



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

## PRODUCT CHANGE NOTIFICATION

**PCN:** PCN193602

**Date:** September 10, 2019

**Subject:** Introduction of Die Overcoat for Select Automotive NOR Flash Memory Product Family

**To:** GENERAL INBOX  
PREMIER FARNELL  
ProductChangeNotices@premierfarnell.com

**Change Type:** Major

### Description of Change:


Cypress has qualified a die overcoat process for select 65nm Automotive NOR Flash Memory products manufactured at Fab 25 (5204 East Ben White Boulevard, Austin, TX 78741, USA).

Cypress is adding a polybenzoxazole (PBO) layer on the topside of the wafer. Cypress has successfully utilized a die overcoat process on non-Flash products for over a decade. Cypress is now extending this best practice to Fab 25 for the FL-S, FS-S, KL-S/KS-S Automotive NOR Flash Memory products.

### Benefit of Change:

The die overcoat will provide a higher level of protection to the silicon surface during production (fab, sort and assembly). As a result, it will minimize the risk of latent failures due to surface damage. Functionality and specifications remain unchanged.

### Part Numbers Affected: 258

See the attached 'Affected Parts List'  file for the list of part numbers affected by this change. The 'Affected Parts List' includes the customer PPAP Part number (Marketing Part number) and the corresponding Sample Part number. Note that any new parts that are introduced after the publication of this PCN will include all changes outlined in this PCN.

### Qualification Status:

The change has been qualified through a series of tests documented in Qualification Test Plans summarized in the table below. The QTP reports can be found as attachments to this notification or by visiting [www.cypress.com](http://www.cypress.com), and typing the QTP number in the keyword search window.

QTP Number	Qualification
162903	FL512S SO3016 and FS512S SO3016 Qualification
171704	FL128S WNG008 Qualification
171705	FL256S FAB024 Qualification
171706	KL/KS512S, KL/KS256S and KL/KS128S (VAA024) Qualification
002-21508	AECQ100 – PBO Qual Report

**Sample Status:**

Qualification samples are not built ahead of time for all part numbers affected by this change. Please refer to the affected parts list file for a list of affected part numbers with their associated sample ordering part numbers. If you require qualification samples, please contact your sales representative as soon as possible, but within 60 days of the date of this PCN. Estimated lead time for qualified samples is 2-4 weeks from order entry.

**Approximate Implementation Date:**

Effective 90 days from the date of notification or upon customer approval, whichever comes first, all shipments of Automotive non-PPAP part numbers in the attached file will have die overcoat.

For Automotive PPAP part numbers, this change will be effective upon customer approval.

**Anticipated Impact:**

None anticipated. Products manufactured with the new process are completely compatible with existing products from a functional, parametric, and quality performance perspective.

Based on our history and experience, Cypress sees this as a low-risk change to series production. The Die Overcoat process is a very mature process. It is applied on top of the existing passivation layer and has no electrical interaction with the circuit. Cypress is confident that the implementation of this change will not require our customers to perform extensive qualifications.

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 product to wafer level, including wafer fabrication location, through the lot number marked on the package.

**Response Required:**

Please share any additional qualification and test requirements if needed.

For additional information regarding this change, contact your local sales representative or contact the PCN Administrator at [pcn\\_adm@cypress.com](mailto:pcn_adm@cypress.com).

Sincerely,

Cypress PCN Administration