Shenzhen Certification Technologh Service Co., Ltd
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China

TEST REPORT

FCC ID: O26-H479

Applicant **VIRTIUM TECHNOLOGY, INC.**

Address **30052 TOMAS RANCHO SANTA MARGARITA, CA 92688**

Equipment under Test (EUT):
Name : SSD Hard Drive

Model : StorFly

Standards **:** FCC PART 15, Subpart B Class B 2011
Report No. **:** STE120607700

Date of Test **:** June 7-June 14, 2012

Date of Issue **:** June 15, 2012

Test Result :	**PASS ***

* In the configuration tested, the EUT complied with the standards specified above

Authorized Signature

(Mark Zhu)
General Manager

The manufacture should ensure that all the products in series production are in conformity with the product sample detailed in this report.

If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of Shenzhen Certification Technology Service Co., Ltd. Or test done by Shenzhen Certification Technology Service Co., Ltd. Approvals in connection with, distribution or use of the product described in this report must be approved by Shenzhen Certification Technology Service Co., Ltd. Approvals in writing.

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Description Page

TEST REPORT VERIFICATION

Applicant : VIRTIUM TECHNOLOGY, INC.

Manufacturer : VIRTIUM TECHNOLOGY, INC.

EUT Description : SSD Hard Drive

(A) Model No.	: StorFly
(B)Trademark	: VIRTIUM
(C) Serial No.	: N/A
(D) Power Supply	: EUT supply by DC 5V from PC, PC supply by AC 120V/60Hz.
(E) Test Voltage	: EUT supply by DC 5V from PC, PC supply by AC 120V/60Hz.

Measurement Standard Used:
FCC Rules and Regulations Part 15 Subpart B Class B 2011

The device described above is tested by Shenzhen Certification Technology Service Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B Class B limits both conducted and radiated emissions. The test results are contained in this test report and Shenzhen Certification Technology Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After the test, our opinion is that EUT compliance with the requirement of the above standards.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen Certification Technology Service Co., Ltd.

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION				
Description of Test Item	**Standard**	**Limits**	**Results**	
Power Line Conducted Emission Test	FCC Part 15: 2011 ANSI C63.4: 2003	Class B	PASS	Minimargin with respect to the limits: -12.51 dB at4.574MHz
Radiated Emission Test	FCC Part 15: 2011 ANSI C63.4: 2003	Class B	PASS	Minimargin with respect to the limits: -15.46 dB at 900.09 MHz

2. GENERAL INFORMATION

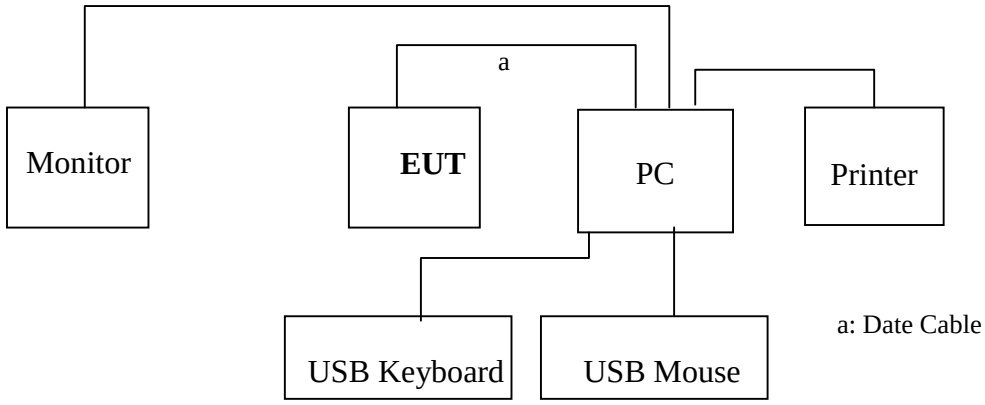
2.1. Description of Device (EUT)

Description	: SSD Hard Drive
Model Number	: StorFly
Trademark	: VIRTIUM
Power Supply	: EUT supply by DC 5V from PC, PC supply by AC 120V/60Hz.
Highest frequency	: Crystal frequency: 50MHz
Applicant	: VIRTIUM TECHNOLOGY, INC. 30052 TOMAS RANCHO SANTA MARGARITA, CA 92688
Manufacturer	: VIRTIUM TECHNOLOGY, INC. 30052 TOMAS RANCHO SANTA MARGARITA, CA 92688
Date of Test	: June 7-June 14, 2012
Sample Type	: Series production

2.2. Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number
1.	Personal Computer	ACER	ASPIRE M1830	PTSF90C00305005CAC3000
2.	Monitor	ACER	G205HV	SNID:10306738385
3.	USB Keyboard	ACER	SK-9625	KBUSB1580500037E0100
4.	USB Mouse	ACER	MS.11200.014	M-UAY-ACR2
5.	Printer	HP	HP1020	CNCJ410726

2.3. Block Diagram of connection between EUT and simulators



※ EUT: SSD Hard Drive

2.4. Test Facility

JAN 13, 2012 File on Federal Communication Commission
Registration Number: 197647

October 11, 2011 Certificated by IC
Registration Number: 8528B

2.5. Measurement Uncertainty

(95% confidence levels, k=2)

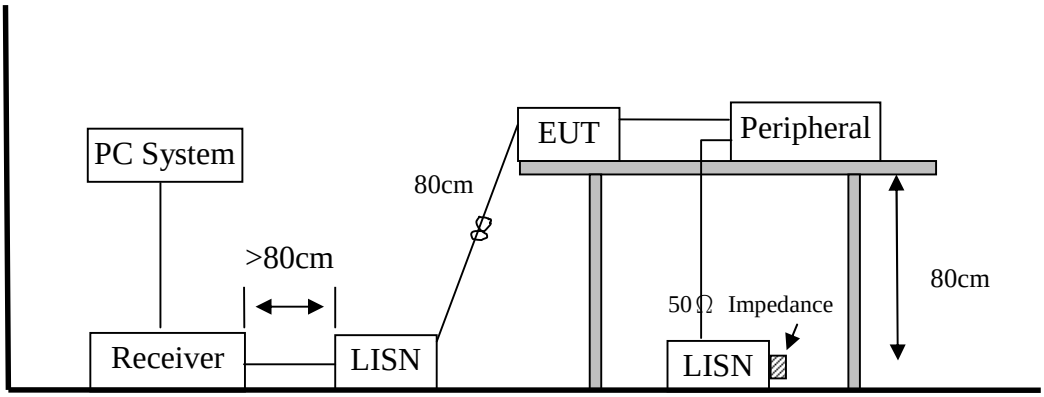
Test Item	Uncertainty
Uncertainty for Conduction emission test	2.50dB
Uncertainty for Radiation Emission test	3.04 dB (Distance: 3m Polarize: V)
	3.02 dB (Distance: 3m Polarize: H)
Uncertainty for test site temperature and humidity	0.6℃
	3%

