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Control No. PCN-20321

August 19, 2020

PRODUCT/PROCESS CHANGE NOTIFICATION

TYPE OF CHANGE: Design Manufacturing Other

This notification is provided in accordance with Power Integrations policy of major change notification. If you have any questions or need further assistance, please contact your regional Power Integrations sales office.

DESCRIPTION OF CHANGE

Upgrade of the Moisture Sensitivity Level (MSL) from level 4 to level 3 of Power Integrations products in SMD-8C package.

REASON FOR CHANGE

Improvement in the customer’s manufacturing flexibility by increasing the current floor life from 72 hours to 168 hours after opening the moisture barrier bag.

PRODUCTS AFFECTED

Product Family	Part Numbers
LinkSwitch-TN2	LNK3202G, LNK3204G, LNK3294G, LNK3205G, LNK3206G, LNK3296G
LinkSwitch-XT2	LNK3604G, LNK3694G, LNK3696G

QUALIFICATION STATUS

Please refer to Appendix 1 for the qualification data.

EFFECT ON CUSTOMER

No adverse impact is expected in manufacturers' applications.

EFFECTIVE DATE

Immediately. Current products with MSL 4 will continue to be shipped during the transition period.

SAMPLE AVAILABILITY

Not applicable.

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The information in this report contains confidential and proprietary information of Power Integrations and its manufacturing partners. By receiving this report, the customer agrees to use this information for the sole purpose of addressing the issues reviewed in this report and to keep the contents confidential. If it becomes necessary for the customer to disclose this information to a third party, a non-disclosure agreement, which provides reasonable and customary protection for the disclosed information, must be executed.



*Appendix 1
Reliability Engineering
Qualification Report*

Qualification Project: E200401

Project Title: LinkSwitch-TN2 and LinkSwitch-XT2 SMD-8C Package Re-qualification with MSL3
Qual Summary:

Reliability testing was performed to re-qualify LinkSwitch-TN2 and LinkSwitch-XT2 products in the SMD-8C package to a moisture sensitivity level of MSL3; products were previously qualified as MSL4. Three LNK3206G qualification lots were subjected to MSL3 preconditioning followed by a suite of package-related reliability stress tests; results showed passing electrical and delamination (from Scanning Acoustic Tomography) test results after MSL3 and subsequent passing results for all reliability stress tests. Based on these results, LinkSwitch-TN2 and LinkSwitch-XT2 products in the SMD-8C package are now qualified with a moisture sensitivity level of MSL3.

Qualification Vehicle: LNK3206G

Reliability Test Descriptions and Conditions

Test Name	Conditions	Reference Specification
THBT (Temperature Humidity Bias Test)	85°C, 85% RH, Vd=100V	EIA/JESD22-A101
TMCL (Temperature Cycle, Air to Air)	-40°C to +125°C, air to air	EIA/JESD22-A104
Unbiased Highly Accelerated Stress Test (UHAST)	Ta=130°C, 85% RH, unbiased	EIA/JESD22-A102
Power Temperature Cycle (PTC)	-40°C to +125°C, air to air, Vd=100V	EIA/JESD22-A105
MSL3 Preconditioning	24-hr 150°C Bake + 192-hr 30°C, 60% RH Moisture Soak + 3 Passes 260°C Solder Reflow	EIA/JESD22-A113

THBT (Temperature Humidity Bias)

Product	Lot #	Package	Test Duration	No. Failures/Sample Size
LNK3206G	8S529A	SMD-8C	MSL3 + 1000 hours	0/77
LNK3206G	8T175A	SMD-8C	MSL3 + 1000 hours	0/77
LNK3206G	8T524A	SMD-8C	MSL3 + 1000 hours	0/77

TMCL (Temperature Cycling)

Product	Lot #	Package	Test Duration	No. Failures/Sample Size
LNK3206G	8S529A	SMD-8C	MSL3 + 850 cycles	0/77
LNK3206G	8T175A	SMD-8C	MSL3 + 850 cycles	0/77
LNK3206G	8T524A	SMD-8C	MSL3 + 850 cycles	0/77

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Unbiased Highly Accelerated Stress Test (UHAST)

Product	Lot #	Package	Test Duration	No. Failures/Sample Size
LNK3206G	8S529A	SMD-8C	MSL3 + 96 hours	0/77
LNK3206G	8T175A	SMD-8C	MSL3 + 96 hours	0/77
LNK3206G	8T524A	SMD-8C	MSL3 + 96 hours	0/77

Power Temperature Cycle (PTC)

Product	Lot #	Package	Test Duration	No. Failures/Sample Size
LNK3206G	8T524A	SMD-8C	MSL3 + 96 hours	0/45

Conclusion: Based on these results, LinkSwitch-TN2 and LinkSwitch-XT2 products in the SMD-8C package are now qualified with a moisture sensitivity level of MSL3.

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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 until the inventory of the earlier version has been depleted.

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 pcn@power.com specifying the PCN# in the subject.

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