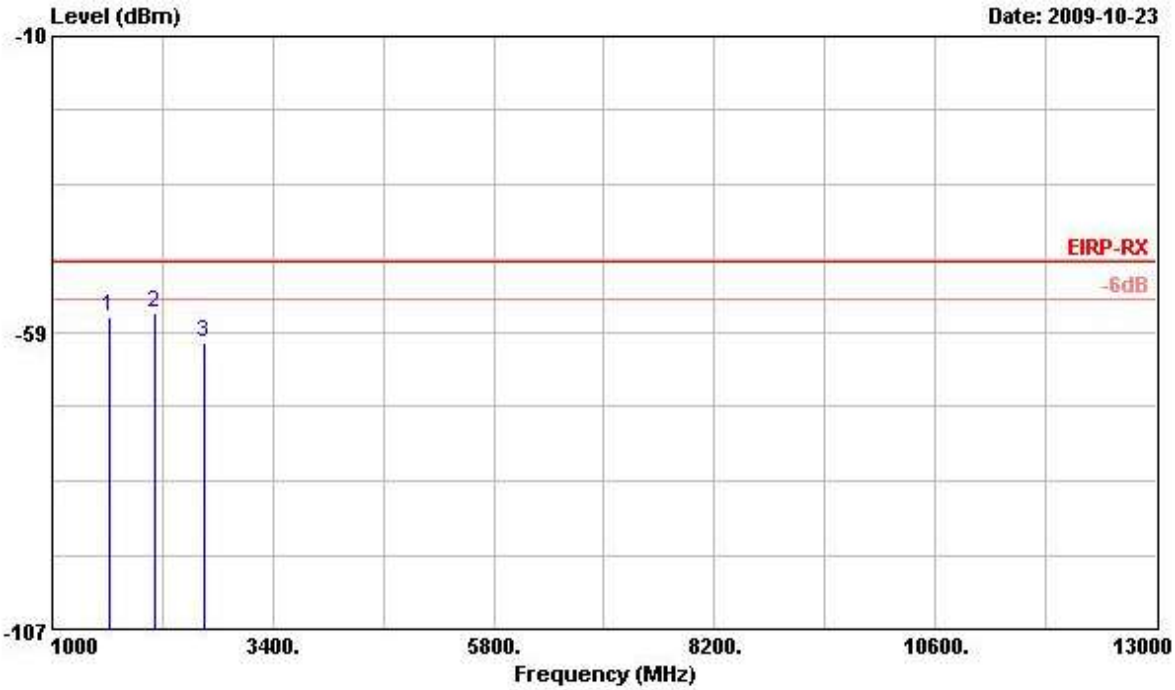
Final Test Date	Oct. 23, 2009	Test Site No.	05CH01-HY
Temperature	22℃	Humidity	52%
Test Engineer	Josh	Configurations	Bluetooth Ch. 78

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1 @	1860.000	-55.72	-8.72	-47.00	-59.45	3.73	---	HORIZONTAL
2 @	2173.000	-57.27	-10.27	-47.00	-62.17	4.90	---	HORIZONTAL
3 @	2473.000	-58.66	-11.66	-47.00	-63.50	4.84	---	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Table Pos	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB	deg	
1 @	1632.000	-56.03	-9.03	-47.00	-57.63	1.60	---	VERTICAL
2 @	2120.000	-55.25	-8.25	-47.00	-60.16	4.91	---	VERTICAL
3 @	2658.000	-60.09	-13.09	-47.00	-65.17	5.08	---	VERTICAL

Note:

The amplitude of spurious emissions that is lower by more than 6dB below the permissible value need not to be reported. Except fundamental harmonic emissions, other emissions listed have been verified as narrow band spurious emissions.

4 LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSU26.5	100015	20Hz ~ 26.5GHz	Oct. 28, 2009	Conducted (TH01-HY)
Power Meter	R&S	NRVS	100444	DC ~ 40GHz	Jul. 31, 2009	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z51	100666	DC ~ 30GHz	Aug. 05, 2009	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z32	100057	30MHz ~ 6GHz	Jul. 31, 2009	Conducted (TH01-HY)
DC Power Source	G.W.	GPC-6030D	C671845	DC 1V ~ 60V	Mar. 13, 2009	Conducted (TH01-HY)
Temp. and Humidity Chamber	Giant Force	GTH-225-20-S	MAB0103-001	N/A	Aug. 06, 2009	Conducted (TH01-HY)
RF CABLE-1m	Jye Bao	RG142	CB034-1m	20MHz ~ 7GHz	Dec. 01, 2008	Conducted (TH01-HY)
RF CABLE-2m	Jye Bao	RG142	CB035-2m	20MHz ~ 1GHz	Dec. 01, 2008	Conducted (TH01-HY)
Vector Signal Generator	R&S	SMU200A	102098	100kHz ~ 6GHz	Feb. 13, 2009	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Mar. 25, 2009	Conducted (TH01-HY)

Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSEK30	100189	9 kHz - 40GHz	Oct. 22, 2009	Radiation (05CH01-HY)
Amplifier	Agilent	8447D	2944A11149	100kHz ~ 1.3GHz	Jul. 03, 2009	Radiation (05CH01-HY)
Amplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	Mar. 09, 2009	Radiation (05CH01-HY)
Bilog Antenna	SCHAFFNER	CBL6111C	2737	25MHz ~ 2GHz	Jul. 11, 2009	Radiation (05CH01-HY)
Horn Antenna	COM-POWER	AH-118	10091	1GHz ~ 18GHz	Jan. 16, 2009	Radiation (05CH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Mar. 09, 2009	Radiation (05CH01-HY)
RF Cable-R03m	Jye Bao	RG142	CB031	30MHz ~1GHz	Sep. 30, 2009	Radiation (05CH01-HY)
RF Cable-HIGH	SUHNER	SUCOFLEX 106	05CH01-HY	1GHz~26.5GHz	Jan. 16, 2009	Radiation (05CH01-HY)
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170221	15GHz ~ 40GHz	Jan. 16, 2009	Radiation (05CH01-HY)
Turn Table	HD	DS 420	420/655/12	0 ~ 360 degree	N/A	Radiation (05CH01-HY)
Antenna Mast	HD	MA 240	240/569/12	1 m ~ 4 m	N/A	Radiation (05CH01-HY)

Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Horn Antenna	COM-POWER	AH-118	10094	1GHz ~ 18GHz	Dec. 20, 2007	Radiation (05CH01-HY)

Note: Calibration Interval of instruments listed above is two year.

5 TEST LOCATION

SHIJR	ADD	:	6Fl., No. 106, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C.
	TEL	:	886-2-2696-2468
	FAX	:	886-2-2696-2255
HWA YA	ADD	:	No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
	TEL	:	886-3-327-3456
	FAX	:	886-3-318-0055
LINKOU	ADD	:	No. 30-2, Dingfu Tsuen, Linkou Shiang, Taipei, Taiwan 244, R.O.C
	TEL	:	886-2-2601-1640
	FAX	:	886-2-2601-1695
DUNGHU	ADD	:	No. 3, Lane 238, Kangle St., Neihu Chiu, Taipei, Taiwan 114, R.O.C.
	TEL	:	886-2-2631-4739
	FAX	:	886-2-2631-9740
JUNGHE	ADD	:	7Fl., No. 758, Jungjeng Rd., Junghe City, Taipei, Taiwan 235, R.O.C.
	TEL	:	886-2-8227-2020
	FAX	:	886-2-8227-2626
NEIHU	ADD	:	4Fl., No. 339, Hsin Hu 2nd Rd., Taipei 114, Taiwan, R.O.C.
	TEL	:	886-2-2794-8886
	FAX	:	886-2-2794-9777
JHUBEI	ADD	:	No.8, Lane 728, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.
	TEL	:	886-3-656-9065
	FAX	:	886-3-656-9085

6 TAF CERTIFICATE OF ACCREDITATION

Certificate No. : L1190-090318

財團法人全國認證基金會
Taiwan Accreditation Foundation

Certificate of Accreditation

This is to certify that

Sporton International Inc.
EMC & Wireless Communications Laboratory
No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

is accredited in respect of laboratory

Accreditation Criteria	:	ISO/IEC 17025:2005
Accreditation Number	:	1190
Originally Accredited	:	December 15, 2003
Effective Period	:	January 10, 2007 to January 09, 2010
Accredited Scope	:	Testing Field, see described in the Appendix
Specific Accreditation Program	:	Accreditation Program for Designated Testing Laboratory for Commodities Inspection Accreditation Program for Telecommunication Equipment Testing Laboratory Accreditation Program for BSMI Mutual Recognition Arrangment with Foreign Authorities

Jay-San Chen
President, Taiwan Accreditation Foundation
Date : March 18, 2009

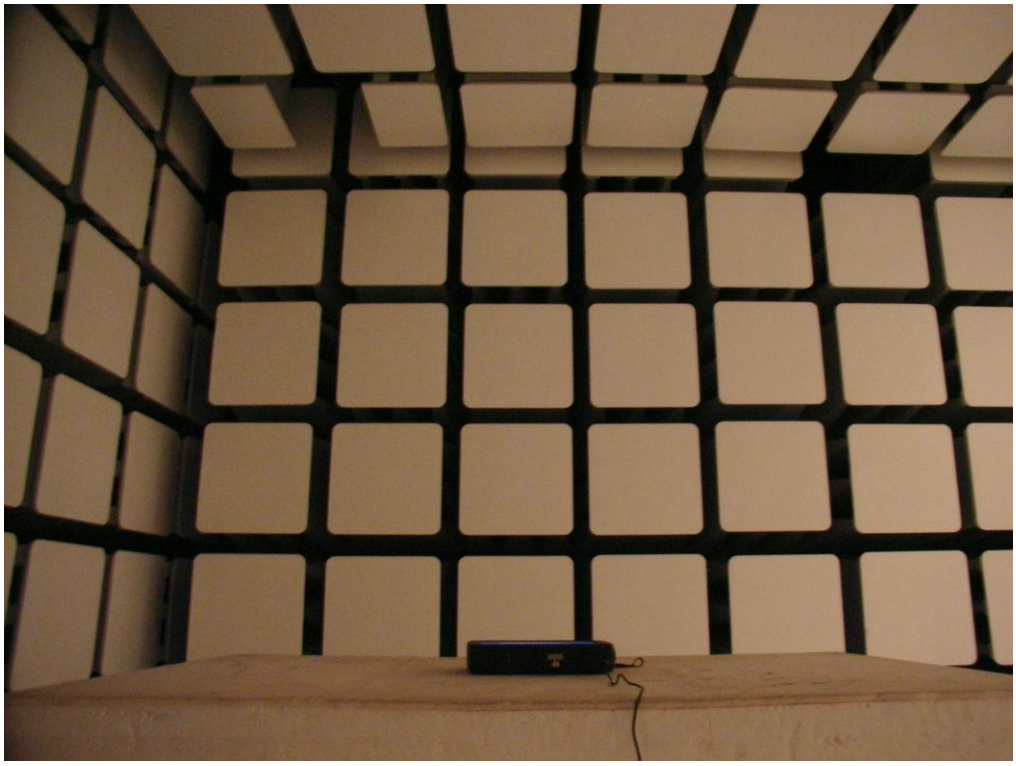
P1, total 19 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix

