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Control No. PCN-22381

November 17, 2022

**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**

1. Japan Semiconductor Corporation (“JSI”), Iwate, Japan is added as an alternative 200mm wafer fab site for the products listed below.
2. There is neither change in technology nor the bill of materials.

**REASON FOR CHANGE**

Improve manufacturing flexibility and diversification of manufacturing sites.

**PRODUCTS AFFECTED**

Product Family	Part Numbers
InnoSwitch3-CE	INN3162C-H101-TL, INN3162C-H102-TL, INN3162C-H113-TL, INN3162C-H114-TL, INN3163C-H101-TL, INN3163C-H102-TL, INN3163C-H113-TL, INN3163C-H114-TL, INN3164C-H101-TL, INN3164C-H102-TL, INN3164C-H107-TL, INN3164C-H111-TL, INN3164C-H113-TL, INN3164C-H114-TL, INN3165C-H101-TL, INN3165C-H102-TL, INN3165C-H103-TL, INN3165C-H104-TL, INN3165C-H105-TL, INN3165C-H109-TL, INN3165C-H113-TL, INN3165C-H114-TL, INN3165C-H117-TL, INN3165C-H122-TL, INN3166C-H101-TL, INN3166C-H102-TL, INN3166C-H105-TL, INN3166C-H106-TL, INN3166C-H109-TL, INN3166C-H110-TL, INN3166C-H113-TL, INN3166C-H114-TL, INN3166C0216-H102-TL, INN3167C-H101-TL, INN3167C-H105-TL, INN3167C-H107-TL, INN3167C-H109-TL, INN3167C-H114-TL, INN3167C-H115-TL, INN3167C-H122-TL, INN3168C-H035-TL, INN3168C-H101-TL, INN3168C-H105-TL, INN3168C-H106-TL, INN3168C-H107-TL, INN3168C-H109-TL, INN3168C-H110-TL, INN3168C-H111-TL, INN3168C-H114-TL, INN3168C-H116-TL, INN3168C0234-TL, SC1513C-TL, SC1513C-H060-TL, SC1532C-TL, SC1533C-TL, SC1534C-TL, <u>SC1542K-TL</u> , SC1543C-HC10-TL, SC1545C-TL, SC1556C-TL, SC1565C-HC03-TL, SC1566C-HC02-TL, SC1567C-HC18-TL

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Product Family	Part Numbers
InnoSwitch3-CP	INN3264C-H201-TL, INN3264C-H202-TL, INN3264C-H220-TL, INN3265C-H201-TL, INN3265C-H202-TL, INN3265C-H211-TL, INN3265C-H214-TL, INN3265C-H216-TL, INN3266C-H203-TL, INN3266C-H204-TL, INN3266C-H206-TL, INN3266C-H207-TL, INN3266C-H210-TL, INN3266C-H214-TL, INN3266C-H217-TL, INN3266C-H219-TL, INN3267C-H205-TL, INN3267C-H214-TL, INN3267C-H217-TL, INN3268C-H202-TL, INN3268C-H207-TL, INN3268C-H208-TL, INN3268C-H209-TL, INN3268C-H210-TL, INN3268C-H212-TL, INN3268C-H214-TL, INN3268C-H215-TL, INN3268C-H217-TL, INN3268C-H221-TL, INN3268C-H233-TL, INN3274C-H201-TL, INN3274C-H202-TL, INN3275C-H122-TL, INN3275C-H201-TL, INN3275C-H202-TL, INN3275C-H211-TL, INN3275C-H213-TL, INN3276C-H203-TL, INN3276C-H204-TL, INN3276C-H206-TL, INN3276C-H210-TL, INN3276C-H214-TL, INN3277C-H205-TL, SC1540C-TL, SC1544C-TL, SC1544C-H010-TL, SC1548C-H016-TL, SC1548C-H023-TL, SC1548C-HC32-TL, SC1549C-HC30-TL, SC1550C-TL, SC1551C-H084-TL, SC1551C-HC26-TL, SC1555C-TL, SC1557C-TL, SC1557C-H071-TL, SC1603C-TL, SC1605C-TL, SC1605C-H079-TL, SC1606C-TL, SC1606C-H016-TL
InnoSwitch3-EP	INN3672C-H601-TL, INN3672C-H602-TL, INN3672C-H606-TL, INN3673C-H601-TL, INN3673C-H602-TL, INN3673C-H606-TL, INN3674C-H601-TL, INN3674C-H602-TL, INN3674C-H606-TL, INN3674C0253-H606-TL, INN3675C-H601-TL, INN3675C-H602-TL, INN3675C-H603-TL, INN3675C-H604-TL, INN3675C-H605-TL, INN3675C-H606-TL, INN3675C0253-H606-TL, INN3676C-H601-TL, INN3676C-H602-TL, INN3676C-H603-TL, INN3676C-H604-TL, INN3676C-H605-TL, INN3676C-H606-TL, INN3676C0253-H606-TL, INN3677C-H601-TL, INN3677C-H602-TL, INN3677C-H603-TL, INN3677C-H604-TL, INN3677C-H605-TL, INN3677C-H606-TL, INN3692C-H606-TL, INN3694C-H606-TL, INN3696C-H606-TL, SC1607C-H019-TL, SC1616C-TL, SC1616C-H063-TL, SC1821C-H021-TL, SC1864C-H054-TL, SC1893C-H065-TL, SC1925K-TL, SC1931C-TL
InnoSwitch3-Pro	INN3365C-H301-TL, INN3365C-H302-TL, INN3366C-H301-TL, INN3366C-H302-TL, INN3367C-H301-TL, INN3367C-H302-TL, INN3368C-H301-TL, INN3368C-H302-TL, INN3368C-H312-TL, INN3374C-H302-TL, INN3375C-H301-TL, INN3375C-H302-TL, INN3376C-H301-TL, INN3376C-H302-TL, INN3377C-H301-TL, INN3377C-H302-TL, SC1702C-TL, SC1702C-H051-TL, SC1703C-H009-TL, SC1707C-TL, SC1709C-TL, SC1710C-TL, SC1711C-H007-TL, SC1711C-H026-TL, SC1712C-H014-TL, SC1713C-H015-TL, SC1715C-H059-TL, SC1716C-H061-TL, SC1717C-H161-TL, SC1738C-TL, SC1738C-H034-TL, SC1738C-H085-TL, SC1750C-TL, SC1750C-H031-TL, SC1751C-H009-TL, SC1754C-H082-TL, SC2375C-H036-TL,
LYTSwitch-6	LYT6063C-TL, LYT6065C-TL, LYT6067C-TL, LYT6068C-TL, LYT6073C-TL, LYT6075C-TL, LYT6077C-TL, SC1970C-TL, SC1971C-TL

