

Date: 01/16/2015

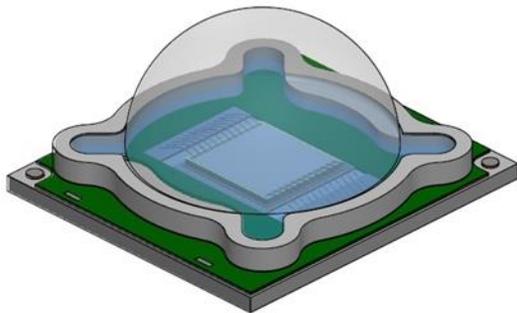
Description of the change: Manufacturing transfer of Luminus SST-90-R series

Dear Customer:

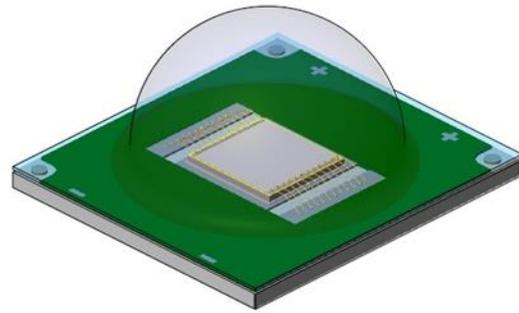
You are receiving this letter due to an upcoming change in manufacturing affecting the SST-90-R series that our records indicate you have purchased in the past 18 months.

As part of continuous optimization of our operations, Luminus is announcing that the SST-90-R series will be produced leveraging the infrastructure of our existing Contract Manufacturing (CM) partners in Asia. This change affects both the production of the die as well as the back-end packaging operations.

This change includes the implementation of an upgraded package process and a transition from a lens-attach approach to a silicon over-molding process. As a result, the lens-holding frame visible on the current package will not be necessary anymore and will be eliminated. The dome of the over-molded LED will be compatible in dimensions and optical properties with the current lens-based version and the product is expected to be backwards compatible with the existing design. The drawing below pictures the current product side-by-side with the upcoming over-molded version.



Original SST-90 – Glass lens with frame



Over-molded version of the SST-90

In addition, the SST-90-R will benefit from Luminus latest Red die technology which will result in an estimated 15% improvement of its optical output.

The over-molded products will meet the same specifications and rigorous quality standards as the current product manufactured in Massachusetts.

Ordering part numbers will remain unchanged and no specific action is requested from customers. A summary of changes for the over-molded product is provided in section 3 of this document.

1. Affected Products

Products series listed below are under the scope of this notification:

SST-90-R-F11-HG100	SSR-90-R-F11-HG100
SST-90-R-F11-HG101	SSR-90-R-F11-HG101
SST-90-R-F11-HH100	SSR-90-R-F11-HH100
SST-90-R-F11-HH101	SSR-90-R-F11-HH101

2. Purpose

- Leverage established offshore production capacity providing increased flexibility and scalability

3. Scope of changes

Ordering Part Number	No Change, over-molded version will ship against the same part number as current products
Product Specification	Revised PDS-001342 document (rev 13) to add drawing of the new over-molded version. No change in parametric specifications
LED chip production facility	Changing from Woburn, MA, USA to Xiamen, China
LED package assembly and test	Changing from Billerica, MA, USA to Taiwan CM manufacturing partner selected has produced the majority of Luminus LED products for over 5 years
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):	Mechanical: removal of the metal frame Functional: Improvement in brightness, estimated +15%
Environmental compliance & Materials	As all Luminus LED products, the SST-90-R sourced from Luminus Asian CM partners is compliant with an extensive range of standards including: <ul style="list-style-type: none"> - RoHS - REACH - Conflict Minerals (DRC – US Dodd Frank Act)

4. Identification of products

Products from current manufacturing source can be visually identified by the presence of a metal frame on the substrate, embedded in the lens (or dome) of the LED. This frame is absent from products manufactured by our CM partner.

5. Schedule

Due to an acceleration of the externalization of our manufacturing, products sourced from Luminus Contract Manufacturing partners may start shipping from February 16th, 2015.

An updated product datasheet (PDS-001342, revision 13) including the over-molded package version and preliminary performance is available.

Customer samples of devices with the over-molded design are available for select bin kits.

Thank you for using Luminus LED products and please contact your local sales representative or Luminus Customer Service (cs@luminus.com) if you have questions regarding this product change notification.