### DECLARATION OF CONFORMITY

# CE

Name of company: CINCON ELECTRONICS CO., LTD. No. 8-1 Fu Kung RD. Fu Hsing Park, Fu Hsing Hsiang, Address: Chang Hua Hsien, Taiwan, R.O.C.

Declares that the component product

**DC-DC** Converters EC7BW-110S05; EC7BW-110S12; EC7BW-110S15; EC7BW-110D12; EC7BW-110D15; EC7BW-110S05N; EC7BW-110S12N; EC7BW-110S15N; EC7BW-110D12N; EC7BW-110D15N

referred to this declaration conforms with the standard(s) or directive(s) as far as applicable:

Product Meet Safety Standard	:	EN60950-1	2006/A12: 2011+A2:2013
EMC Standards	:	EN50121-1	2006
		EN50121-3-2	2006
		EN55011	2009+A1: 2010

Directives	:	Low Voltage Directive	2014/35/EU
		<b>EMC</b> Directives	2014/30/EU
		<b>RoHS</b> Directive	2011/65/EU

This component product must be used within other equipment and must not be operated as a stand alone product.

The company named above will keep on file for review the following technical documentation:

· Technical drawings

·Other technical documentation

Manufacturer

Signature: John Son CHENG

Date: Oct. 03. 2016

Name: Johnson Cheng / President



## SHOCK TEST REPORT

Company : <u>Cincon Electronics Co., Ltd.</u>

Address : <u>No.8-1 Fu Kung Rd ., Fu Hsing ind.</u> Park , Fu Hsing Hsiang, Chang <u>Hua Hsien , Taiwan , R.O.C.</u>

Model Name : <u>EC7BW-110S15</u>, ECLB40W-110S05, CQB60W-110S24

Date Received : MAY 15, 2015

Date Tested : MAY 15, 2015

#### TESTING LABORATORY IS ACCREDITED BY:

IEC/IECQ 17025 certificate of independent test laboratory approval

Certificate No. : 1.72.0031

ISO 17025 accredited in respect of laboratory is approved by TAF

Certificate No. : L0835-140329

ISO 9001 certificate is approved by TUV CERT certification body of TUV NORD Cert GmbH

### WE HEREBY CERTIFY THAT:

The test(s) shown in the attachment were conducted according to the indicating procedures. We assume full responsibility for the accuracy and completeness of these tests and vouch for the qualifications of all personnel performing them.

2622671	Name	Signature	Date
Test Engineer	Gin Lu	Jin La	May 20, 2015
Manager	Injel Chen	Injel Chen	May 20, 2015

### NOTE :

- 1. This report will be invalid if reproduced in part or altered in any way
- 2. This report refers only to the specimen(s) submitted to test, and is invalid
- 3. This report is ONLY valid with the examination seal and signature
- 4. The tested specimen(s) will only be preserved for thirty days from the collected by the applicant.



Reliability & Failure Analysis Engineering Group 1F, No.19, Pu-ding Rd., Hsin - chu City, Taiwan, R.O.C. Tel: 886-3-579-9909, Fax: 886-3-610-0399 http://www.istgroup.com

## TABLE OF CONTENTS

#### **1. GENERAL INFORMATION**

2
2

## 2. SHOCK TEST

A	TTACHMENTS	.4
	2.5 SUMMARY OF TEST	3
	2.4 TEST CONDITION	3
	2.3 REFERENCE DOCUMENT	3
	2.2 LABORATORY AMBIENCE CONDITION	3
	2.1 TEST EQUIPMENT	3



Reliability & Failure Analysis Engineering Group 1F, No.19, Pu-ding Rd., Hsin - chu City, Taiwan, R.O.C. Tel: 886-3-579-9909, Fax: 886-3-610-0399 http://www.istgroup.com

## **1. GENERAL INFORMATION**

#### **1.1 DESCRIPTION OF UNIT**

Manufacturer : Cincon Electronics Co., Ltd.

Model name and sample quantity :

Model name	Sample quantity	
EC7BW-110S15	3 units (Unit no.1 to Unit no.3)	
ECLB40W-110S05	3 units (Unit no.1 to Unit no.3)	
CQB60W-110S24	3 units (Unit no.1 to Unit no.3)	

#### **1.2 UNIT OPERATING CONDITION:**

None



Reliability & Failure Analysis Engineering Group 1F, No.19, Pu-ding Rd., Hsin - chu City, Taiwan, R.O.C. Tel: 886-3-579-9909, Fax: 886-3-610-0399 http://www.istgroup.com

## 2. SHOCK TEST

#### 2.1 TEST EQUIPMENT

Model	Serial Number	Calibration Date
SHINKEN G-0230N	SG-4345	JUL 01, 2014

#### 2.2 LABORATORY AMBIENCE CONDITION

Temperature : 25 °C ± 5 °C

Relative humidity :  $65 \% \pm 5 \%$  (RH)

#### 2.3 REFERENCE DOCUMENT

The test is based on EN50155/EN61373 (2010)

#### **2.4 TEST CONDITION**

#### 2.4.1 Test Condition 1

Units are non-operating.