3. POWER LINE CONDUCTED EMISSION TEST

3.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde&Schwarz	ESCI	1166.5950K03 -1011	Oct. 17, 11	1 Year
2.	L.I.S.N.	Schwarzbeck	NSLK8126	8126466	Oct. 17, 11	1 Year
3.	L.I.S.N.-2	Kyoritsu	KNW-407	8-1628-5	Oct. 17, 11	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 1	Oct. 17, 11	1 Year
5.	RF Cable	Schwarzbeck	9111505/200	5995-12-161-6890#	Oct. 17, 11	1Year
6.	Coaxial Switch	Schwarzbeck	CX-210	N/A	Oct. 17, 11	1 Year
7.	Pulse Limiter	Schwarzbeck	VTSD9516 F	9618	Oct. 17, 11	1 Year

3.2. Block Diagram of Test Setup



3.3. Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. Emission level=Read level+ LISN factor-Preamp factor+ Cable loss
2* Decreasing linearly with logarithm of frequency.
3. The lower limit shall apply at the transition frequencies.

3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.
Support Equipments : As Tested Supporting System Detail, in Section 2.2.

3.5. Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.
3.5.2. Turn on the power of all equipment.
3.5.3. Let the EUT work in test mode (Link PC) and measure it.

3.6. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N. #2), this provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4-2003 on conducted Emission test.

The bandwidth of test receiver (R&S TEST RECEIVER ESCI) is set at 10kHz.

The frequency range from 150KHz to 30MHz is checked. The test result are reported on Section 3.7.

3.7. Conducted Disturbance at Mains Terminals Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)

The EUT with the following test mode was tested and read Q.P values and average values, the test results are listed in next pages.

Temperature: 29.5℃ Humidity: 55%

The details of test mode is as follows：

No.	Test Mode
1.	Copy data

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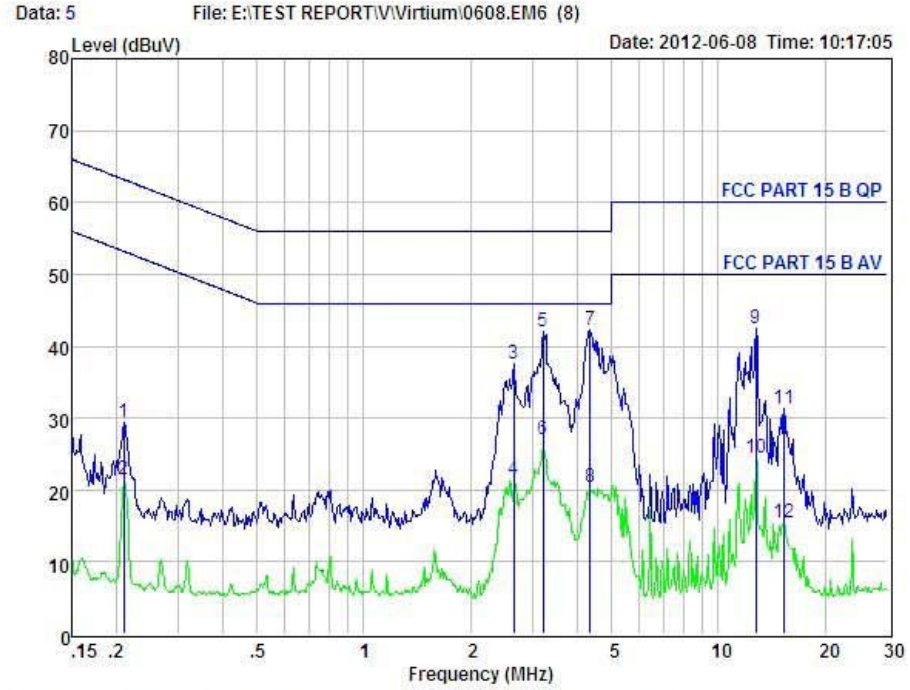

Condition : FCC PART 15 B QP POL: NEUTRAL
EUT : SSD Hard Drive
Model No. : StorFly
Test Mode : Copy Data
Power : DC 5V From PC
Test Engineer: Terry
Remark :

Item	Freq	Read	LISN Factor	Preamp Factor	Cable Lose	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	0.211	19.59	0.03	-9.72	0.10	29.44	63.18	-33.74	QP
2	0.211	11.59	0.03	-9.72	0.10	21.44	53.18	-31.74	Average
3	2.650	27.67	0.06	-9.70	0.11	37.54	56.00	-18.46	QP
4	2.650	11.67	0.06	-9.70	0.11	21.54	46.00	-24.46	Average
5	3.207	32.18	0.07	-9.69	0.12	42.06	56.00	-13.94	QP
6	3.207	17.18	0.07	-9.69	0.12	27.06	46.00	-18.94	Average
7	4.361	32.39	0.09	-9.68	0.12	42.28	56.00	-13.72	QP
8	4.361	10.39	0.09	-9.68	0.12	20.28	46.00	-25.72	Average
9	12.784	32.54	0.24	-9.44	0.22	42.44	60.00	-17.56	QP
10	12.784	14.54	0.24	-9.44	0.22	24.44	50.00	-25.56	Average
11	15.388	21.51	0.24	-9.39	0.25	31.39	60.00	-28.61	QP
12	15.388	5.51	0.24	-9.39	0.25	15.39	50.00	-34.61	Average

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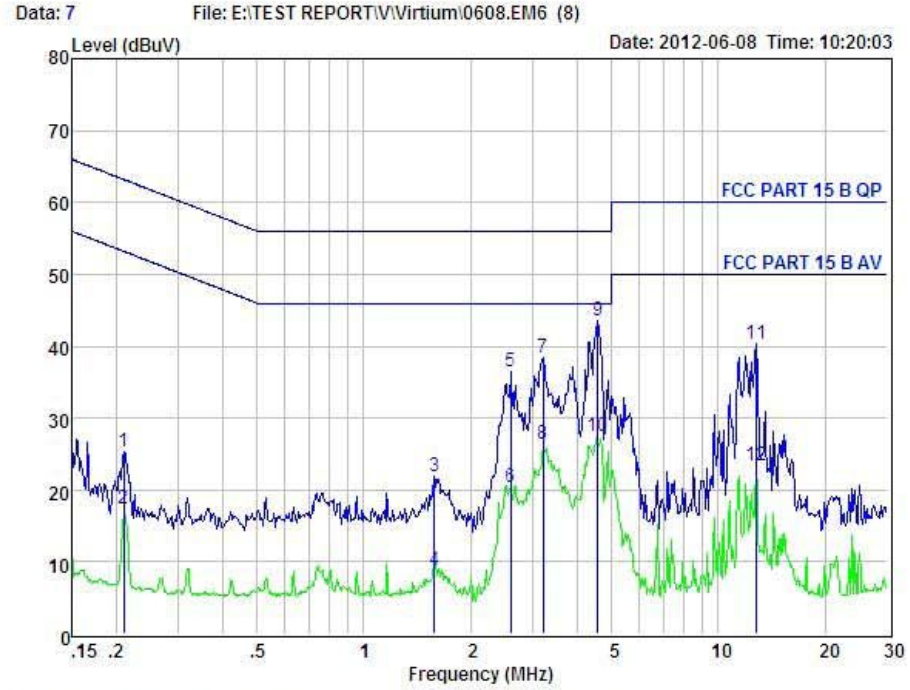