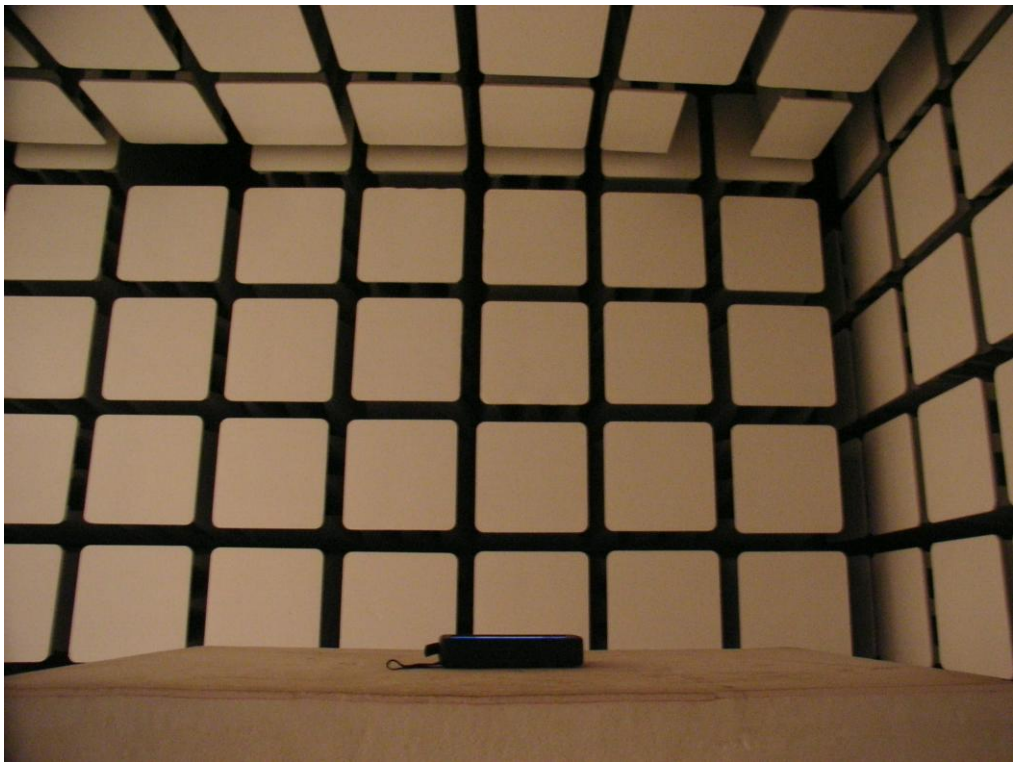
Appendix A. Test Photos

1 Photographs of Radiated Emissions Test Configuration

FRONT VIEW

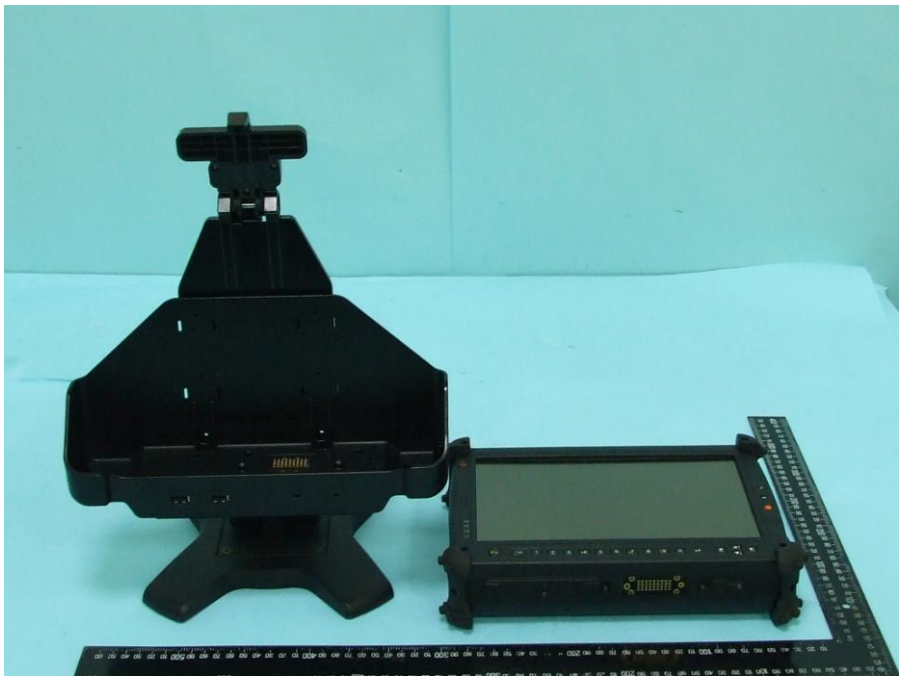


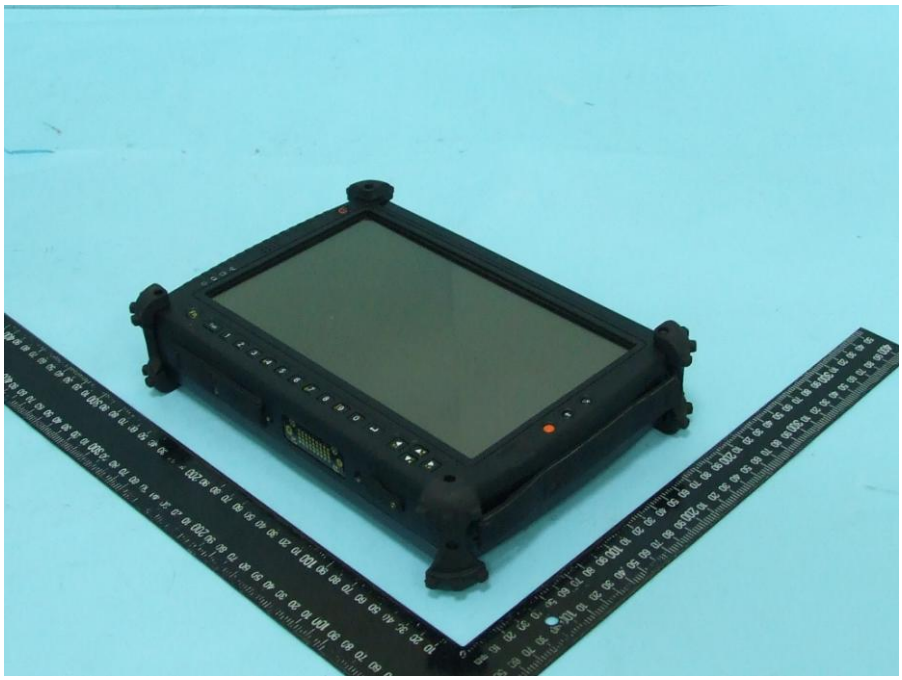
REAR VIEW



APPENDIX B. Photographs of EUT

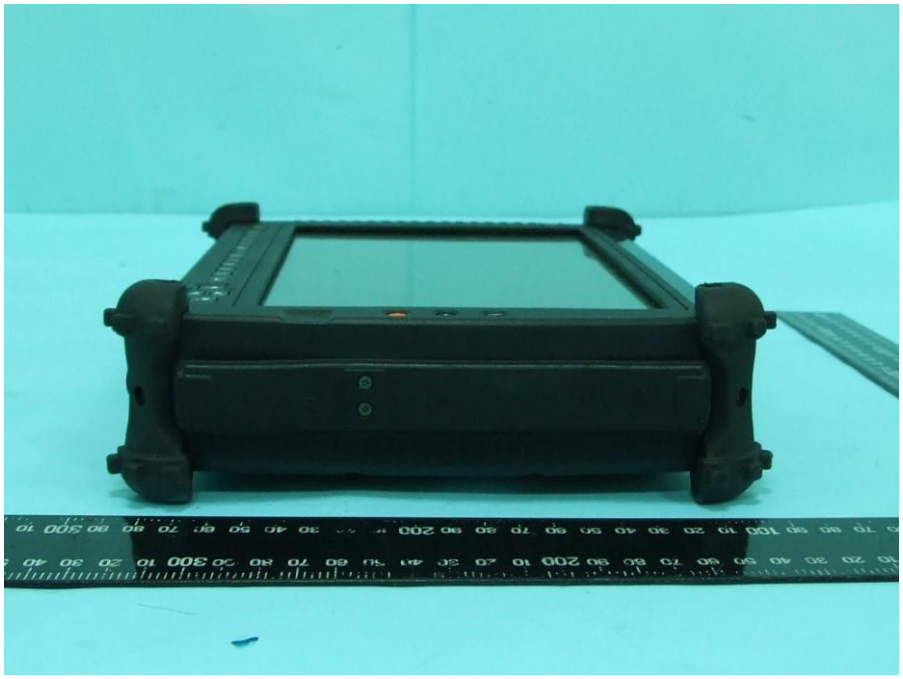




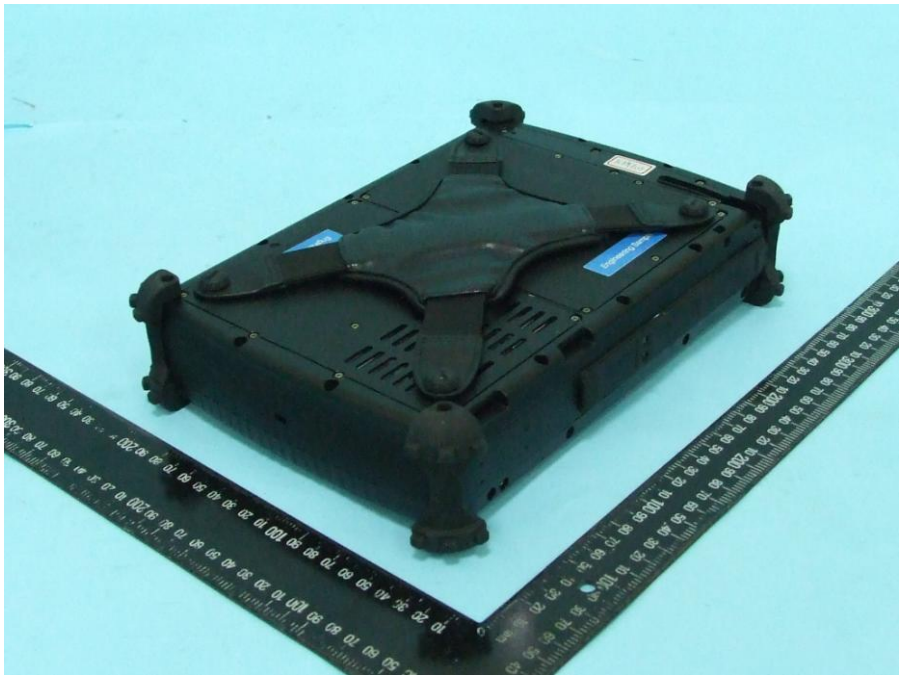




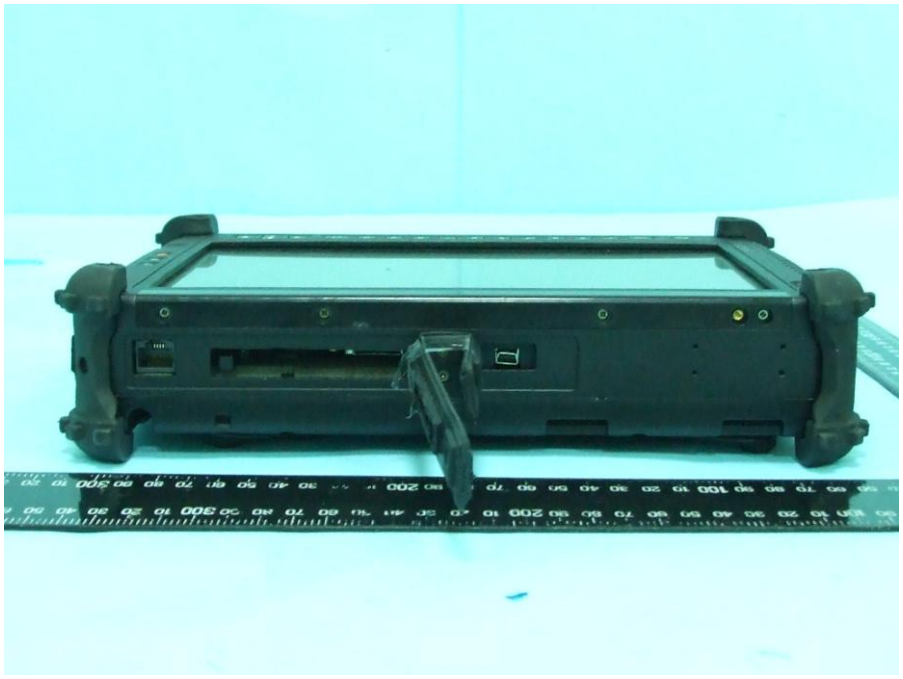






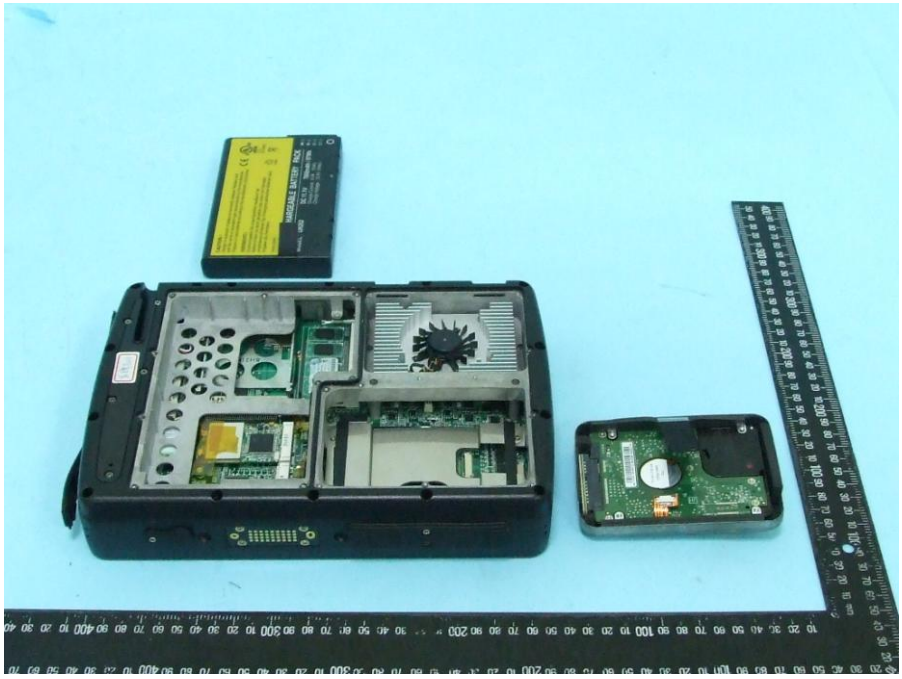


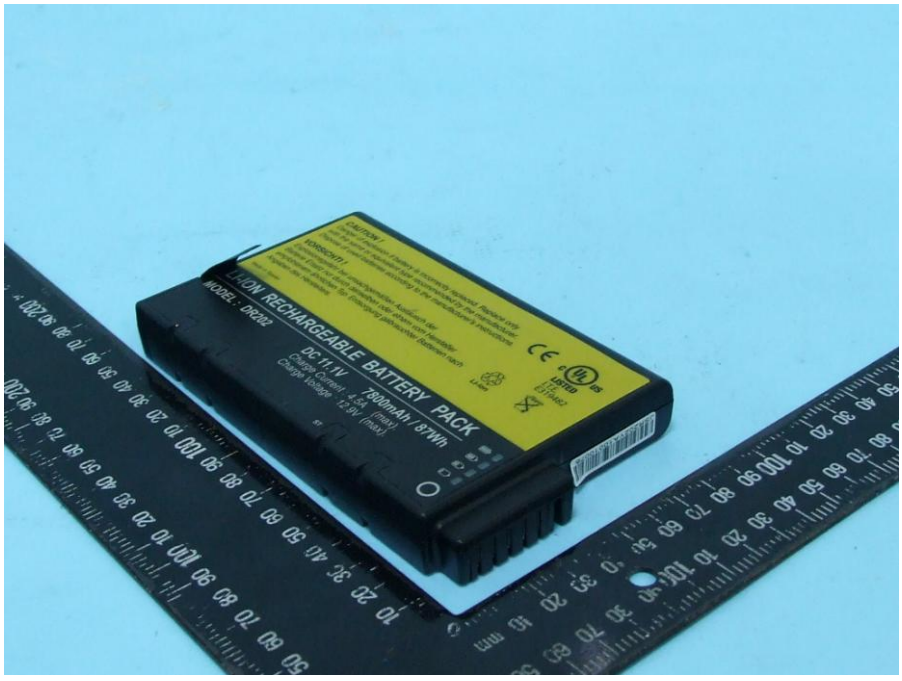


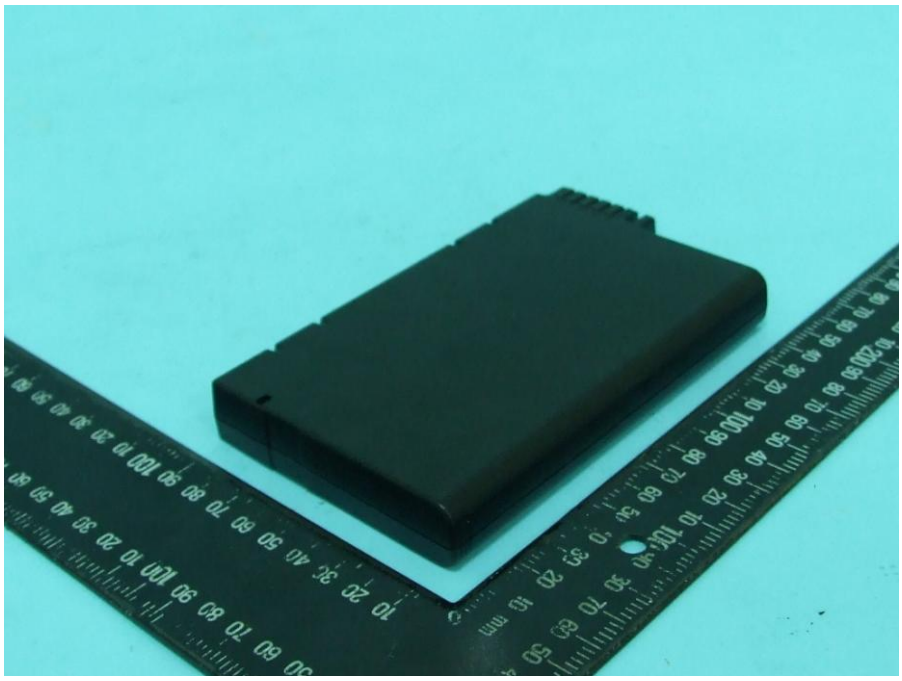



Engineering Sample


RECHARGEABLE BATTERY PACK



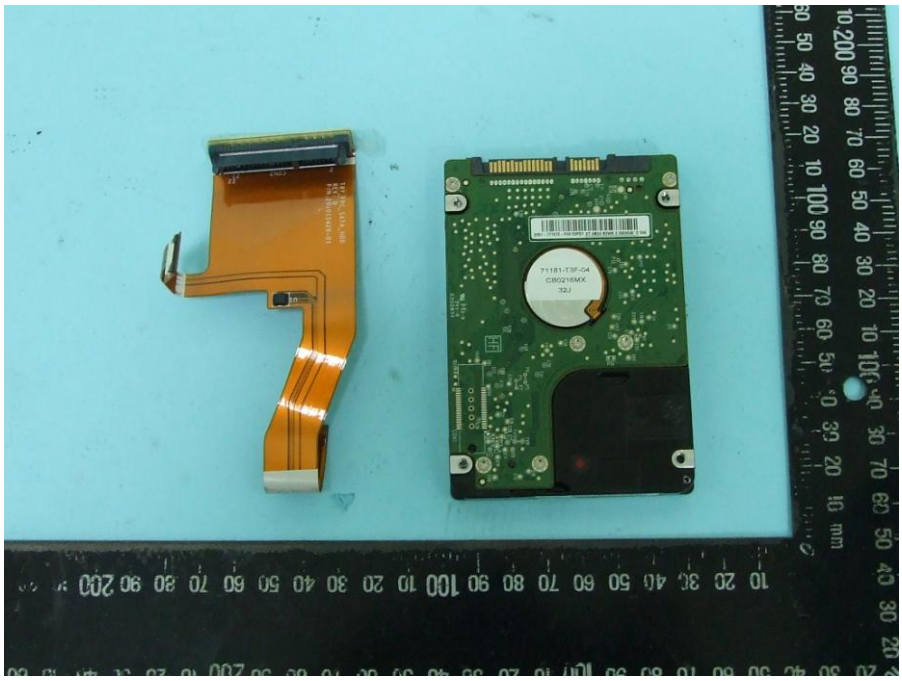

ION RECHARGEABLE BATTERY PACK
DC 11.1V
7800mAh / 87Wh

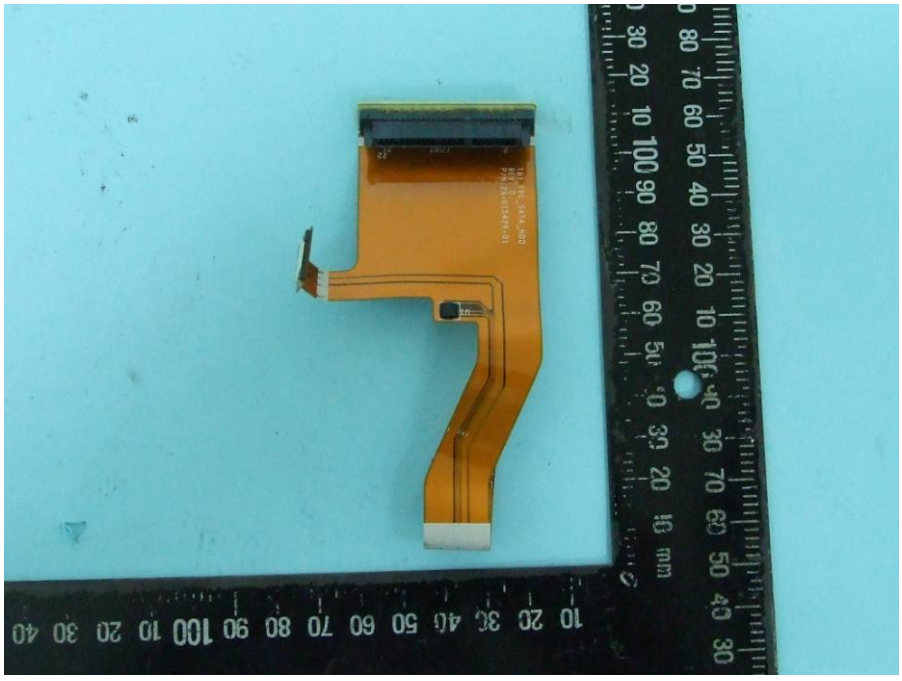


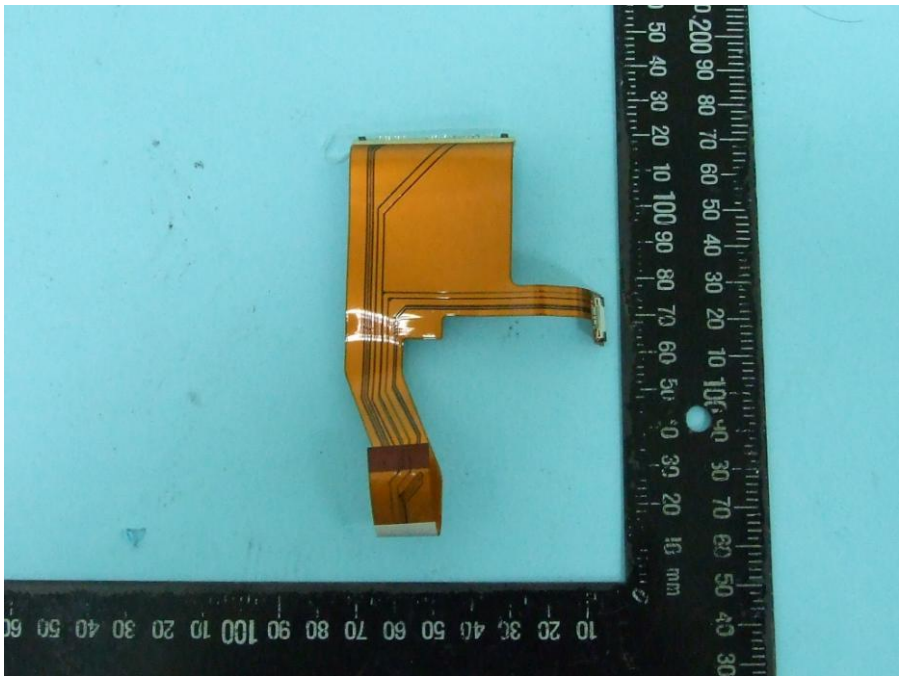

CAUTION !
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.
VORSICHTI !
Explosionsgefahr bei unsachgemäßen Austausch der Batterie Ersatz nur durch denselben oder elnem vom Hersteller empfohlenem ähnlichen Typ. Entsorgung gabrauchter Batterien nach Angaben des Herstellers.
LISTED
I.T.E.
E319482
Li-ion
Made in Taiwan
LI-ION RECHARGEABLE BATTERY PACK
MODEL : DR202
DC 11.1V 7800mAh / 87Wh
Charge Current : 4.5A (max).
Charge Voltage : 12.9V (max).









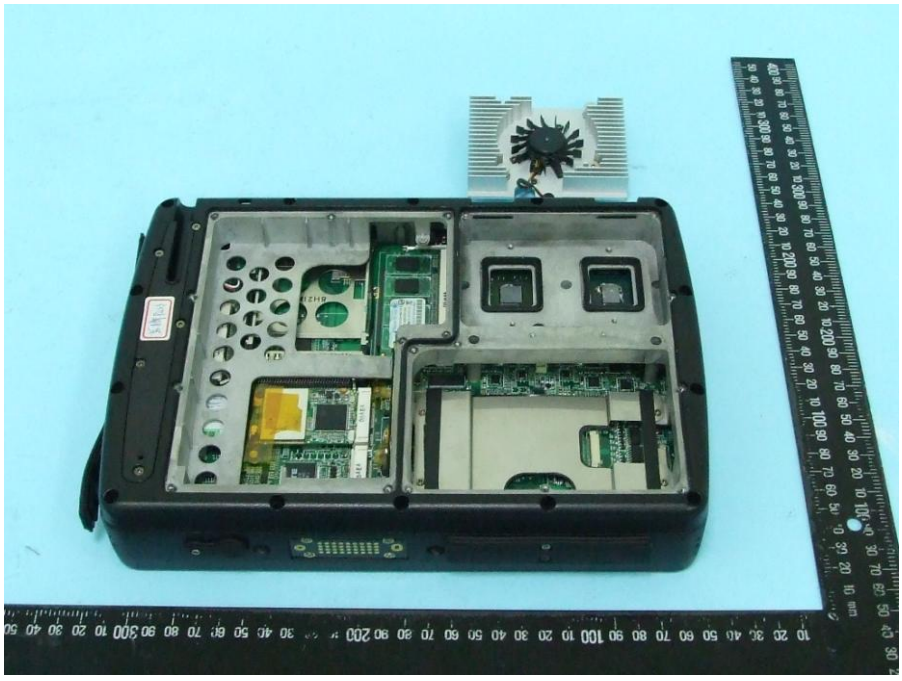


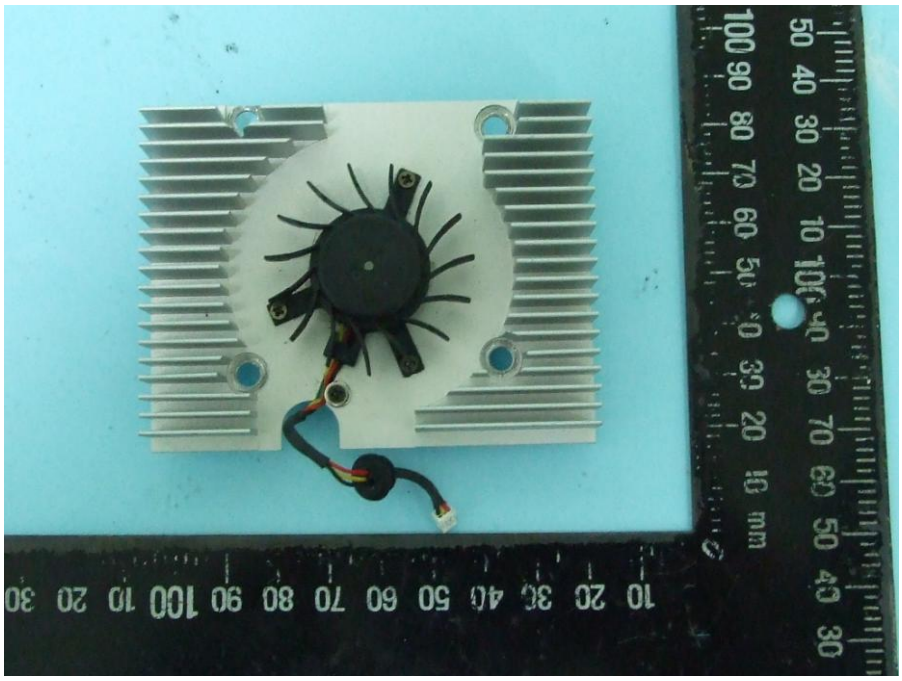

80GB
WD800BEVT
WD Scorpio Blue

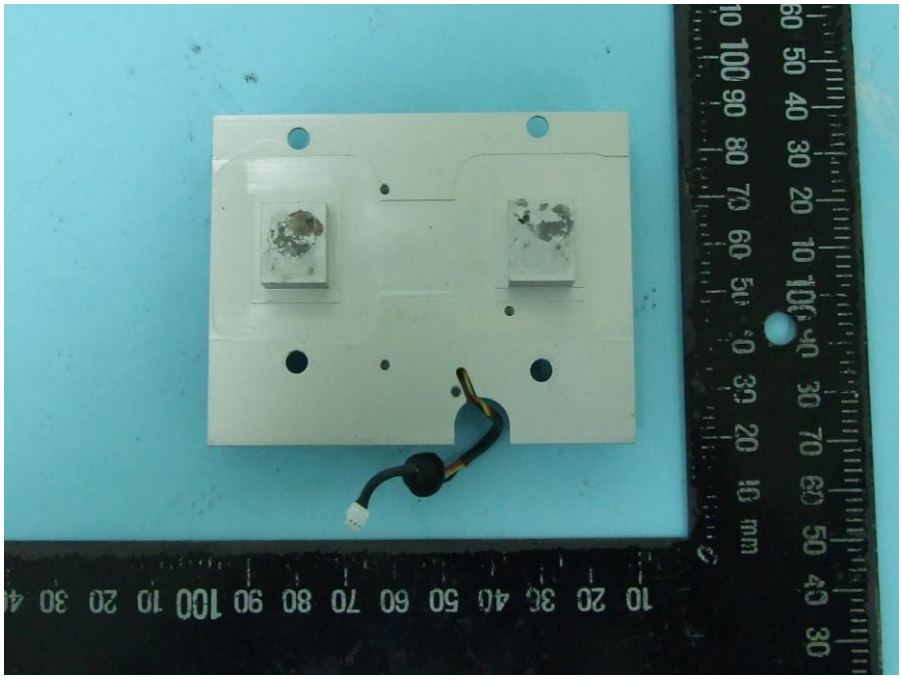


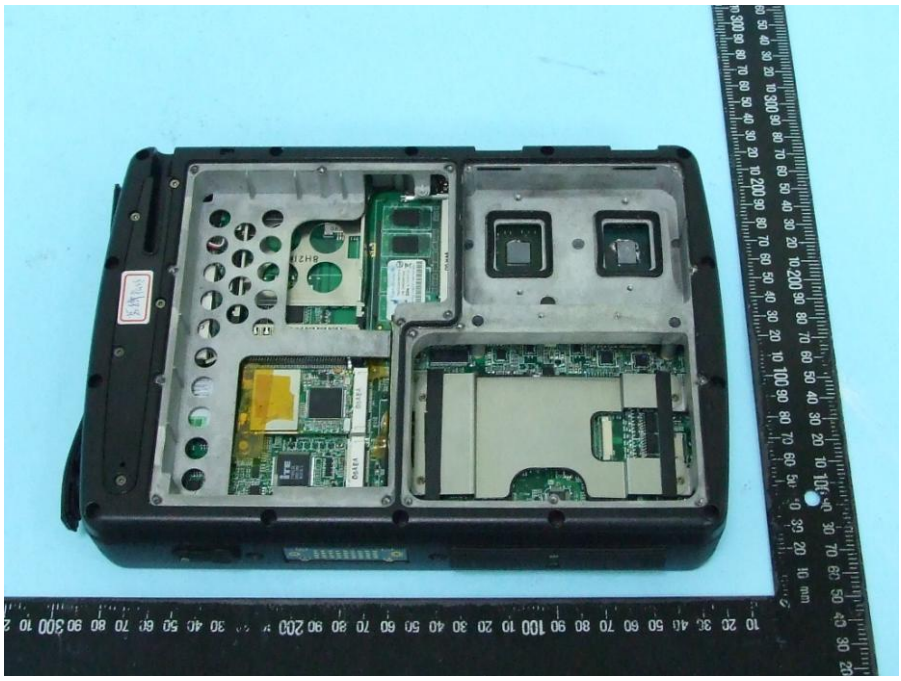

FRAGILE
DO NOT COVER
ANY DRIVE HOLES
WD
www.westerndigital.com
80GB
WD800BEVT
S/N : WX81A2007019
MDL : WD800BEVT – 00A23T0
Product warranty will be void if seal,
label or cover is removed or damaged.
Do not press
on top cover.
WWN:50014EE2AED5E8E0
DATE: 28 FEB 2010
LBA : 156301488
DCM : HHCTJHBB
5VDC : 0.55A
DCX : 0A0122137
R/N : 771672
U.S. Patents: 6178056, 5956196,6289484, 6263459
Product of Thailand
Canada ICES – 003 Class B/
NMB – 003 Classe B
RoHS
SERIAL ATA
D33015
E101559
N3565
WDT – 771672(B)
WD Scorpio® Blue™

