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Control No. PCN-23221 July 10, 2023

TYPE OF CHANGE:	Design		Other	
This notification is provide	d in accordance wi	th Power Integrations policy o	of product/process change	notification If you

have any questions or need further assistance, please contact your regional Power Integrations sales office.

### **DESCRIPTION OF CHANGE**

Tianshui Huatian Technology (TSHT), a qualified manufacturing facility, located in Tianshui, China, will be added as a qualified site for assembly and testing of Power Integrations in the eSIP packages as listed below.

There is neither change in the bill of materials nor manufacturing process. Datasheet also remains unchanged.

### **REASON FOR CHANGE**

Improve manufacturing flexibility and diversification of manufacturing sites.

### **PRODUCTS AFFECTED**

Product Family	Ordering Part Number	Package
HiperLCS	LCS700HG, LCS700HG0186, LCS700HG0228, LCS701HG, LCS701HG0228,	eSIP-16J
	LCS702HG, LCS702HG0103, LCS703HG, LCS703HG0228, LCS705HG, LCS708HG	
LinkSwitch-3	LNK6408E, LNK6418E, LNK6428E, LNK6448E	eSIP-7C
LinkSwitch-HP	LNK6663E, LNK6663E0225, LNK6664E, LNK6665E, LNK6666E, LNK6667E,	eSIP-7C
	LNK6668E, LNK6669E, LNK6763E, LNK6764E, LNK6765E, LNK6766E,	
	LNK6766E0105, LNK6767E, LNK6768E, LNK6769E, LNK6773E, LNK6774E,	
	LNK6775E, LNK6776E, LNK6777E, LNK6778E, LNK6779E, SC1166E, SC1189E	
LinkSwitch-PH	LNK403EG, LNK404EG, LNK405EG, LNK406EG, LNK407EG, LNK408EG,	eSIP-7C
	LNK409EG, LNK410EG, LNK413EG, LNK414EG, LNK415EG, LNK416EG,	
	LNK417EG, LNK418EG, LNK419EG, LNK420EG, SC1153EG	
LYTSwitch-4	LYT4211E, LYT4211E2, LYT4212E, LYT4212E2, LYT4213E, LYT4213E2, LYT4214E,	eSIP-7C
	LYT4214E2, LYT4215E, LYT4215E2, LYT4216E, LYT4216E2, LYT4217E, LYT4217E2,	
	LYT4218E, LYT4218E2, LYT4221E, LYT4221E3, LYT4222E, LYT4222E3, LYT4223E,	
	LYT4223E3, LYT4224E, LYT4224E3, LYT4225E, LYT4225E3, LYT4226E, LYT4226E3,	
	LYT4227E, LYT4227E3, LYT4228E, LYT4228E3, LYT4311E, LYT4311E2, LYT4312E,	
	LYT4312E2, LYT4313E, LYT4313E2, LYT4314E, LYT4314E2, LYT4315E, LYT4315E2,	
	LYT4316E, LYT4316E2, LYT4317E, LYT4317E2, LYT4318E, LYT4318E2, LYT4321E,	
	LYT4321E3, LYT4321E4, LYT4322E, LYT4322E3, LYT4323E, LYT4323E3, LYT4324E,	
	LYT4324E3, LYT4325E, LYT4325E3, LYT4326E, LYT4326E3, LYT4327E, LYT4327E3,	
	LYT4328E, LYT4328E3	
TopSwitch-HX	TOP262EN, TOP258EN, TOP255EN, TOP256EN, TOP259EG, TOP261EN,	eSIP-7C
	TOP253EN0105, TOP256EG, TOP253EN0004, TOP254EG, TOP257EN,	
	TOP253EN, TOP252EN, TOP259EN, TOP254EN, TOP256EN0186, TOP255EG,	
	TOP254EN0105, TOP260EN, TOP258EG, TOP252EG, TOP253EG,	

CONFIDENTIAL	

PCN-23221 Page 1 of 5

	TOP254EG0105, TOP255EG, TOP256EN0156, TOP257EG, TOP257EN0004, TOP257EN0166, TOP258EN0105, TOP260EG, TOP260EN0004, TOP261EG	
TopSwitch-JX	TOP266EG, TOP271EG, SC1060E, TOP265EG, TOP268EG, TOP270EG, TOP264EG,	eSIP-7C
	TOP267EG, TOP269EG, TOP267EG0068, SC1061E, SC1058E, TOP270EG0225	

### **QUALIFICATION STATUS**

See Appendix 1 for the qualification report.

#### **EFFECT ON CUSTOMER**

No adverse impact is expected in customers' applications. The product will be guaranteed to meet the datasheet limits.

### **EFFECTIVE DATE**

October 10, 2023. This date is subject to change. Products assembled at the current locations will continue to be shipped after the addition.

#### **SAMPLE AVAILABILITY**

Samples will be available 8 weeks from the date of request. Please send requests for samples within two weeks after receipt of this notification to the local Power Integrations sales office. For manufacturers that request samples, an accommodation will be made in order to allow time of customer's qualification in a case-specific manner.

CONFIDENTIAL

PCN-23221 Page 2 of 5



Appendix 1 Reliability Engineering Qualification Report Qualification Project: P230603, P230604

Project Title: TSHT eSIP-7C and eSIP-16J Qualification

### **Summary:**

Reliability testing was performed to qualify TSHT assembly site for assembly of eSIP-7C and eSIP-16J packages. Three lots of TOP271EG (eSIP-7C) and LCS708HG (eSIP-16J) were built and subjected to reliability test with passing results. Parametric Characterization, Resistance to Solder Heat and Solderability test were all completed with passing results. Assembly yield and test yield analysis were completed with acceptable results.