Condition : FCC PART 15 B QP POL: LINE
EUT : SSD Hard Drive
Model No. : StorFly
Test Mode : Copy Data
Power : DC 5V From PC
Test Engineer: Terry
Remark :

Item	Freq	Read	LISN Factor	Preamp Factor	Cable Lose	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	0.211	15.43	0.03	-9.72	0.10	25.28	63.18	-37.90	QP
2	0.211	7.43	0.03	-9.72	0.10	17.28	53.18	-35.90	Average
3	1.585	12.02	0.05	-9.71	0.10	21.88	56.00	-34.12	QP
4	1.585	-0.98	0.05	-9.71	0.10	8.88	46.00	-37.12	Average
5	2.594	26.57	0.06	-9.70	0.11	36.44	56.00	-19.56	QP
6	2.594	10.57	0.06	-9.70	0.11	20.44	46.00	-25.56	Average
7	3.207	28.44	0.07	-9.69	0.12	38.32	56.00	-17.68	QP
8	3.207	16.44	0.07	-9.69	0.12	26.32	46.00	-19.68	Average
9	4.574	33.60	0.09	-9.68	0.12	43.49	56.00	-12.51	QP
10	4.574	17.60	0.09	-9.68	0.12	27.49	46.00	-18.51	Average
11	12.784	30.45	0.24	-9.44	0.22	40.35	60.00	-19.65	QP
12	12.784	13.45	0.24	-9.44	0.22	23.35	50.00	-26.65	Average

4. RADIATED EMISSION TEST

4.1. Test Equipment

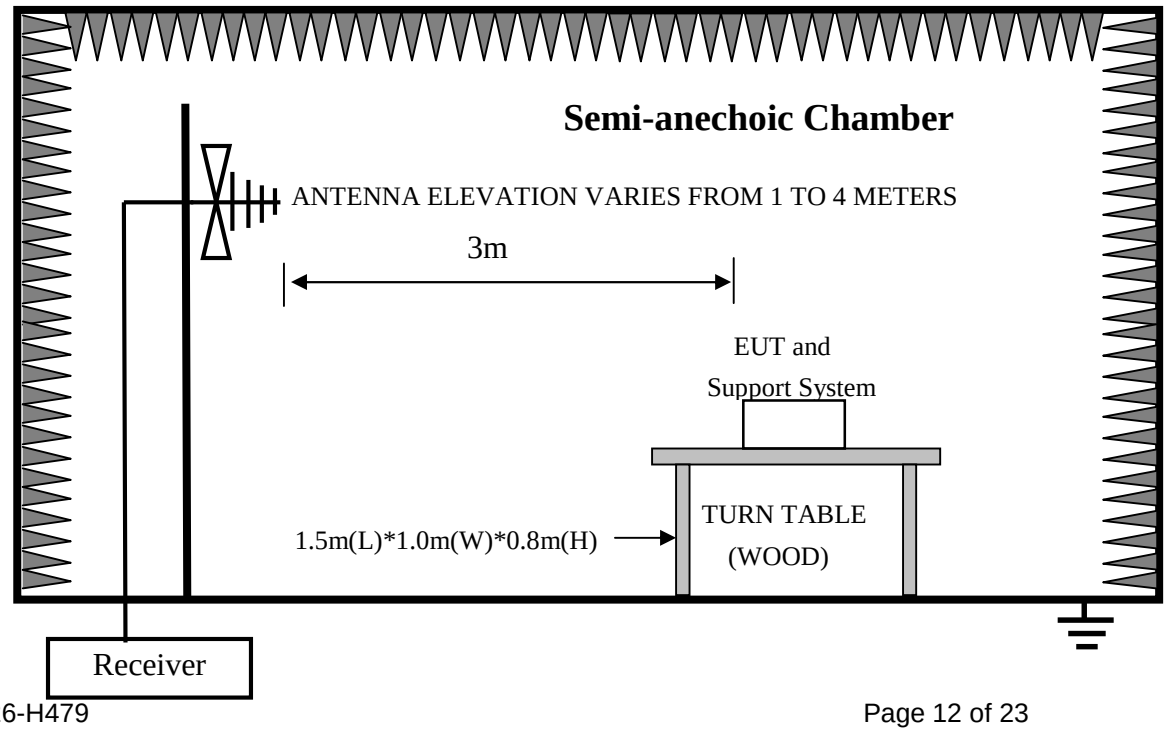
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Test Receiver	Rohde&Schwarz	ESCI	1166.5950K06-1012	Oct. 17, 11	1 Year
2	Amplifier	Schwarzbeck	BBV9743	9743-019	Oct. 17, 11	1 Year
3	Bilog Antenna	Schwarzbeck	VULB 9168	VULB9168-438	Feb. 10, 12	1 Year
4	RF Cable	Schwarzbeck	AK9515E	95891-2m	Oct. 17, 11	1 Year
5	RF Cable	Schwarzbeck	AK9515E	95891-11m	Oct. 17, 11	1 Year
6	RF Cable	Schwarzbeck	AK9515E	95891-0.5m	Oct. 17, 11	

For frequency range 1GHz~5GHz (At Semi Anechoic Chamber)