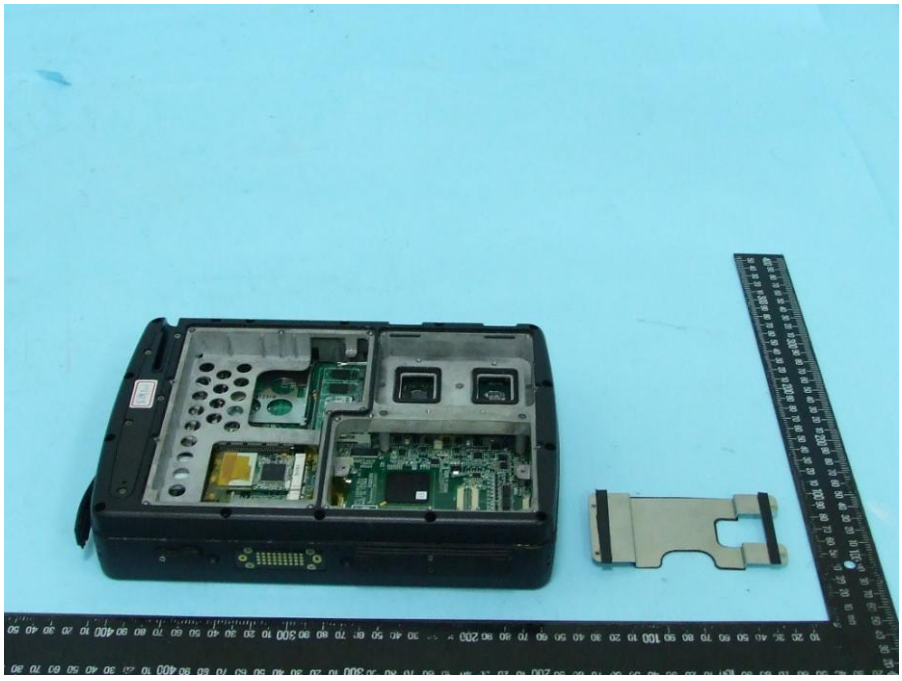




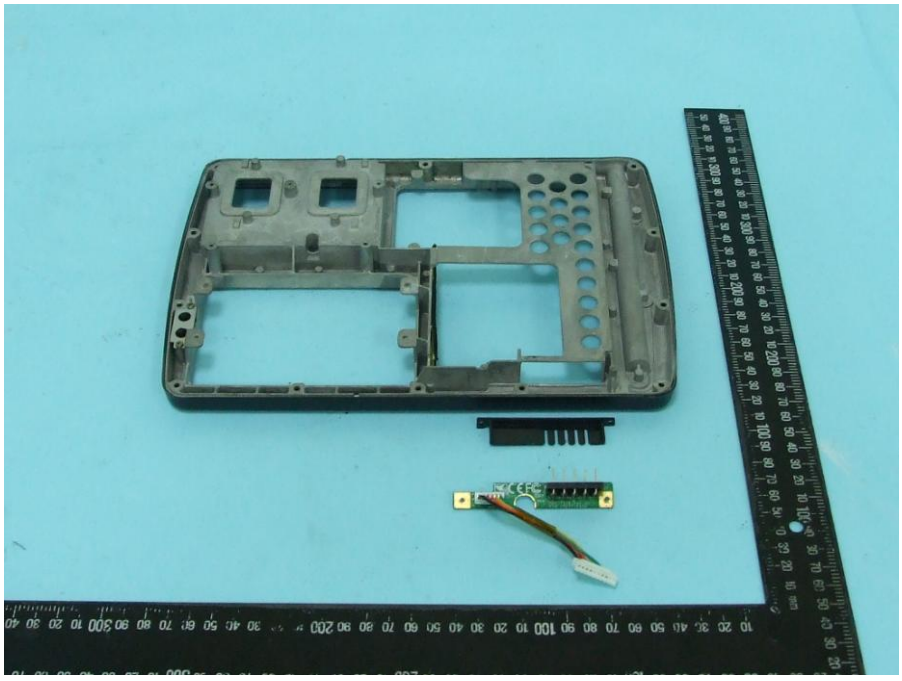






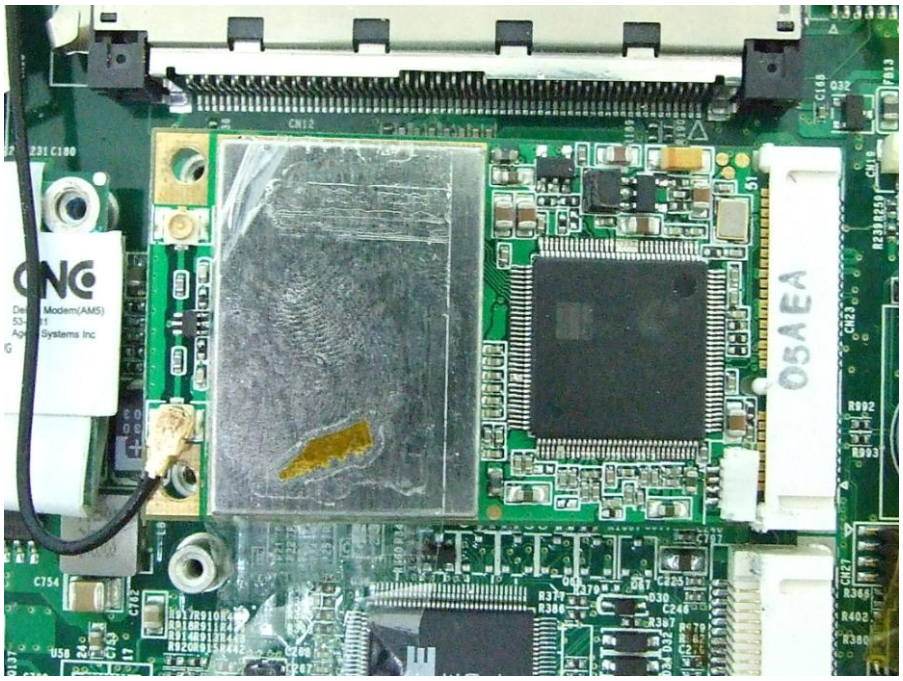


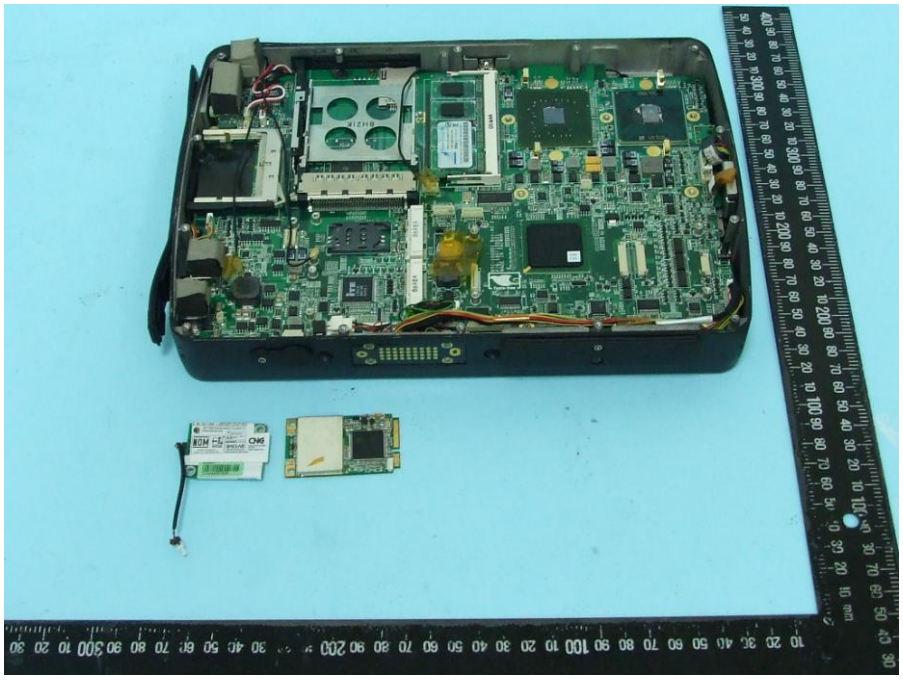


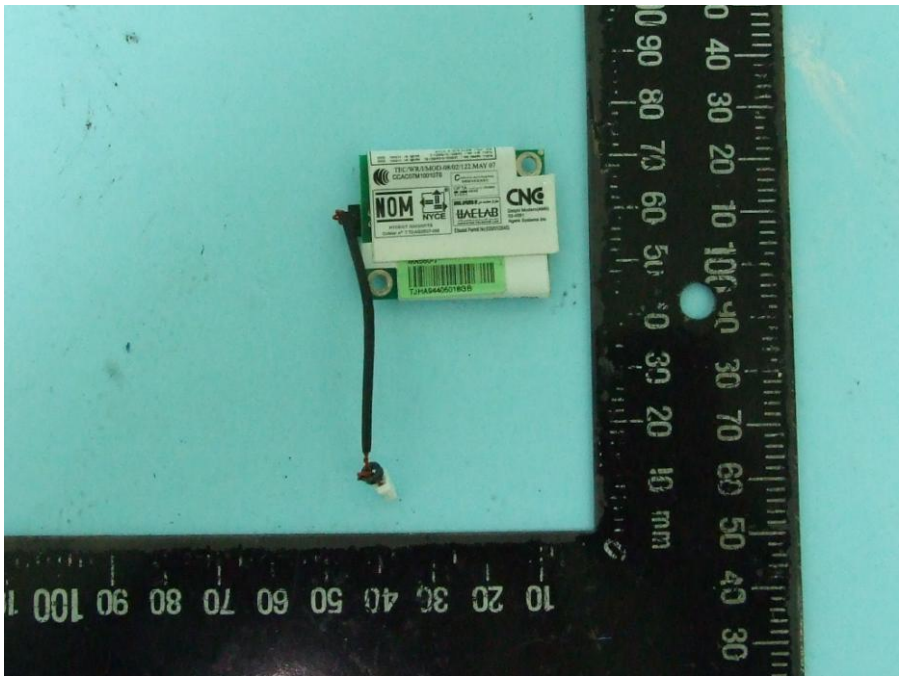


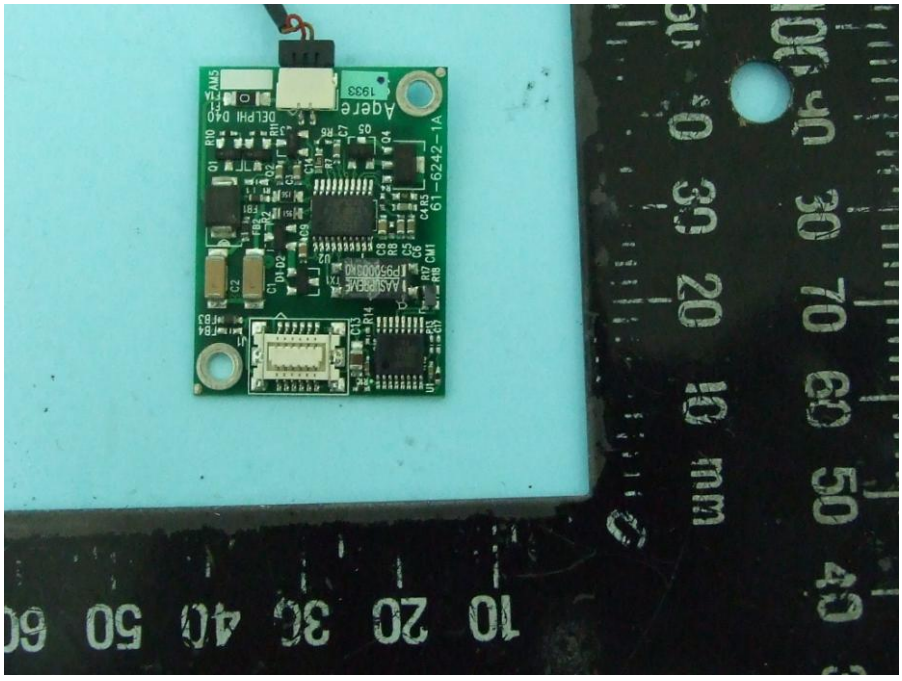


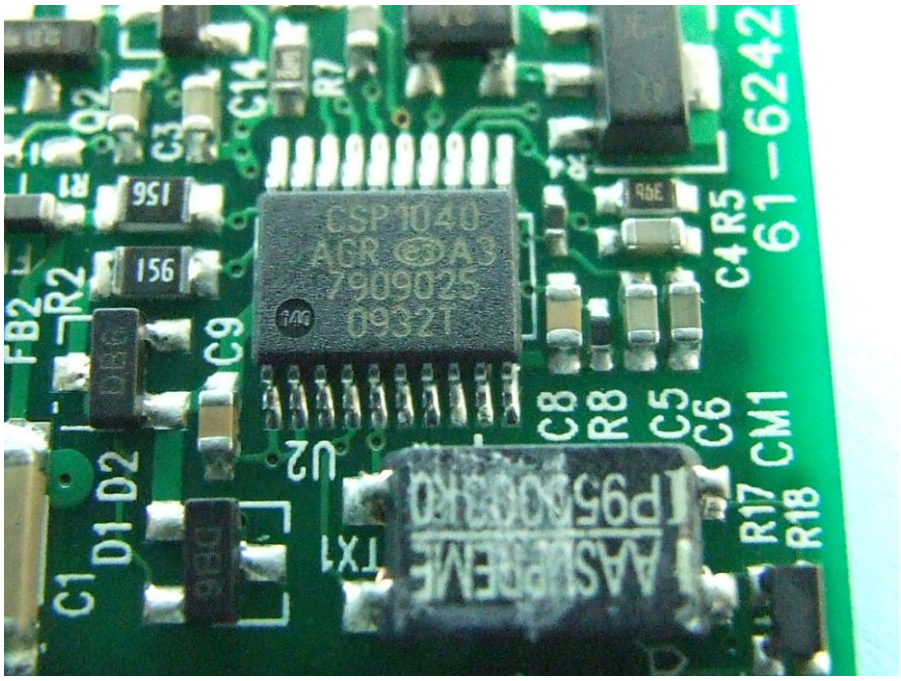


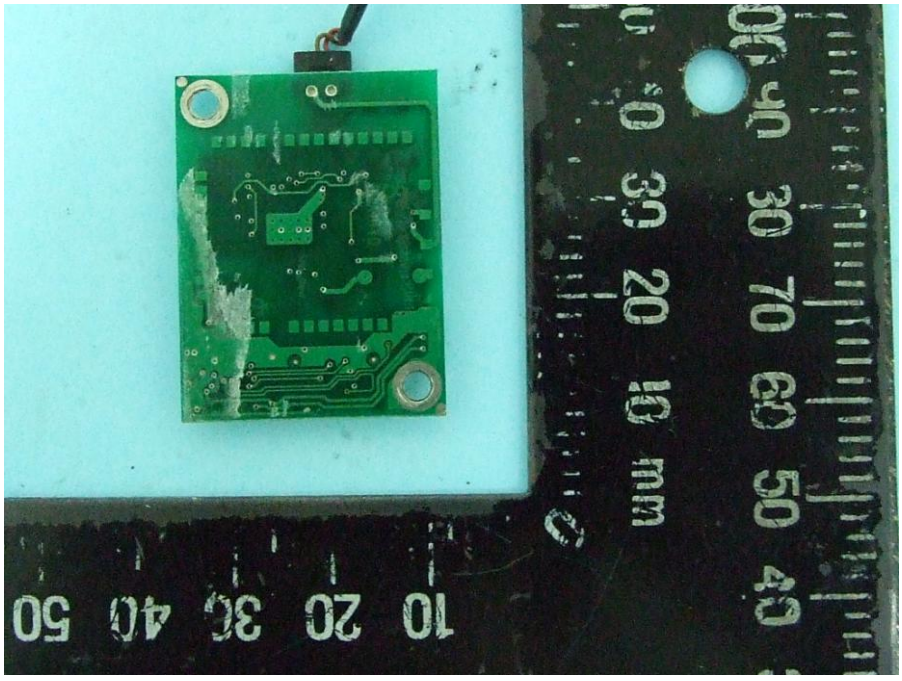


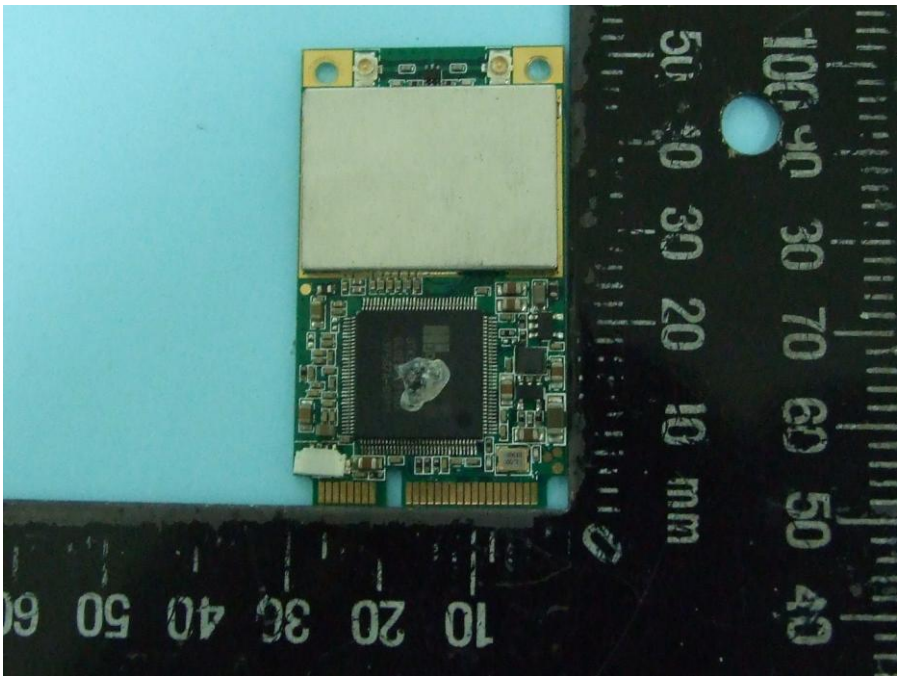


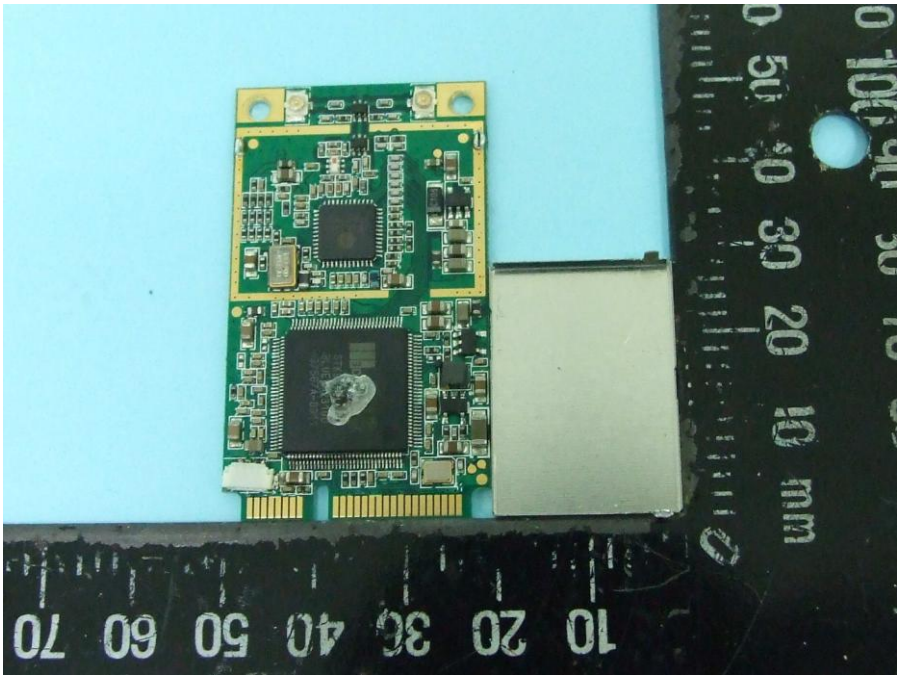

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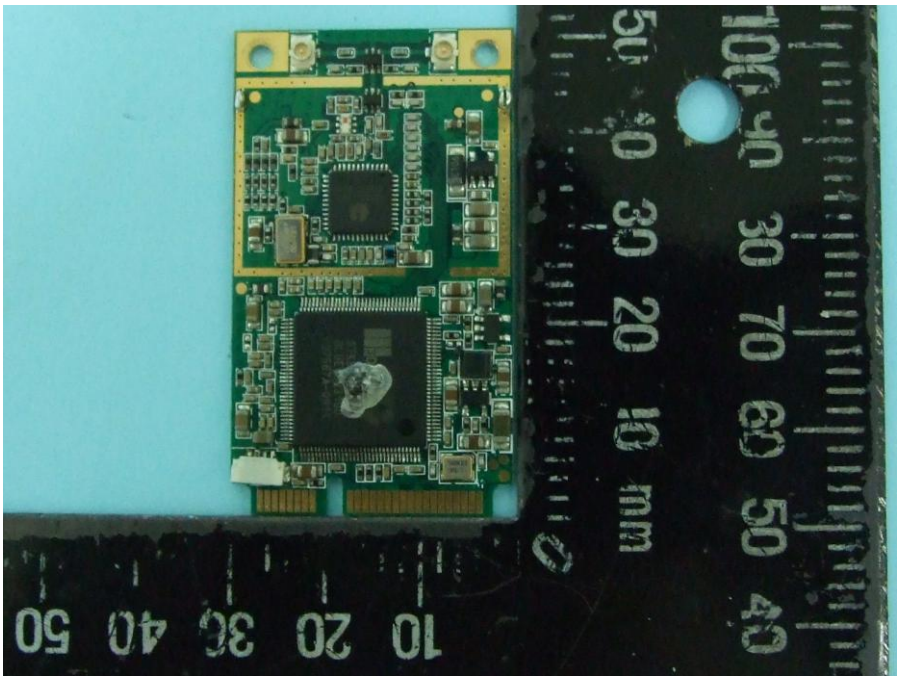

