

### **Regulatory and Certification documents package**

Regulatory Model Number: STA028

Series Name(s): FireCuda 515 SSD & FireCuda 520 SSD

Internal Name: E21T

Date	Comments:
Jun 22, 2022	Package generated.
Oct 06, 2022	Declaration of similarity
Oct 21, 2022	Updated Declaration of similarity

#### Contents:

- Declaration of similarity
- Canada ICES CoT (Certificate of Test)CB Certificate(s)
- CE DoC (Declaration of Conformity)
- CE CoT (Certificate of Test)
- FCC SDoC
- FCC CoT (Certificate of Test)
- Korea RRL Certificate
- Korea CoT (Certificate of Test)
- Morocco\_DoC (Declaration of Conformity)
- UL/cUL safety
- TUV safety
- Taiwan BSMI certificate
- Taiwan CoT (Certificate of Test)
- VCCI CoT (Certificate of Test)
- VCCI Certificate (Certificate of Acceptance)
- UKCA (Certificate of Test)
- UKCA (Certificate of Acceptance)

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Author: Regulatory Assurance



### Regulatory Model Number (RMN) STA028

Statement of Similarity

Tested model ZP2000GV30001 Models added by Similarity FireCuda 515 SSD ZP250GV30001 ZP500GV30001 ZP1000GV30001 ZP2000GV30001

FireCuda 520 SSD ZP500GV30012 ZP1000GV30012 ZP2000GV30012 ZP500GV3A012 ZP1000GV3A012 ZP2000GV3A012

The regulatory model number, STA028 is both single- and double-sided M.2 2280 form factor, Gen 4 Solid State Drive architected with an NVMe (Non-Volatile Memory express) interface for enterprise applications. It utilizes the M.2 platform with an NVMe slot when available or be used in a PCI-e slot with adapter. This drive will be offered in the various capacities, 2000, 1000, 500, 250 GBs. It will be offered in various endurance options. Format size will be 512E only. All models, regardless of capacity, endurance and features, are physically and electrically identical.

DocuSigned by: ten Allen

Ken Allen Vice President Operations Products and Technology

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### VERIFICATION OF COMPLIANCE

This is to certify that the product listed below was (were) tested in the BTL EMC Laboratory to comply with the criteria limits Class B of conducted and radiated emissions of the Technical Standards ICES-003, established by the Innovation, Science and Economic Development Canada.

Equipment	FireCuda 515 SSD	
Model Name	STA028, ZP250GV30001, ZP500GV30001, ZP1000GV3000	1, ZP2000GV30001
Brand Name	Seagate	dia
Applicant	Seagate Technology LLC	
Address	389 Disk Drive Longmont, CO 80503 USA	
Standard(s)	ICES-003, Issue 7, October 2020 ANSI C63.4-2014	76
Report(s)	BTL-ISEDE-1-2201T133	1

The test data, data evaluation, and equipment configuration contained in our test report(s) above was (were) obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO/IEC 17025 quality assessment standard and technical standard(s). The test data contained in the referenced test report relate only to the EUT sample and item(s) tested.

Pike Lee Authorized Signatory

LAB

BTL INC. No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist, Taipei City 114, Taiwan TEL:+886-2-2657-3299 FAX:+886-2-2657-3331





### EU DECLARATION OF CONFORMITY

TYPE OF EQUIPMENT: REGULATORY MODEL: PRODUCT NAME (Internal): SEAGATE MODELS: MARKETING NAME: TRADE/BRAND NAME: Solid State Drive STA028 FireCuda 515 SSD ZP250GV30001, ZP500GV30001, ZP1000GV30001, ZP2000GV30001 Seagate

CE

#### I. Product Safety and EMC Compliance

A. The product(s) meets the requirements of the Electromagnetic Compatibility (EMC) Directive 2014/30/EU by application of the following standards:

EN 55032:2015	Electromagnetic compatibility of multimedia equipment - Emission
	requirements.
EN 55035:2017	Information technology equipment - Immunity characteristics -
	Limits and methods of measurement.
EN 61000-3-2:2014	Electromagnetic compatibility (EMC) - Part 3-2: Limits for harmonic
	current emissions (equipment input current <= 16 A per phase).
EN 61000-3-3:2013	Electromagnetic compatibility (EMC) - Part 3-3: Limitation of voltage
	changes, voltage fluctuations and flicker in public low-voltage supply
	systems, for equipment with rated current <= 16 A per phase.

B. The product(s) meets the requirements of The Low Voltage Directive (LVD) 2014/35/EU by application of the following standards:

EN 60950-1:2006	Information Technology Equipment - Safety- (Second Edition) Part
/A11:2009 /A1:2010	1: General Requirements
A12:2011/A2:2013	
EN 62368-1:2014/A11:2017	Audio/video, information and communication technology equipment
	<ul> <li>Part 1: Safety requirements (IEC 62368-1:2014, Modified)</li> </ul>

#### II. Product Environmental Compliance (EU/China)

A. The product(s) meets the requirements of the Directive 2011/65/EU RoHS "Recast" (RoHS 2) as amended by Directive (EU) 2015/863 and further amended by Directive 2018/739 and Directive 2018/740 and by application of the following standards:

EN IEC 63000:2018	Technical documentation for the assessment of electrical and
	electronic products with respect to the restriction of hazardous
	substances.
EN 62321-6:2015	Determination of certain substances in electrotechnical products.
	Polybrominated biphenyls and polybrominated diphenyl ethers in
	polymers by gas chromatography-mass spectrometry (GC-MS).

China RoHS	Management Methods for Controlling Pollution by Electronic
	Information Products, Ministry of Information Industry Order No. 39
	(China RoHS)
China RoHS 2	Management Methods for the Restriction of the Use of Hazardous
	Substances in electrical and Electronic Products, Ministry of Industry
	and Information Technology Order No. 32 effective July 1, 2016 (China
	RoHS 2)

B. Seagate products rely on the following RoHS 2 exemptions for compliance:

6(a)-I	Lead as an alloying element in steel for machining purposes containing up to 0.35% lead by weight and in batch hot dip galvanised steel components containing up to 0.2% lead by weight
6(b)-11	Lead as an alloying element in aluminum for machining purposes up to 0.4% lead by weight
6(c)	Copper alloy up to 4% lead by weight
7(a)	Lead in high melting temperature type solders (i.e. lead-based solder alloys containing 85 % by weight or more lead)
7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors (e.g. piezoelectronic devices) or in a glass or ceramic matrix compound

#### III. Due Diligence

- A. For parts and materials in Seagate products procured from external suppliers, we rely on the representations of our suppliers regarding the presence of RoHS 2 substances in these parts and materials. Our supplier contracts require compliance with our chemical substance restrictions, and our suppliers document their compliance with our requirements by providing material content declarations for all parts and materials for Seagate products. Current supplier declarations include disclosure of any substances regulated by RoHS 2 in such parts or materials.
- B. Seagate also has internal systems in place to ensure ongoing compliance and all laws and regulations. These systems include standard operating procedures that ensure that product safety, EMC and environmental compliance requirements are followed and an internal auditing process to ensure compliance with all standard operating procedures.

#### Year to Begin Affixing Mark: 2022

Manufacturer's Name: Manufacturer's Address:	Seagate Technology, LLC 47488 Kato Road Fremont, California 94538, U.S.A
European Contact:	Seagate Technology (Netherlands) B.V. Tupolevlaan 105 1119 PA Schiphol – Rijk The Netherlands

This product or products are in conformity with the relevant Union harmonization legislation. This declaration of conformity is issued under the sole responsibility of Seagate Technology, LLC.

Date of Issue: June 28, 2022

Signature:

Ken Allen Vice President of Operations, Products and Technology



#### **Declaration of Conformity**

According to FCC 47 CFR Part 15 of the FCC Rules, and ICES-003.