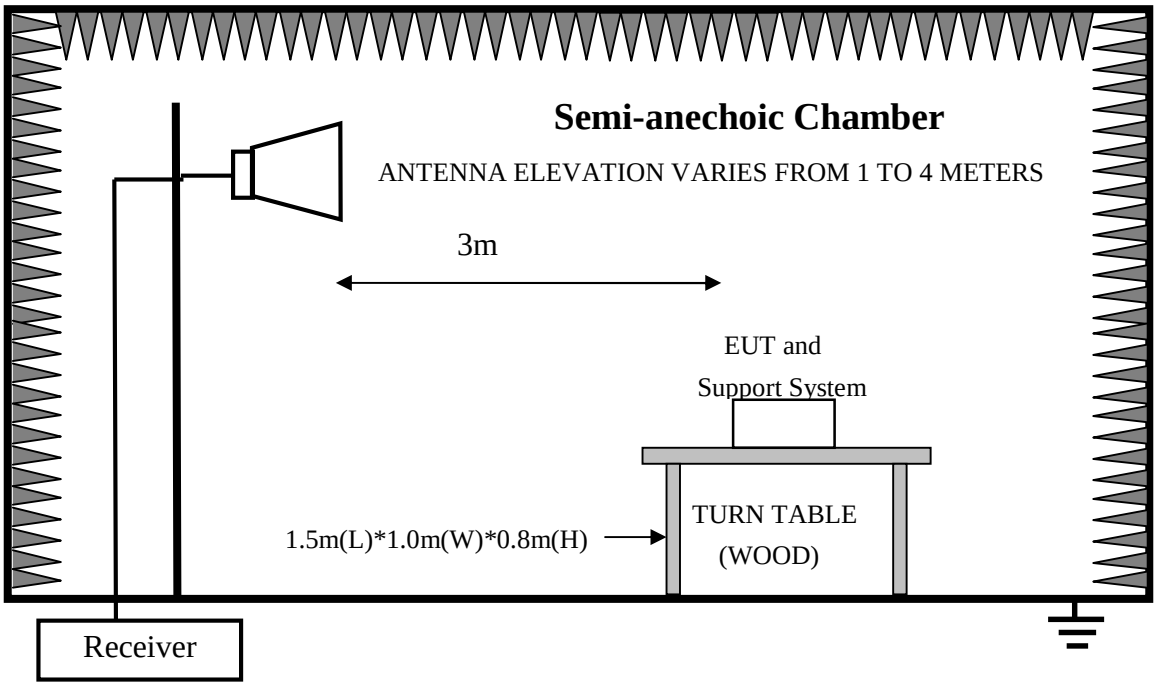
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	Oct. 17, 11	1 Year
2	Horn Antenna	EMCO	BBV9743	9743-019	Feb. 10, 12	1 Year
3	Amplifier	Schwarzbeck	SCHWARZBECK	N/A	Oct. 17, 11	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	Oct. 17, 11	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	271471/4	Oct. 17, 11	1 Year
6	RF Cable	Hubersuhner	SUCOFLEX102	29086/2	Oct. 17, 11	1 Year

4.2. Block Diagram of Test Setup

4.2.1. In Semi Anechoic Chamber (3m) Test Setup Diagram for 30MHz~1000MHz



4.2.2.In Semi Anechoic Chamber (3m)Test Setup Diagram for 1-5GHz



4.3. Radiated Emission Limit

Frequency MHz	Distance (Meters)	Field Strengths Limits dB(μV)/m
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	54.0
1000 ~ 5000	3	74(Peak) 54(Average)

Remark**:** (1) Emission level = Read level+Antenna Factor-Preamp Factor +Cable Loss

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

4.4. EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner that tends to maximize its emission characteristics in normal application.

4.4.1. Support Equipments : As Tested Supporting System Detail, in Section 2.2.

4.5. Operating Condition of EUT

4.5.1. Setup the EUT as shown in Section 4.2.

4.5.2. Turn on the power of all equipment.

4.5.3. Let the EUT work in test mode (Link PC) and test it.

4.6. Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 3m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4-2003 on Radiated Emission test.

The bandwidth setting on the test receiver (ROHDE&SCHWARZ TEST RECEIVER ESCI) is 120 kHz.

The resolution bandwidth of the Agilent Spectrum Analyzer E4446A was set at 1MHz. (For above 1GHz)

The frequency range from 30MHz to 1000MHz was pre-scanned with a peak detector and all final readings of measurement from Test Receiver are Quasi-Peak values.

The frequency range from 1GHz to 5GHz was checked with peak and average detector, measurement distance is 3m in 3m chamber.

Finally, selected operating situations at Anechoic Chamber measurement, all the test results are listed in section 4.7.

4.7. Radiated Disturbance Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)

For frequency range 30MHz~1000MHz

The EUT with the following test mode was tested and read Q.P values, all the test results listed in next pages.

Temperature: 24℃ Humidity: 56%

The details of test mode is as follows：

NO.	Test Mode
1.	Copy daya

For frequency range above 1GHz

The highest frequency of the internal sources of the EUT is Crystal frequency is 50 MHz less than 108 MHz, the measurement shall only be made up to 1 GHz. So the frequency above 1GHz radiation test not applicable.

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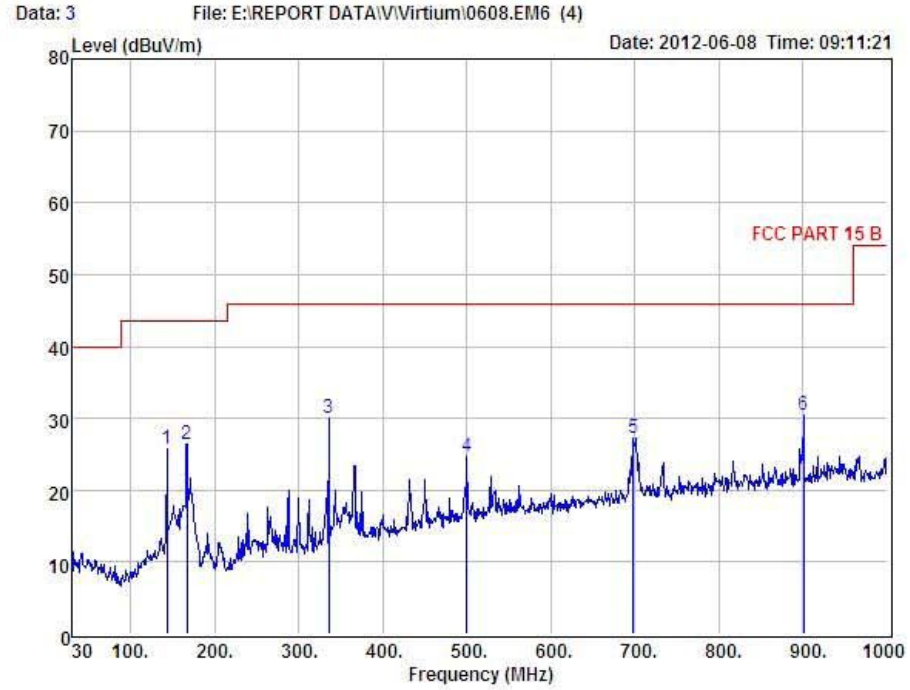

