

Control No. PCN-22181

June 10, 2022

**PRODUCT/PROCESS CHANGE NOTIFICATION**

**TYPE OF CHANGE:**       Design                       Manufacturing                       Other

This notification is being 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 X-Fab France SAS, an existing Fab, located in Corbeil-Essonnes, Ile-De-France for the fabrication of the power-switch die of the multi-die products listed in this notification. There is no change in the wafer technology, bill of materials or final test program.

**REASON FOR CHANGE**

Improve manufacturing flexibility and diversification of manufacturing sites.

**PRODUCTS AFFECTED**

Product Family	Ordering Part Number	Package
ClampZero	CPZ1062M-TL	MinSOP-16A
InnoSwitch3-CE	INN3162C-H101-TL, INN3162C-H102-TL, INN3162C-H113-TL, INN3162C-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, 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, SC1516C-H045-TL, SC1518C-H069-TL, SC1518C-H086-TL, SC1532C-TL, SC1533C-TL, SC1543C-HC10-TL, SC1545C-TL, SC1546C-HC15-TL,	InSOP-24D
InnoSwitch3-CP	INN3265C-H201-TL, INN3265C-H202-TL, INN3265C-H211-TL, INN3265C-H214-TL, INN3265C-H216-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-H221-TL, INN3268C-H233-TL, SC1540C-TL, SC1544C-TL, SC1544C-H010-TL, SC1548C-H016-TL, SC1548C-H023-TL, SC1548C-HC32-TL, SC1551C-H084-TL, SC1551C-HC26-TL, SC1555C-TL, SC1570C-H027-TL, SC1572C-H030-TL	InSOP-24D
InnoSwitch3-LT	SC1565K-TL	eSOPR-16B

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Product Family	Ordering Part Number	Package
InnoSwitch3-PD	INN3865C-H801-TL, INN3868C-H801-TL, SC2205C-H073-TL	InSOP-24D
InnoSwitch3-PRO	INN3365C-H301-TL, INN3365C-H302-TL, INN3368C-H301-TL, INN3368C-H302-TL, INN3368C-H312-TL, SC1702C-TL, SC1702C-H051-TL, SC1707C-TL, SC1709C-TL, SC1710C-TL, SC1712C-H014-TL, SC1715C-H059-TL, SC1738C -TL, SC1738C-H034-TL, SC1738C-H085-TL	InSOP-24D
LYTSwitch-3	LYT3314D, LYT3314D-TL, LYT3318D, LYT3318D-TL, LYT5218D, LYT5218D-TL	SO-16B
LYTSwitch-6	LYT6065C-TL,LYT6068C-TL	InSOP-24D
LYTSwitch-8	LYT8365C-TL, LYT8368C-TL, LYT8668C-TL, LYT8768C-TL, LYT8868C-TL	InSOP-24B

**QUALIFICATION STATUS**

See Appendix 1 for the qualification report.

**EFFECT ON CUSTOMER**

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

**EFFECTIVE DATE**

October 24, 2022. This date is subject to change. Products fabricated at the current wafer foundry sites 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 the request for samples within two weeks after receipt of this notification to the local Power Integrations sales office.

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Appendix 1  
Reliability Engineering  
Qualification Report

Qualification Project: E214002

**Project Title: X-Fab France SAS Power-switch Qualification for InnoSwitch and LYTSwitch Products**
**Qual Summary:**

Reliability testing was performed to qualify wafer fabrication for the power-switch used in InnoSwitch and LYTSwitch products X-Fab France SAS, located in Corbeil-Essonnes, Ile-De-France. Three InnoSwitch3-CE lots 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, InnoSwitch and LYTSwitch products (see the Products Affected list above) are qualified for wafer fabrication at X-Fab France SAS.

Qualification Vehicles: INN3168C (InSOP-24D Package), DL613B1CR Discrete Power-switch (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
HTRB (High Temperature Reverse Bias Test)	Ta=150°C; Vd=520V, Vbp=Vshunt	EIA/JESD22-A108
HTGB (High Temperature Gate Bias Test)	Ta=150°C; Vg = 10V, Vd=Vs=0V	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)	85°C, 85% RH, Vd(peak)=520V	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 #	Power-switch Wafer Fab	Test Duration	No. Failures/Sample Size
INN3168C	MBC913A	X-Fab France SAS	MSL3 + 1000 hours	0 / 45
INN3168C	MBD874A	X-Fab France SAS	MSL3 + 1000 hours	0 / 45
INN3168C	MBD877A	X-Fab France SAS	MSL3 + 1000 hours	0 / 45

**HTRB (High Temperature Reverse Bias)**

Product	Lot #	Power-switch Wafer Fab	Test Duration	No. Failures/Sample Size
INN3168C	MBC913A	X-Fab France SAS	MSL3 + 1000 hours	0 / 45
INN3168C	MBD874A	X-Fab France SAS	MSL3 + 1000 hours	0 / 45
INN3168C	MBD877A	X-Fab France SAS	MSL3 + 1000 hours	0 / 45

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**HTGB (High Temperature Gate Bias)**

Product	Lot #	Power-switch Wafer Fab	Test Duration	No. Failures/Sample Size
DL613B1CR Discrete Power-switch	MBC913B	X-Fab France SAS	MSL3 + 1000 hours	0 / 45
DL613B1CR Discrete Power-switch	MBD874B	X-Fab France SAS	MSL3 + 1000 hours	0 / 45
DL613B1CR Discrete Power-switch	MBD877B	X-Fab France SAS	MSL3 + 1000 hours	0 / 45

**THBT (Temperature Humidity Bias)**

Product	Lot #	Power-switch Wafer Fab	Test Duration	No. Failures/Sample Size
INN3168C	MBC913A	X-Fab France SAS	MSL3 + 1000 hours	0 / 45
INN3168C	MBD874A	X-Fab France SAS	MSL3 + 1000 hours	0 / 45
INN3168C	MBD877A	X-Fab France SAS	MSL3 + 1000 hours	0 / 45

**TMCL (Temperature Cycling)**

Product	Lot #	Power-switch Wafer Fab	Test Duration	No. Failures/Sample Size
INN3168C	MBC913A	X-Fab France SAS	MSL3 + 1700 cycles	0 / 45
INN3168C	MBD874A	X-Fab France SAS	MSL3 + 1700 cycles	0 / 45
INN3168C	MBD877A	X-Fab France SAS	MSL3 + 1700 cycles	0 / 45

**HTSL (High Temperature Storage Life)**

Product	Lot #	Power-switch Wafer Fab	Test Duration	No. Failures/Sample Size
INN3168C	MBC913A	X-Fab France SAS	MSL3 + 1000 hours	0 / 45
INN3168C	MBD874A	X-Fab France SAS	MSL3 + 1000 hours	0 / 45
INN3168C	MBD877A	X-Fab France SAS	MSL3 + 1000 hours	0 / 45

**HALT (Humidity Accelerated Life Test)**

Product	Lot #	Power-switch Wafer Fab	Test Duration	No. Failures/Sample Size
INN3168C	MBC913A	X-Fab France SAS	MSL3 + 1000 hours	0 / 20
INN3168C	MBD874A	X-Fab France SAS	MSL3 + 1000 hours	0 / 20
INN3168C	MBD877A	X-Fab France SAS	MSL3 + 1000 hours	0 / 20

**Conclusion:** Based on these results, InnoSwitch and LYTSwitch products (see the Products Affected list above) are qualified for wafer fabrication at X-Fab France SAS.

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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**

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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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