For the following product:

Internal Product Name:	FireCuda 515 SSD
Brand Name:	Seagate
Regulatory Model Number:	STA028
Seagate internal Model Number:	ZP250GV30001, ZP500GV30001, ZP1000GV30001, ZP2000GV30001

#### We hereby declare:

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
   This device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus complies with Canadian ICES-003, Issue 7

#### Standards:

FCC 47 CFR Part 15, Subpart B, Class B (U.S.A, FCC) ICES-003, Issue 7, Class B (Canada)

Test report: BTL-ISEDE-1-2201T133

#### **Responsible Party for Compliance:**

Seagate Technology LLC 47488 Kato Road, Fremont, CA 94538 United States of America

Ken Allen

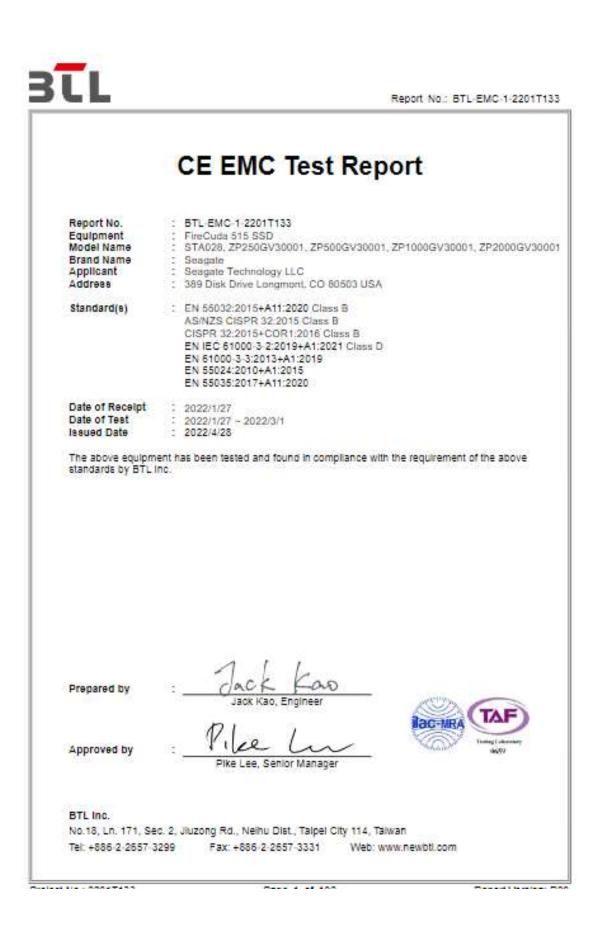
Vice President of Operations, Products and Technology Date: June 28, 2022

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## CE VERIFICATION OF COMPLIANCE

This is to certify that the product listed below was (were) tested in the BTL EMC Laboratory to comply with the required criteria levels of the follow-mentioned Generic Standards or Product Family Standard(s) and/or Basic Standard(s) based-on the essential conformity requirements of EMC Directive 2014/30/EU.

Equipment	FireCuda 515 SSD
Model Name	STA028, ZP250GV30001, ZP500GV30001, ZP1000GV30001, ZP2000GV30001
Brand Name	Seagate
Applicant	Seagate Technology LLC
Address	389 Disk Drive Longmont, CO 80503 USA
Standard(s)	EN 55032:2015+A11:2020 Class B
	AS/NZS CISPR 32:2015 Class B
	CISPR 32:2015+COR1:2016 Class B
	EN IEC 61000-3-2:2019+A1:2021 Class D EN 61000-3-3:2013+A1:2019
	EN 55024:2010+A1:2015
	EN 55035:2017+A11:2020
Report(s)	BTL-EMC-1-2201T133
	Notes and the second
obtained utilizin TAF according	lata evaluation, and equipment configuration contained in our test report(s) above was (were) ing the test procedures, test instruments, test sites that has been accredited by the Authority of to the ISO/IEC 17025 quality assessment standard and technical standard(s). The test data e referenced test report relate only to the EUT sample and item(s) tested.
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	Pike Lee
	Authorized Signatory
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	A DESCRIPTION OF THE OWNER OWNER OF THE OWNER OWNER OF THE OWNER OWNE
	BTL INC.
	No.18, Ln. 171, Sec. 2, Jluzong Rd.,
	Neihu Dist., Taipei City 114, Taiwan
	TEL:+886-2-2657-3299 FAX:+886-2-2657-3331
	PAA:+000-2+203/+3331



Report No.: BTL FCCE-1-2201T133 FCC EMC Test Report : BTL-FCCE-1-2201T133 : FireCuda 515 SSD Report No. Equipment : STA028, ZP250GV30001, ZP500GV30001, ZP1000GV30001, ZP2000GV30001 Model Name Brand Name : Seagate : Seagate Technology LLC : 389 Disk Drive Longmont, CO 80503 USA Applicant Address FCC Rule Part(s) : FCC CFR Title 47, Part 15, Subpart 5, Class B Measurement : ANSI C63.4-2014 Procedure(s) Date of Receipt : 2022/1/27 : 2022/1/27 - 2022/3/1 : 2022/4/28 Date of Test lasued Date The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc. 20 aC Prepared by Jack Kao, Engineer TA JC-MRA er Lake Approved by 8659 Pike Lee, Senior Manager BTL Inc. No.18, Ln. 171, Sec. 2, Jluzong Rd., Nelhu Dist., Talpel City 114, Talwan Tel: +886-2-2657-3299 Fax: +886 2 2657 3331 Web: www.newbtl.com

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IEA9 AS28 4435 0224

상로 또는 성명 Trade Name or Registrant	SEAGATE TECHNOLOGY LLC	
기자재명칭(제품명칭) Equipment Name	FireCuda 515 SSD	
기기부호/추가기기부호 Equipartar code (Additional Equipment code	IMI	
기본모델명 Bese Medel Manber	STA028	
파생모델명 Senits Model Number	ZP500GV30001, ZP2000GV30001, ZP1000GV30001, ZP250GV30001	
등록번호 Registration No.	R-R-STX-STA028	
제조자/제조국가 Manufacture:/County of Origin	SEAGATE TECHNOLOGY LLC / 배국, 대만	
등록연월일 Detrof Registration	2022-05-04	
기타 Oritem		
It is verified that foregoing waves Act.	] 제58포의2 제3항에 따라 등록되었음을 증명합니다. equipment has been registered under the Clause 3, Article 58-2 of Radio 2022년(Year) 05월(Month) 04일(Day) 국립전파연구원장 [] General of National Radio Research Agency	
It is verified that foregoing waves Act.	equipment has been rep 국립전	
	국립전파연구원장 변등진 General of National Radio Research Agency 동전기자지는 만드시 "제발생생가표시" 등 주석하여 유등에 여야 많니다. 편만시 과제도 제품 및 등록이 위수된 수 있습니다	

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التصريح بالمطابقة

Seagate Technology LLC.	مصنع الجهاز
389 Disc Drive Longmont, CO 80503 USA	العنوان
قرص صلب SSD	نوع الجهاز
Seagate	العلامة التجارية
FireCuda 515 SSD	النوع
STA028; ZP250GV30001; ZP500GV30001; ZP1000GV30001; ZP2000GV30001	النماذج

الصورة



نحن مصنع الجهاز المذكور أعلاه نعلن تحت مسؤوليتنا الخاصة أن الجهاز موضوع هذا الإعلان يتطابق مع المتطلبات الأساسية للقرار رقم 2574.14 الصادر في 16 يوليوز 2015 والمتعلق بالتوافق الكهرومغناطيسي للتجهيزات.

تم اثبات هذا التوافق بحسب المعايير المغربية التالية ]

EMC NM EN 55024 NM EN 55035 NM EN 61000-3-2; NM EN 61000-3-3; NM CEI 61000-4-2; NM CEI 61000-4-3; NM CEI 61000-4-4; NM CEI 61000-4-5; NM CEI 61000-4-6; NM CEI 61000-4-8; NM CEI 61000-4-11. EN 55032

Signed by or on behalf of	Seagate Technology LLC	لتوقيع من طرف وباسم	
Place; Date of issue	مكان الأصدار Longmont, CO, Jun 22, 2022	تاريخ ومكان الاصدار	
Name	Ken Allen	الأمنم	
Signature	BocuSigned by: Len Allen 907478029/79420	التوقيع	

Certificate Number	E106814
Report Reference	E106814-20210507
Issue Date	2022-MARCH-22
Issued to:	SEAGATE TECHNOLOGY L L C
	389 DISC DR
	LONGMONT, CO 80503-9364 United States
This certificate confirms that representative samples of	AUDIO/VIDEO, INFORMATION AND COMMUNICATION TECHNOLOGY EQUIPMENT - COMPONENT
ոտատ	See addendum page for models
	Have been investigated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.
Standard(s) for Safety:	UL 62368-1 & CAN/CSA C22.2 No. 62368-1-14 - Audio/video, Information and Communication Technology Equipment - Part 1: Safety Requirements
Additional Information:	See the UL Online Certifications Directory at https://ig.ulprospector.com for additional information.