Condition : FCC PART 15 B 3m POL: VERTICAL
EUT : SSD Hard Drive
Model No. : StorFly
Test Mode : Copy Data
Power : DC 5V From PC
Test Engineer : Terry
Remark :

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Lose	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	143.49	39.93	13.64	28.90	1.10	25.77	43.50	-17.73	QP
2	166.77	40.51	13.56	28.92	1.22	26.37	43.50	-17.13	QP
3	335.55	43.53	13.58	29.25	2.12	29.98	46.00	-16.02	QP
4	499.48	34.71	16.51	29.62	2.99	24.59	46.00	-21.41	QP
5	698.33	34.02	19.64	29.76	3.40	27.30	46.00	-18.70	QP
6	900.09	34.74	21.64	29.64	3.80	30.54	46.00	-15.46	QP

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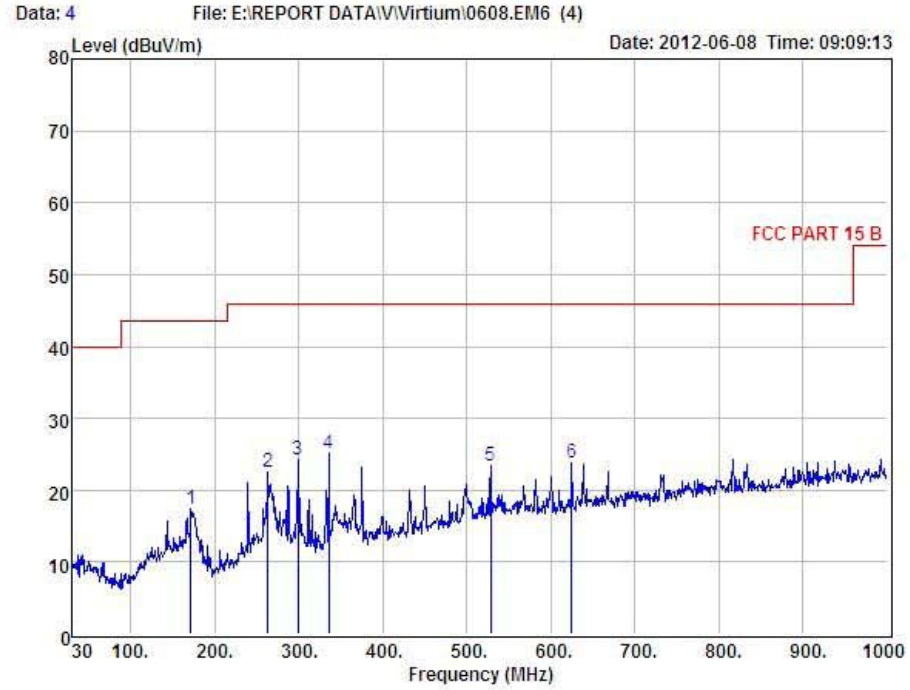


Condition : FCC PART 15 B 3m POL: HORIZONTAL
EUT : SSD Hard Drive
Model No. : StorFly
Test Mode : Copy Data
Power : DC 5V From PC
Test Engineer : Terry
Remark :

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Lose	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	171.62	32.23	12.88	28.92	1.25	17.44	43.50	-26.06	QP
2	263.77	37.96	11.90	29.13	1.74	22.47	46.00	-23.53	QP
3	298.69	38.61	12.80	29.19	1.92	24.14	46.00	-21.86	QP
4	335.55	38.71	13.58	29.25	2.12	25.16	46.00	-20.84	QP
5	528.58	32.85	17.03	29.67	3.06	23.27	46.00	-22.73	QP
6	624.61	31.65	18.76	29.81	3.25	23.85	46.00	-22.15	QP

