

Control No. PCN-18061

February 21, 2018

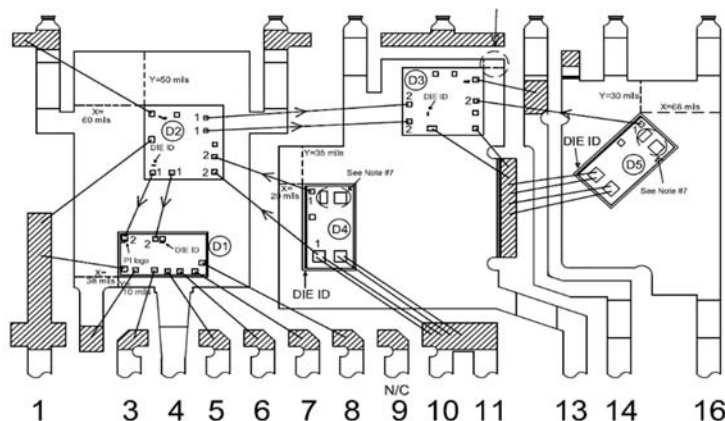
### PRODUCT/PROCESS CHANGE NOTIFICATION

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

Add an alternative equivalent MOSFET (D4 and D5) to the HiperLCS product family. There is neither change to the manufacturing sites nor the bill of materials.



#### REASON FOR CHANGE

Manufacturing flexibility.

#### PRODUCTS AFFECTED

LCS700HG/LG, LCS700HG0186, LCS701HG/LG, LCS702HG/LG, LCS702HG0103, LCS703HG/LG, LCS705HG/LG, LCS708HG/LG

#### QUALIFICATION STATUS

Refer to Appendix 1 for the qualification data.

#### EFFECT ON CUSTOMER

No adverse impact is expected in manufacturers' applications. The product will be guaranteed to meet the existing data sheet limits.

### CONFIDENTIAL

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.

**EFFECTIVE DATE**

May 21, 2018. This date is subject to change. Products assembled using the current MOSFET will continue to be shipped after implementation of the above change.

**SAMPLE AVAILABILITY**

Samples are available upon request.

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Appendix 1  
Reliability Engineering  
Qualification Report

Qualification Project: E172903

**Project Title: HiperLCS Qualification with an alternative equivalent MOSFET**
**Qualification Summary:**

Reliability testing was performed on the LCS708HG for qualification of the updated BOM using an alternative equivalent MOSFET. All required reliability tests were completed on the qualification lot with passing results. Yield analysis and assembly-level testing were completed with acceptable results. Based on these results, the HiperLCS products fabricated with the alternative equivalent MOSFETs are approved for release.

Qualification Vehicles: LCS708HG

**Reliability Test Descriptions and Conditions**

Test Name	Conditions	Reference Specification
DOPL (Dynamic Operating Life Test)	T <sub>j</sub> =125°C, V <sub>d(peak)</sub> =480V	EIA/JESD22-A108-D
HTRB (High Temperature Reverse Bias Test)	T <sub>a</sub> =150°C; V <sub>d</sub> =480V	EIA/JESD22-A108-D
THBT (Temperature Humidity Bias Test)	85°C, 85% RH, V <sub>d</sub> =30V	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)	T <sub>a</sub> =175°C, unbiased	EIA/JESD22-A103-D

**DOPL (Dynamic Operating Life)**

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
LCS708HG	M4L848L	E172903	1000 hours	0/47

**HTRB (High Temperature Reverse Bias)**

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
LCS708HG	M4L848L	E172903	1000 hours	0/47

**THBT (Temperature Humidity Bias)**

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
LCS708HG	M4L848L	E172903	1000 hours	0/47

**TMCL (Temperature Cycling)**

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
LCS708HG	M4L848L	E172903	850 cycles	0/47

**HTSL (High Temperature Storage Life)**

Product	Lot #	Qualification Project	Test Duration	No. Failures/Sample Size
LCS708HG	M4L848L	E172903	1000 hours	0/47

**Conclusion:** Based on acceptable results, HiperLCS products are approved with an alternative equivalent MOSFET.

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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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