Selective Inventory Exchange Notice

TEXAS INSTRUMENTS

Potential Lifted Bond-pad

TI Device(s):	Multiple Products
Package / Pin:	SOIC/ D&DW/ 8,14 & 20
Potentially Affected Material:	See attached spreadsheet

Dear Customer,

Texas Instruments (TI) strives to provide high quality products to its customers. We have identified a potential issue, described below, that makes the Potentially Affected Material subject to our **S**elective Inventory Exchange Process (SIEP). We appreciate your business and apologize for any inconvenience this may cause. We are ready to work with you to minimize possible impact to your business.

Please review the information below to help you with your analysis.

Issue description:

Periodic review of manufacturing data identified certain products with elevated fallout at final test for continuity. Failure analysis of those products identified separation between the IMC (intermetallic layer) and ILD (inter-layer dielectric) at the bond pad. (See example below.) Commonality indicates that this potential anomaly correlates to a certain die coat batch. Our preliminary root cause analysis, based on TI internal testing to date, indicates potential corrosion on bond pads.



Issue symptoms and isolation:

The affected units can manifest as possible open and/or leakage failures during line-test post mount or in the field after thermal cycling.

Potentially Affected Material risk assessment:

TI's initial risk assessment on limited material from these batches through Reflow and Autoclave indicates potential sensitivity to high temperature and high humidity. At this time, TI has not seen any customer issues or returns related to this issue. Reliability studies on Potentially Affected Material are ongoing. TI intends to provide an update end of March 2023.

Application risk assessment:

Depending upon your application and/or use conditions, your results may vary. As noted above, TI expects to have more information and intends to provide an update end of March 2023. In the meantime, if you have specific questions, please contact TI at the numbers listed below or through your field sales representative or TI authorized distributor.

Disposition:

Please review your inventory against the list of Potentially Affected Material in the attached spreadsheet. If you choose to return the Potentially Affected Material to TI for replacement, please notify your TI field sales representative or TI-authorized distributor for an exchange of any Potentially Affected Material matching the provided spreadsheet. TI reserves the right to reject replacement requests that are received by TI more than sixty (60) days after the date of this notice.

Through this SIEP, TI is offering to replace all Potentially Affected Material, without requiring confirmation that specific devices fail to conform to TI's specification. Other costs and expenses associated with recovering and replacing Potentially Affected Material remain your responsibility. Please see TI's Terms of Sale at www.ti.com.

Please contact TI at the email address below if (1) you have any safety or security-related concerns regarding the Potentially Affected Material or the safe use of the Potentially Affected Material in your application, (2) you (or your customer) have concerns about your products in the field that incorporate Potentially Affected Material, or (3) you (or your customer) are considering a recall based on this SIEP.

If you determine that the described issue does not affect your application and you do not wish to return the Potentially Affected Material, your decision represents your acknowledgement of the issue and the associated risks, your intent to use the Potentially Affected Material in your application despite having received this notice, and your agreement that TI and TI's authorized distributor, as applicable, are not liable for any issue arising from your decision to use the Potentially Affected Material.

Thank you for your cooperation,

Dan Grzeda Product Quality Engineer grzeda@ti.com

Identification of Potentially Affected Material

1.) By Ship Trace Code (STC)

Potentially Affected Material may be identified by comparing the Ship Trace Codes (STC) in the attached spreadsheet (column labeled **STC**) with the Ship Trace Codes (STC) of the TI material you have in stock.



2.) By Lot Trace Code & Top Side Marking

If the Potentially Affected Material cannot be identified by STC, it may be identified by the Lot Trace Code (LTC) printed on the outer package of the Potentially Affected Material. Please work with your Customer Service Representative, if needed.