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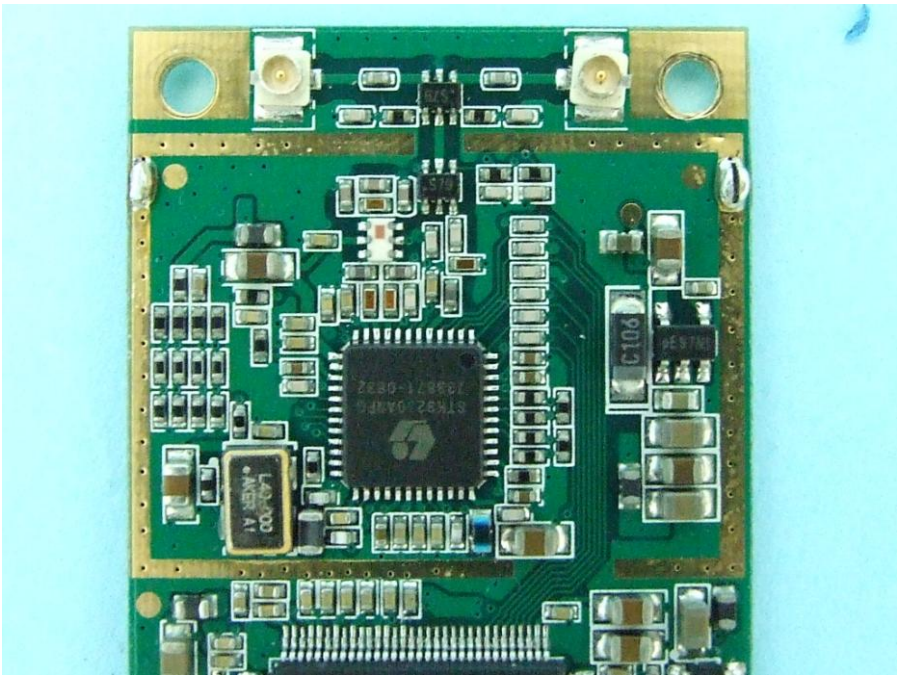

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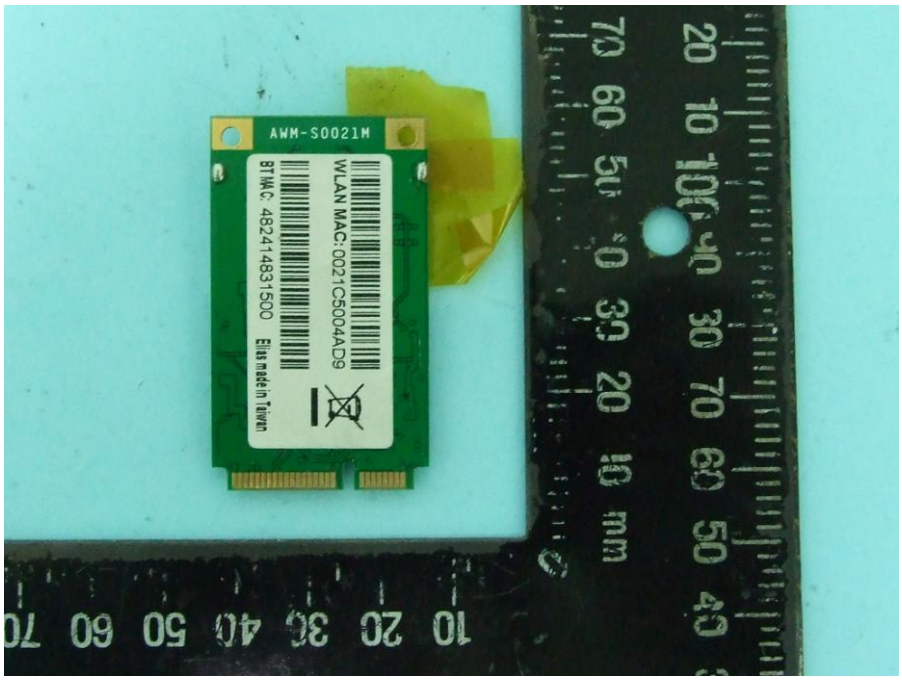

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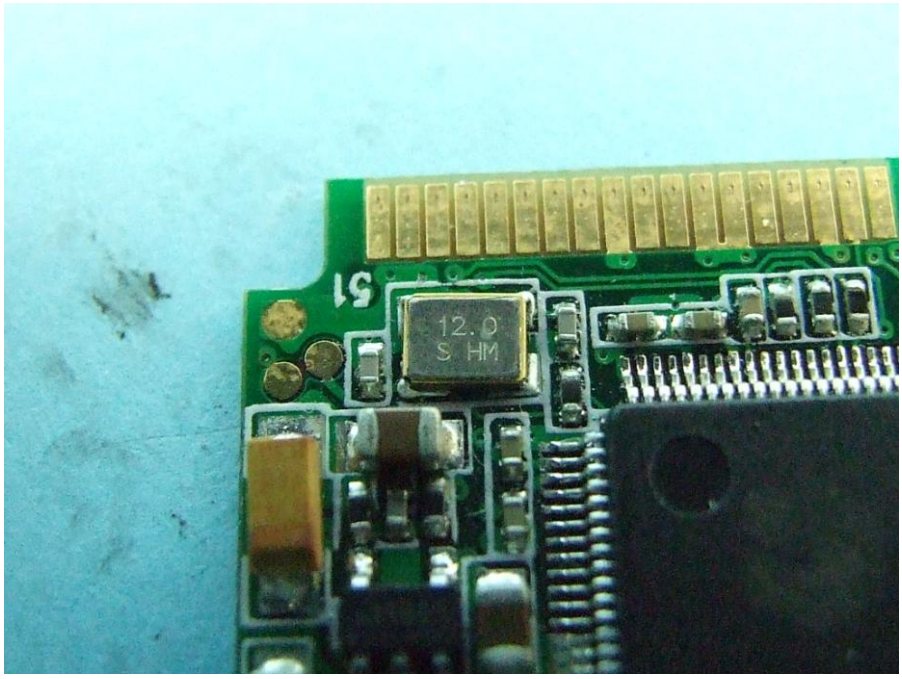




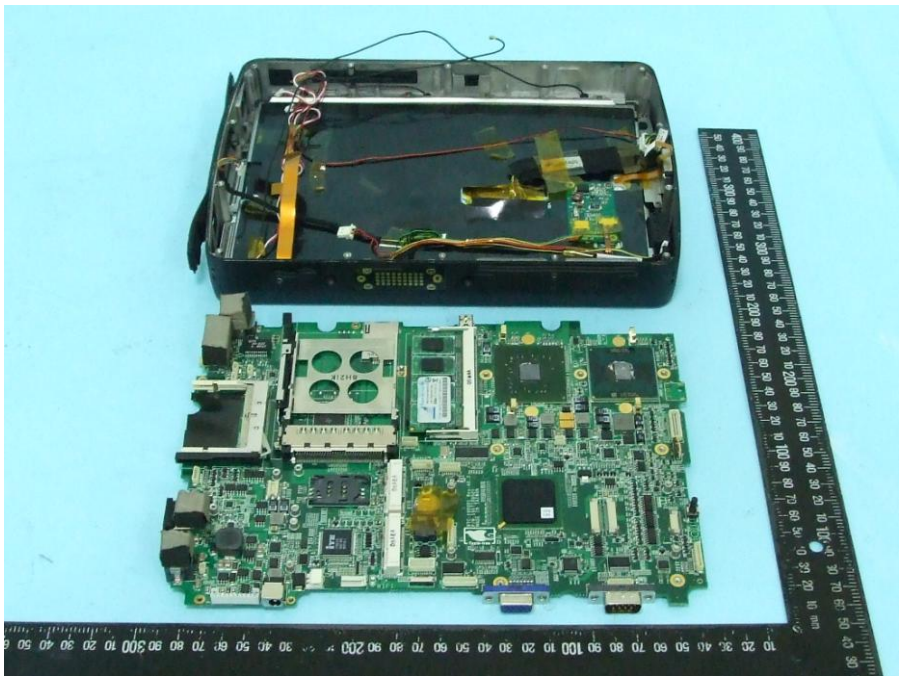


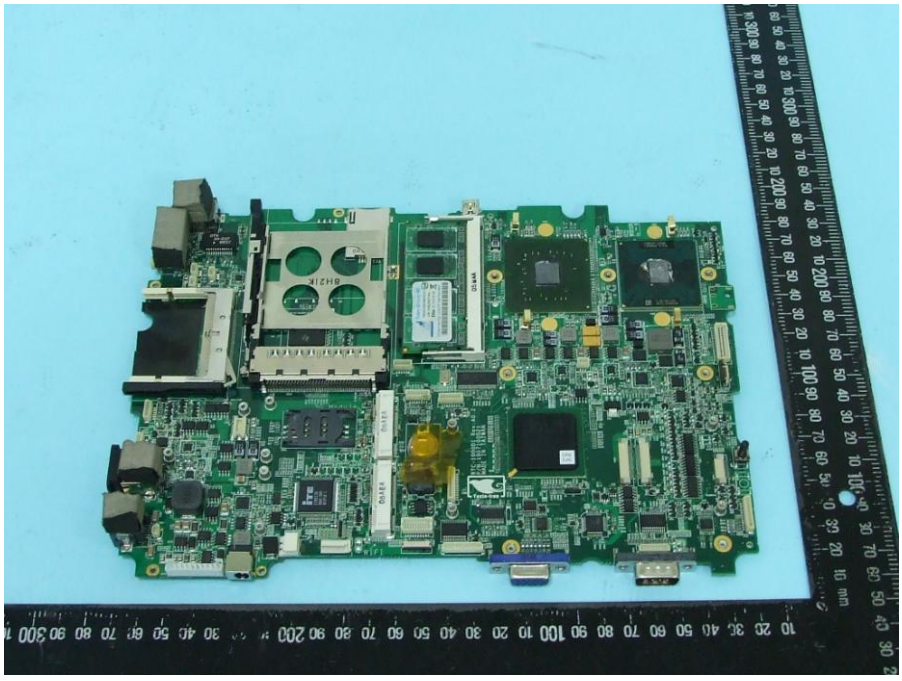

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Elitegroup made in Taiwan

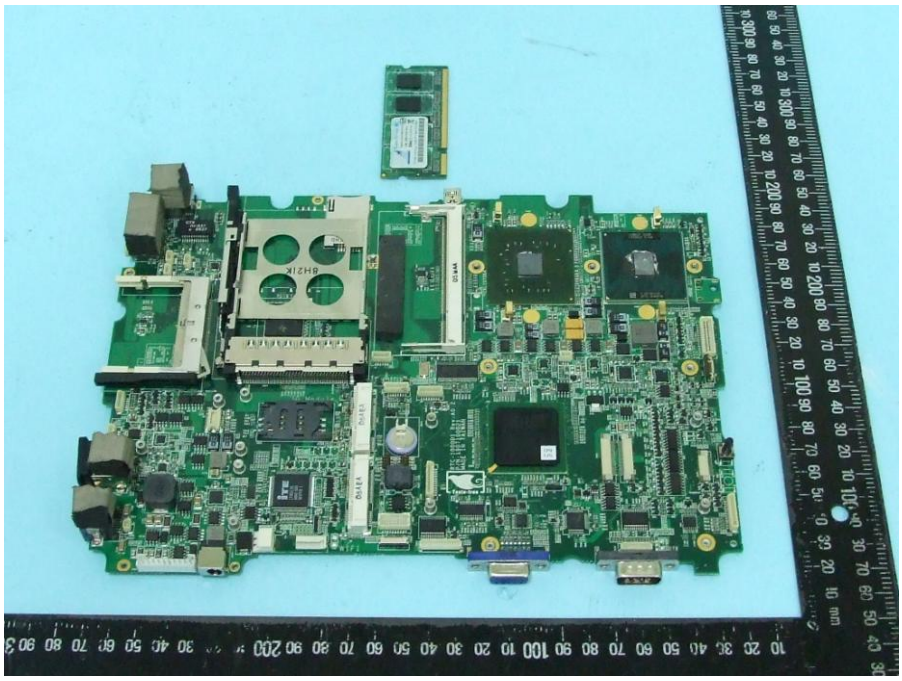

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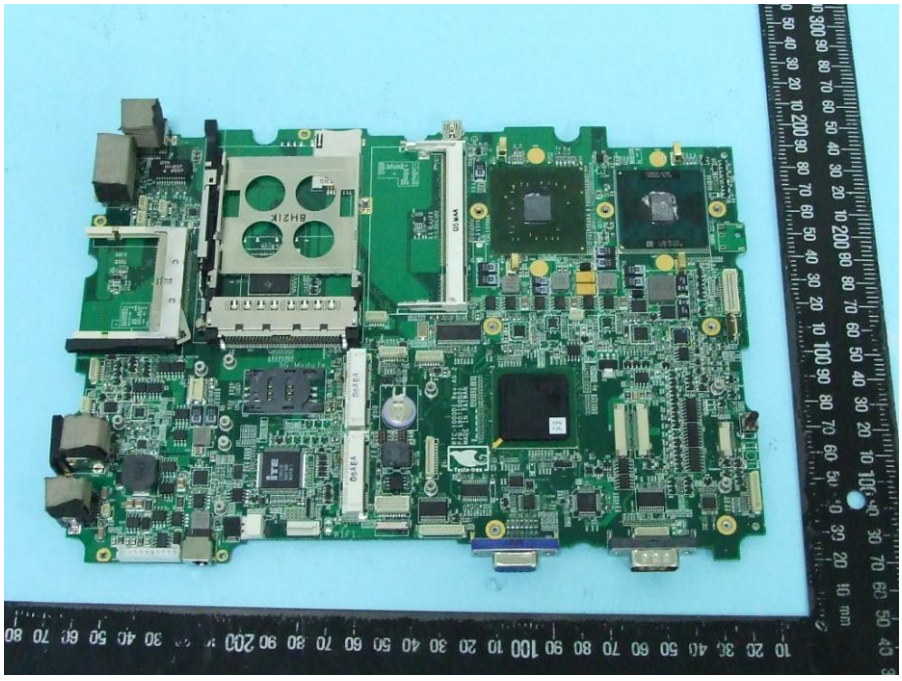







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U4
Team Group INC
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Warranty void if removed

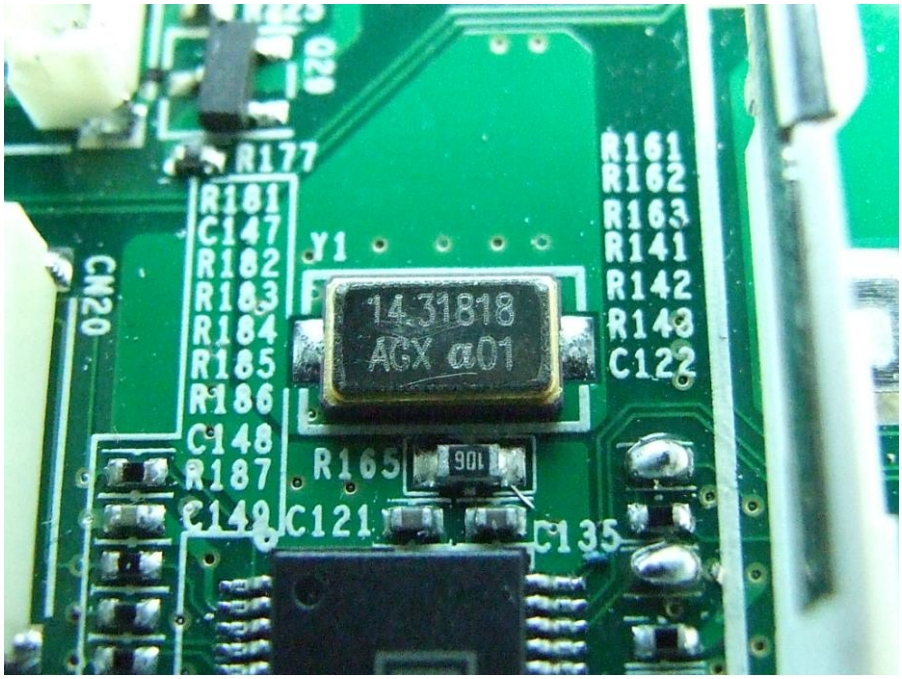

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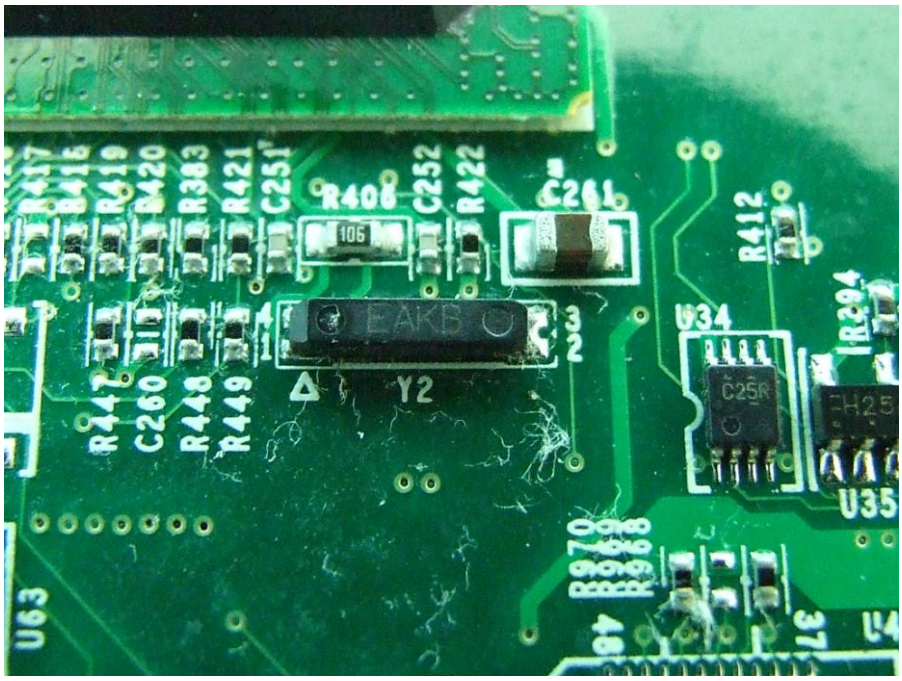


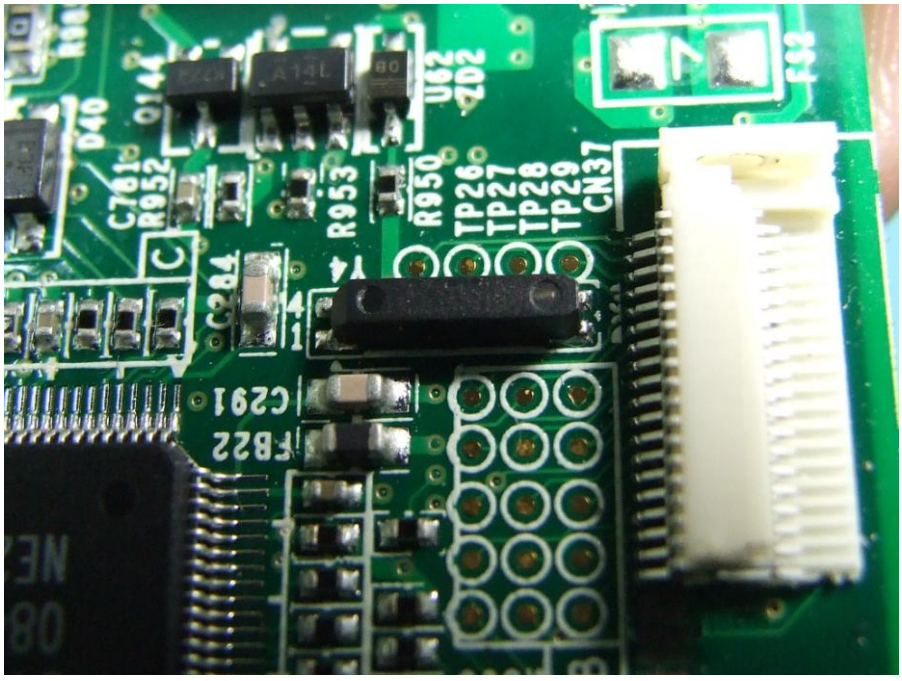

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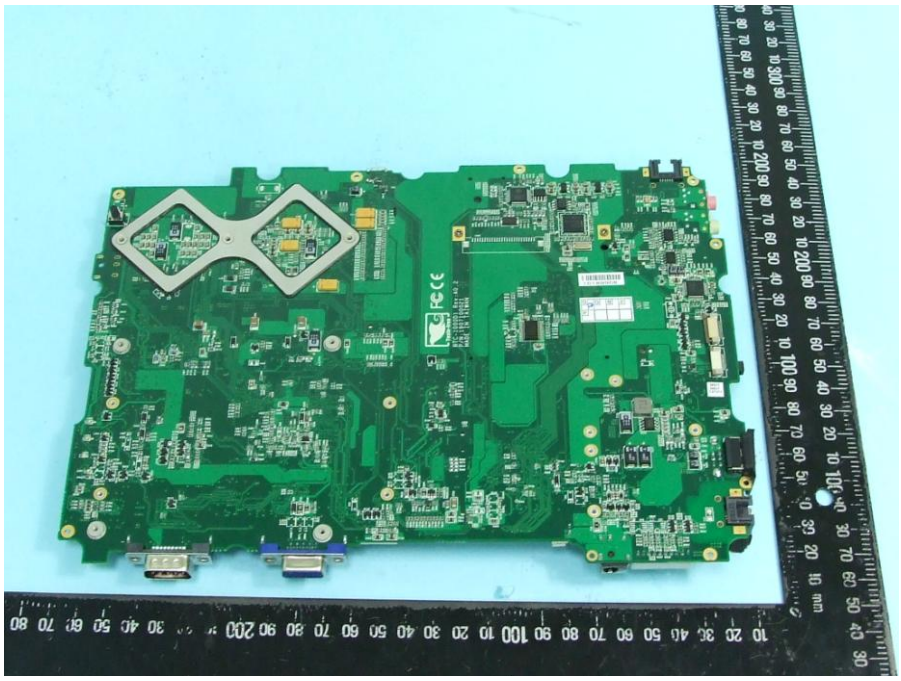