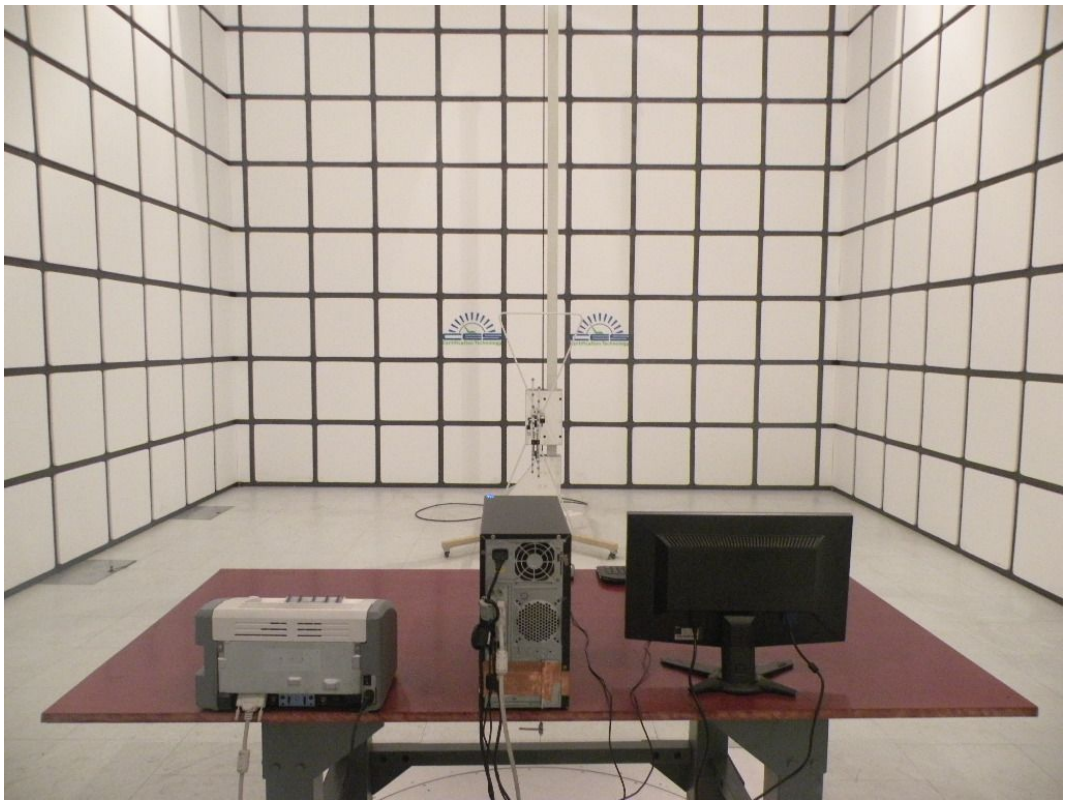
5. PHOTOGRAPH

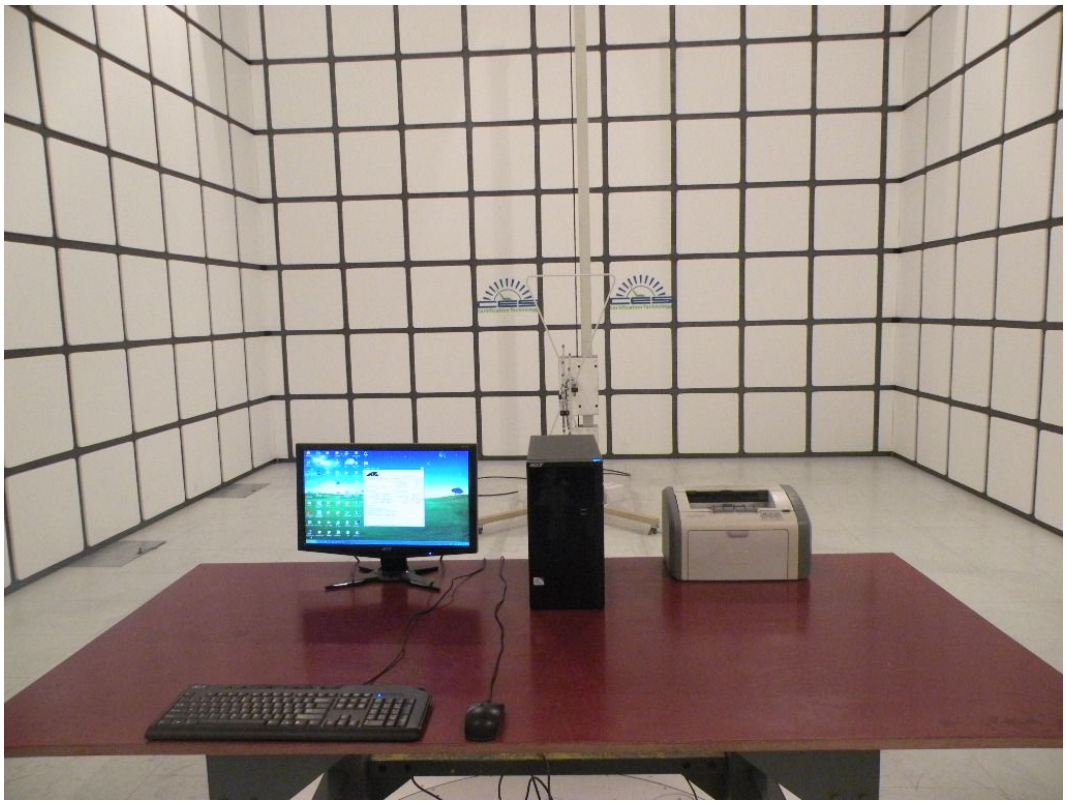
5.1.Photos of Power Line Conducted Emission Test

Note: EUT installation in the PC.

5.2.Photos of Radiated Emission Test (In Anechoic Chamber)

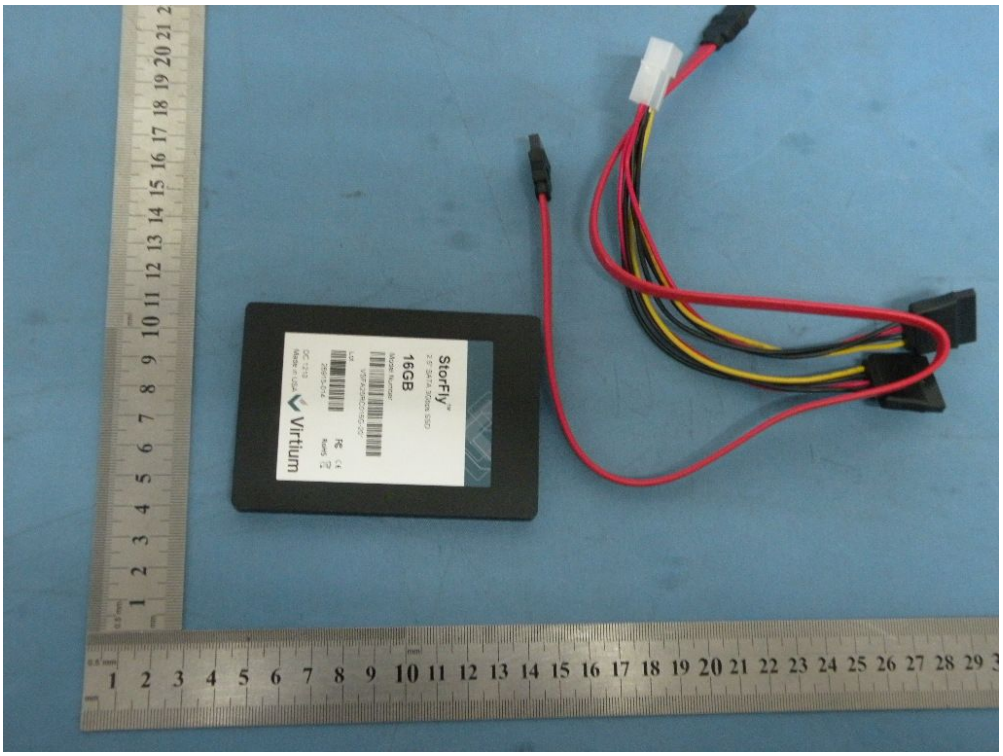
Note: EUT installation in the PC.