This Certificate of Compliance does not provide authorization to apply the UL Recognized Component Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

Bamely

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licenses of UL. For questions, please contact a local UL Customer Service Representative at http://ul.com/aboutul/locations/

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### CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference Issue Date E106814 E106814-20210507 2022-MARCH-22

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

FireCuda 530 SSD STA025 (ZP4000GM30003 for 4TB, ZP2000GM30003 for 2TB, ZP1000GM30003 for 1TB, ZP500GM30003 for 500GB)

PCIe M.2 2280-E16 SSD STA020; ZP1000GM30012

PCIe M.2 2230-E13-E19 SSD ZP500GM30013 ZP1000GM30013 ZP2000GM30013 ZP500GM30023 ZP4000GM30023 ZP1000GM30023 ZP4000GM30023 ZP4000GM30023

PCIe M.2 2280-E12S SSD STA027 XP512EX30001 XP1024EX30001 XP2048EX30001

PCIe M.2 2280-E21 SSD STA028, ZP250GV30001, ZP500GV30001, ZP1000GV30001, ZP2000GV30001

#### PCIe M.2 2280-E20-7mm SSD

STA029, XP1920SE10005, XP3840SE10005, XP7680SE10005, XP1920SE10015, XP3840SE10015, XP7680SE10015, XP1920SE10025, XP3840SE10025, XP7680SE10025, XP1600LE10005, XP3200LE10005, XP6400LE10005, XP1600LE10015, XP3200LE10015, XP6400LE10015, XP1600LE10025, XP3200LE10025, XP3200LE10025, XP800LE10025, XP80

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Page 2 of 3

### CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference Issue Date E106814 E106814-20210507 2022-MARCH-22

#### PCIe M.2 2280-E20 SSD

STA026, XP6400LE70005, XP6400LE70015, XP6400LE70025, XP3200LE70005, XP3200LE70015, XP3200LE70025, XP1600LE70005, XP1600LE70015, XP1600LE70025, XP800LE70005, XP3800LE70015, XP7680SE70015, XP7680SE70015, XP7680SE70005, XP1920SE70005, XP1920SE70015, XP3840SE70015, XP3840SE70025, XP1920SE70005, XP1920SE70015, XP1920SE70025, XP6400LE70035, XP6400LE70045, XP6400LE70055, XP3200LE70035, XP3200LE70035, XP1600LE70035, XP1600LE70035, XP1600LE70035, XP1600LE70035, XP7680SE70035, XP1920SE70035, XP1920SE70045, XP1920SE70045, XP1920SE70035,

BAMIL IL LLC



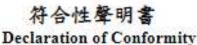
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Page 3 of 3

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normation and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any auth of a local UL Customer Service Representative at http://ul.com/abouts/locations/

IFC IECEE	Ref. Certif. No.
i≕, <b>∔</b> .	DK-124927-UL
	F TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME
CB TEST CERTIFICATE	
Product	FireCude 515 SSD
Name and address of the applicant	SEAGATE TECHNOLOGY INC 389 Disc Drive Longmont, CO 80503 United States
Name and address of the manufacturer	Phison Electronics Corp. No. 1, Oun Yi Rd., Jhunan, Miaoli 350, Taiwan
Name and address of the factory	CAL-COMP ELECTRONICS (THAILAND) PUBLIC CO., LTD 80 MOO, 8 SETHAKIJ RD., KLONG MADUEA KRATOOM BEAN-SAMUTSAKORN 74110
linin lithen mane then ane featury, gleese legari an gege 2	THAILAND Additional Information on page 2
Ratings and principal characteristics	+3.3 Vdc, 1.45 A (Optional)
Tradomark (if any)	SEAGATE
Customer's Testing Facility (CTF) Stage used	
Model / Type Ref.	STA028, ZP250GV30001, ZP500GV30001, ZP1000GV30001, ZP2000GV30001
Additional information (if necessary may also be reported on page 2)	Additionally evaluated to: EN 62368-1:2014, EN 62368-1:2014/A11:2017 National Differences specified in the CB Test Report.
	Additional Information on page 2
A sample of the product was tested and found to be in conformity with	IEC 62368-1:2014
As shown in the Test Report Ref. No. which forms part of this Cartificate	WL-ITAV-22A2601-A0 issued on 2022-03-04
This CB Test Certificate is issued by the Nation	nal Certification Body
	O. U. 1025. 227 Pflaghes Rd I. 10003. Northbook, USA     O. Denker, Generating G. Dechtlic Research Devices.     O. U. Denker, Generating G. Dechtlic Research Devices.     O. U. S. Statements Theory Weith Burding ST, 1-8-1 Mecurranity, Chapterson, Traja 122-0005. JAN-44
<b>U</b>	E II. 154) T Linderstram Goalt. Terrent, Mr.S. Skil Dersen, CANNER Terrent Super setting names and setting names and setting names and setting names.
Date: 2022-03-08	Jas out Sapanal
	Signature: Jan-Erik Storgaap

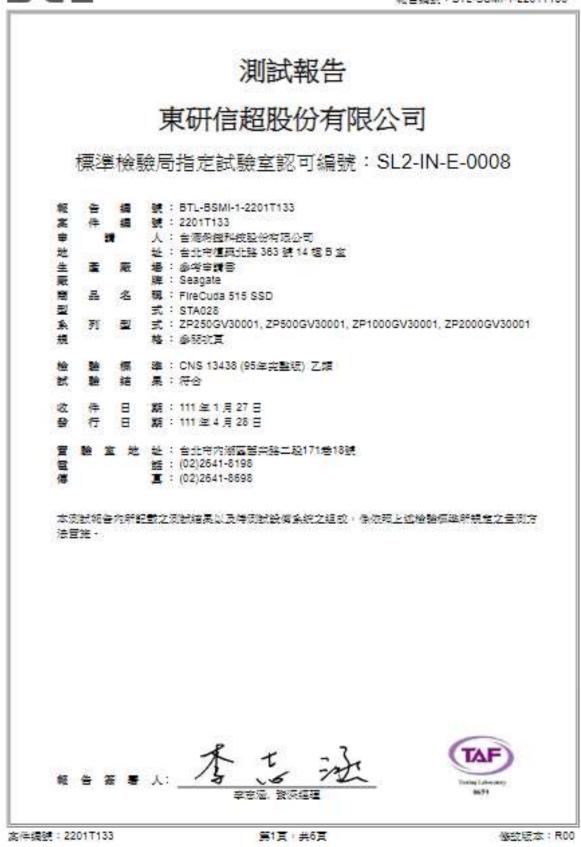


和检查符人代码	總號
Code of the applicant	Number

本符合性聲明書應依商品檢驗法規定備費相關技術文件後始得簽具 Please check all the related technical documents in accordance with the Commodity Inspection Act before signing the form.

