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Control No. PCN-17363

September 22, 2017

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

Seiko Epson, Sakata, Japan is added as an alternative wafer fab site for CAPZero products listed below. Seiko Epson, Sakata, Japan is one of the qualified wafer fab sites of Power Integrations products. There is neither change in technology nor the bill of materials.

REASON FOR CHANGE

Improve manufacturing flexibility and diversification of manufacturing sites.

PRODUCTS AFFECTED

CAP002DG, CAP003DG, CAP004DG, CAP005DG, CAP006DG, CAP007DG, CAP008DG, CAP009DG, CAP012DG, CAP013DG, CAP014DG, CAP015DG, CAP016DG, CAP017DG, CAP017DGAU, CAP017DG0166, CAP018DG, CAP019DG, CAP200DG, SC1143DG

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

December 22, 2017. This date is subject to change. Products fabricated at the current locations will continue to be shipped after the addition.

SAMPLE AVAILABILITY

Samples are available upon 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: E172801

Project Title: CAPZero SEC Wafer Fabrication Qualification
Qual Summary: Reliability testing was performed to qualify SEC for wafer fabrication of CAPZero products. SEC is a fully qualified wafer fab in high volume production with the same process used for CAPZero products. All required reliability stress tests were completed with passing results. Yield analysis was completed with acceptable results. Based on these results, SEC is qualified for wafer fabrication of CAPZero products.
Qualification Vehicles: CAP200DG
Fab: Seiko-Epson six-inch wafer fabrication facility located in Sakata, Japan

Reliability Test Descriptions and Conditions

Test Name	Conditions	Reference Specification
HTRB (High Temperature Reverse Bias Test)	Ta=150°C, Vd=560V	EIA/JESD22-A108-D
THBT (Temperature Humidity Bias Test)	85°C, 85% RH, Vd=30V	EIA/JESD22-A101-C
TMCL (Temperature Cycle, Air to Air)	-65°C to +150°C, air to air, unbiased	EIA/JESD22-A104-E
MSL1 Preconditioning	24-hr 150C bake → 168-hr 85°C, 85% RH soak → 3 passes 260C solder reflow	IPC/JEDEC J-STD-020E

HTRB (High Temperature Reverse Bias)

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
CAP200DG	5Z317B	E172801	MSL1 + 1000 hours	0/47

THBT (Temperature Humidity Bias)

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
CAP200DG	5Z317B	E172801	MSL1 + 1000 hours	0/47

TMCL (Temperature Cycling)

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
CAP200DG	5Z317B	E172801	MSL1 + 1000 cycles	0/47

Conclusion: Based on acceptable reliability test results, SEC is now qualified for wafer fabrication of CAPZero 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 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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