

5245 Hellyer Avenue San Jose, CA 95138 U.S.A. (408) 414-9200

Control No. PCN-19471

December 11, 2019

PRODUCT/PROCESS CHANGE NOTIFICATION

TYPE OF CHANGE:

Design

Manufacturing

Other

This notification is provided in accordance with Power Integrations policy 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

Power Integrations is adding Lapis Kagoshima, a qualified factory in Japan for the fabricating of the products listed in this notification.

REASON FOR CHANGE

Improve manufacturing flexibility and diversification of manufacturing sites.

PRODUCTS AFFECTED

Product Family	Part Numbers	Package
LinkSwitch-II	DAP021B1, LNK603DG, LNK603DG0004, LNK603DGAU, LNK604DG, LNK606DG, LNK606DG0004, LNK606DG0166,LNK606DGAU, LNK613DG, LNK614DG, LNK614DGAU, LNK616DG, LNK616DGAU, SC1097DG, SC1097DGAU, SC1098DG, SC1139DG, SC1139DG0105, SC1139DG0166, SC1139DGAU	SO-8C
	LNK603PG, LNK603PG0004, LNK603PGAU, LNK604PG, LNK604PG0004, LNK604PGAU, LNK606PG, LNK606PGAU, LNK613PG, LNK614PG, LNK616PG, LNK616PGAU,	DIP-8C
	LNK606GG, LNK616GG	SMD-8C
LNK623DG,LNK623DG0166, LNK623DGAU, LNK624DG, LNK624DGAU, LNK625DG, LNK625DG0055, LNK625DG0105, LNK625DG0176, LNK625DGAU, LNK626DG, LNK626DG0004, LinkSwitch-CV LNK626DG0139, LNK626DGAU, SC1132DG		SO-8C
	LNK623PG, LNK623PGAU, LNK624PG, LNK624PG0004, LNK624PG0105, LNK624PGAU, LNK625PG, LNK626PG, LNK626PG0004, LNK626PG0152, LNK626PGAU	DIP-8C

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QUALIFICATION STATUS

Refer to Appendix 1 for the qualification data.

EFFECT ON CUSTOMER

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

EFFECTIVE DATE

March 11, 2020. This date is subject to change. Products fabricated at the current wafer fab site will continue to be shipped after the implementation of the above change.

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.



Appendix 1 Reliability Engineering Qualification Report

Qualification Project: E184506

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

Summary:

The Lapis Kagoshima wafer fab was previously qualified for DM process wafer fabrication. One LNK606DG lot was subjected to a full suite of reliability stress tests to qualify all LinkSwitch-II products at Lapis Kagoshima. All tests were completed with passing results.

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

Reliability Test Descriptions and Conditions

Test Name	Conditions	Reference Specification
DOPL (Dynamic Operating Life Test)	Ta = 95°C (TJ = 125°C,), Vd(Peak) = 560V	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 = 560V	EIA/JESD22-A108
THBT (Temperature Humidity Bias Test)	85°C, 85% RH; off-state bias, Vd = 30V	EIA/JESD22-A101
TMCL (Temperature Cycle)	-65°C to +150°C, air-to=air	EIA/JESD22-A104
High Temperature Storage Life (HTSL)	Ta=150°C; unbiased	EIA/JESD22-A103
MSL1 Preconditioning	24-hr 150C bake → 168-hr 85°C, 85% RH soak → 3 passes 260C solder reflow	IPC/JEDEC J-STD-020

Dynamic Operating Life Test (DOPL)

Device	Assy Lot	Wafer Lot	Package	Total Hours	Results (Rej/SS)
LNK606DG	7T278A	DM036C1 Lot ADB995-001J	SO-8C	MSL1 +1000	0 / 47

High Temperature Reverse Bias (HTRB)

Device	Assy Lot	Wafer Lot	Package	Total Hours	Results (Rej/SS)
LNK606DG	7T278A	DM036C1 Lot ADB995-001J	SO-8C	MSL1 +1000	0 / 47

Humidity Accelerated Life Test (HALT)

Device	Assy Lot	Wafer Lot	Package	Total Hours	Results (Rej/SS)
LNK606DG	7T278A	DM036C1 Lot ADB995-001J	SO-8C	MSL1 +1000	0 / 20

Temperature / Humidity Bias (THBT)

Device	Assy Lot	Wafer Lot	Package	Total Hours	Results (Rej/SS)
LNK606DG	7T278A	DM036C1 Lot ADB995-001J	SO-8C	MSL1 +1000	0 / 47

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Temperature Cycling (TMCL)

Device	Assy Lot	Wafer Lot	Package	Total Cycles	Results (Rej/SS)
LNK606DG	7T278A	DM036C1 Lot ADB995-001J	SO-8C	MSL1 +1000	0 / 47

High Temperature Storage Life (HTSL)

Device	Assy Lot	Wafer Lot	Package	Total Hours	Results (Rej/SS)
LNK606DG	7T278A	DM036C1 Lot ADB995-001J	SO-8C	MSL1 +1000	0 / 47

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

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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:		
Email Address/Phone#:	 	
Company/Location:	 	
CUSTOMER COMMENTS		

Please email this signed form to <u>pcn@power.com</u> specifying the PCN# in the subject.

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