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1.2G

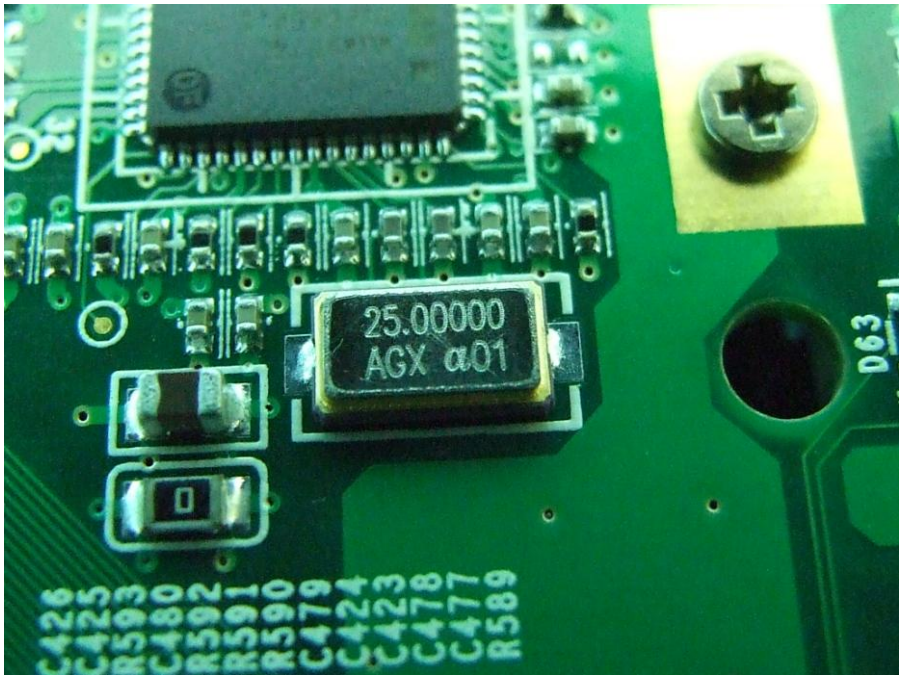

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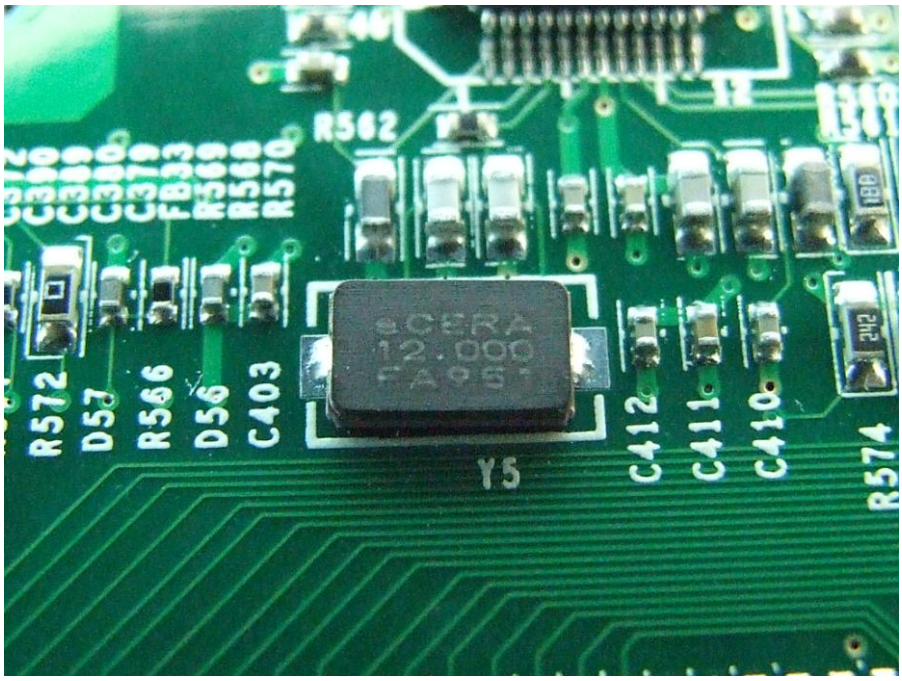

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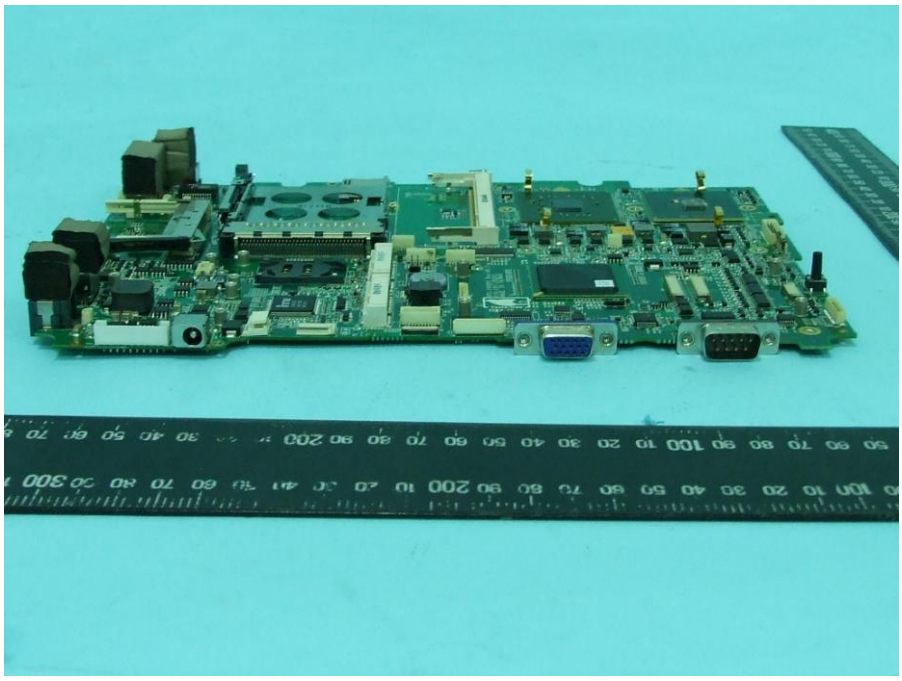

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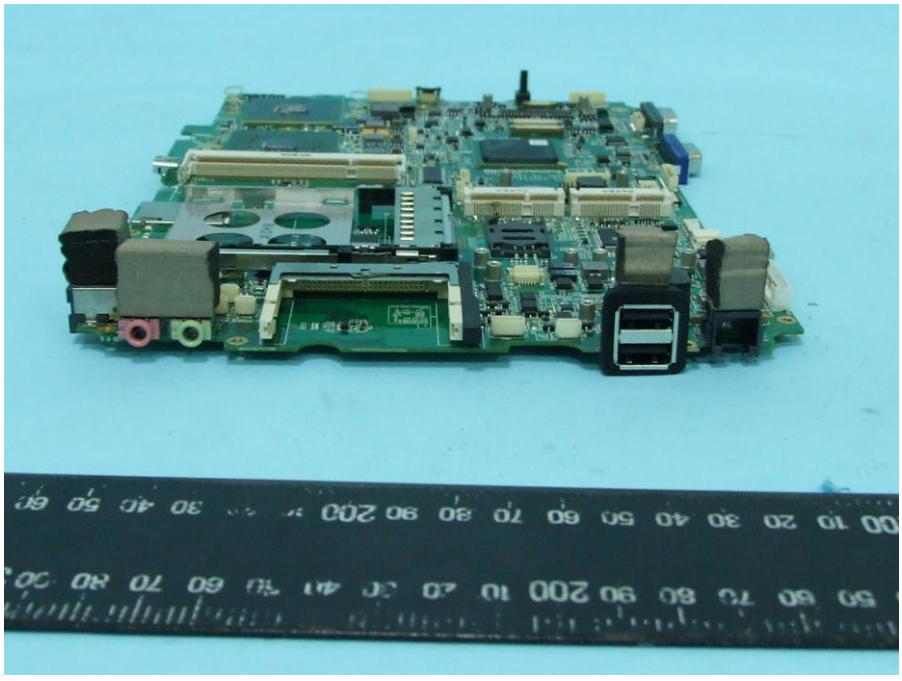


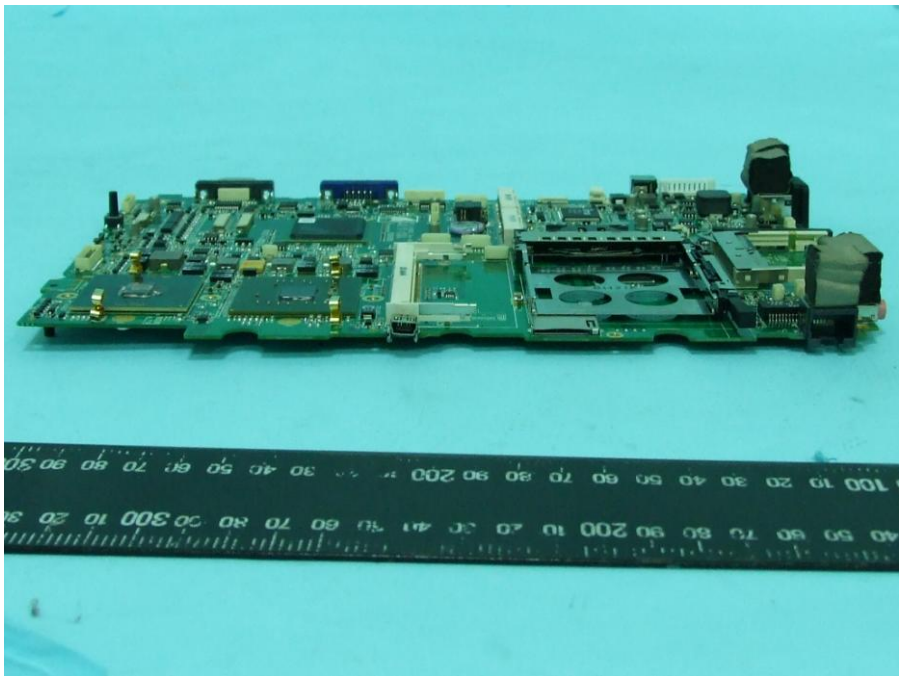

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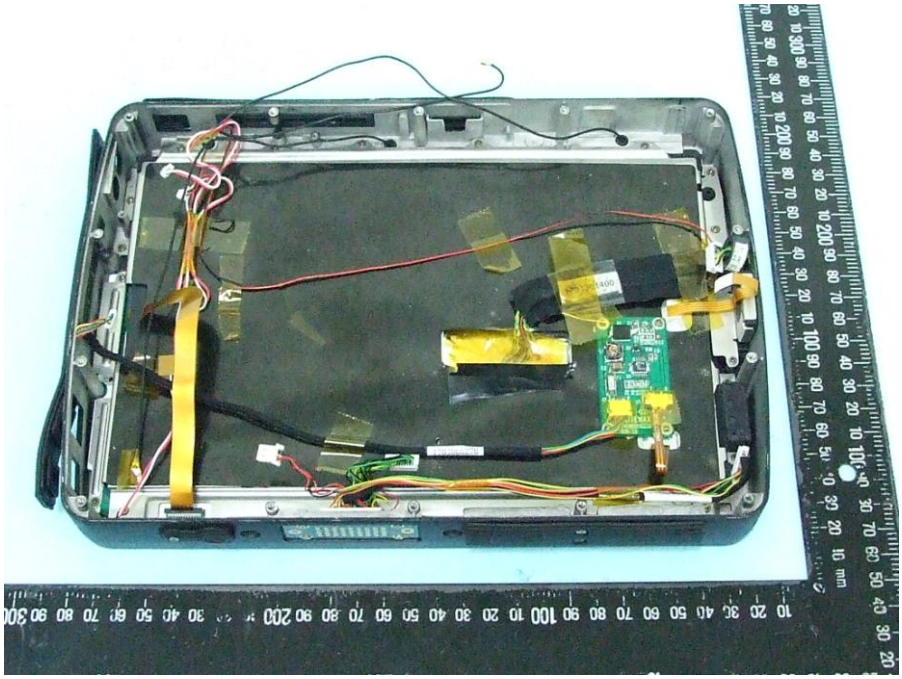

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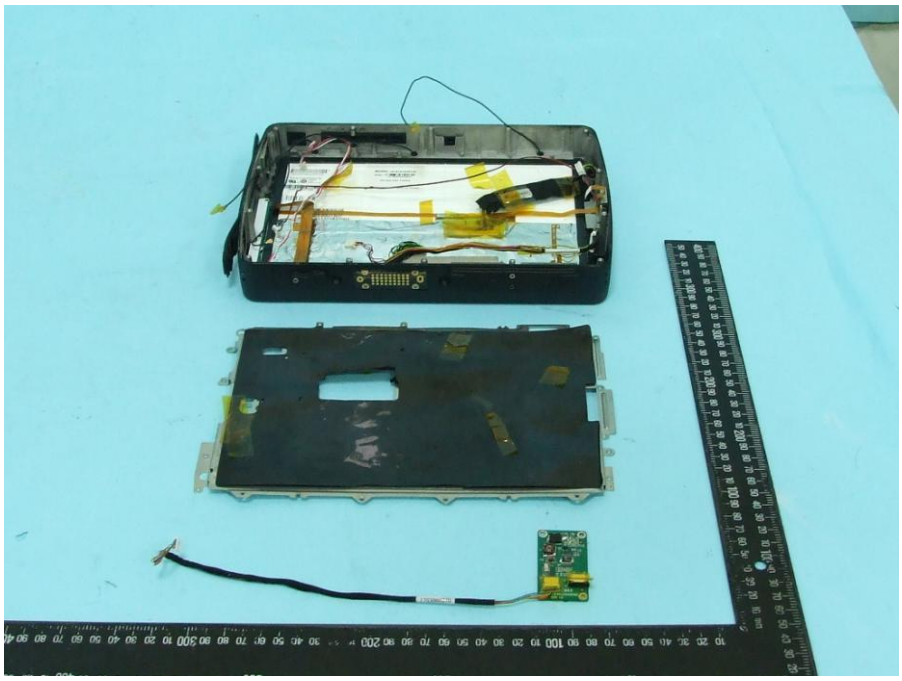

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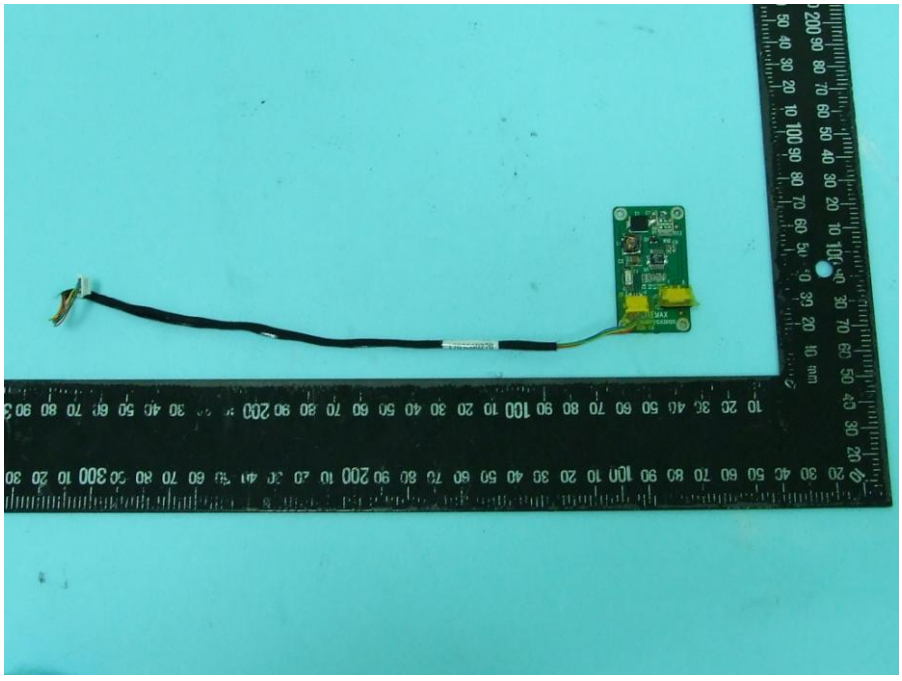


