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

PRODUCT CHANGE NOTIFICATION

PCN: PCN181005 **Date:** March 15, 2018

Subject: Qualification of Fab 25 with the Copper (Cu) BEOL Process and Test 25 as an Additional Sort Site for the PSoC® 4200L Product Family

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 sort site for the PSoC® 4200L product family.

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: 31
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 reports 172307 and 171610. 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.

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. This change will be effective upon customer approval.

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

It is recommended to use PSoC Creator 4.2 version for both Al BEOL and Cu BEOL sample parts to ensure optimized IMO functionality of the chip in USB mode at extreme operating temperatures.

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

Item	Marketing Part Number	Sample Order Part Number
1	CY8C4246AZI-L423	CY8C4246AZI7-L423; Subject to lead time
2	CY8C4246AZI-L423T	CY8C4246AZI7-L423; Subject to lead time
3	CY8C4246AZI-L433	CY8C4246AZI7-L433; Subject to lead time
4	CY8C4246AZI-L433T	CY8C4246AZI7-L433; Subject to lead time
5	CY8C4246AZI-L435	CY8C4246AZI7-L435; Subject to lead time
6	CY8C4246AZI-L445	CY8C4246AZI7-L445; Subject to lead time
7	CY8C4246LTI-L445	CY8C4246LTI7-L445; Subject to lead time
8	CY8C4247AZI-L423	CY8C4247AZI7-L423; Subject to lead time
9	CY8C4247AZI-L423T	CY8C4247AZI7-L423; Subject to lead time
10	CY8C4247AZI-L433	CY8C4247AZI7-L433
11	CY8C4247AZI-L433T	CY8C4247AZI7-L433
12	CY8C4247AZI-L445	CY8C4247AZI7-L445; Subject to lead time
13	CY8C4247AZI-L475	CY8C4247AZI7-L475; Subject to lead time
14	CY8C4247AZI-L485	CY8C4247AZI7-L485; Subject to lead time
15	CY8C4247BZI-L479	CY8C4247BZI7-L479; Subject to lead time
16	CY8C4247BZI-L479T	CY8C4247BZI7-L479; Subject to lead time
17	CY8C4247BZI-L489	CY8C4247BZI7-L489; Subject to lead time
18	CY8C4247LTI-L445	CY8C4247LTI7-L445; Subject to lead time
19	CY8C4247LTI-L475	CY8C4247LTI7-L475; Subject to lead time
20	CY8C4247LTI-L485	CY8C4247LTI7-L485; Subject to lead time
21	CY8C4248AZI-L475	CY8C4248AZI7-L475
22	CY8C4248AZI-L485	CY8C4248AZI7-L485; Subject to lead time
23	CY8C4248BZI-L469	CY8C4248BZI7-L469
24	CY8C4248BZI-L479	CY8C4248BZI7-L479
25	CY8C4248BZI-L489	CY8C4248BZI7-L489
26	CY8C4248LTI-L475	CY8C4248LTI7-L475
27	CY8C4248LTI-L485	CY8C4248LTI7-L485
28	CYSHM35926P-L068LTI	CYSHM35926P7-L068LTI; Subject to lead time
29	CYSHM35926P-L068LTIT	CYSHM35926P7-L068LTI; Subject to lead time
30	CG8621AM	CG8621BM; Subject to lead time
31	CG8622AM	CG8622BM; Subject to lead time