Based on these results, eSIP-7C and eSIP-16J packages are qualified at TSHT.

### **Reliability Test Descriptions and Conditions**

Test Name	Conditions	Reference Specification	
DOPL (Dynamic Operating Life Test)	Ta=95°C, Vd <sub>(peak)</sub> =580V	EIA/JESD22-A108	
HALT (Humidity Accelerated Life Test)	Ta=85°C/ 85%RH, Vd <sub>(peak)</sub> =580V	Internal Standard	
HTRB (High Temperature Reverse Bias Test)	Ta=150°C, Vd=580V, Vc=8.2V Ta=150°C, Vd=425V, Vc=15V	EIA/JESD22-A108	
THBT (Temperature Humidity Bias Test)	Ta=85°C, 85% RH, Vd=30V, Vc=8.2V Ta=85°C, 85% RH, Vd=30V, Vc=15V	EIA/JESD22-A101	
TMCL (Temperature Cycle, Air to Air)	-40°C to +125°C, air to air	EIA/JESD22-A104	
HTSL (High Temperature Storage Life)	Ta=150°C, unbiased	EIA/JESD22-A103	

### **DOPL (Dynamic Operating Life)**

Product	Lot #	Rel Reference #	Test Duration	No. Failures/Sample Size
TOP271EG	CD051B	P230603	1000 hours	0 / 45
TOP271EG	CD052B	P230603	1000 hours	0 / 45
TOP271EG	CD054B	P230603	1000 hours	0 / 45

### **HALT (Humidity Accelerated Life Test)**

Product	Lot #	Rel Reference #	Test Duration	No. Failures/Sample Size
TOP271EG	CD051B	P230603	1000 hours	0 / 45
TOP271EG	CD052B	P230603	1000 hours	0 / 45
TOP271EG	CD054B	P230603	1000 hours	0 / 45

### **CONFIDENTIAL**

PCN-23221 Page 3 of 5

# **HTRB (High Temperature Reverse Bias)**

Product	Lot #	Rel Reference #	Test Duration	No. Failures/Sample Size
TOP271EG	CD051B	P230603	1000 hours	0 / 45
TOP271EG	CD052B	P230603	1000 hours	0 / 45
TOP271EG	CD054B	P230603	1000 hours	0 / 45
LCS708HG	MBW288A	P230604	1000 hours	0 / 45
LCS708HG	MBW288B	P230604	1000 hours	0 / 45
LCS708HG	MBW288C	P230604	1000 hours	0 / 45

# **THBT (Temperature Humidity Bias)**

Product	Lot #	Rel Reference #	Test Duration	No. Failures/Sample Size
TOP271EG	CD051B	P230603	1000 hours	0 / 45
TOP271EG	CD052B	P230603	1000 hours	0 / 45
TOP271EG	CD054B	P230603	1000 hours	0 / 45
LCS708HG	MBW288A	P230604	1000 hours	0 / 45
LCS708HG	MBW288B	P230604	1000 hours	0 / 45
LCS708HG	MBW288C	P230604	1000 hours	0 / 45

# **TMCL (Temperature Cycling)**

Product	Lot #	Rel Reference #	Test Duration	No. Failures/Sample Size
TOP271EG	CD051B	P230603	850 cycles	0 / 45
TOP271EG	CD052B	P230603	850 cycles	0 / 45
TOP271EG	CD054B	P230603	850 cycles	0 / 45
LCS708HG	MBW288A	P230604	850 cycles	0 / 45
LCS708HG	MBW288B	P230604	850 cycles	0 / 45
LCS708HG	MBW288C	P230604	850 cycles	0 / 45

# **HTSL (High Temperature Storage Life)**

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Product	Lot #	Rel Reference #	Test Duration	No. Failures/Sample Size	
TOP271EG	CD051B	P230603	1000 hours	0 / 45	
TOP271EG	CD052B	P230603	1000 hours	0 / 45	
TOP271EG	CD054B	P230603	1000 hours	0 / 45	
LCS708HG	MBW288A	P230604	1000 hours	0 / 45	
LCS708HG	MBW288B	P230604	1000 hours	0 / 45	
LCS708HG	MBW288C	P230604	1000 hours	0 / 45	

**Conclusion**: Based on passing results, eSIP-7C and eSIP-16J packages are qualified at TSHT.

CONFIDENTIAL

PCN-23221 Page 4 of 5

### **CUSTOMER ACKNOWLEDGEMENT**

Power Integrations requests you acknowledge the receipt of the above-mentioned PCN. If no acknowledgment is received within 30 days of this notification, Power Integrations will assume the change is acceptable. Lack of any additional response within 90 days of this notification further constitutes acceptance of the change.

Power Integrations reserves the right to ship either version manufactured after the effective date.

If you have any questions or need further assistance, please contact your regional Power Integrations sales office. Otherwise, please check the box below, acknowledging the receipt of the PCN.

The indicated Product/Process Change Notification was received by the undersigned authority.

Name/Title:	
Signature:	Date:
Email Address/Phone#:	
CUSTOMER COMMENTS	
Please email this signed form to <a href="mailto:pcn@power.com">pcn@power.com</a> specifying the PCN# in the subject.	

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PCN-23221 Page 5 of 5