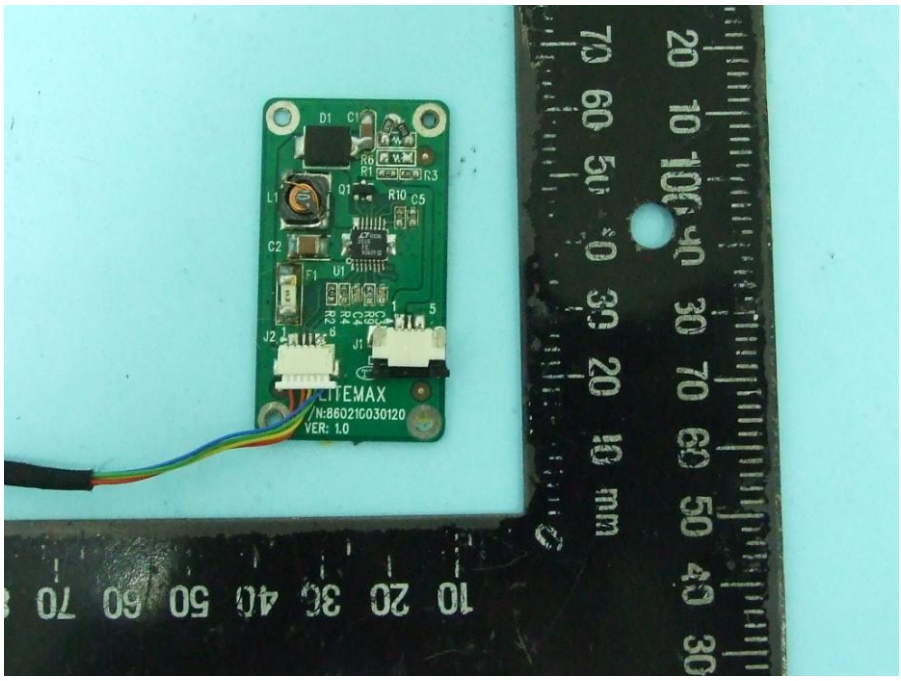


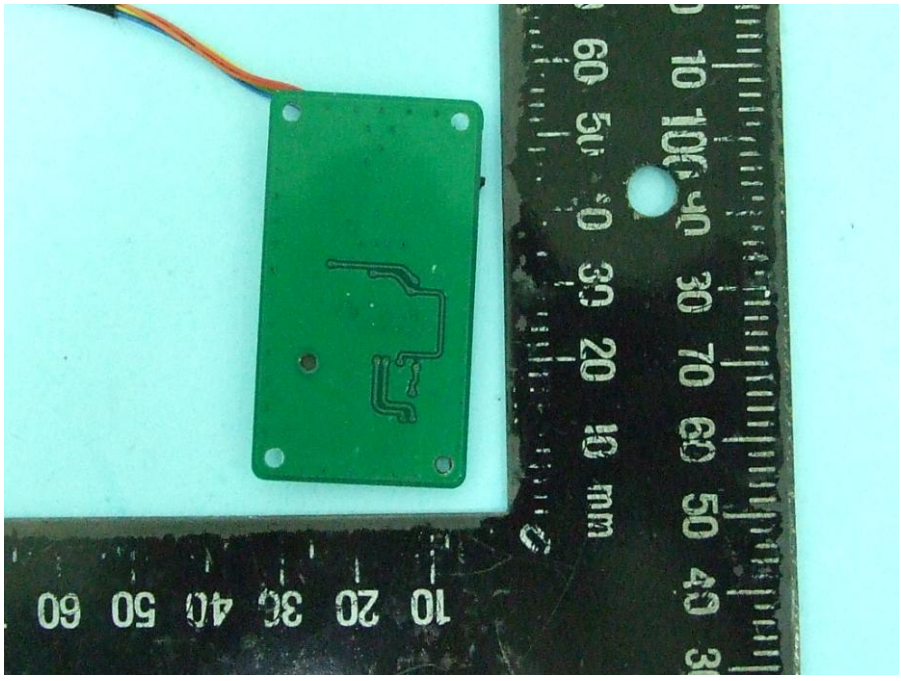


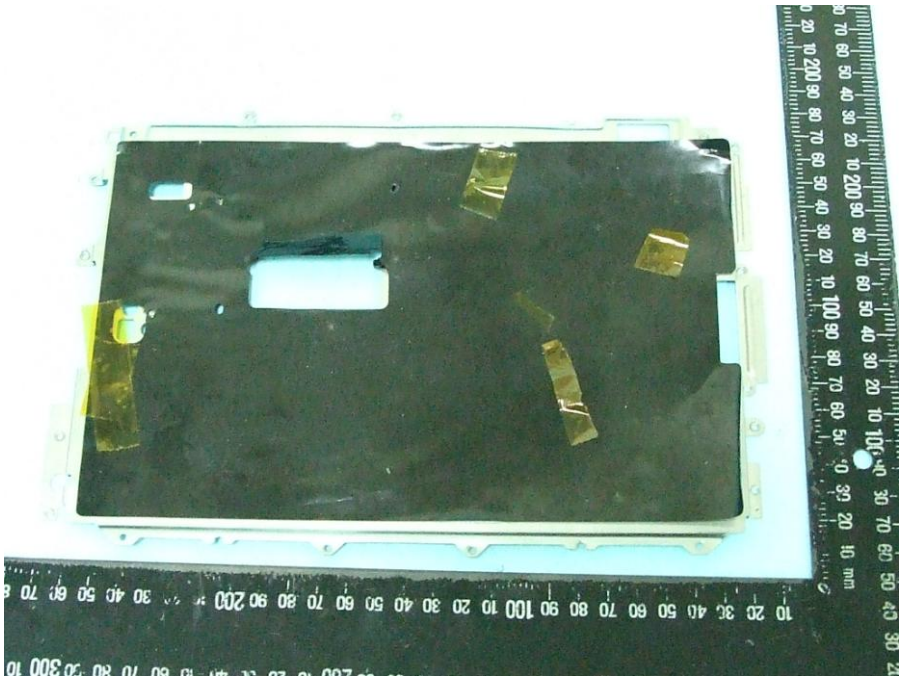


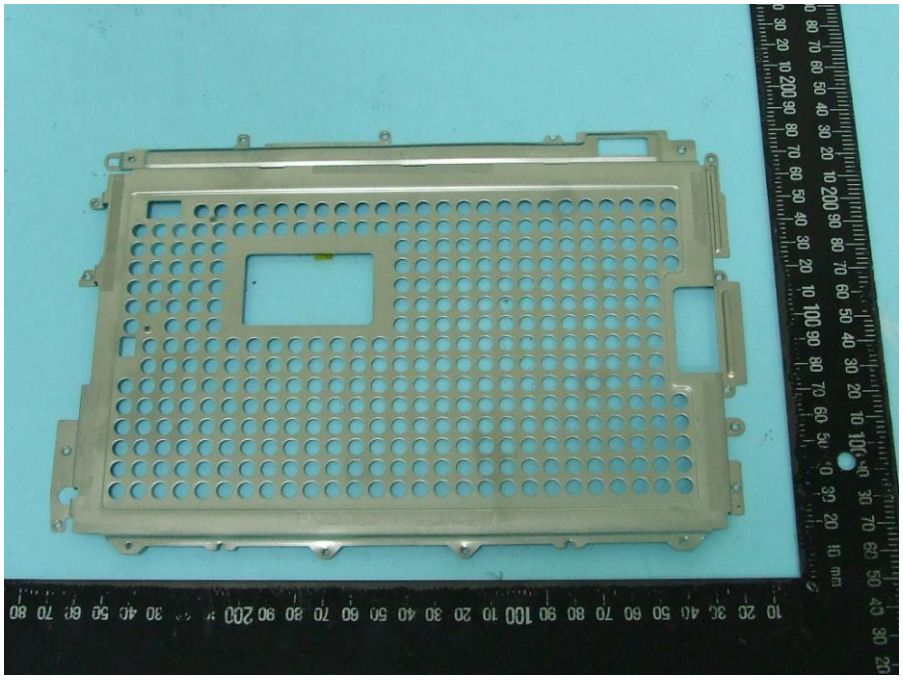


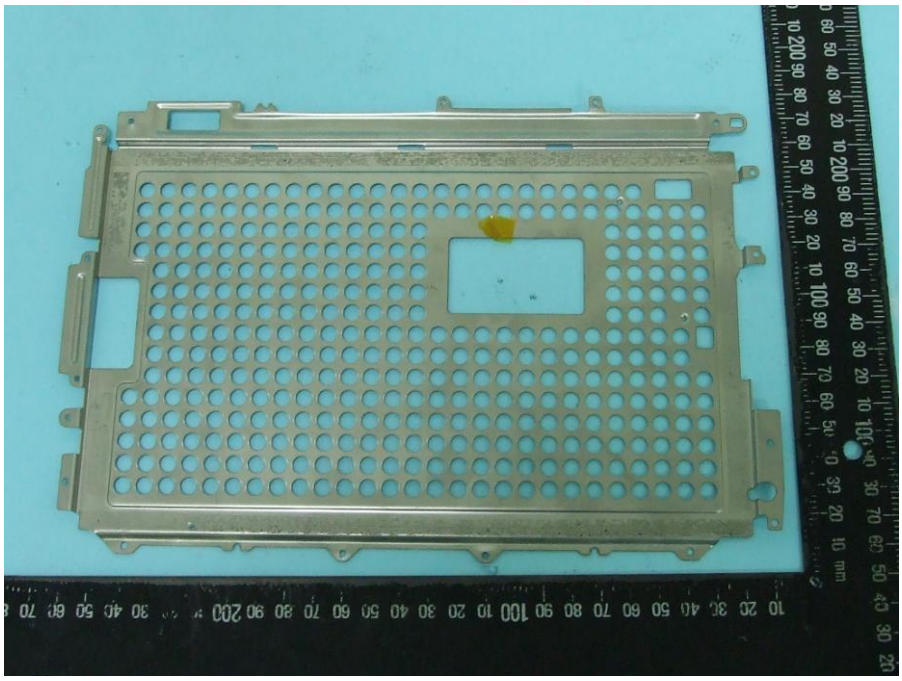


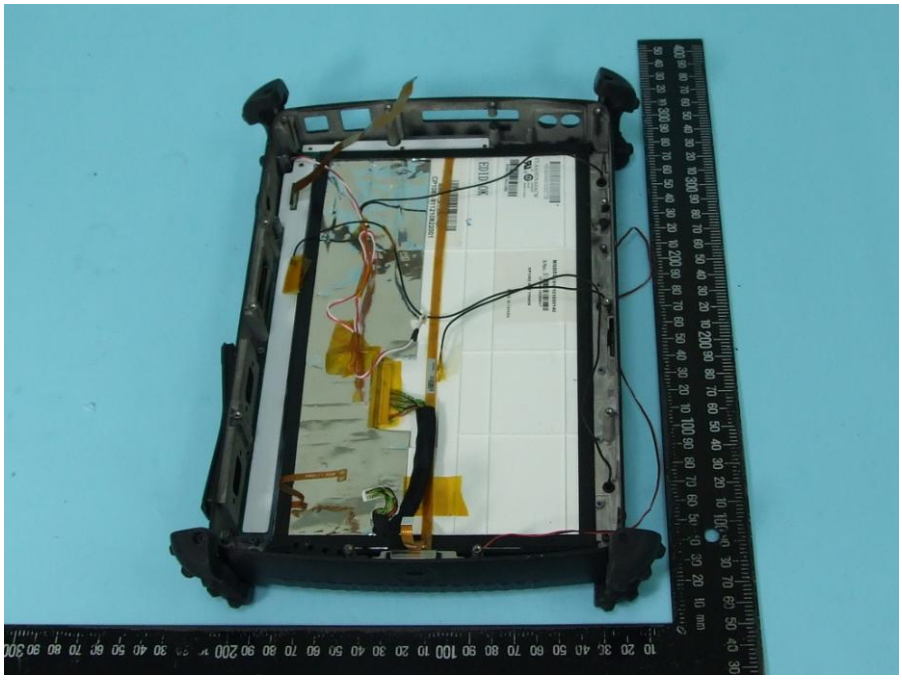

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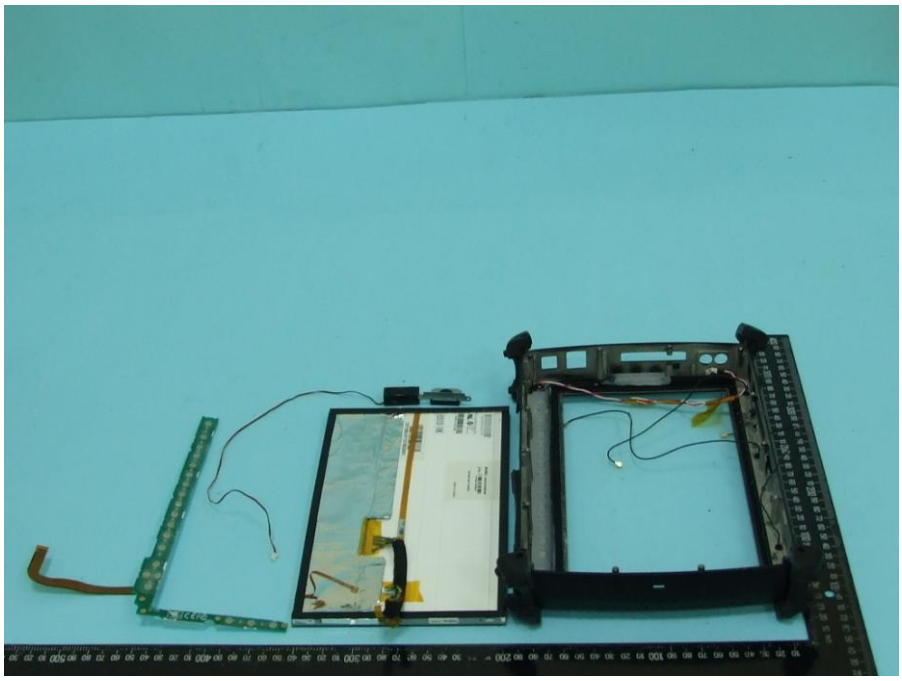


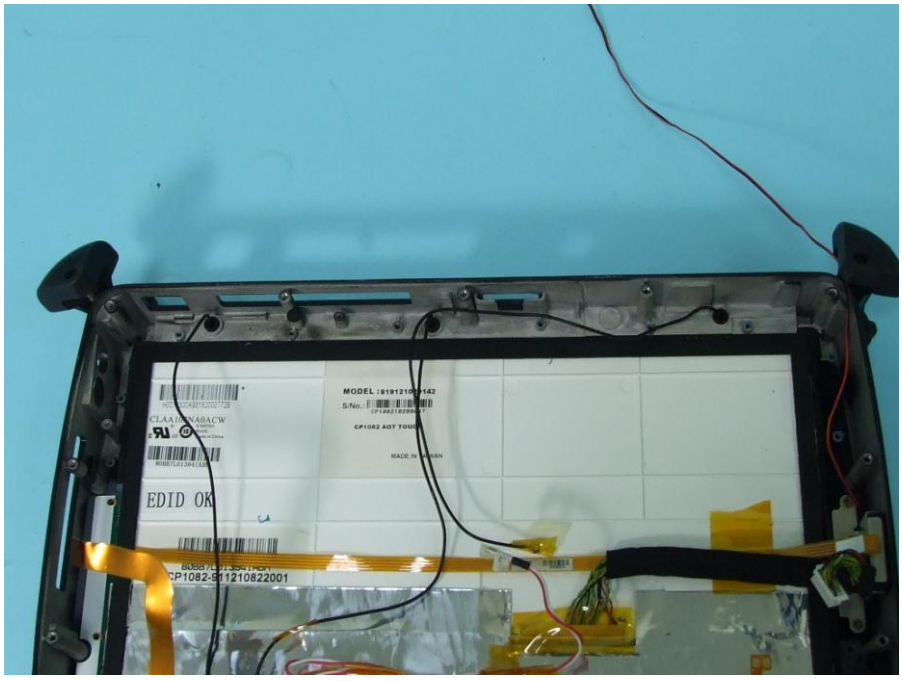


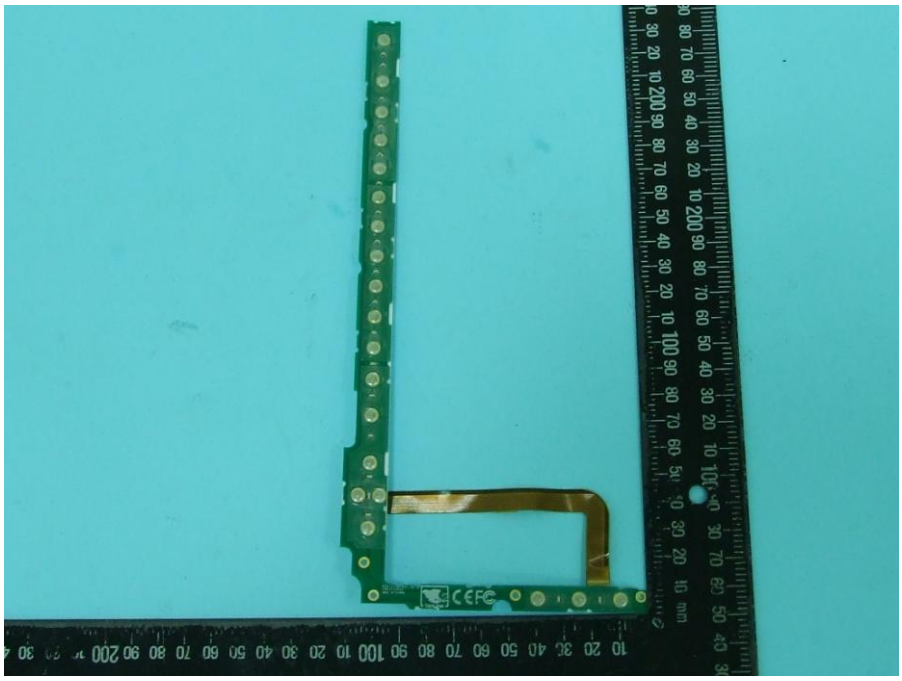


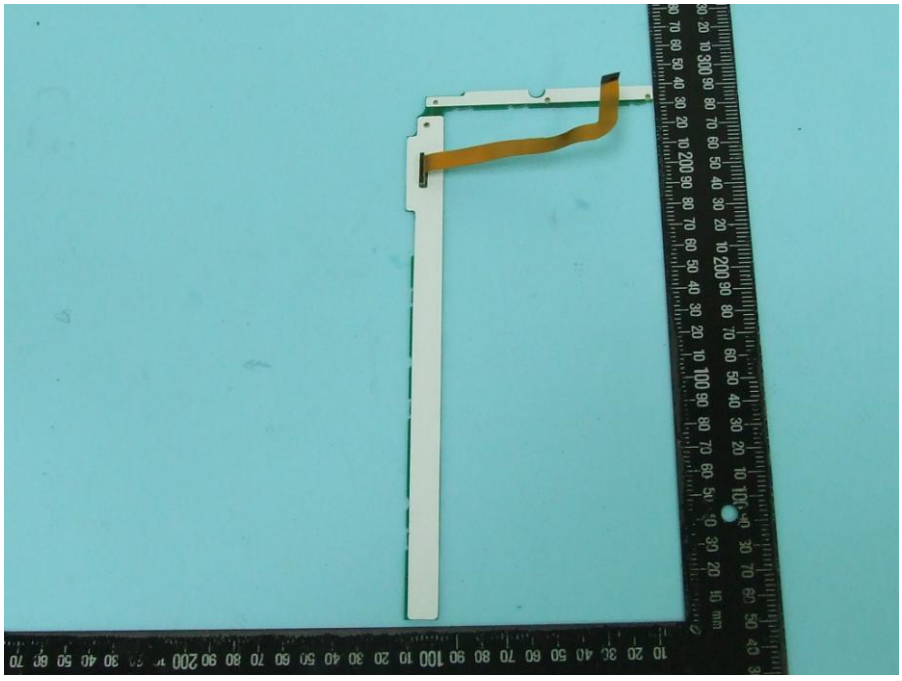




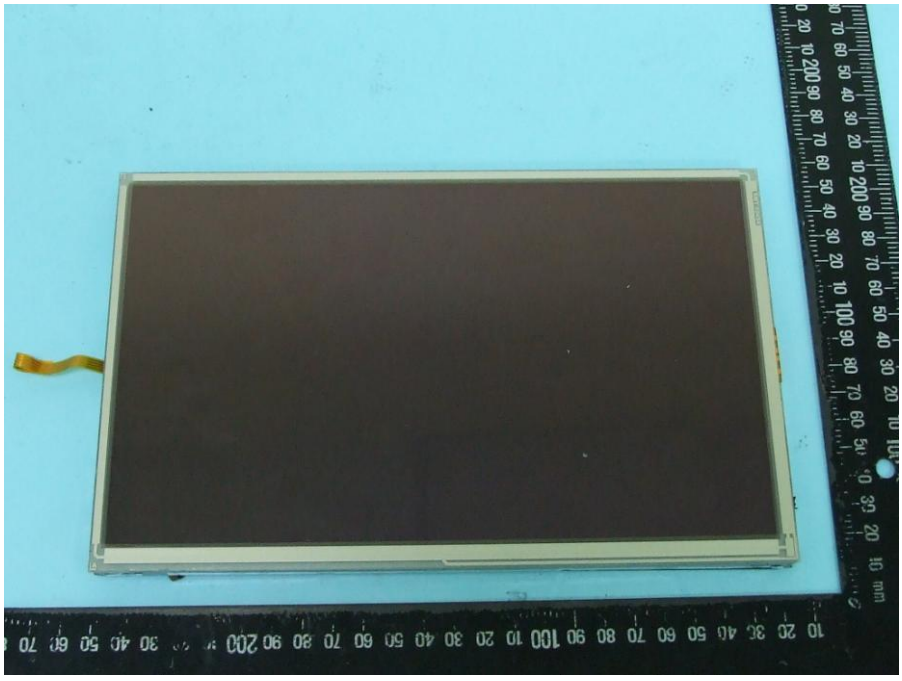


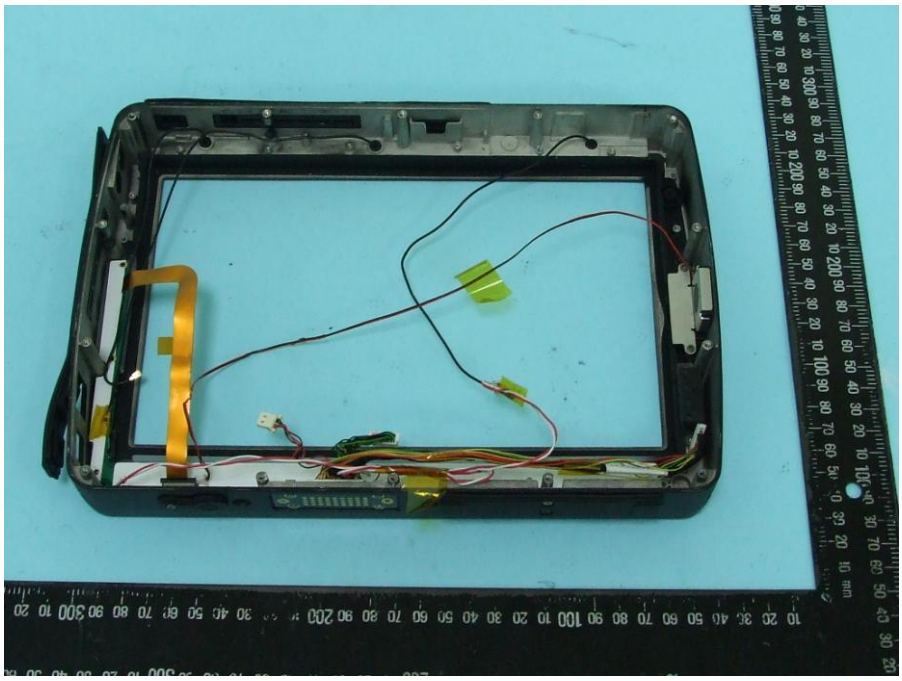

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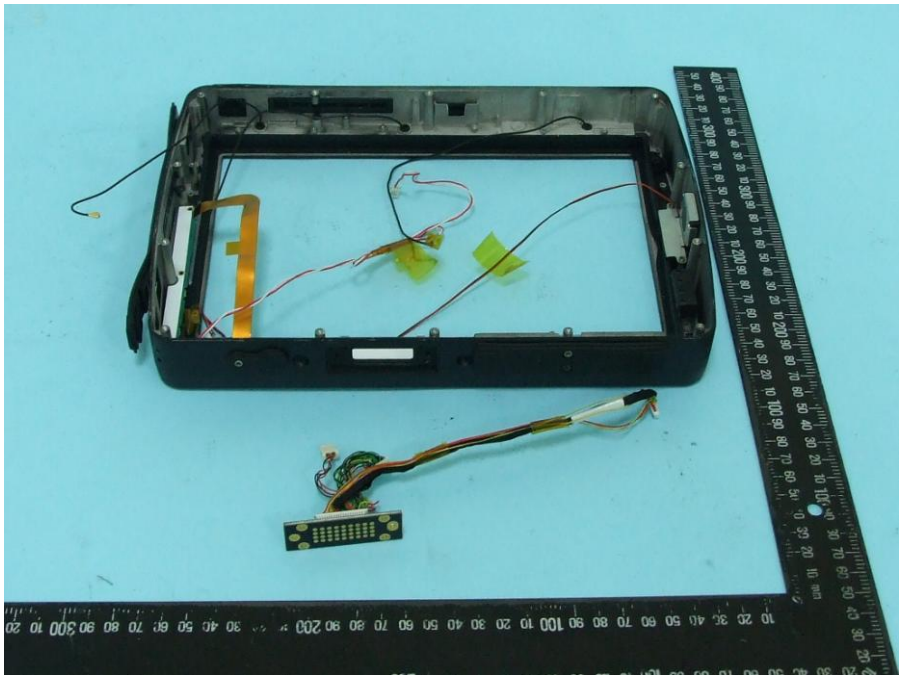


