



Cypress Semiconductor Corporation, 198 Champion Court, San Jose, CA 95134. Tel: (408) 943-2600

PRODUCT CHANGE NOTIFICATION

PCN: PCN155369

Date: May 05, 2015

Subject: Qualification of an Additional Top Passivation Layer for F-RAM Devices

Change Type: Minor

Description of Change:

Cypress has qualified an additional top passivation layer to the Texas Instruments F-RAM wafer manufacturing process. Total thickness of the top passivation layer is increased from 7K Å to 15K Å. The benefits of the added additional passivation layer are, a) added strength to the existing passivation layer to prevent scratches due to wafer handling during die preparation, transit, and assembly and b) added thickness to the existing passivation layer to protect wire bonding pads.

See the attached file for a cross-section comparison of the existing and new passivation layers.

15K Å thick top passivation layer was qualified and is being used on other F-RAM products since 2014. This PCN is a fan-out activity to include the additional devices.

Benefit of Change:

The top passivation layer improves assembly yields by minimizing wafer scratches and metal pad distortion.

Affected Part Numbers: 29

Affected Parts: Please see attached 'Affected Parts List' file

Qualification Status:

The top passivation layer has been qualified through a series of tests documented in Qualification Test Plans (QTPs) 143801 and 142501. These qualification reports can be found as an attachment to this notification or by visiting www.cypress.com and typing the QTP number in the keyword search window.

Sample Status:

Qualification samples are not built ahead of time for all part numbers affect by this change. Please review the attached 'Affected Parts List' file for a list of affected part numbers with their associated sample ordering part numbers. Sample requests for products without sample order part numbers are not built ahead of time, will be built to order and subject to standard lead times. Please contact your sales representative as soon as possible, but within 30 days of the date of this PCN, to place any sample orders.

Approximate Implementation Date:

Effective 90 days from the date of this notification shipments of the affected part numbers in the attached 'Affected Parts List' file will begin to transition to the thicker top passivation layer.

Anticipated Impact:

None expected. Products manufactured are completely compatible with existing product from a functional, parametric, and quality performance perspective.

Cypress also recommends that customers take this opportunity to review these changes against current application notes, system design considerations and customer environment conditions to assess impact (if any) to their application

Method of Identification:

Cypress maintains traceability of our products to the wafer level, including wafer fabrication location, through the lot number marked on the package.

Response Required:

No response is required.

For additional information regarding this change, contact your local sales representative or contact the PCN Administrator at pcn_adm@cypress.com.

Sincerely,

Cypress PCN Administration