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Control No. PCN-24131

May 8, 2024

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

Hana Semiconductor Co. Limited, located in Ayutthaya, Thailand will be added as an alternative assembly and test site for the InnoSwitch3-MX products listed below. Hana Semiconductor Co. Limited, located in Ayutthaya, Thailand is a qualified assembly and test site of Power Integrations products.

There is neither change in the Bill of Materials nor a change to the data sheet.

REASON FOR CHANGE

Improve manufacturing flexibility and diversification of manufacturing sites.

PRODUCTS AFFECTED

Product Family	Part Numbers	Package
InnoSwitch3-MX	INN3464C-TL, INN3464C0245-TL, INN3465C-TL, INN3465C0245-TL, INN3466C-TL, INN3467C-TL, INN3468C-TL, INN3470C-TL, INN3475C-TL, INN3476C-TL, INN3477C-TL, INN3478C-TL, INN3479C-TL, SC1881C-TL, SC1883C-TL	InSOP-24D

QUALIFICATION STATUS

Please refer to Appendix 1 for the qualification data.

EFFECT ON CUSTOMER

There will be no adverse impact in manufacturers' applications.

EFFECTIVE DATE

August 8, 2024. This date is subject to change. Current products from the existing assembly and test sites will continue to be shipped after implementation of the above changes.

SAMPLE AVAILABILITY

Samples will be available in 6 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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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 2
Reliability Engineering
Qualification Report

Qualification Project: E172011

Project Title: InnoSwitch3-MX Hana InSOP-24D Assembly Site Qualification**Qual Summary:**

Reliability testing was performed on InnoSwitch3 products in the InSOP-24D package to qualify InnoSwitch3-MX products for assembly at Hana Semiconductor Co. Limited, located in Ayutthaya, Thailand. All required reliability tests were completed on three qualification lots with passing results. Yield analysis and assembly-level testing were completed with acceptable results. Based on these results, Hana is approved for InSOP-24D assembly of InnoSwitch3-MX products.

Qualification Vehicles: INN3168C

Reliability Test Descriptions and Conditions

Test Name	Conditions	Reference Specification
DOPL (Dynamic Operating Life Test)	Tj=125°C, Vd _(peak) =520V	EIA/JESD22-A108-D
HTRB (High Temperature Reverse Bias Test)	Ta=150°C; Vd=520V, Vbp = 5.3V	EIA/JESD22-A108-D
THBT (Temperature Humidity Bias Test)	85°C, 85% RH, Vd=30V, Vbp = 5.3V	EIA/JESD22-A101-C
TMCL (Temperature Cycle, Air to Air)	-40°C to +125°C, air to air, unbiased	EIA/JESD22-A104-E
HTSL (High Temperature Storage Life)	Ta=175°C, unbiased	EIA/JESD22-A103-D
HALT (Humidity Accelerated Life Test)	DOPL Tj=115°C, 85% RH, Vd(peak)=520V	Internal Standard
MSL3 Preconditioning	24-hr 150C bake → 192-hr 30°C, 60% RH soak → 3 passes 260C solder reflow	IPC/JEDEC J-STD-020E

DOPL (Dynamic Operating Life)

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
INN3168C	M5U933A	E172011	MSL3 + 1000 hours	0/47
INN3168C	M5U933B	E172011	MSL3 + 1000 hours	0/47
INN3168C	M5U933E	E172011	MSL3 + 1000 hours	0/47

HTRB (High Temperature Reverse Bias)

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
INN3168C	M6D990Q	E174004	MSL3 + 1000 hours	0/47
INN3168C	M6D990U	E174004	MSL3 + 1000 hours	0/47
INN3168C	M6D990V	E174004	MSL3 + 1000 hours	0/47

THBT (Temperature Humidity Bias)

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
INN3168C	M6D990Q	E174004	MSL3 + 1000 hours	0/47
INN3168C	M6D990U	E174004	MSL3 + 1000 hours	0/47
INN3168C	M6D990V	E174004	MSL3 + 1000 hours	0/47

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TMCL (Temperature Cycling)

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
INN3168C	M5U933A	E172011	MSL3 + 850 cycles	0/47
INN3168C	M5U933B	E172011	MSL3 + 850 cycles	0/47
INN3168C	M5U933E	E172011	MSL3 + 850 cycles	0/47

HTSL (High Temperature Storage Life)

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
INN3168C	M5U933A	E172011	MSL3 + 1000 hours	0/47
INN3168C	M5U933B	E172011	MSL3 + 1000 hours	0/47
INN3168C	M5U933E	E172011	MSL3 + 1000 hours	0/47

HALT (Humidity Accelerated Life Test)

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
INN3168C	M5U933A	E172011	MSL3 + 1000 hours	0/20
INN3168C	M5U933B	E172011	MSL3 + 1000 hours	0/20
INN3168C	M5U933E	E172011	MSL3 + 1000 hours	0/20

Conclusion: Based on acceptable results, Hana is approved for InSOP-24D assembly of InnoSwitch3-MX 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: _____ 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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