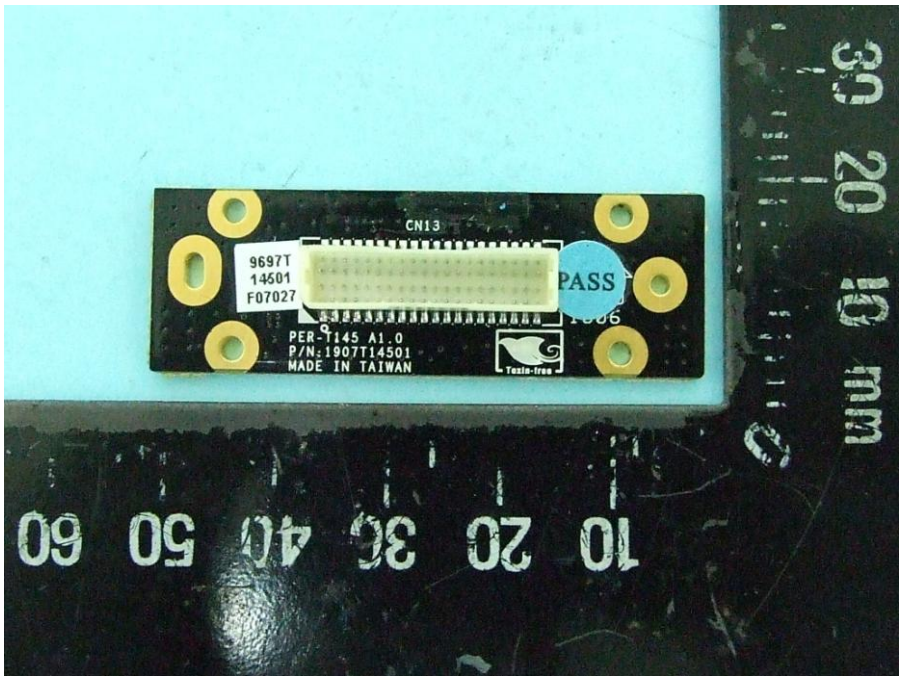


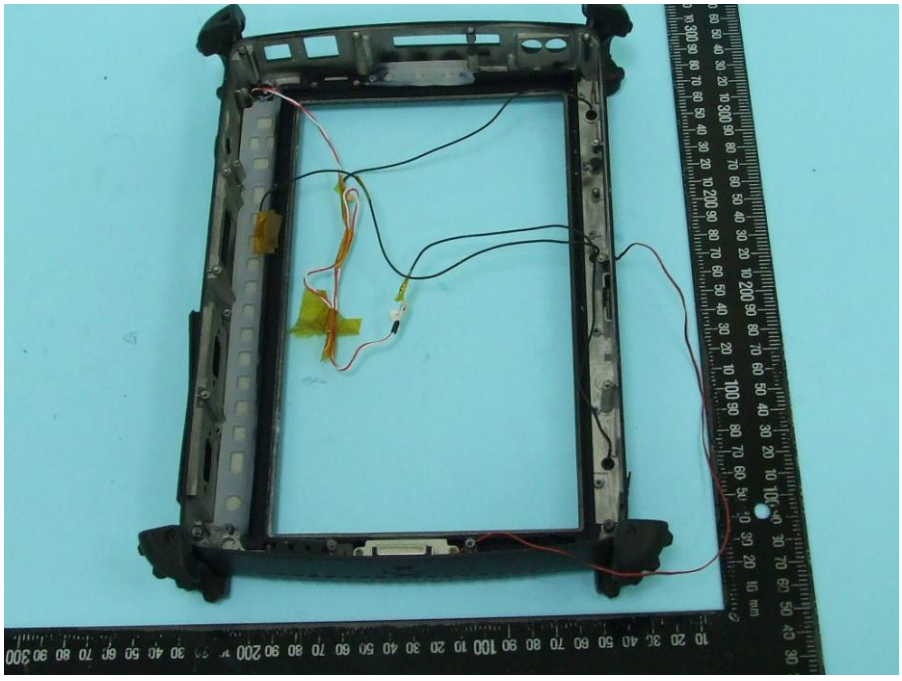

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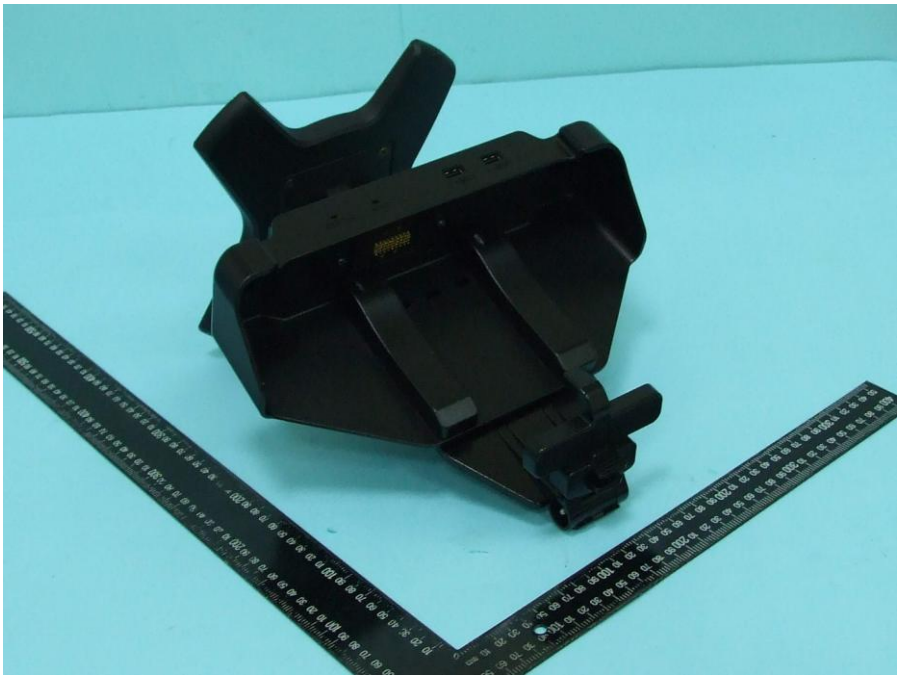


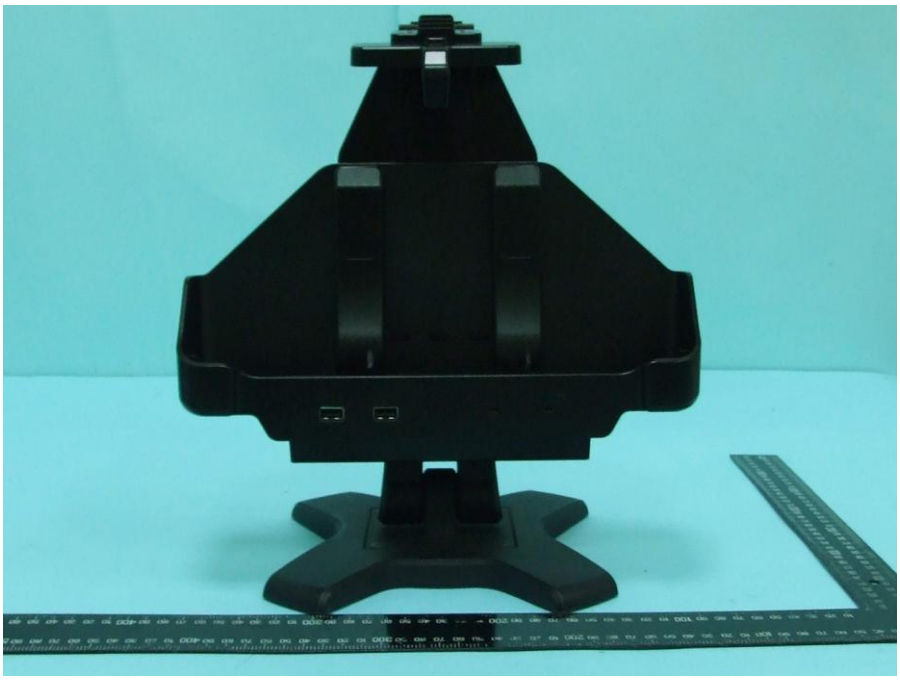



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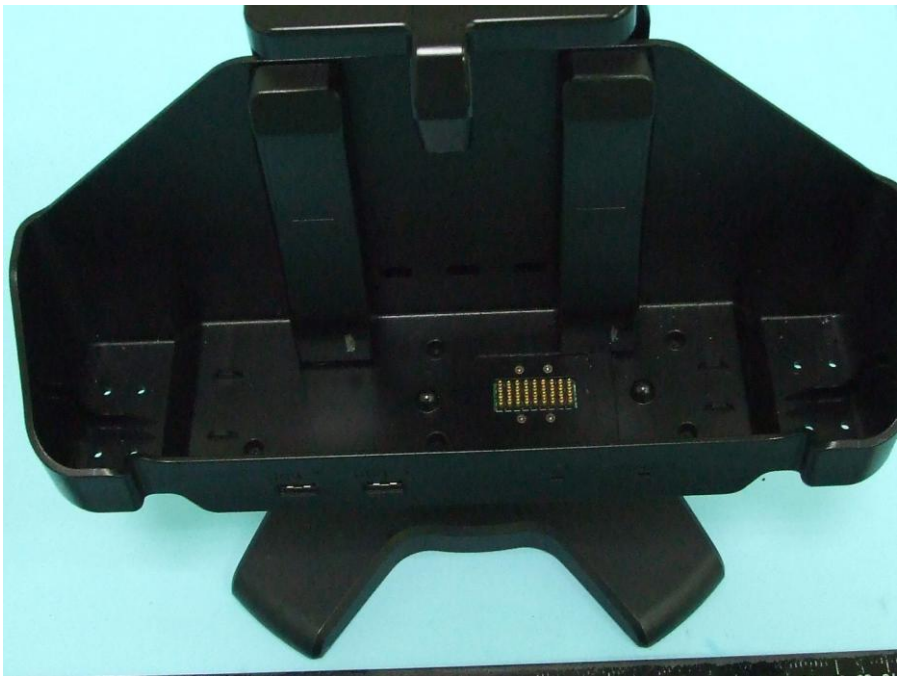


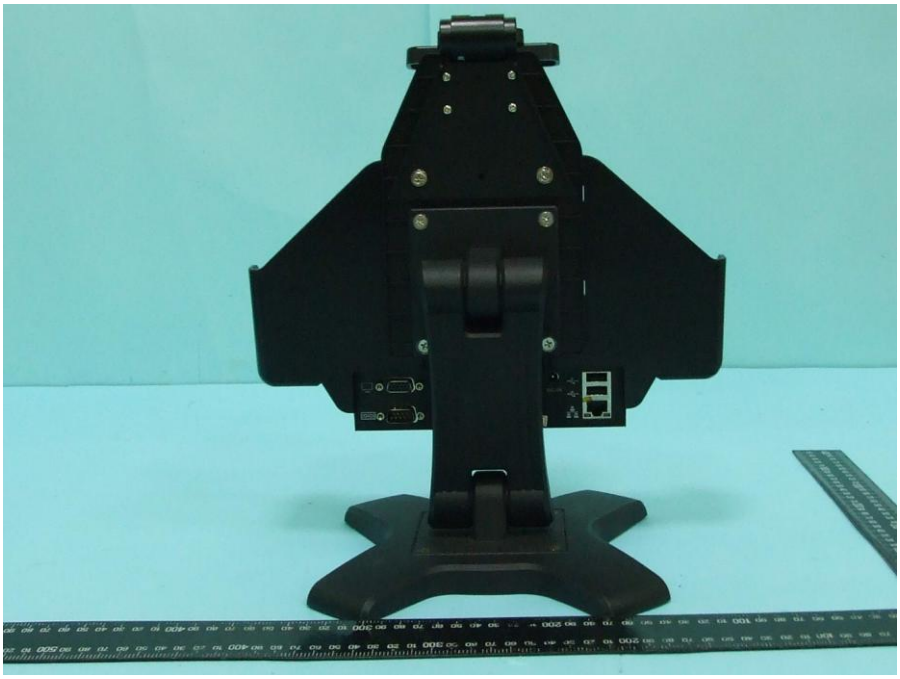




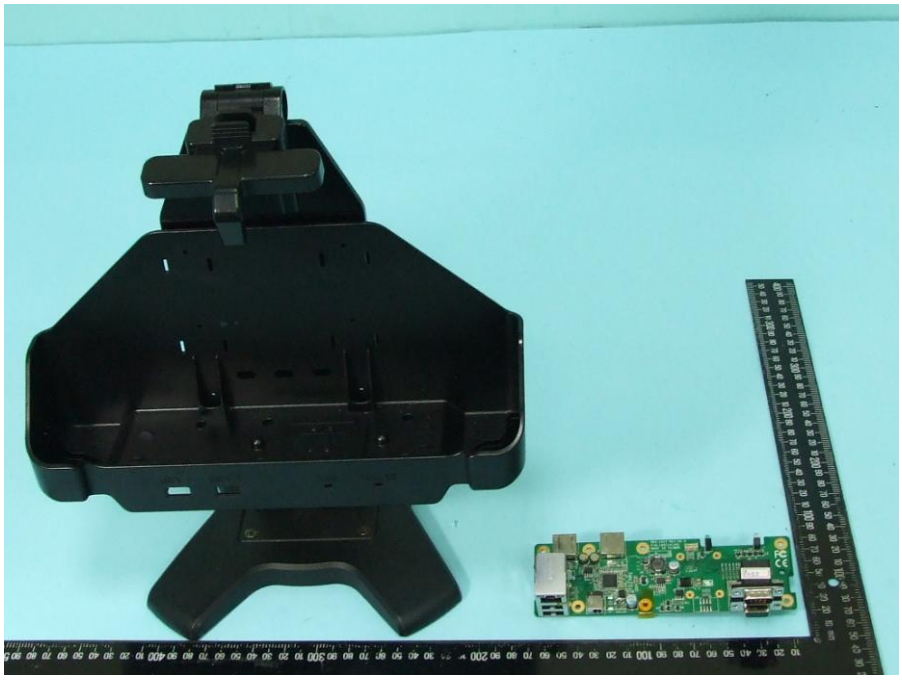


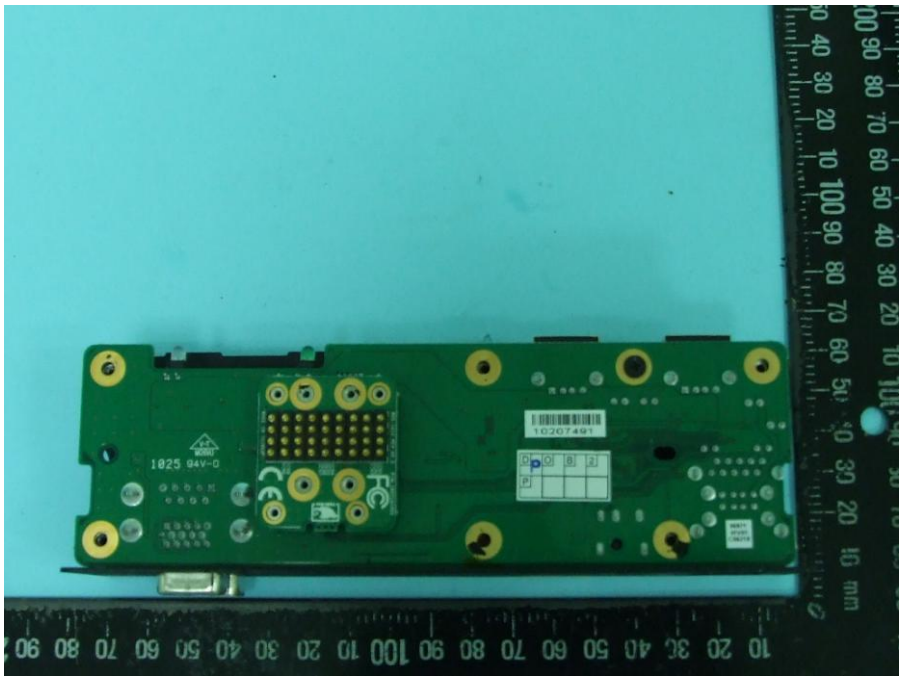


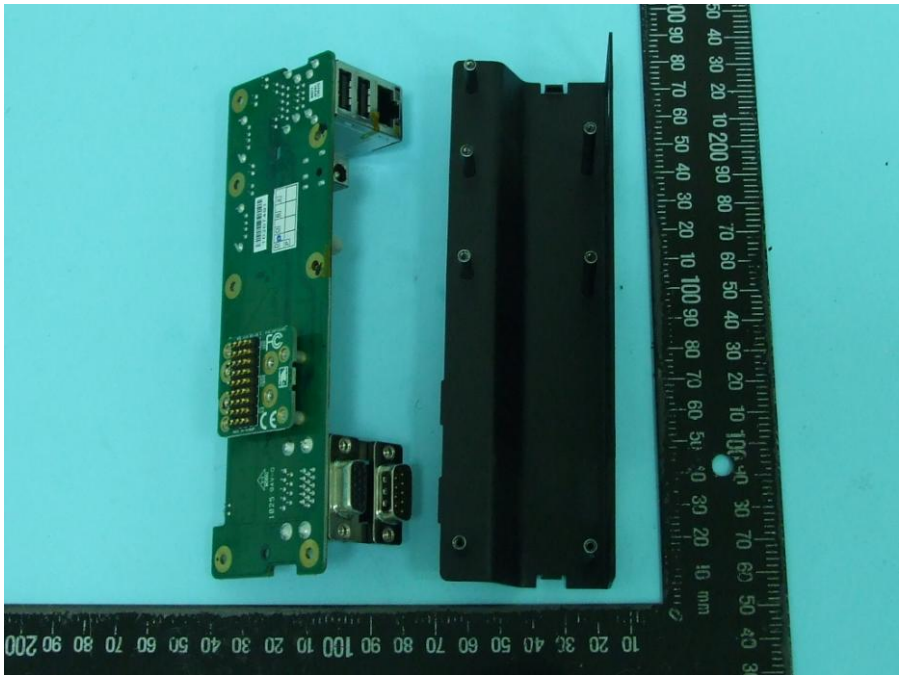


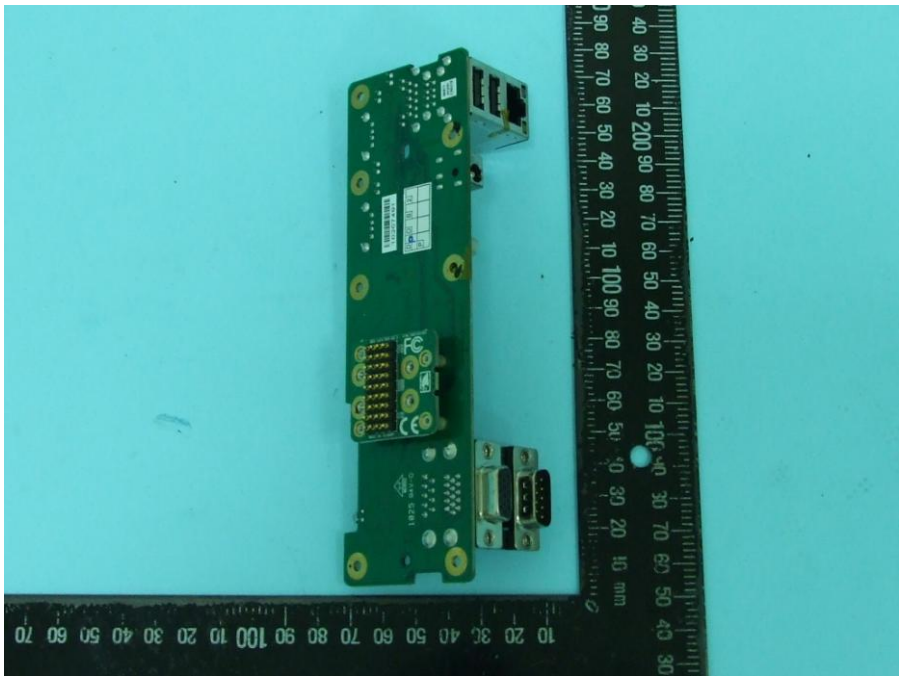


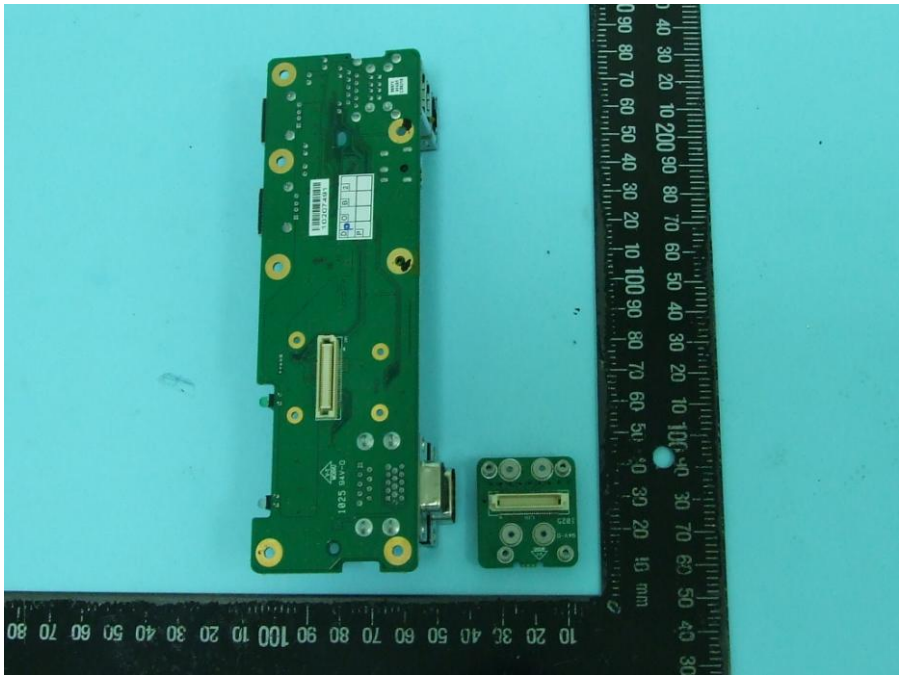

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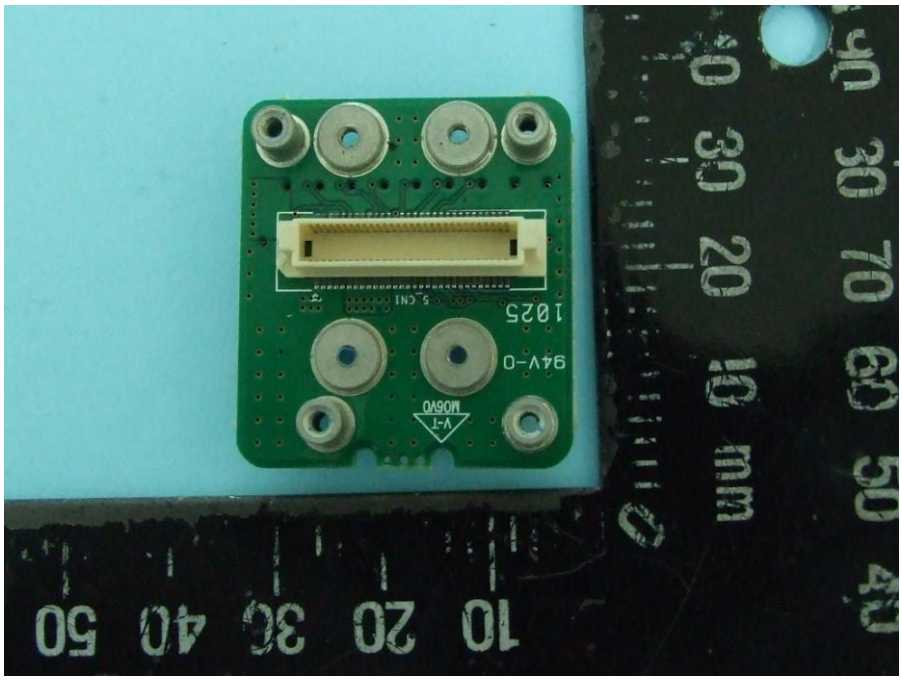