6. PHOTOS OF THE EUT

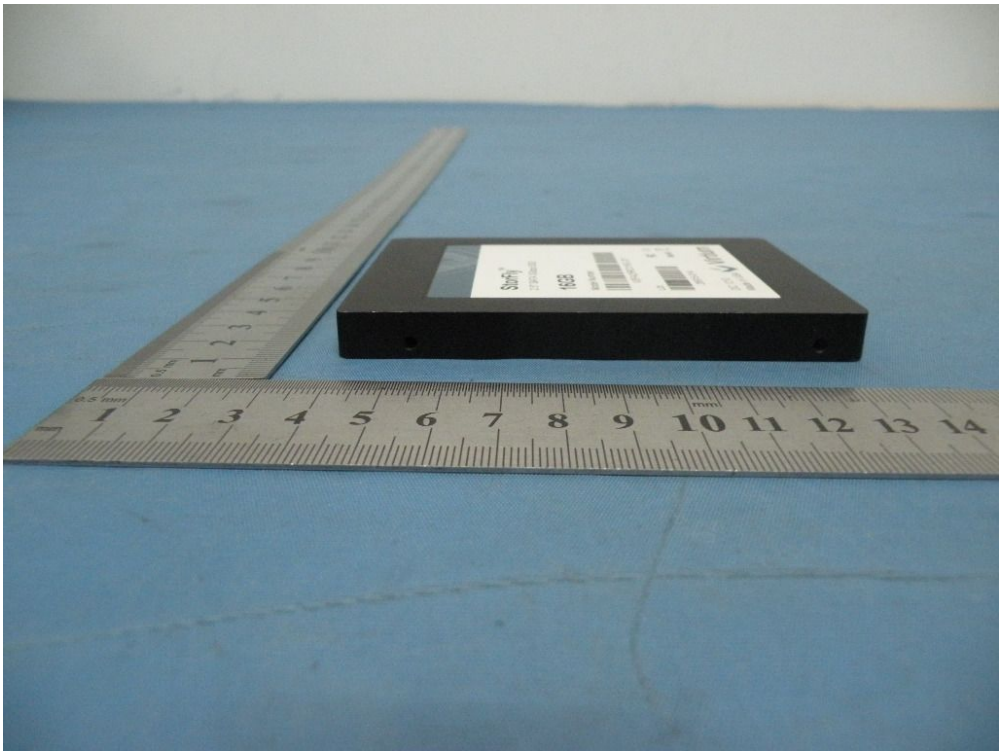
Full View



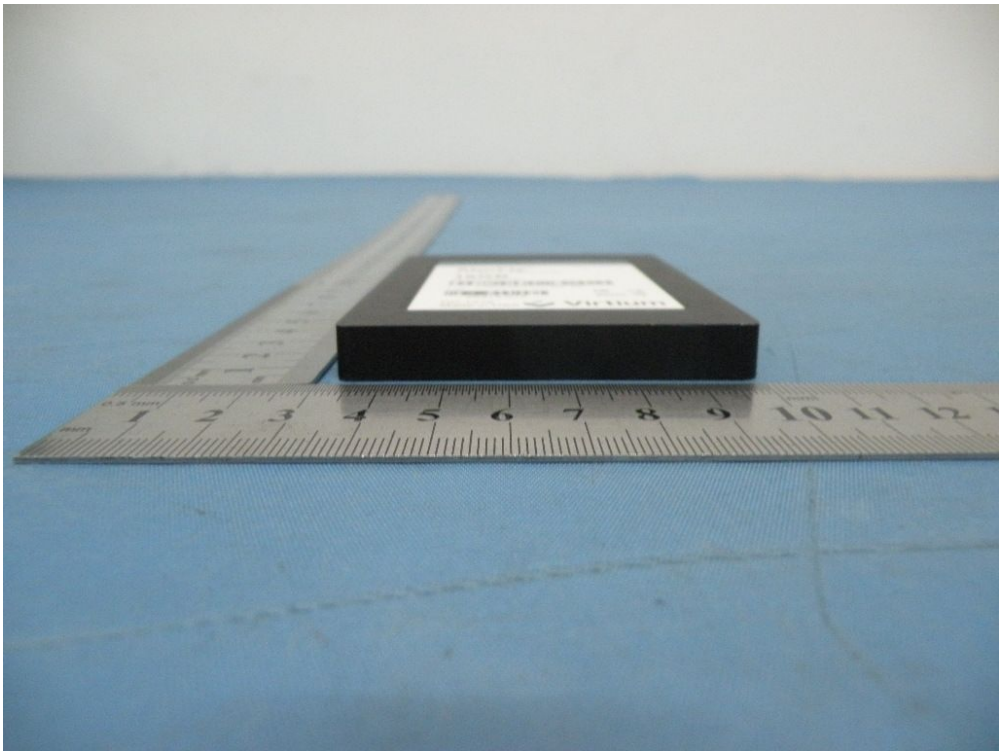
Top View

Bottom View

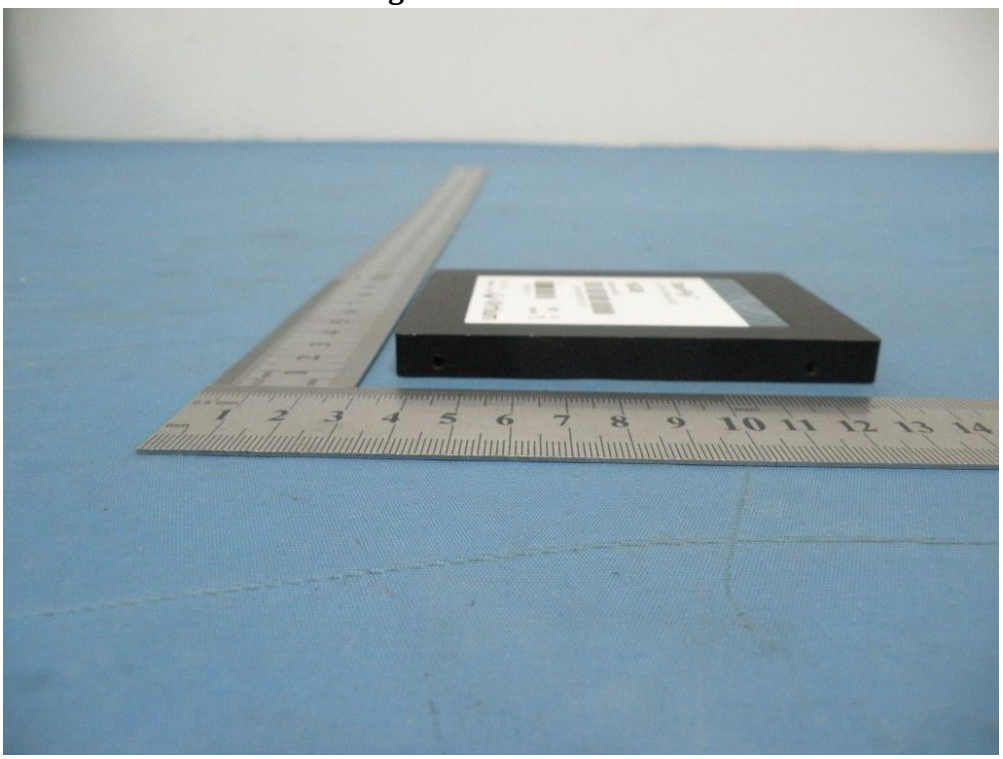
Rear View



