

Report No.: HCO0181/2018 Page: 1 of 7

Date: November 5, 2018

VECOW CO., LTD.
3 F., NO. 10, JIANKANG RD.,
ZHONGHE DIST., NEW TAIPEI CITY,
TAIWAN, R.O.C.

The following merchandise was submitted and identified by the vendor as:

Product Description: Ultra-compact Embedded System

Style/ Item No.: ARS-2000/ No.1

Quantity: Total 1 set

Testing Period: Oct. 30, 2018 to Nov.1, 2018

We have tested the submitted sample(s) as requested and the following results were obtained:

<u>Test Required:</u> (According to client's test specification, please see following sheets in detail.)

1. Random Vibration Test

2. Mechanical Shock Test

Test Results: -PLEASE SEE ATTACHED SHEETS-

Signed for and on behalf of SGS TAIWAN Ltd.

Hank Chiou Supervisor

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sus.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sus.com/terms e-document.htm, Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forego or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.31, No.33, No.35, Wu Chyuan Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五權路 31 號, 33 號, 35 號 No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號



Report No.: HCO0181/2018

Page: of 7

1. Random Vibration Test:

Test Equipment:

Name	Brand	Model	Serial No.
Vibration Test System	UNHOLTZ-DICKIE	SAI60-H560BAC/2/ST	474
Controller	Dactron	LASER	7110357
Control Accelerometer	PCB	353B34	143550

Lab Environmental Conditions:

Ambient temperature: (25 ± 3) °C $(55 \pm 20) \% RH$ Ambient humidity:

Test Method/ Specification:

Test method: IEC 60068-2-64, Edition 2.0: 2008 Sample condition: Operating (execute "BurnIn Test")

Wave form: Random $(5 \sim 500) \text{ Hz}$ Frequency:

Frequency (Hz)	Left Slope (dB/Oct.)	PSD (g ² /Hz)	Right Slope (dB/Oct.)
5	_	0.05	0
500	0	0.05	_
=> equivalen	t to 5.0 G _{rms}		

Direction: X, Y, Z axes (see photo $3 \sim 5$)

Duration: 30 minutes/axis

- Examine the appearance of specimen(s) by visual check and perform functional check after this test.
- Functional check: Turn on the power of specimen then examine the test program "BurnIn Test" could work normally or not.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sus.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sus.com/terms e-document.htm, Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.31, No.33, No.35, Wu Chyuan Road, Wuku Industrial Zone, New Taipei City, Taiwan/新北市五股工業區五權路 31 號, 33 號, 35 號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279 f (886-2) 2299-9558



Report No.: HCO0181/2018

Page: 3 of 7

Specimen:

Style/ Item No.: ARS-2000/ No.1

Quantity: Total 1 set

Test Result:

Check Item Style/ Item No.	Appearance check (Visual check)	Functional check
ARS-2000/ No.1	No visible damage	Normal

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions, htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.31, No.33, No.35, Wu Chyuan Road, Wuku Industrial Zone, New Taipei City, Taiwan/新北市五股工業區五權路 31 號, 33 號, 35 號

台灣檢驗科技股份有限公司_

t (886-2) 2299-3279 f (886-2) 2299-9558



Report No.: HCO0181/2018

Page: of 7

2. Mechanical Shock Test:

Test Equipment:

Name	Brand	Model	Serial No.
Shock Test System	LANSMONT	65-81 TTSII	M-13418
Data Acquisition & Analysis System	LANSMONT	103570-2-B	0503-73
ICP Accelerometer	PCB	353B14	79347

Lab Environmental Conditions:

 $(25 \pm 3) \, ^{\circ}\text{C}$ Ambient temperature: Ambient humidity: $(55 \pm 20) \% RH$

Test Method/ Specification:

Test Method: IEC 60068-2-27, Edition 4.0: 2008

Sample condition: Operating (execute "BurnIn Test")

Half-sine Pulse shape:

Acceleration: 50 g

Pulse duration: <u>11 ms</u>

6 faces ($\pm X$, $\pm Y$, $\pm Z$ axes, see photo 6 ~ 11) Shock direction:

No. of shock: 3 shocks/ axis (total 18 shocks)

- Examine the appearance of specimen(s) by visual check and perform functional check after this test.
- Functional check: Turn on the power of specimen then examine the test program "BurnIn Test" could work normally or not.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sus.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sus.com/terms e-document.htm, Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

台灣檢驗科技股份有限公司

SGS Taiwan Ltd.

