

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

PRODUCT CHANGE NOTIFICATION

PCN: PCN191101

Date: March 14, 2019

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

To:

Change Type: Major

Description of Change:

Cypress announces the qualification of Fab 25 (5204 East Ben White Boulevard, Austin, TX 78741, USA) with the Copper (Cu) Backend of Line (BEOL) process and Test 25 (5204 East Ben White Boulevard, Austin, TX 78741, USA) as an additional wafer sort site for the PSoC® 4200 product family.

The Aluminum (AI) BEOL process uses Tungsten (W) plugs and Ti/TiN/AI 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/AI metallization with subtractive patterning to Cu damascene with Ta/TaN barriers.

This qualification is 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 sites 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: 67

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 <u>www.cypress.com</u> and typing the QTP number in the keyword search window.

QTP Report Number	Qualification
171802	PSoC® 4200 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 associate 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 fabricated at the new site 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 <u>pcn_adm@cypress.com</u>.

Sincerely,

Cypress PCN Administration

Item	Marketing Part Number	Sample Order Part Number	Sample Availability
1	CY8C4124AXI-443	CY8C4124AXI7-443	Available
2	CY8C4124AXI-443T	CY8C4124AXI7-443	Available
3	CY8C4124AXQ-443	CY8C4124AXQ7-443	Subject to leadtime
4	CY8C4124AZI-443	CY8C4124AZI7-443	Subject to leadtime
5	CY8C4124FNI-443T	CY8C4124FNI7-443T	Subject to leadtime
6	CY8C4124LQI-443	CY8C4124LQI7-443	Available
7	CY8C4124LQI-443T	CY8C4124LQI7-443	Available
8	CY8C4124LQQ-443	CY8C4124LQQ7-443	Subject to leadtime
9	CY8C4124PVI-432	CY8C4124PVI7-432	Available
10	CY8C4124PVI-432T	CY8C4124PVI7-432	Available
11	CY8C4124PVI-442	CY8C4124PVI7-442	Available
12	CY8C4124PVI-442T	CY8C4124PVI7-442	Available
13	CY8C4124PVQ-432	CY8C4124PVQ7-432	Subject to leadtime
14	CY8C4124PVQ-442	CY8C4124PVQ7-442	Subject to leadtime
15	CY8C4125AXI-473	CY8C4125AXI7-473	Subject to leadtime
16	CY8C4125AXI-483	CY8C4125AXI7-483	Available
17	CY8C4125AXI-483T	CY8C4125AXI7-483	Available
18	CY8C4125AXQ-473	CY8C4125AXQ7-473	Subject to leadtime
19	CY8C4125AXQ-483	CY8C4125AXQ7-483	Subject to leadtime
20	CY8C4125AZI-473	CY8C4125AZI7-473	Subject to leadtime
21	CY8C4125AZI-483	CY8C4125AZI7-483	Subject to leadtime
22	CY8C4125FNI-483T	CY8C4125FNI7-483T	Subject to leadtime
23	CY8C4125LQI-483	CY8C4125LQI7-483	Available
24	CY8C4125LQI-483T	CY8C4125LQI7-483	Available
25	CY8C4125LQQ-483	CY8C4125LQQ7-483	Subject to leadtime
26	CY8C4125PVI-482	CY8C4125PVI7-482	Available
27	CY8C4125PVI-482T	CY8C4125PVI7-482	Available
28	CY8C4125PVQ-482	CY8C4125PVQ7-482	Subject to leadtime
29	CY8C4244AXQ-443	CY8C4244AXQ7-443	Subject to leadtime
30	CY8C4244AZI-443	CY8C4244AZI7-443	Subject to leadtime
31	CY8C4244FNI-443T	CY8C4244FNI7-443T	Subject to leadtime
32	CY8C4244LQI-443	CY8C4244LQI7-443	Subject to leadtime
33	CY8C4244LQQ-443	CY8C4244LQQ7-443	Subject to leadtime
34	CY8C4244PVI-442	CY8C4244PVI7-442	Subject to leadtime
35	CY8C4244PVQ-432	CY8C4244PVQ7-432	Subject to leadtime
36	CY8C4244PVQ-442	CY8C4244PVQ7-442	Subject to leadtime
37	CY8C4245AXI-473	CY8C4245AXI7-473	Subject to leadtime
38	CY8C4245AXI-483	CY8C4245AXI7-483	Subject to leadtime
39	CY8C4245AXQ-473	CY8C4245AXQ7-473	Subject to leadtime
40	CY8C4245AXQ-483	CY8C4245AXQ7-483	Subject to leadtime
41	CY8C4245AZI-473	CY8C4245AZI7-473	Subject to leadtime
42	CY8C4245AZI-483	CY8C4245AZI7-483	Subject to leadtime
43	CY8C4245FNI-483T	CY8C4245FNI7-483T	Subject to leadtime
44	CY8C4245LQI-483	CY8C4245LQI7-483	Available
45	CY8C4245LQI-483T	CY8C4245LQI7-483	Available
46	CY8C4245LQQ-483	CY8C4245LQQ7-483	Subject to leadtime
47	CY8C4245PVI-482	CY8C4245PVI7-482	Available
48	CY8C4245PVQ-482	CY8C4245PVQ7-482	Subject to leadtime
49	CY8CEBIKEAXI-111	CY8CEBIKEAXI7-111	Subject to leadtime
50	CY8CEBIKEAZI-111	CY8CEBIKEAZI7-111	Subject to leadtime
51	CG8080AM	CG8080YM	Subject to leadtime
52	CG8344AM	CG8344YM	Subject to leadtime
53	CG8344AMT	CG8344YM	Subject to leadtime
54	CG8349AT	CG8349YT	Available

55	CG8349ATT	CG8349YT	Available
56	CG8384AM	CG8384YM	Subject to leadtime
57	CG8431AA	CG8431YA	Subject to leadtime
58	CG8431AAT	CG8431YA	Subject to leadtime
59	CG8634AM	CG8634YM	Subject to leadtime
60	CG8634AMT	CG8634YM	Subject to leadtime
61	CG8660AM	CG8660YM	Available
62	CP8562AT	CP8562YT	Subject to leadtime
63	CP8562ATT	CP8562YT	Subject to leadtime
64	CP8570AT	CP8570YT	Subject to leadtime
65	CP8570ATT	CP8570YT	Subject to leadtime
66	CS8590AM	CS8590YM	Subject to leadtime
67	CS8590AMT	CS8590YM	Subject to leadtime