



November 20, 2017

**Subject: PCN# 07A-17 Notification of ECP5 285-csfBGA Package MSL Rating Upgrade from MSL5 to MSL3**

Dear Lattice Customer,

Lattice Semiconductor is providing this notification of changes to the ECP5™ and ECP5-5G™ family 285-csfBGA package Moisture Sensitivity Level (MSL) rating.

**Change Description**

The MSL rating of 285-csfBGA package for the following ECP5 and ECP5-5G devices is being upgraded from MSL5 to MSL3: ECP5 and ECP5-5G devices in 12K, 25K, and 45K LUT densities.

**Effects to Customer Design**

None

**Affected Products**

The Ordering Part Numbers (OPNs) affected by this PCN are listed in Appendix A.

Note: This PCN affects all speed grades, temperature grades, and other options (see Appendix A for list) and any custom devices (i.e. factory programmed, tape & reel, special test, etc.) which are derived from any of the devices listed below.

**Data Sheet Specifications**

The updated Solder Reflow Guide for Surface Mount Devices is available on the Lattice website [here](#).

**Qualification Data**

The ECP5 Qualification Summary includes the MSL3 qualification results. The qualification summary can be accessed [here](#).

**Recommended Actions**

Current 285-csfBGA package customers who have been purchasing the existing MSL5 parts **using the “MS5” Ordering Part Number (OPN) suffix** have the option to stay with that OPN and continue to receive MSL5 labeled parts.

Current 285-csfBGA package customers who have been purchasing the existing MSL5 parts using the **standard OPN** will start receiving MSL3 parts.

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All new 285-csfBGA package customers should order using the standard OPN and will receive MSL3 parts. The MSL rating will be reflected on the box labels.

Customers who have further questions regarding this specification change are encouraged to contact local field support or [sales@latticesemi.com](mailto:sales@latticesemi.com).

### **PCN Timing**

The changes are effective immediately. The MSL rating will be reflected on the box labels. There are no changes to the silicon and therefore samples are not applicable to these changes.

Lattice PCNs are available on the [Lattice website](#). Please sign up to receive e-mail PCN alerts by registering [here](#). If you already have a Lattice web account and wish to receive PCN alerts, you can do so by logging into [your account](#) and making edits to your subscription options.

Sincerely,

Lattice PCN Administrator

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## Appendix A OPNs Affected

### Commercial Temp.

Part number	Grade	Package	Pins	Temp.	LUTs (K)	SERDES
LFE5U-12F-6MG285C	-6	Lead free csfBGA	285	Commercial	12	No
LFE5U-12F-7MG285C	-7	Lead free csfBGA	285	Commercial	12	No
LFE5U-12F-8MG285C	-8	Lead free csfBGA	285	Commercial	12	No
LFE5U-25F-6MG285C	-6	Lead free csfBGA	285	Commercial	24	No
LFE5U-25F-7MG285C	-7	Lead free csfBGA	285	Commercial	24	No
LFE5U-25F-8MG285C	-8	Lead free csfBGA	285	Commercial	24	No
LFE5U-45F-6MG285C	-6	Lead free csfBGA	285	Commercial	44	No
LFE5U-45F-7MG285C	-7	Lead free csfBGA	285	Commercial	44	No
LFE5U-45F-8MG285C	-8	Lead free csfBGA	285	Commercial	44	No
LFE5UM-25F-6MG285C	-6	Lead free csfBGA	285	Commercial	24	Yes
LFE5UM-25F-7MG285C	-7	Lead free csfBGA	285	Commercial	24	Yes
LFE5UM-25F-8MG285C	-8	Lead free csfBGA	285	Commercial	24	Yes
LFE5UM-45F-6MG285C	-6	Lead free csfBGA	285	Commercial	44	Yes
LFE5UM-45F-7MG285C	-7	Lead free csfBGA	285	Commercial	44	Yes
LFE5UM-45F-8MG285C	-8	Lead free csfBGA	285	Commercial	44	Yes
LFE5UM5G-25F-8MG285C	-8	Lead free csfBGA	285	Commercial	24	Yes
LFE5UM5G-45F-8MG285C	-8	Lead free csfBGA	285	Commercial	44	Yes

### Industrial Temp.

Part number	Grade	Package	Pins	Temp.	LUTs (K)	SERDES
LFE5U-12F-6MG285I	-6	Lead free csfBGA	285	Industrial	12	No
LFE5U-12F-7MG285I	-7	Lead free csfBGA	285	Industrial	12	No
LFE5U-12F-8MG285I	-8	Lead free csfBGA	285	Industrial	12	No
LFE5U-25F-6MG285I	-6	Lead free csfBGA	285	Industrial	24	No
LFE5U-25F-7MG285I	-7	Lead free csfBGA	285	Industrial	24	No
LFE5U-25F-8MG285I	-8	Lead free csfBGA	285	Industrial	24	No
LFE5U-45F-6MG285I	-6	Lead free csfBGA	285	Industrial	44	No
LFE5U-45F-7MG285I	-7	Lead free csfBGA	285	Industrial	44	No
LFE5U-45F-8MG285I	-8	Lead free csfBGA	285	Industrial	44	No
LFE5UM-25F-6MG285I	-6	Lead free csfBGA	285	Industrial	24	Yes
LFE5UM-25F-7MG285I	-7	Lead free csfBGA	285	Industrial	24	Yes
LFE5UM-25F-8MG285I	-8	Lead free csfBGA	285	Industrial	24	Yes
LFE5UM-45F-6MG285I	-6	Lead free csfBGA	285	Industrial	44	Yes
LFE5UM-45F-7MG285I	-7	Lead free csfBGA	285	Industrial	44	Yes
LFE5UM-45F-8MG285I	-8	Lead free csfBGA	285	Industrial	44	Yes
LFE5UM5G-25F-8MG285I	-8	Lead free csfBGA	285	Industrial	24	Yes
LFE5UM5G-45F-8MG285I	-8	Lead free csfBGA	285	Industrial	44	Yes

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