報驗義務人:台灣希捷科技股份有限公司 **Obligatory** Applicant 地址:台北市復興北路363號14樓 B 室 Address 電話:02-2514 2201 Telephone 商品中(英)文名稱:<u>FireCuda 515 SSD</u> Commodity Name 商品型式 (或型號): STA028. ZP250GV30001. ZP500GV30001. ZP1000GV30001, ZP2000GV30001 Commodity Type (Model) 符合之檢驗標準及版次:CNS13438(95年完整版); Standard(s) and version CNS 15663 第5 節「含有標示」(102 年) 試驗報告編號:BTL-BSMI-1-2201T133 lest Report Number 試驗室名稱及代號:<u>東研信超股份有限公司/SL2-IN-E-0008</u> Testing laboratory name and designation number 符合性聲明檢驗標識及識別號碼 ŝ. The form of the DoC marking appears like this D33027 (1) 字数下方標位之端寫僅道用電機電子銀商品) RoHS D3302 RoHS 兹登明上述商品符合商品检验法符合性登明之规定,若因違反本登明書 所聲明之內容,願意擔負相關法律責任。 I hereby declare that the listed commodity conforms to Declaration of Conformity requirements stipulated in the Commodity Inspection Act. I agree to take any legal obligations should violations against the Declaration of Conformity occur. (答查) 報验義務人: **Obligatory** Applicant (Signature) ÷ R 111 年 A 28 筵 國 4 B DATE (inonth) (day) (year)

報告编號: BTL-BSMI-1-2201T133



BIL

	VCCI Test Report
Report No. Equipment Model Name Brand Name Applicant Address	<ul> <li>BTL-VCCI-1-2201T133</li> <li>FireCuda 515 SSD</li> <li>STA026, ZP250GV30001, ZP500GV30001, ZP1000GV30001, ZP2000GV300</li> <li>Seagate</li> <li>Seagate Technology LLC</li> <li>389 Disk Drive Longmont, CO 80503 USA</li> </ul>
Standard(8)	<ul> <li>VCCI-TECHNICAL REQUIREMENTS (VCCI-CISPR 32: 2016) CISPR 32:2015+COR1:2016 Class B</li> </ul>
Date of Receipt Date of Test Issued Date	: 2022/1/27 : 2022/1/27 - 2022/3/1 : 2022/4/28
The above equipm	ent has been tested and found in compliance with the requirement of the above
standards by BTL I	
	- Jack Kao
standards by BTL I	



### VERIFICATION OF COMPLIANCE

This is to certify that the product listed below was (were) tested in the BTL EMC Laboratory to comply with the oriterta limits Class B of conducted and radiated emissions according to the follow-mentioned Measurement Standard established by the VCCI, Japan.

Equipment	FireCuda 515 \$\$D
Model Name	\$TA028, ZP250GV30001, ZP500GV30001, ZP1000GV30001, ZP2000GV30001
Brand Name	Seagate
Applicant	Seagate Technology LLC
Address	385 Disk Drive Longmont, CO 80503 USA
Standard(s)	VCCI-TECHNICAL REQUIREMENTS (VCCI-CISPR 32: 2016) CISPR 32:2015+COR1:2016

Report(a)

BTL-VCCI-1-2201T133

The test data, data evaluation, and equipment configuration contained in our test report(s) above was (were) obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO/IEC 17025 guality assessment standard and technical standard(s). The test data contained in the referenced test report relate only to the EUT sample and item(s) tested.

Pike Lee

Authorized Signatory



BTL INC. No.18, Ln. 171, Sec. 2, Jluzong Rd., Nelhu Dist., Taipel City 114, Taiwan TEL +886-2 2657-3299 FAX:+886-2 2657-3331





# UK

### VERIFICATION OF COMPLIANCE

This is to certify that the product listed below was (were) tested in the BTL EMC Laboratory to comply with the required criteria levels of the follow-mentioned Generic Standards or Product Family Standard(s) and/or Basic Standard(s) based on the essential conformity requirements of Electromagnetic Compatibility Regulations 2016.

Equipment	FireCuda 515 SSD
Model Name	\$TA028, ZP250GV30001, ZP500GV30001, ZP1000GV30001, ZP2000GV30001
Brand Name	Seagate
Applicant	Seagate Technology LLC
Address	389 Disk Drive Longmont, CO 80503 USA
Standard(s)	B\$ EN 55032:2015+A11:2020 Class B B\$ EN IEC 61000-3-2:2019+A1:2021 Class D B\$ EN 61000-3-3:2013+A1:2019 B\$ EN 55024:2010+A1:2015 B\$ EN 55035:2017+A11:2020
Report(s)	BTL-EMC-1-2201T133

The test data, data evaluation, and equipment configuration contained in our test report(s) above was (were) obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO/IEC 17025 quality assessment standard and technical standard(s). The test data contained in the referenced test report relate only to the EUT sample and Item(s) tested.

Pike Lee

Authorized Signatory



BTL INC. No.18, Ln. 171, Sec. 2, Jluzong Rd., Nelhu Dist., Taipel City 114, Taiwan TEL:+886-2-2657-3299 FAX:+886-2-2657-3331



### **UKCA Declaration of Conformity**

#### **Product Safety and EMC Compliance**

The product(s) meets the requirements of the Electromagnetic Compatibility Regulation 2016 by application of the following standards:

BS EN 55032:2015	Electromagnetic compatibility of multimedia equipment - Emission requirements, Class B
BS EN 55024:2010	
BS EN 55035:2017	Information Technology Equipment – Immunity characteristics – Limits and methods of measurement
BS EN 61000-3-2:2014	Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
BS EN 61000-3-3:2013	Limitation of Voltage Changes, Voltage Fluctuations and Flicker in Low-Voltage
	Supply Systems for Equipment with Rated Current ≤16 Amps per Phase

The product(s) meets the requirements of the Electrical Equipment (Safety) Regulations 2016 by application of the following standard(s):

BS EN 60950-1:2006 /A2:2013 Information Technology Equipment - Safety- (Second Edition) Part 1: General Requirements

BS EN 62368-1:2014/A11:2017 Audio/video, information and communication technology equipment - Part 1: Safety requirements (IEC 62368-1:2014, Modified)

#### Product Environmental Compliance, UK RoHS Declaration of Conformity

The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012. <u>BS EN IEC 63000:2018</u> Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.

#### Seagate products rely on the following RoHS exemptions for compliance:

13	Lead as an alloying element in steel for machining purposes containing up to 0.35% lead by weight and in batch hot dip galvanized steel components containing up to 0.2% lead by weight	
17 Lead as an alloying element in aluminum for machining purposes up to 0.4% lead b		
18	Copper alloy up to 4.0% lead by weight	
19	Lead in high melting temperature type solders (i.e. lead-based solder alloys containing 85 % by weight or more lead	
21	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors (e.g. piezoelectronic devices) or in a glass or ceramic matrix compound	

Year to Begin Affixing Mark: Manufacturer's Name: Manufacturer's Address:

Type of Equipment: Internal Product Name: Regulatory Model Number: Seagate Internal Model Number: 2022 Seagate Technology Netherlands B.V. (UK Branch) Jubilee House, Third Avenue, Globe Park Marlow SL7 1EY,UK

Solid State Drive FireCuda 515 SSD STA028 ZP250GV30001, ZP500GV30001, ZP1000GV30001, ZP2000GV30001

This product or products are in conformity with the relevant Union harmonization legislation. This declaration of conformity is issued under the sole responsibility of Seagate Technology LLC.

June 29, 2022 | 06:45:59 PDT Date: Len Allen

Signature: Ken Allen Vice President of Operations, Products and Technology



### **Regulatory and certification documents package**

Regulatory Model Number: STA020

Series Name(s): FireCuda520, FireCuda510

Internal Name: E16 Dual-sided PCB

DateComments:September 18, 2019Package generated.

Contents:

- Australia/New Zealand RCM mark SDoC (Supplier Declaration of Conformity)
- Australia/New Zealand CoT (Certificate of Test)
- Canada ICES CoT (Certificate of Test)
- CB Certificate(s)
- CE DoC (Declaration of Conformity)
- CE EMC CoT (Certificate of Test)
- FCC SDoC
- FCC CoT (Certificate of Test)
- Korea RRL Certificate
- Korea CoT (Certificate of Test)
- UL/cUL safety
- TUV safety
- Taiwan BSMI certificate
- Taiwan CoT (Certificate of Test)
- VCCI CoT (Certificate of Test)



### Regulatory Model Number (RMN) STA020

Statement of Similarity

Tested model ZP1000GM30012

Models added by Similarity

FireCuda510: ZP500GM30001, ZP1000GM30001, ZP2000GM30001 FireCuda520: ZP500GM30002, ZP1000GM30002, ZP2000GM30002 IronWolf525: ZP500NM30002, ZP1000NM30002, ZP2000NM30002

The regulatory model number STA020 is a Solid State Drive (SSD). It is designed for internal integration into products with a PCIe NVMe interface. The SSD is available with a variety of endurance levels and other features that may be offered. User capacity, endurance features and data security options are determined by the firmware. All models, regardless of these various features and configurations, are physically and electrically identical.