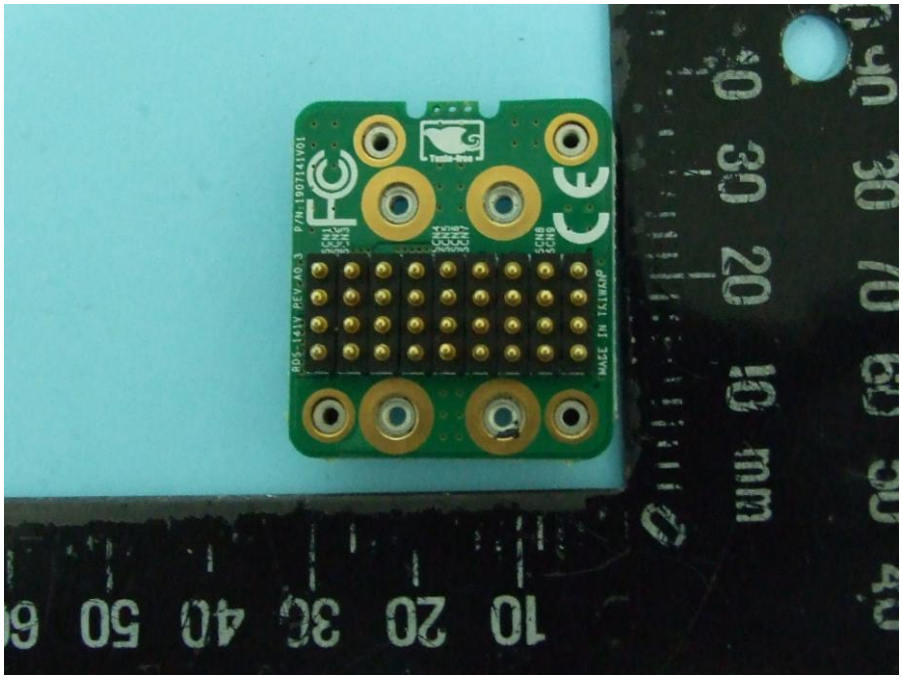


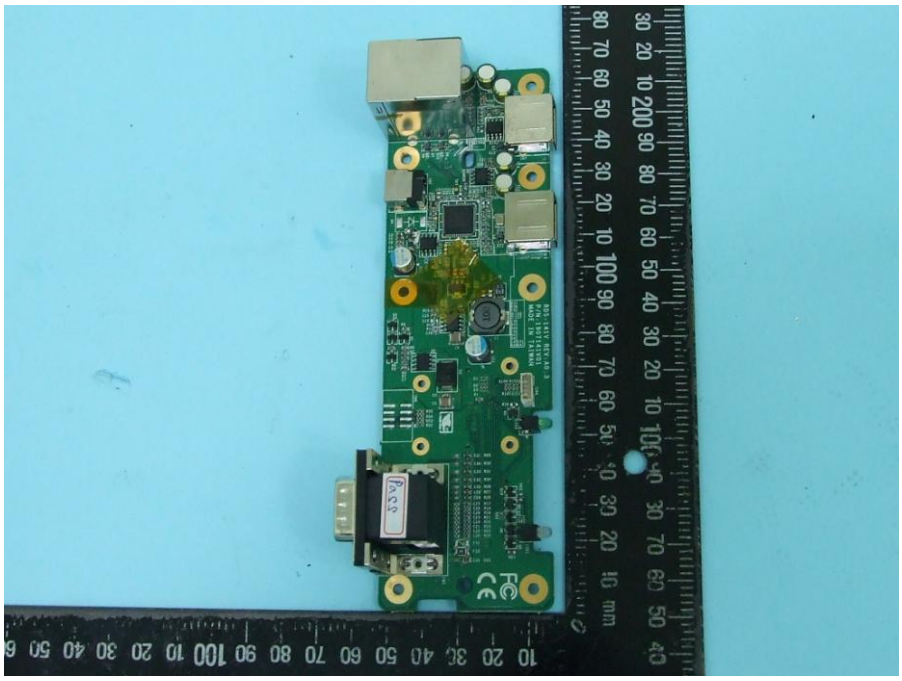


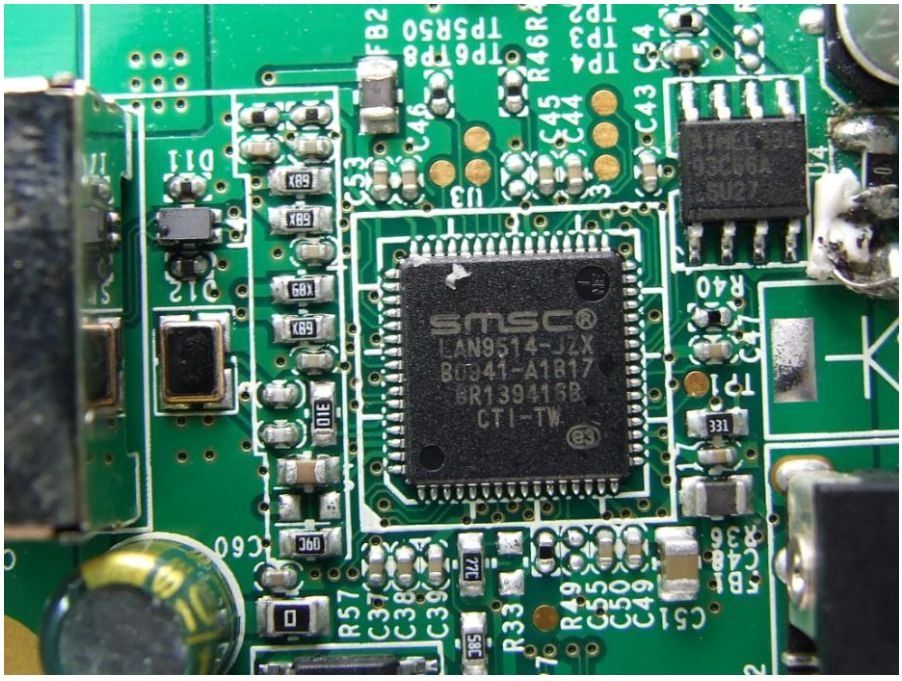


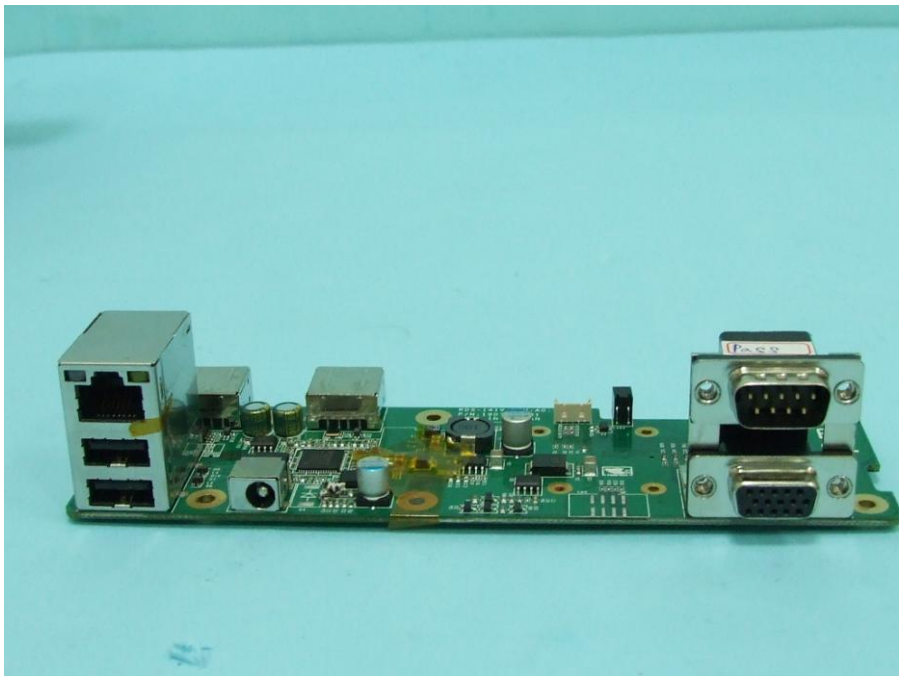


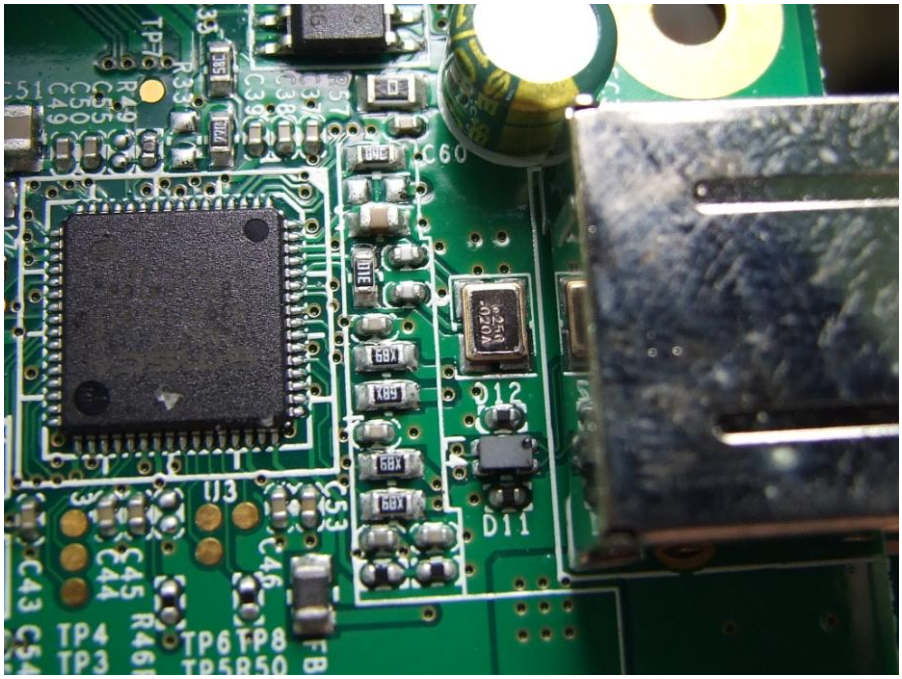

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V-1
MO5VO

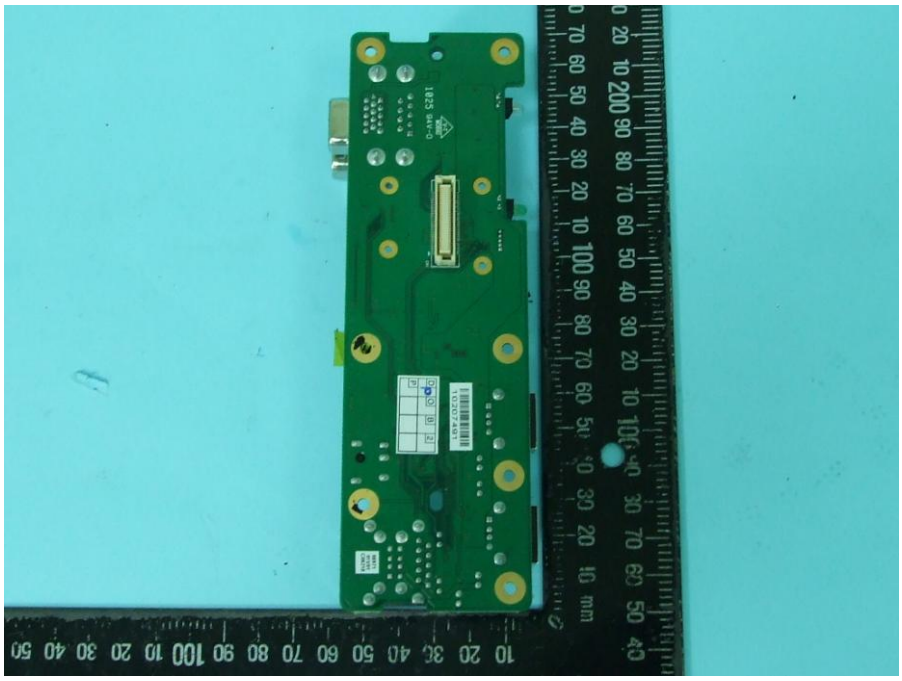

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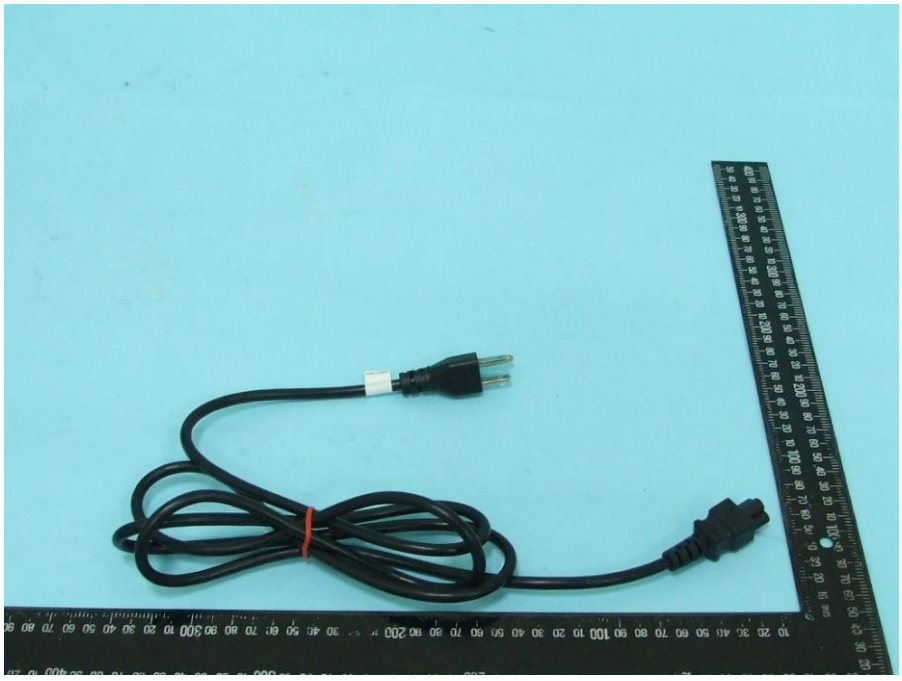



smsc
LAN9514-JZX
CTI-TW

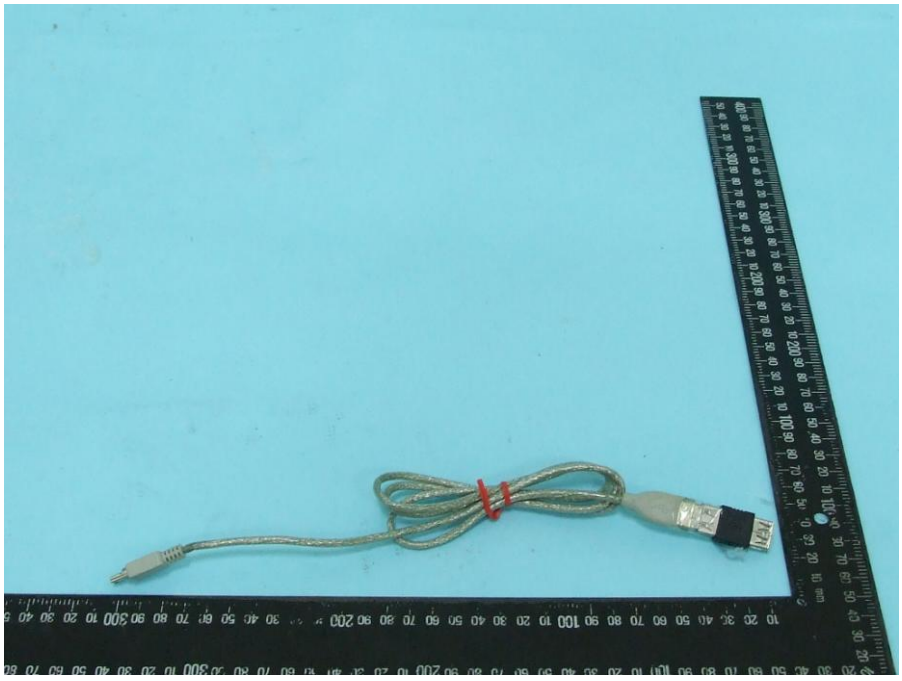


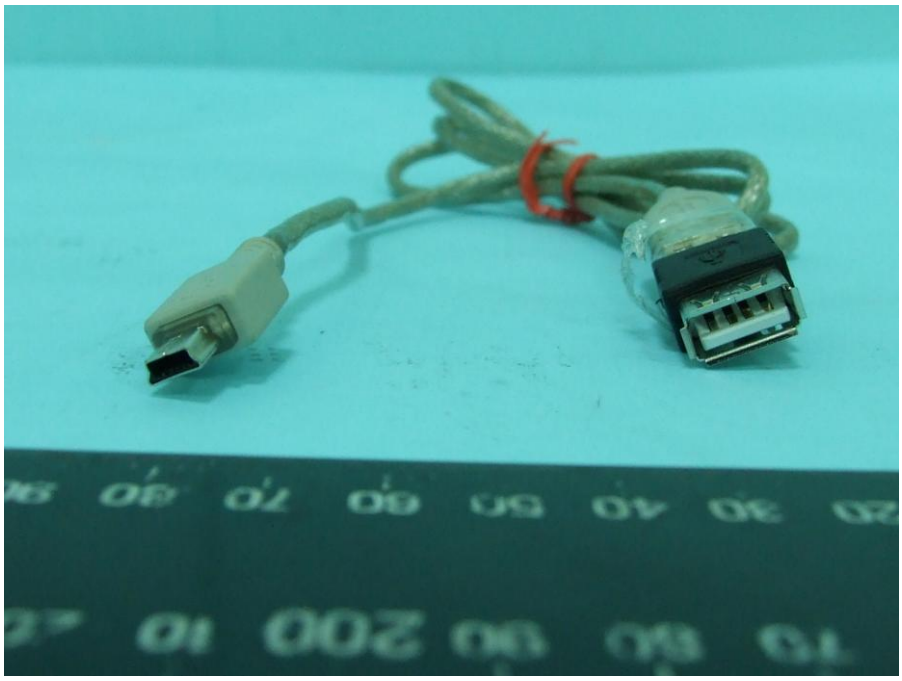

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C44
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TP8
TP5
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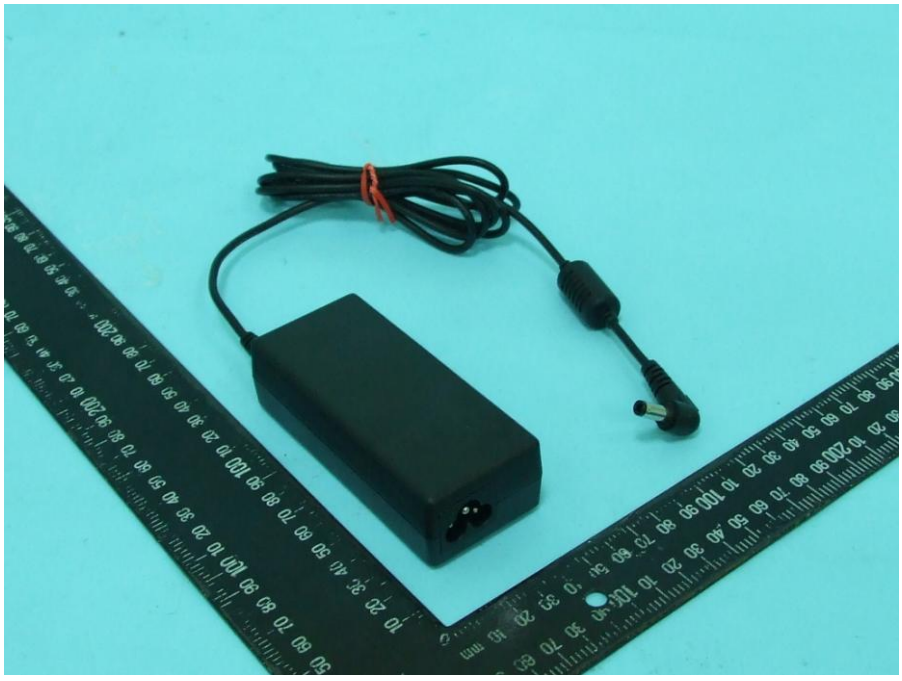


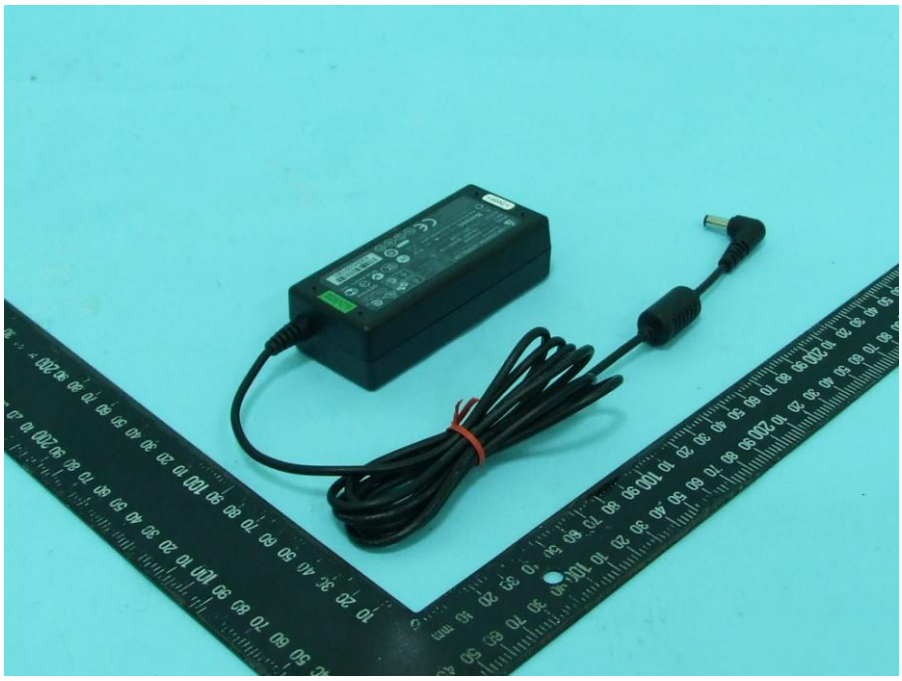













LI SHIN INTERNATIONAL ENTERPRISE CORP.
AC ADAPTER 交流适配器/電源供應器
MODEL : 型号/型號: 0335A2065
INPUT : 输入/輸入: 100-240V~,50-60Hz 1.7A
OUTPUT : 输出/輸出: 20V ⎓ 3.25A
WARNING: 注意:
RISK OF ELECTRIC SHOCK DO NOT OPEN
For Indoor Use Only 仅限室内使用/ 僅限室內使用
"Apparatet må tilkoples jordet stikkontakt"
"Apparaten skall anslutas till jordat uttag"
"Laite on liitettävä suojamaadoitus-
koskettimilla varustettuun pistorasiaan"
For IEC60950-1 products only
LISTED LEVEL3
E193430 LR114321
I.T.E. POWER SUPPLY
Q031514
N136 R43011 BZ02
A30942091061
MADE IN CHINA 中国制造/中國製造 TY03