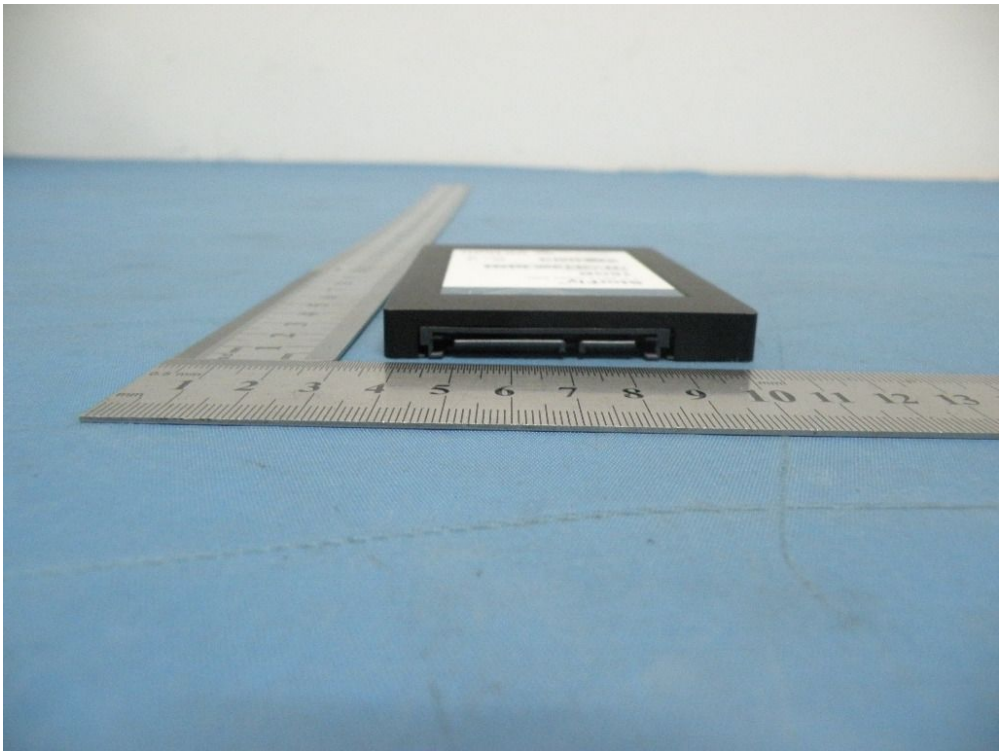
Left View



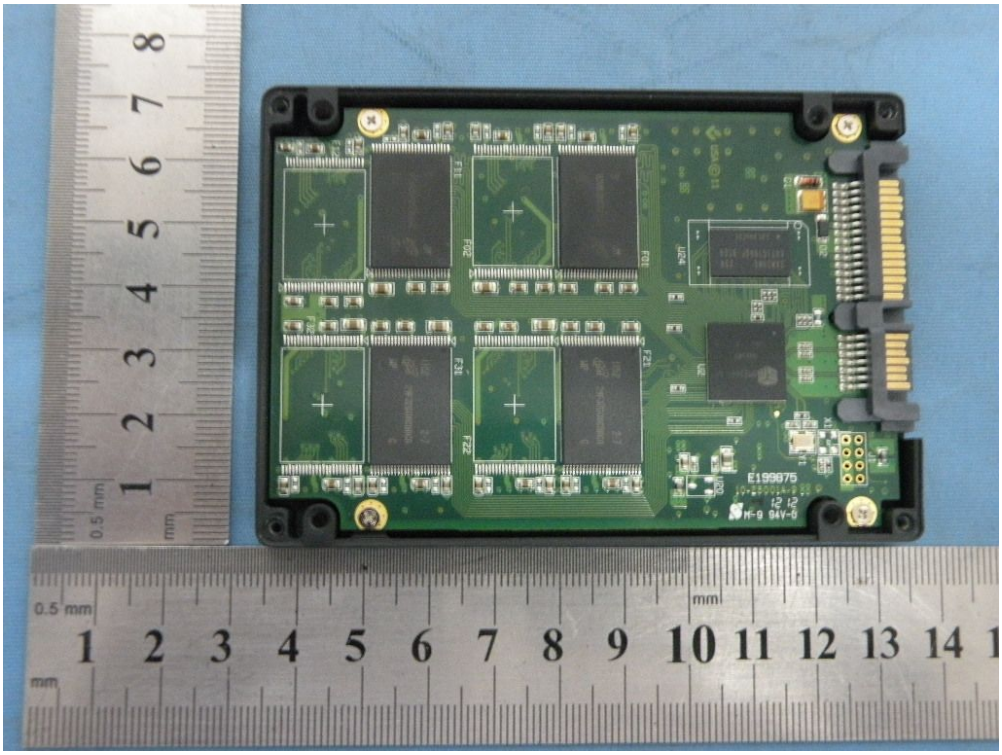
Right View

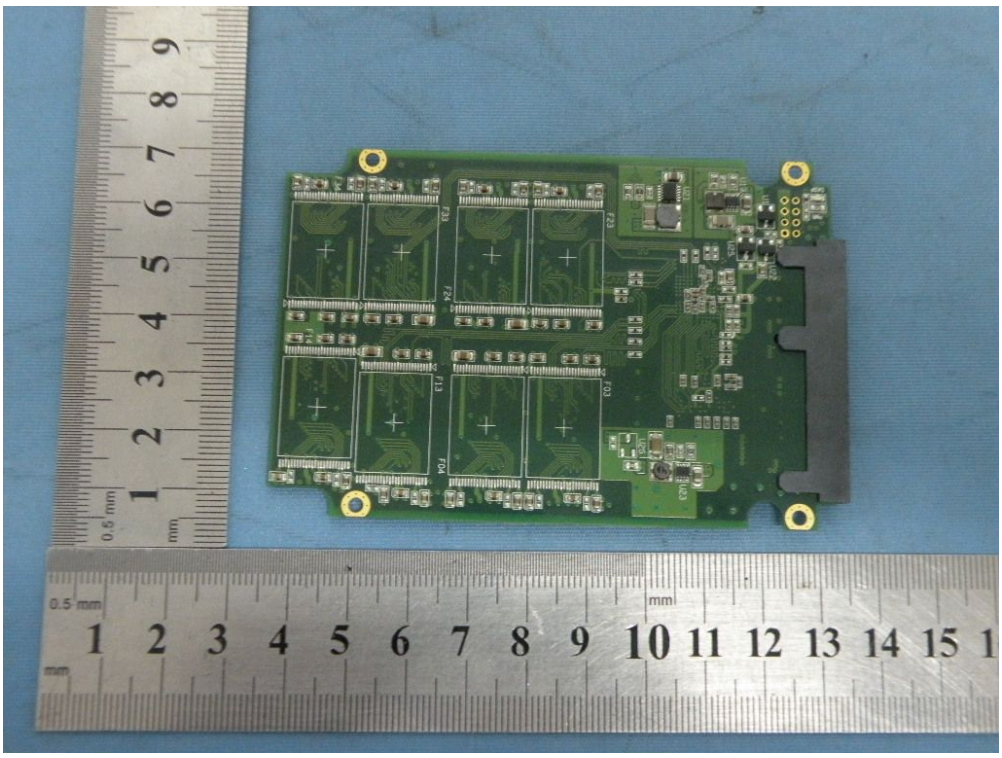


Front View



Inside View





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