DocuSigned by:

ken Allen -9D7478D29779420...-

Ken Allen Vice President Operations and Technology



### **Supplier's Declaration of Conformity**

Declaration of Conformity as a registered and responsible supplier under the Australian Communications and Media Authority (ACMA) regulatory arrangements for Regulatory Compliance Mark (RCM) and it's placement.

Responsible Supplier Name: Seagate Technology Australia Pty Ltd Responsible Supplier Number: E806

### Seagate Technology Australia Pty. Limited Level 7, 91 Phillip St PARRAMATTA NSW 2150 AUSTRALIA

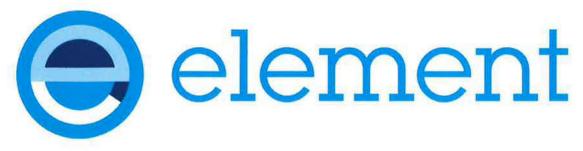
Declare under our sole responsibility that the following product(s):

### Seagate M.2 NVMe Solid State Drive

Model: STA020

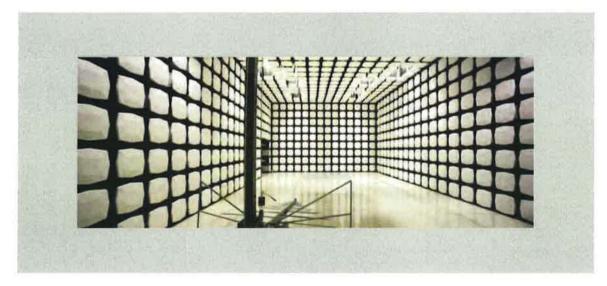
to which this declaration relates is in conformity with the following standard(s):

Title		Test	Regulation	
Australian/New	Zealand Standard	AS/I	NZS CISPR 32: 2015	
(Name of the Au	thorized Person)		Sam Zavaglia	
(Title of the Auth	orized Person)	Senior Fie	eld Applications Engineer	
(Date of Issue)	29 <sup>th</sup> August 201	1		
(Signature)	AA			



### Seagate Technology LLC Model STA020

Report # SEAG0231



NVLAP LAB CODE: 200881-0



This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government. This Report shall not be reproduced, except in full without written approval of the laboratory.

### **CERTIFICATE OF TEST**



### Last Date of Test: August 15, 2019 Seagate Technology LLC Model STA020

### Emissions

#### Standards

Specification	Method
AS/NZS CISPR 32:2015 Class B	AS/NZS CISPR 32:2015
EN 55032:2012/AC:2013 Class B	CISPR 32:2015
EN 61000-3-2:2014	IEC 61000-3-2:2018
EN 61000-3-3:2013	IEC 61000-3-3:2013 +A1:2017
FCC 15.107:2019 Class B FCC 15.109:2019 Class B FCC 15.109(g):2019 Class B ICES-003:2016 updated April 2017 Class B	ANSI C63.4:2014
VCCI-CISPR 32:2016 Class B	CISPR 32:2015

#### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

### **Deviations From Test Standards**

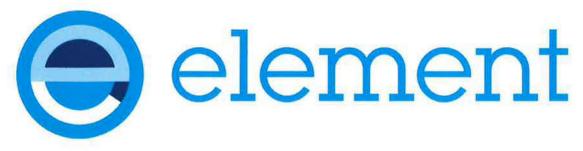
None

Approved By:

m

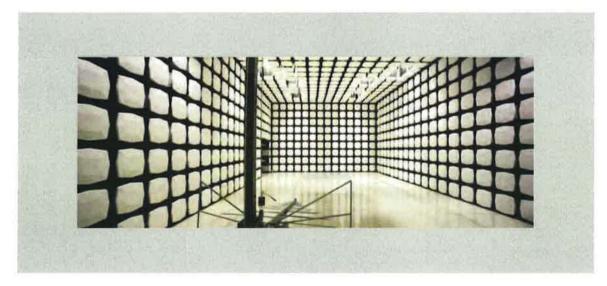
Matt Nuernberg, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.



### Seagate Technology LLC Model STA020

Report # SEAG0231



NVLAP LAB CODE: 200881-0



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### **CERTIFICATE OF TEST**



### Last Date of Test: August 15, 2019 Seagate Technology LLC Model STA020

### Emissions

#### Standards

Specification	Method		
AS/NZS CISPR 32:2015 Class B	AS/NZS CISPR 32:2015		
EN 55032:2012/AC:2013 Class B	CISPR 32:2015		
EN 61000-3-2:2014	IEC 61000-3-2:2018		
EN 61000-3-3:2013	IEC 61000-3-3:2013 +A1:2017		
FCC 15.107:2019 Class B FCC 15.109:2019 Class B FCC 15.109(g):2019 Class B ICES-003:2016 updated April 2017 Class B	(ANSI C63.4:2014)		
VCCI-CISPR 32:2016 Class B	CISPR 32:2015		

#### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

### **Deviations From Test Standards**

None

Approved By:

m

Matt Nuernberg, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.



### IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

### **CB TEST CERTIFICATE**

Product Name and address of the applicant	Disk drives Seagate Technology LLC	
Name and address of the applicant	Seagate Technology LLC 1280 Disc Drive Shakopee, MN 55379-1863 USA	
Name and address of the manufacturer	Seagate Technology LLC 1280 Disc Drive, Shakopee, MN 55379-1863, USA	
Name and address of the factory	CAL-COMP Electronics (Thailand) Co. Ltd. 60 Moo, 8 Sethakij Road, Klong Maduea, Kratoom Bean, Samuthsakorn 74110, THAILAND	
	Netronix, Inc. No. 945, Boai Street, 30265 Jubei City, Hsinchu, TAIWAN	
Ratings and principal characteristics	Rated Input Voltage:+3.3VdcRated Frequency:dcRated Input Current:STA019 1.2ASTA020 1.55AProtection Class:IIIDegree of Protection:IPX0	
Trade mark (if any)	Seagate	
Customer's Testing Facility (CTF) Stage used	CTF STAGE 2	
Model/type Ref.	STA019 and STA020	
A sample of the product was tested and found to be in conformity with	IEC 60950-1:2005 IEC 60950-1:2005/AMD1:2009 IEC 60950-1:2005/AMD2:2013	
as shown in the Test Report Ref. No. which forms part of this certificate	092-72152145A-000	
his CB Test Certificate is issued by the Nationa	Certification Body	

CB 041780 0695 Rev. 00 Date, 2019-09-12





### IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

### **CB TEST CERTIFICATE**

Product Name and address of the applicant	Disk drives Seagate Technology LLC 1280 Disc Drive Shakopee, MN 55379-1863 USA	
Name and address of the manufacturer	Seagate Technology LLC 1280 Disc Drive, Shakopee, MN 55379-1863, USA	
Name and address of the factory	CAL-COMP Electronics (Thailand) Co. Ltd. 60 Moo, 8 Sethakij Road, Klong Maduea, Kratoom Bean, Samuthsakorn 74110, THAILAND	
	Netronix, Inc. No. 945, Boai Street, 30265 Jubei City, Hsinchu, TAIWAN	
Ratings and principal characteristics	Rated Input Voltage:+3.3VdcRated Frequency:dcRated Input Current:STA019 1.2ASTA020 1.55AIIIProtection Class:IIIDegree of Protection:IPX0	
Trade mark (if any)	Seagate	
Customer's Testing Facility (CTF) Stage used	CTF STAGE 2	
Model/type Ref.	STA019 and STA020	
A sample of the product was tested and found to be in conformity with	IEC 62368-1:2014	
as shown in the Test Report Ref. No. which forms part of this certificate	092-72152145B-000	

This CB Test Certificate is issued by the National Certification Body

CB 041780 0696 Rev. 00 Date, 2019-09-12



 Page 1 of 1
 (Adrian Rabago Valenzuela)

 TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany



### **EU Declaration of Conformity**

### **Product Safety and EMC Compliance**

The product(s) meets the requirements of The Electromagnetic Compatibility (EMC) Directive 2014/30/EU by application of the following standards:

EN 55032:2012	Electromagnetic compatibility of multimedia equipment — Emission requirements – class B.
EN55024:2010	Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement
EN61000-3-2:2014	Limits for Harmonic Current Emissions (Equipment Input Current ≤16 Amps Per Phase)
EN61000-3-3:2013	Limitation of Voltage Changes, Voltage Fluctuations and Flicker in Low-Voltage
	Supply Systems for Equipment with Rated Current ≤16 Amps Per Phase

The product(s) meets the requirements of The Low Voltage Directive (LVD) 2014/35/EU by application of the following standards:

EN 62368-1:2014 Audio/video, information and communication technology equipment - Part 1: Safety requirements (IEC 62368-1:2014, Modified)

EN 60950-1:2006 /A11:2009 /A1:2010 /A12:2011/A2:2013 Information Technology Equipment - Safety- (Second Edition) Part 1: General Requirements

#### Product Environmental Compliance, EU/China RoHS Declaration of Conformity

#### Conformity with Harmonized Standards/Technical Specifications:

- Directive 2011/65/EU RoHS "Recast" (RoHS 2) as amended by Directive (EU) 2015/863 and further amended by Directive 2018/739 and Directive 2018/740 EN 50581:2012
- 2. Management Methods for Controlling Pollution by Electronic Information Products, Ministry of Information Industry Order No. 39 (China RoHS)
- 3. Management Methods for the Restriction of the Use of Hazardous Substances in electrical and Electronic Products, Ministry of Industry and Information Technology Order No. 32 effective July 1, 2016 (China RoHS 2)
- 4. Joint JEDEC/ECA Standard, Definition of "Low-Halogen" for Electronic Products, JS709B

Seagate products rely on the following RoHS 2 exemptions for compliance:

6(a)-I	Lead as an alloying element in steel for machining purposes containing up to 0.35% lead by weight and in batch hot dip galvanized steel components containing up to 0.2% lead by weight
6(b)-II	Lead as an alloying element in aluminum for machining purposes up to 0.4% lead by weight
6с	Copper alloy up to 0.4% lead by weight
7a	Lead in high melting temperature type solders (i.e. lead-based solder alloys containing 85 % by weight or more lead
7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors (e.g. piezoelectronic devices) or in a glass or ceramic matrix compound

#### **Due Diligence**

For parts and materials in Seagate products procured from external suppliers, we rely on the representations of our suppliers regarding the presence of RoHS 2 substances in these parts and materials. Our supplier contracts require compliance with our chemical substance restrictions, and our suppliers document their compliance with our requirements by providing material content declarations for all parts and materials for Seagate products. Current supplier declarations include disclosure of any substances regulated by RoHS 2 in such parts or materials.

Seagate also has internal systems in place to ensure ongoing compliance and all laws and regulations. These systems include standard operating procedures that ensure that product safety, EMC and environmental compliance requirements are followed, and an internal auditing process to ensure compliance with all standard operating procedures.

Year to Begin Affixing Mark: 2019

Manufacturer's Name: Seagate Technology, LLC Manufacturer's Address: 10200 South De Anza Blvd. (And Importer) Cupertino, California 95014-3029 U.S.A. **European Contact:** Director of Operations Seagate Technology (Netherlands) B.V. Tupolevlaan 105, 1119 PA Schiphol - Rijk, The Netherlands Type of Equipment: Solid State Drive **Product Name:** FireCuda **STA020** 

**Regulatory Model Number(s):** ST

**Seagate Models:** 

FireCuda 510 SSD

ZP500GM30001 ZP1000GM30001 ZP2000GM30001

FireCuda 520 SSD

ZP500GM30002 ZP1000GM30002 ZP2000GM30002

This product or products are in conformity with the relevant Union harmonization legislation. This declaration of conformity is issued under the sole responsibility of Seagate Technology LLC.

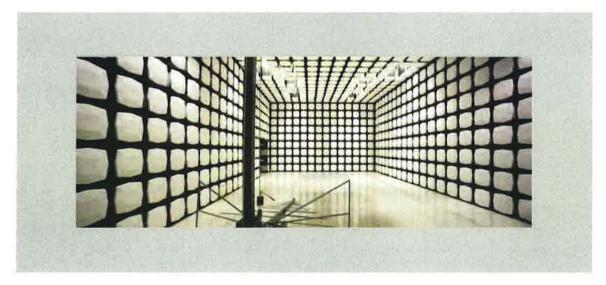
	DocuSigned by:
September 13, 2019   14:00:24 PDT Date:	(Sigestyrebacs

Matthew C. Brown Vice President Operations and Technology



### Seagate Technology LLC Model STA020

Report # SEAG0231







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### **CERTIFICATE OF TEST**



### Last Date of Test: August 15, 2019 Seagate Technology LLC Model STA020

### Emissions

#### Standards

Specification	Method		
AS/NZS CISPR 32:2015 Class B	AS/NZS CISPR 32:2015		
EN 55032:2012/AC:2013 Class B	CISPR 32:2015		
EN 61000-3-2:2014	IEC 61000-3-2:2018		
EN 61000-3-3:2013	IEC 61000-3-3:2013 +A1:2017		
FCC 15.107:2019 Class B FCC 15.109:2019 Class B FCC 15.109(g):2019 Class B ICES-003:2016 updated April 2017 Class B	ANSI C63.4:2014		
VCCI-CISPR 32:2016 Class B	CISPR 32:2015		

#### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

### **Deviations From Test Standards**

None

Approved By:

n

Matt Nuernberg, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.



## Last Date of Test: August 15, 2019 Seagate Technology LLC Model STA020

## Immunity

Specification	Method
opecification	Metrod
EN 55024:2010	IEC 61000-4-2:2008
	IEC 61000-4-3:2010
	IEC 61000-4-4:2012
	IEC 61000-4-5:2014 +A1:2017
	IEC 61000-4-6:2013
	IEC 61000-4-8:2009
	IEC 61000-4-11:2004 + A1:2017

#### Results

Test Description	Performance Criteria			
	Applied	Standard Specified	Observed Criteria	Comments
Electrostatic Discharge (ESD)	Yes	В	A	
Radiated Immunity	Yes	A	A	
Electrical Fast Transients and Bursts (EFT)	Yes	В	A	
Surge	Yes	В	A	
Conducted Immunity	Yes	A	A	
Magnetic Field Immunity	Yes	A	A	
Voltage Interruptions	Yes	C	C	
Voltage Dips	Yes	B/C	A/C	

Details on the application of the performance criteria, as well as any manufacturer provided performance criteria or acceptable degradation of performance, are all contained within the report.

## **Deviations From Test Standards**

None

Approved By:

Matt Nuernberg, Operations Manager



## **Declaration of Conformity**

Standards to which conformity is declared?

FCC Part 15B

47 CFR FCC Part 15B: 2019 (Class B) Information Technology Equipment (ITE) - Limits and methods of measurement

Manufacturer Name:	Seagate Technology LLC
Manufacturer Address:	10200 South DeAnza Boulevard
(And Importer)	Cupertino California 95014

Type of Equipment :

Solid State Device

Product Model Number : <u>STA020</u>

Seagate Technology LLC hereby declares that the equipment specified above conforms with the protection requirements of the above named Directive(s) and Standards.