No.31, No.33, No.35, Wu Chyuan Road, Wuku Industrial Zone, New Taipei City, Taiwan/新北市五股工業區五權路 31 號, 33 號, 35 號 t (886-2) 2299-3279 f (886-2) 2299-9558



Report No.: HCO0181/2018

Page: of 7

Specimen:

Style/ Item No.: ARS-2000/ No.1

Quantity: Total 1 set

Test Result:

Check Item Style/ Item No.	Appearance check (Visual check)	Functional check
ARS-2000/ No.1	No visible damage	Normal

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions, htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.31, No.33, No.35, Wu Chyuan Road, Wuku Industrial Zone, New Taipei City, Taiwan/新北市五股工業區五權路 31 號, 33 號, 35 號

台灣檢驗科技股份有限公司_

t (886-2) 2299-3279 f (886-2) 2299-9558

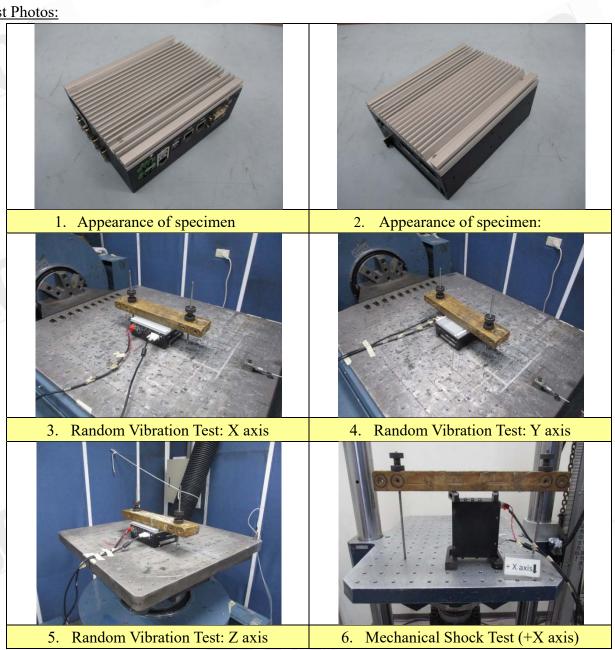
www.tw.sgs.com Member of SGS Group



Report No.: HCO0181/2018

Page: of 7

Test Photos:



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions, htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

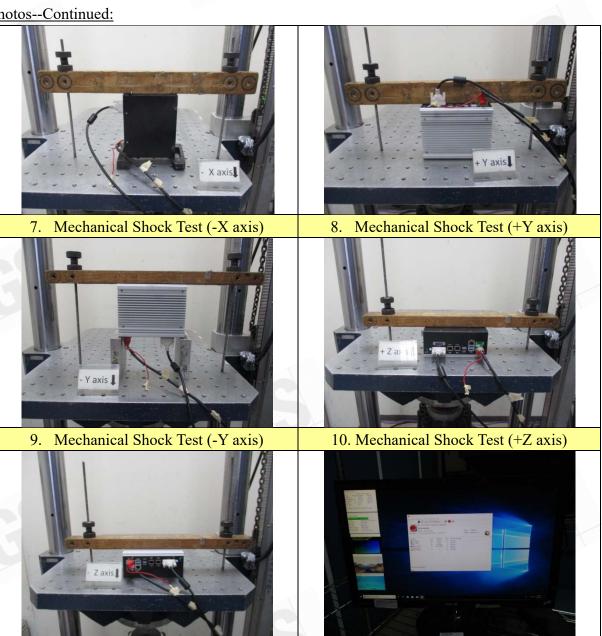
No.31, No.33, No.35, Wu Chyuan Road, Wuku Industrial Zone, New Taipei City, Taiwan /新北市五股工業區五權路 31 號, 33 號, 35 號



Report No.: HCO0181/2018

Page: 7 of 7

Test Photos--Continued:



The End of Test Report

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sus.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sus.com/terms e-document.htm, Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.31, No.33, No.35, Wu Chyuan Road, Wuku Industrial Zone, New Taipei City, Taiwan/新北市五股工業區五權路 31 號, 33 號, 35 號

11. Mechanical Shock Test (-Z axis)

12. Functional check