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Control No. PCN-19092 March 18, 2019

# PRODUCT/PROCESS CHANGE NOTIFICATION

TYPE OF CHANGE:	Design		Other	
•		th Power Integrations policy of please contact your regions		
DESCRIPTION OF CHANG	ìE			
_		nima, Japan factory for the fa anufacturing process or final	•	listed in this

# **REASON FOR CHANGE**

Addition of an alternative production line for increased manufacturing capacity and flexibility.

# **PRODUCTS AFFECTED**

Product Family	Part Numbers	Package
	LNK6663E, LNK6664E, LNK6665E, LNK6666E, LNK6667E, LNK6668E, LNK6669E, LNK6763E, LNK6764E, LNK6765E, LNK6766E, LNK6766E0105, LNK6767E, LNK6768E, LNK6769E, LNK6773E, LNK6774E, LNK6775E, LNK6776E, LNK6777E, LNK6778E, LNK6779E, SC1166E, SC1189E	eSIP-7C
LinkSwitch-HP	LNK6663K, LNK6664K, LNK6664K1, LNK6665K, LNK6665K1, LNK6666K, LNK6667K, LNK6668K, LNK6669K, LNK6763K, LNK6764K,, LNK6765K, LNK6766K, LNK6767K, LNK6767K0190, LNK6768K, LNK6769K, LNK6769K0190, LNK6773K, LNK6774K, LNK6775K, LNK6776K, LNK6777K, LNK6778K, LNK6779K, LNK6779K0190	eSOP-12B
	LNK6663V, LNK6664V, LNK6665V, LNK6666V, LNK6667V, LNK6668V, LNK6669V, LNK6763V, LNK6764V, LNK6765V, LNK6766V, LNK6767V, LNK6768V, LNK6769V, LNK6773V, LNK6774V, LNK6775V, LNK6776V, LNK6777V, LNK6778V, LNK6779V	eDIP-12B

# **QUALIFICATION STATUS**

Refer to Appendix 1 for the qualification data.

# **EFFECT ON CUSTOMER**

No adverse impact is expected in manufacturers' applications. There is no change to the datasheet.

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PCN-19092 Page 1 of 5

# **EFFECTIVE DATE**

June 18, 2019. This date is subject to change. Products assembled at the current wafer fab site will continue to be shipped after implementation of the above change.

# **SAMPLE AVAILABILITY**

Samples will be available 12 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.

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PCN-19092 Page 2 of 5



Appendix 1 Reliability Engineering Qualification Report Qualification Project: E184504

Project Title: LinkSwitch-HP Product Family Lapis Kagoshima Wafer Fab Transfer Qual Report

# **Summary:**

Lapis Kagoshima wafer fab was previously qualified for wafer fabrication with the same process technology used by LinkSwitch-HP family of products. One LNK6779E lot was subjected to a full suite of reliability stress tests to qualify all LinkSwitch-HP products at Lapis Kagoshima. All tests were completed with passing results. Yield and temperature characterization were completed with acceptable results.

Based on these results, Lapis Kagoshima is qualified for wafer fabrication of all LinkSwitch-HP products.

# **Reliability Test Descriptions and Conditions**

Test Name	Conditions	Reference Specification
DOPL (Dynamic Operating Life Test)	Ta = 95°C (TJ = 125°C, ), Vd(Peak) = 580V	EIA/JESD22-A108
HALT (Humidity Accelerated Life Test)	DOPL at Ta = 85°C, 85% RH, Tj=115°C	Internal Specification
HTRB (High Temp Reverse Bias Test)	Ta=150°C; off-state bias, Vd = 580V	EIA/JESD22-A108
THBT (Temperature Humidity Bias Test)	85°C, 85% RH; off-state bias, Vd = 30V	EIA/JESD22-A101
TMCL (Temperature Cycle)	-40°C to +125°C, air-to=air	EIA/JESD22-A104
High Temperature Storage Life (HTSL)	Ta=150°C; unbiased	EIA/JESD22-A103

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

Device	Assy Lot	Wafer Lot	Package/Assy Site	Total Hours	Results (Rej/SS)
LNK6779E	7S332A	DM249A1 Lot ADB990-001J	eSIP-7C/UTL	1000	0 / 47

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

Device	Assy Lot	Wafer Lot	Package/Assy Site	Total Hours	Results (Rej/SS)
LNK6779E	7S332A	DM249A1 Lot ADB990-001J	eSIP-7C/UTL	1000	0 / 47

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

	Device	Assy Lot	Wafer Lot	Package/Assy Site	Total Hours	Results (Rej/SS)
LN	IK6779E	7S332A	DM249A1 Lot ADB990-001J	eSIP-7C/UTL	1000	0 / 20

#### **CONFIDENTIAL**

PCN-19092 Page 3 of 5

# **Temperature / Humidity Bias (THBT)**

Device	Assy Lot	Wafer Lot	Package/Assy Site	Total Hours	Results (Rej/SS)
LNK6779E	7S332A	DM249A1 Lot ADB990-001J	eSIP-7C/UTL	1000	0 / 47

# **Temperature Cycling (TMCL)**

Device	Assy Lot	Wafer Lot	Package/Assy Site	Total Cycles	Results (Rej/SS)
LNK6779E	7S332A	DM249A1 Lot ADB990-001J	eSIP-7C/UTL	1700	0 / 47

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

Device	Assy Lot	Wafer Lot	Package/Assy Site	<b>Total Hours</b>	Results (Rej/SS)
LNK6779E	7S332A	DM249A1 Lot ADB990-001J	eSIP-7C/UTL	1000	0 / 47

**Conclusion**: Based on passing qualification results, Lapis Kagoshima is qualified for wafer fabrication of all LinkSwitch-HP products.

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PCN-19092 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#:		
Company/Location:		
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-19092 Page 5 of 5