Location: Minneso

Minnesota, USA

Certificate Date:

12 Sept, 2019

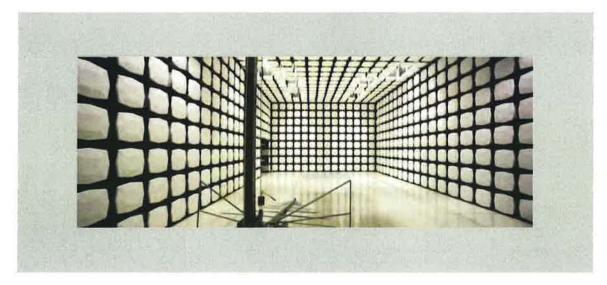
Gary A. Stigsell (Full Printed Name) Sr Project/Program Manager (position) 952-402-2544 (Phone)

Key Supel



# Seagate Technology LLC Model STA020

Report # SEAG0231





NVLAP LAB CODE: 200881-0

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## Last Date of Test: August 15, 2019 Seagate Technology LLC Model STA020

# Emissions

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-		and the second	

Specification	Method		
AS/NZS CISPR 32:2015 Class B	AS/NZS CISPR 32:2015		
EN 55032:2012/AC:2013 Class B	CISPR 32:2015		
EN 61000-3-2:2014	IEC 61000-3-2:2018		
EN 61000-3-3:2013	IEC 61000-3-3:2013 +A1:2017		
FCC 15.107:2019 Class B FCC 15.109:2019 Class B FCC 15.109(g):2019 Class B ICES-003:2016 updated April 2017 Class B	ANSI C63.4:2014		
VCCI-CISPR 32:2016 Class B	CISPR 32:2015		

#### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

## **Deviations From Test Standards**

None

Approved By:

n

Matt Nuernberg, Operations Manager

78E2-D198-35AC-7B06

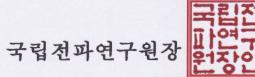
# 방송통신기자재등의 적합등록 필증

Registration of Broadcasting and Communication Equipments

상호 또는 성명 Trade Name or Registrant	SEAGATE TECHNOLOGY LLC
기자재명칭(제품명칭) Equipment Name	Solid State Drive
기본모델명 Basic Model Number	STA020
파생모델명 Series Model Number	ZP500GM30002, ZP2000GM30001, ZP500GM30001, ZP1000GM30002, ZP1000GM30001, ZP2000GM30002
등록번호 Registration No.	R-R-STX-STA020
제조자/제조(조립)국가 Manufacturer/Country of Origin	SEAGATE TECHNOLOGY LLC / 태국, 대만
등록연월일 Date of Registration	2019-08-28
기타 Others	
위 기자재는 「전파법」	제58조의2 제3항에 따라 등록되었음을 증명합니다.

It is verified that foregoing equipment has been registered under the Clause 3, Article 58-2 of Radio Waves Act.

2019년(Year) 08월(Month) 28일(Day)



Director General of National Radio Research Agency

※ 적합등록 방송통신기자재는 반드시 "적합성평가표시"를 부착하여 유통하여야 합니다. 위반시 과태료 처분 및 등록이 취소될 수 있습니다.



## Report No. SEAG0231.1

NRRA Notice 2018-128 (2018.12.24) Test Method for Electromagnetic Compatibility

Applicant Information	Applicant:	Seagate Technolo	ogy LLC
	Address:	1280 Disc Drive Shakopee, MN 55	379
	Contact Name:	Curt Propson	
Product Information	Equipment Name:	Solid State Drive	
	Model Name:	STA020	
	KCC ID Number	R-R-STX-STA020	
	Manufacturer:	Seagate Technolo	ogy LLC
	Manufacturer Address:	1280 Disc Drive Shakopee, MN 55	379
	Origin Country:	Thailand and Taiw	
Date(s) of testing		2019-08-12, 2019- 2019-08-15	-08-13, 2019-08-14,
Equipment Class		Class A	Class B
Test Results		PASS	🗍 FAIL
Lab Performing the Tests Element Materials Technology 9349 W Broadway Ave. Brooklyn Park, MN 55445 612-638-5136 888-364-2378		Brooklyn Park Lak	2

mayne	Matt Mus
Test Technicians: Marcelo Aguayo	Operations Manager: Matt Nuernberg



## Last Date of Test: August 15, 2019 Seagate Technology LLC Model STA020

# Emissions

#### Standards

Specification	Method
KN 32 Class B	KN 32
Technical Dequirements for Electromognetic	Compatibility: NPRA Nation 2018 20 (2018 12 24)

Technical Requirements for Electromagnetic Compatibility: NRRA Notice 2018-29 (2018.12.24)

Test Methods for Electromagnetic Compatibility: NRRA Notice 2018-128 (2018.12.24)

Notice regarding Conformity Evaluation of Broadcasting and Communication Equipment: NRRA Notice 2018-17 (2018.8.17)

#### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	

### **Deviations From Test Standards**

None

**Approved By:** 

m Att

Matt Nuernberg, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information.



## Last Date of Test: August 15, 2019 Seagate Technology LLC Model STA020

## Immunity

### **Standards**

Specification	Method
	KN 61000-4-2
KN 35	KN 61000-4-3
	KN 61000-4-4
	KN 61000-4-5
	KN 61000-4-6
	KN 61000-4-8
	KN 61000-4-11

Technical Requirements for Electromagnetic Compatibility: NRRA Notice 2018-29 (2018.12.24)

Test Methods for Electromagnetic Compatibility: NRRA Notice 2018-128 (2018.12.24)

Notice regarding Conformity Evaluation of Broadcasting and Communication Equipment: NRRA Notice 2018-17 (2018,8.17)

#### Results

Test Description	Per	formance Cr	iteria	
	Applied	Standard Specified	Observed Criteria	Comments
Electrostatic Discharge (ESD)	Yes	В	A	
Radiated Immunity	Yes	A	A	
Electrical Fast Transients and Bursts (EFT)	Yes	В	В	
Surge	Yes	В	A	
Conducted Immunity	Yes	A	A	
Magnetic Field Immunity	Yes	A	A	
Voltage Interruptions	Yes	С	С	
Voltage Dips	Yes	B/C	A/A	

Details on the application of the performance criteria, as well as any manufacturer provided performance criteria or acceptable degradation of performance, are all contained within the report.

### **Deviations From Test Standards**

None

Approved By:

m att

Matt Nuernberg, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information.

# CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference Issue Date 20190917-E145123 E145123-A57-UL 2019-September-17

Issued to:

SEAGATE TECHNOLOGY L L C 1280 DISC DR SHAKOPEE MN 55379-1863

This certificate confirms that representative samples of

COMPONENT - INFORMATION TECHNOLOGY EQUIPMENT INCLUDING ELECTRICAL BUSINESS EQUIPMENT COMPONENT - AUDIO/VIDEO, INFORMATION AND COMMUNICATION TECHNOLOGY EQUIPMENT Solid State Drive- STA019, STA020

Have been investigated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

Standard(s) for Safety:	UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07- Information Technology Equipment - Safety - Part 1: General Requirements	
Additional Information:	See the UL Online Certifications Directory at <a href="https://iq.ulprospector.com">https://iq.ulprospector.com</a> for additional information.	

This Certificate of Compliance does not provide authorization to apply the UL Recognized Component Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

Barnally

Bruce Mahrenholz, Director North American Certification Program



Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at http://ul.com/aboutul/locations/

# CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference Issue Date 20190917-E145123 E145123-A6005-UL 2019-September-17

Issued to:

SEAGATE TECHNOLOGY L L C 1280 DISC DR SHAKOPEE MN 55379-1863

This certificate confirms that representative samples of COMPONENT - AUDIO/VIDEO, INFORMATION AND COMMUNICATION TECHNOLOGY EQUIPMENT COMPONENT - INFORMATION TECHNOLOGY EQUIPMENT INCLUDING ELECTRICAL BUSINESS EQUIPMENT Solid State Drive-STA019, STA020

Have been investigated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

Standard(s) for Safety:UL 62368-1 and CAN/CSA C22.2 No. 62368-1-14-<br/>Audio/video, information and communication technology<br/>equipment Part 1: Safety requirementsAdditional Information:See the UL Online Certifications Directory at<br/><br/>https://iq.ulprospector.com<br/>for additional information.

