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PRODUCT CHANGE NOTIFICATION

PCN: PCN183803 **Date:** December 10, 2018

Subject: Qualification of Fab 25 with the Copper (Cu) BEOL Process and Test 25 as an Additional Wafer Sort Site for the MBR3, PSoC® 4000 and PSoC® 4100S Product Families

To: GENERAL INBOX PREMIER FARNELL

ProductChangeNotices@premierfarnell.com

Change Type: Major

Description of Change:

Cypress announces the qualification of Fab 25 in Austin, Texas with the Copper (Cu) Backend of Line (BEOL) process and Test 25 as an additional wafer sort site for the MBR3, PSoC® 4000 and PSoC® 4100S product families.

The Aluminum (Al) BEOL process uses Tungsten (W) plugs and Ti/TiN/Al metallization with subtractive patterning to create the metal interconnect layers. The Cu BEOL process converts the underlying metal interconnect layers from W plugs to Cu plugs and from Ti/TiN/Al metallization with subtractive patterning to Cu damascene with Ta/TaN barriers.

These qualifications are part of the flexible manufacturing initiatives which allow Cypress to meet its delivery commitments in dynamic and changing market conditions.

Benefit of Change:

Qualification of alternate manufacturing processes is part of the ongoing flexible manufacturing initiative announced by Cypress. The goal of the flexible manufacturing initiative is to provide the means for Cypress to continue to meet delivery commitments through dynamic, changing market conditions.

Part Numbers Affected: 164

See the attached 'Affected Parts List' file for a list of all part numbers affected by this change. 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 Cu BEOL process and sort site have been qualified through a series of tests documented in Qualification Test Plan (QTP) reports in the table below. These qualification reports can be found as attachments to this PCN or by visiting www.cypress.com and typing the QTP number in the keyword search window.

QTP Report Number	Qualification
175110	CY8CMBR3XXX F25 Cu BEOL Qualification
183602	PSoC® 4000 Device Family F25 Cu BEOL Qualification
180417	PSoC® 4100S Device Family F25 Cu BEOL Qualification
171610	T25 Sort Site Qualification

Sample Status:

Qualification samples may not be built ahead of time for all part numbers affected 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. Samples are available now unless there is an indication that the sample ordering part numbers are subject to lead times. If you require qualification samples, please contact your local Cypress sales representative as soon as possible, preferably 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 or upon customer approval, whichever comes first, all shipments of the affected part numbers in the attached file will be supplied from any of the qualified manufacturing sites.

Anticipated Impact:

Products manufactured at Fab 25 with the Cu BEOL process are completely compatible with existing products from form, fit, functional, parametric, and quality performance perspectives.

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:

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