Pulse shape : Half-sine waveform

Impact acceleration : 50 m/s<sup>2</sup>

Pulse duration : 30 ms

Number of shocks / Orientation : 6 shocks (3 shocks for ±X axis)

#### 2.4.2 Test Condition 2

Units are non-operating. Pulse shape : Half-sine waveform Impact acceleration : 30 m/s<sup>2</sup> Pulse duration : 30 ms

Number of shocks / Orientation : 12 shocks (3 shocks for  $\pm$ Y and  $\pm$ Z axis)

#### 2.5 SUMMARY OF TEST

After testing, visual inspection showed no physical defect on the units. No functions check requested from customer.



## **VIBRATION TEST REPORT**

Company : <u>Cincon Electronics Co., Ltd.</u>

Address : <u>No.8-1 Fu Kung Rd ., Fu Hsing ind.</u> Park , Fu Hsing Hsiang, Chang Hua Hsien , Taiwan , R.O.C.

Model Name : <u>EC7BW-110S15</u>, ECLB40W-110S05, CQB60W-110S24

Date Received : MAY 14, 2015

Date Tested : <u>MAY 14, 2015 ~ MAY 15, 2015</u>

#### TESTING LABORATORY IS ACCREDITED BY:

IEC/IECQ 17025 certificate of independent test laboratory approval

Certificate No. : 1.72.0031

ISO 17025 accredited in respect of laboratory is approved by TAF

Certificate No. : L0835-140329

ISO 9001 certificate is approved by TUV CERT certification body of TUV NORD Cert GmbH

#### WE HEREBY CERTIFY THAT:

The test(s) shown in the attachment were conducted according to the indicating procedures. We assume full responsibility for the accuracy and completeness of these tests and vouch for the qualifications of all personnel performing them.

2622671	Name	Signature	Date
Test Engineer	Gin Lu	Jin La	May 20, 2015
Manager	Injel Chen	Injel Chen	May 20, 2015

#### NOTE :

- 1. This report will be invalid if reproduced in part or altered in any way,
- 2. This report refers only to the specimen(s) submitted to test, and is invested if used
- 3. This report is ONLY valid with the examination seal and signature of this
- The tested specimen(s) will only be preserved for thirty days from collected by the applicant.



Reliability & Failure Analysis Engineering Group 1F, No.19, Pu-ding Rd., Hsin - chu City, Taiwan, R.O.C. Tel: 886-3-579-9909, Fax: 886-3-610-0399 http://www.istgroup.com

## TABLE OF CONTENTS

### **1. GENERAL INFORMATION**

1.1 DESCRIPTION OF UNIT	2
1.2 UNIT OPERATING CONDITION	2
2. VIBRATION TEST	
2.1 TEST EQUIPMENT	3
2.2 LABORATORY AMBIENCE CONDITION	3
2.3 REFERENCE DOCUMENT	3
2.4 TEST CONDITION	3
2.5 SUMMARY OF TEST	6





Reliability & Failure Analysis Engineering Group 1F, No.19, Pu-ding Rd., Hsin - chu City, Taiwan, R.O.C. Tel: 886-3-579-9909, Fax: 886-3-610-0399 http://www.istgroup.com Report No. : HS1505160024A-1 Page 2 of 15

## **1. GENERAL INFORMATION**

#### **1.1 DESCRIPTION OF UNIT**

Manufacturer : Cincon Electronics Co., Ltd.

Model name and sample quantity :

Model name	Sample quantity	
EC7BW-110S15	3 units (Unit no.1 to Unit no.3)	
ECLB40W-110S05	3 units (Unit no.1 to Unit no.3)	
CQB60W-110S24	3 units (Unit no.1 to Unit no.3)	

#### **1.2 UNIT OPERATING CONDITION:**

During operating testing, unit power is on and functional.



Reliability & Failure Analysis Engineering Group 1F, No.19, Pu-ding Rd., Hsin - chu City, Taiwan, R.O.C. Tel: 886-3-579-9909, Fax: 886-3-610-0399 http://www.istgroup.com

## 2. VIBRATION TEST

#### 2.1 TEST EQUIPMENT

Model	Serial Number	Calibration Date
SHINKEN G-0250L	SG-4795	JUL 01, 2014
King Design EM-600F2K-40N120	UW102090290	JUL 01, 2014

#### 2.2 LABORATORY AMBIENCE CONDITION

Temperature : 25 °C ± 5 °C

Relative humidity :  $65 \% \pm 5 \%$  (RH)

#### 2.3 REFERENCE DOCUMENT

The test is based on EN50155/EN61373 (2010)

#### **2.4 TEST CONDITION**

#### 2.4.1 Test Condition 1

Units are operating.

Vibration waveform : Random waveform



#### Integrated Service Technology Inc. Reliability & Failure Analysis Engineering Group INTEGRATED 1F, No.19, Pu-ding Rd., Hsin - chu City, Taiwan, R.O.C. SERVICE Tel: 886-3-579-9909, Fax: 886-3-610-0399 TECHNOLOGY

Report No. : HS1505160024A-1 Page 4 of 15

http://www.istgroup.com

#### 2.4.2 Test Condition 2

Units are operating.

Vibration waveform : Random waveform



Duration of test : 10 minutes for the axis

Vibration axis : Y axis

#### 2.4.3 Test Condition 3

Units are operating.

Vibration waveform : Random waveform



Vibration axis : Z axis



5 20 150 Duration of test : 5 hours for the axis

Frequency (Hz)

Juration of test - 5 hours for the

Vibration axis : Y axis



Vibration axis : Z axis

#### 2.5 SUMMARY OF TEST

Before, during and after test condition 1 to 6, visual inspection showed no physical defect or functional degradation of units.