This Certificate of Compliance does not provide authorization to apply the UL Recognized Component Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

Barnelly

Bruce Mahrenholz, Director North American Certification Program



Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at http://ul.com/aboutul/locations/





# CERTIFICATE

No. B 041780 0691 Rev. 00

Holder of Certificate: Seagate Technology LLC

1280 Disc Drive Shakopee, MN 55379-1863 USA

**Certification Mark:** 



**Product:** 

**Disk drives** 

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

Test report no.:

092-72123961-200

Valid until:

2020-12-20

Date,

2019-09-13

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(Adrian Rabago Valenzuela)

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# CERTIFICATE

No. B 041780 0691 Rev. 00

Model(s):

# Regulatory Models: STA002, STA018, STA019, STA020, STA021

## Parameters:

Rated Input Voltage:	+5Vdc, +3.3Vdc
Rated Frequency:	dc
Rated Input Current:	
STA002:	1.10A
STA018:	0.20A
STA019:	1. <b>2</b> A
STA020:	1.55A
STA021:	0.30A
Protection Class:	III
Degree of Protection:	IPX0

#### Model Differences:

#### **Regulatory Model Number STA002:**

\*1TB, SATA interface, 1024 MB cache 512GB, SATA interface, 512 MB cache 256GB, SATA interface, 256 MB cache 128GB, SATA interface, 256 MB cache (possible future configuration)

#### **Regulatory Model Number STA018**

960GB, SATA interface, 2.5"

#### **Regulatory Model Number STA019**

\* 1000 GigaByte, NVMe Interface, PCIe Gen 3x4, 512E format 500 GigaByte, NVMe Interface, PCIe Gen 3x4, 512E format 250 GigaByte, NVMe Interface, PCIe Gen 3x4, 512E format

#### **Regulatory Model Number STA020**

\* 2000 GigaByte, NVMe Interface, PCIe Gen 4x4, 512E format 1000 GigaByte, NVMe Interface, PCIe Gen 4x4, 512E format 500 GigaByte, NVMe Interface, PCIe Gen 4x4, 512E format

#### **Regulatory Model Number STA021**

- \* 2000 GigaByte, Serial-ATA interface 1000 GigaByte, SATA Interface 500 GigaByte, SATA Interface 250 GigaByte, SATA Interface
- \* = Indicates configuration tested

# CERTIFICATE No. B 041780 0691 Rev. 00

### Conditions of Acceptability:

- 1. Disc drives are to be supplied by a reliably SELV power supply.
- 2. Suitable enclosure (fire/mechanical) to be provided/evaluated when disc drive is installed in the end use product.
- Drives were evaluated at maximum ambient (55°C) determined by Seagate specification. Seagate specification also states, a maximum allowable drive case temperature of 60°C. This specification was exceeded during testing.
- 4. External fan was part of test fixture to maintain recommended case temperature during testing. Additional cooling is recommended as part of end use configuration to maintain recommended operating case temperature at specific airflow.

**Tested according to:** 

EN 60950-1:2006/A2:2013

Production Facility(ies): 096583, 028752





# CERTIFICATE

No. B 041780 0692 Rev. 00

Holder of Certificate:

Seagate Technology LLC 1280 Disc Drive Shakopee, MN 55379-1863 USA

**Certification Mark:** 



Product:

Disk drives Solid State Drive

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

Test report no.:

092-72144195-200

Valid until:

2020-12-20

Date,

2019-09-13

(Adrian Rabago Valenzuela)

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A4 / 07.17



# CERTIFICATE

No. B 041780 0692 Rev. 00

Model(s):

Regulatory Models: STA002, STA012, STA018, STA019, STA020, STA021

Parameters:

Rated Input Voltage:	+5Vdc, +3.3Vdc
Rated Frequency:	dc
Rated Input Current:	
STA002, STA012:	1.10A
STA018:	0.20A
STA019:	1.2A
STA020:	1.55A
STA021:	0.30A
Protection Class:	111
Degree of Protection:	IPX0

#### Conditions of Acceptability:

- 1. Solid state drives are to be supplied by a reliably SELV power supply.
- 2. Suitable enclosure (fire/mechanical) to be provided/evaluated when drive is installed in the end use product.
- Proper air flow should be considered in the end use product to limit maximum case temperature to 60°C. Testing was conducted with a 40 CFM fan.

Tested according to: EN 62368-1:2014/A11:2017

Production Facility(ies): 028752, 096583

Daa	符合性聲明 laration of Cont			幸愿就要逐多人代码 Code of the applicant	編 Numb	Store and
本符合性聲明書應 Please check all the related tec signing the form.	依商品檢驗法	規定備齊	相關技術 the Commodity	D33027 文件後始得 y Inspection Act bef	09132019 簽具 fore	1510
報驗義務人: <u>台灣希捷科技股份</u>	分有限公司(Seagate	Technology T	aiwan, Ltd.)	u es constativos - en	Saran in die	
Obligatory Applicant 地址: <u>臺北市松山區復興北路 3</u> Address	63號14樓B室			-		
電話: <u>886-2-2514-2273</u> Telephone 商品中(英)文名稱: <u>固態磁</u>	碟機 SSD					-
Commodity Name 商品型式(或型號): Commodity Type (Model)	STA020: ZP500GN ZP1000GM30002, 2			000GM30001, ZP50	<u>0GM30002.</u>	-
符合之檢驗標準及版次: <u>CNS</u>	3 13438/ Complete 2000	6 Class B/ Sectio	n 5 "Marking of	presence" of CNS 1	5663 2013.3	7)
Standard(s) and version 試驗報告編號: <u>SEAG0231.2</u> Fest Report Number	2 (EMC)/ ATS/GENV/2	. <u>88/19/yao</u>				
試驗室名稱及代號: <u>Element M</u> Festing laboratory name and designat		MC)/ ALS Labo	ratory Group (R	oHS)		
S 符合性聲明檢驗標識及請 The form of the DoC marking appears lik		D33027 RoHS	或 or	D33027 RoHS		
茲聲明上述商品符合商品檢驗法 hereby declare that the listed cor Commodity Inspection Act. I agre Conformity occur.	nmodity conforms to	Declaration of	Conformity re	之內容·願意擔負材 quirements stipulat	ed in the	t任·
報驗義務人: <u>台灣希捷科技股份</u> Obligatory Applicant The Board C	CHATTER CHAPTER AND AND AND A THE AND A T	¥		·e )		
中 華 民 國 108 DATE (year)	年 09 月 (month)	∃ 13 (day)	日			

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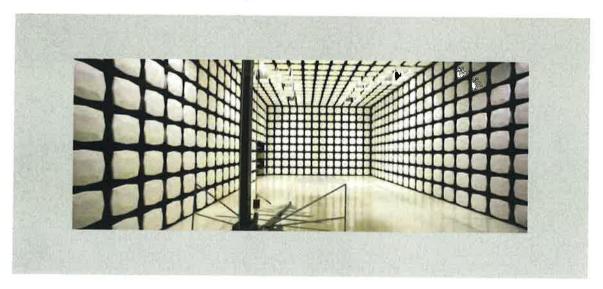


# Seagate Technology LLC

Model STA020

ZP500GM30001 ZP1000GM30001 ZP2000GM30001 ZP500GM30002 ZP1000GM30002 ZP2000GM30002

Report # SEAG0231.2







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## Last Date of Test: August 14, 2019 Seagate Technology LLC Model STA020

# Emissions

### Standards

Specification	Method
CNS 13438:2006 (Complete) Class B	CNS 13438:2006 (Complete)

#### **Results**

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	

### **Deviations From Test Standards**

None

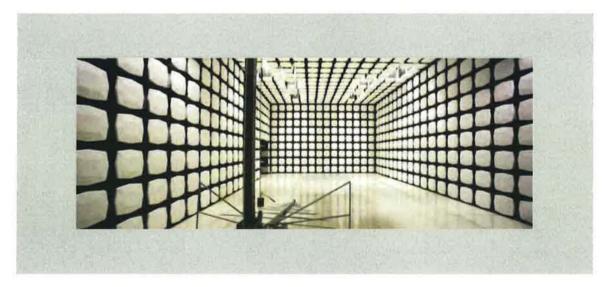
**Approved By:** 

Matt Nuernberg, Operations Manager



# Seagate Technology LLC Model STA020

Report # SEAG0231



NVLAP LAB CODE: 200881-0



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## Last Date of Test: August 15, 2019 Seagate Technology LLC Model STA020

# Emissions

### Standards

Specification	Method		
AS/NZS CISPR 32:2015 Class B	AS/NZS CISPR 32:2015		
EN 55032:2012/AC:2013 Class B	CISPR 32:2015		
EN 61000-3-2:2014	IEC 61000-3-2:2018		
EN 61000-3-3:2013	IEC 61000-3-3:2013 +A1:2017		
FCC 15.107:2019 Class B FCC 15.109:2019 Class B FCC 15.109(g):2019 Class B ICES-003:2016 updated April 2017 Class B	ANSI C63.4:2014		
VCCI-CISPR 32:2016 Class B	CISPR 32:2015		

### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Radiated Emissions High Frequency	Yes	Pass	
Conducted Emissions	Yes	Pass	
Telecom Conducted Emissions	Yes	Pass	
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

## **Deviations From Test Standards**

None

Approved By:

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Matt Nuernberg, Operations Manager