

CUSTOMER ADVISORY ADV1202

FULL LASER MARK INTRODUCTION FOR PRODUCTS USING LIDDED / HEAT SPREADER PACKAGES

Change Description

Altera is introducing top side laser mark for all flip chip devices assembled with the lidded / heat spreader package.

Recommended Action

This change does not affect the form, fit or function as defined in the product data sheets and is backwards compatible with existing devices. There is no change to the device marking format.

Reason for Change

Laser marking provides manufacturing advantages by increasing mark permanency and consistency. The use of a laser marking process is also environmentally friendly when compared to current ink marking processes.

Products Affected

The products affected by this change include the APEX™ II family, Arria® GX family, Excalibur™ family, Mercury™ family and the entire Stratix® family. These products utilize flip chip technology and are assembled using lidded packages (i.e. Ball Grid Array (BGA), Fineline (FBGA) and Hybrid (HBGA)).

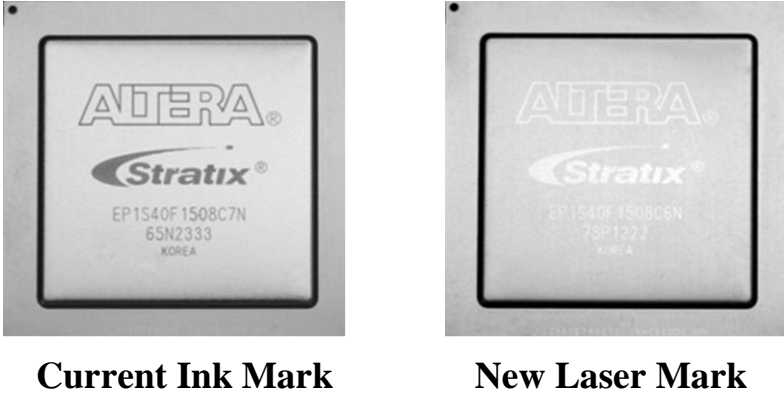
Product Traceability and Transition Dates

Altera plans to begin shipping units with top side laser mark by the end of March 2012. After this date, Altera will use laser technology as the primary production marking source. Customers may receive laser marked parts beginning with a date-code marking of 1213 or later; refer to Figure 1. Altera continues to maintain ink mark as a qualified process and will use when applicable.

Figure 1. Date-code Marking



Figure 2. Comparative top side images of the current ink vs. new laser mark



Contact

For more information, please contact Altera Technical Support by submitting a Service Request at Altera’s [mySupport](#) website.

Customer Notifications Subscription

Customers that have subscribed to Altera’s customer notification mailing list will receive notifications and updates automatically via email.

If you would like to receive customer notifications by e-mail, please subscribe to our customer notification mailing list at <https://www.altera.com/subscriptions/email/signup/eml-index.jsp>

Revision History

Date	Rev	Description
02/14/2012	1.0.0	Initial Release

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