**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**

February 17, 2023. This date is subject to change. Products fabricated at the current locations will continue to be shipped after the addition.

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**SAMPLE AVAILABILITY**

Samples will be available 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. For manufacturers that request samples, an accommodation will be made in order to allow time of customer's qualification in a case-specific manner.

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Appendix 1  
Reliability Engineering  
Qualification Report

Qualification Project: E223002

**Project Title: JSI Wafer Fab DXC Process Qual for InnoSwitch3 Product Families**
**Qual Summary:**

Reliability testing was performed to the JSI (Japan Semiconductor Corporation, Iwate) wafer fab for production of the DXC process used to fabricate the primary and secondary controller die used for multiple InnoSwitch3 product families. One INN3168C (InnoSwitch3-CE) and two INN3368C (InnoSwitch3-Pro) qual lots with JSI primary and secondary controller die were subjected to a full set of reliability stress tests with passing results. Yield analysis and assembly-level testing were completed with acceptable results. Based on these results, the primary and secondary controller die for InnoSwitch3 products (see the Products Affected list above) are qualified for wafer fabrication at JSI.

Qualification Vehicles: INN3168C (InnoSwitch3-CE) and INN3368C (InnoSwitch3-Pro) in the InSOP-24D Package

**Reliability Test Descriptions and Conditions**

Test Name	Conditions	Reference Specification
DOPL (Dynamic Operating Life Test)	Tj=125°C, Vd(peak)=520V	EIA/JESD22-A108
THBT (Temperature Humidity Bias Test)	85°C, 85% RH, Vd=30V, Vbp=Vshunt	EIA/JESD22-A101
TMCL (Temperature Cycle, Air to Air)	-40°C to +125°C, air to air, unbiased	EIA/JESD22-A104
HTSL (High Temperature Storage Life)	Ta=150°C; unbiased	EIA/JESD22-A103
HALT (Humidity Accelerated Life Test)	DOPL bias, Vd(peak)=520V, Tj=115C, 85% RH,	Internal Standard
MSL3 Preconditioning	24-hr 150°C Bake + 40-hr 60°C, 60% RH Soak + 3 Passes 260°C Solder Reflow	IPC/JEDEC J-STD-020

**DOPL (Dynamic Operating Life)**

Product	Lot #	Primary & Secondary Controller Die Wafer Fab	Test Duration	No. Failures/Sample Size
INN3368C	MBZ724A	JSI	MSL3 + 1000 hours	0 / 45
INN3368C	MCS523C	JSI	MSL3 + 1000 hours	0 / 45
INN3168C	MCS523D	JSI	MSL3 + 1000 hours	0 / 45

**THBT (Temperature Humidity Bias)**

Product	Lot #	Primary & Secondary Controller Die Wafer Fab	Test Duration	No. Failures/Sample Size
INN3368C	MBZ724A	JSI	MSL3 + 1000 hours	0 / 45
INN3368C	MCS523C	JSI	MSL3 + 1000 hours	0 / 45
INN3168C	MCS523D	JSI	MSL3 + 1000 hours	0 / 45

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**TMCL (Temperature Cycling)**

Product	Lot #	Primary & Secondary Controller Die Wafer Fab	Test Duration	No. Failures/Sample Size
INN3368C	MBZ724A	JSI	MSL3 + 1700 cycles	0 / 45
INN3368C	MCS523C	JSI	MSL3 + 1700 cycles	0 / 45
INN3168C	MCS523D	JSI	MSL3 + 1700 cycles	0 / 45

**HTSL (High Temperature Storage Life)**

Product	Lot #	Primary & Secondary Controller Die Wafer Fab	Test Duration	No. Failures/Sample Size
INN3368C	MBZ724A	JSI	MSL3 + 1000 hours	0 / 45
INN3368C	MCS523C	JSI	MSL3 + 1000 hours	0 / 45
INN3168C	MCS523D	JSI	MSL3 + 1000 hours	0 / 45

**HALT (Humidity Accelerated Life Test)**

Product	Lot #	Primary & Secondary Controller Die Wafer Fab	Test Duration	No. Failures/Sample Size
INN3368C	MBZ724A	JSI	MSL3 + 1000 hours	0 / 45
INN3368C	MCS523C	JSI	MSL3 + 1000 hours	0 / 45
INN3168C	MCS523D	JSI	MSL3 + 1000 hours	0 / 45

**Conclusion:** Based on these results, the primary and secondary controller die for InnoSwitch3 products (see the Products Affected list above) are qualified for wafer fabrication at JSI.

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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**

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Please email this signed form to [pcn@power.com](mailto:pcn@power.com) specifying the PCN# in the subject.

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