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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

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

Item	Marketing Part Number						
1	CY8CMBR3002-SX1I	42	CG8653AAT	83	CY8C4014SXI-421T	124	CY8C4125LQI-S412
2	CY8CMBR3002-SX1IT	43	CP3155	84	CY8C4014FNI-421AT	125	CY8C4125LQI-S412T
3	CY8CMBR3102-SX1I	44	CP3155B	85	CG8360AM	126	CY8C4125LQI-S413
4	CY8CMBR3102-SX1IT	45	CP3155BT	86	CG8360AMT	127	CY8C4125LQI-S413T
5	CY8CMBR3106S-LQXI	46	CP3155T	87	CG8372AM	128	CY8C4125LQI-S422
6	CY8CMBR3106S-LQXIT	47	CP8338AT	88	CG8372AMT	129	CY8C4125LQI-S422T
7	CY8CMBR3108-LQXI	48	CP8338ATT	89	CG8469AM	130	CY8C4125LQI-S423
8	CY8CMBR3108-LQXIT	49	CP8365AT	90	CG8469AMT	131	CY8C4125LQI-S423T
9	CY8CMBR3110-SX2I	50	CP8365ATT	91	CP8347AT	132	CY8C4125LQI-S432
10	CY8CMBR3110-SX2IT	51	CP8381AT	92	CP8347ATT	133	CY8C4125LQI-S432T
11	CY8CMBR3116-LQXI	52	CP8381ATT	93	CP8363AT	134	CY8C4125LQI-S433
12	CY8CMBR3116-LQXIT	53	CP8386AT	94	CP8363ATT	135	CY8C4125LQI-S433T
13	CY8CMBR3145-LQXI	54	CP8386ATT	95	CP8809ATT	136	CY8C4126AXI-S423
14	CY8CMBR3145-LQXIT	55	CP8547AT	96	CP8810ATT	137	CY8C4126AXI-S433
15	CY8CMBR3150-LQXI	56	CP8547ATT	97	CP8811ATT	138	CY8C4126AZI-S423
16	CY8CMBR3150-LQXIT	57	CP8569AT	98	CY8C4124AZI-S413	139	CY8C4126AZI-S423T
17	CY8CMBR3155-LQXI	58	CP8569ATT	99	CY8C4124AZI-S413T	140	CY8C4126AZI-S433
18	CY8CMBR3155-LQXIT	59	CY8C4013LQI-411	100	CY8C4124AZI-S433	141	CY8C4126AZI-S433T
19	CY8CMBR3175-LQXI	60	CY8C4013LQI-411T	101	CY8C4124AZI-S433T	142	CY8C4145AXI-S423
20	CY8CMBR3175-LQXIT	61	CY8C4013SXI-400	102	CY8C4124FNI-S403T	143	CY8C4145AXI-S433
21	CY8CMBR3195-LQXI	62	CY8C4013SXI-400T	103	CY8C4124FNI-S413T	144	CY8C4145AZI-S423
22	CY8CMBR3195-LQXIT	63	CY8C4013SXI-410	104	CY8C4124FNI-S433T	145	CY8C4145AZI-S423T
23	CG8164AA	64	CY8C4013SXI-410T	105	CY8C4124LQI-S412	146	CY8C4146AXI-S423
24	CG8164AAT	65	CY8C4013SXI-411	106	CY8C4124LQI-S412T	147	CY8C4146AXI-S433
25	CG8164BA	66	CY8C4013SXI-411T	107	CY8C4124LQI-S413	148	CY8C4146AZI-S423
26	CG8164BAT	67	CY8C4014LQI-412	108	CY8C4124LQI-S413T	149	CY8C4146AZI-S423T
27	CG8337AA	68	CY8C4014LQI-412T	109	CY8C4124LQI-S432	150	CY8C4146AZI-S433
28	CG8337AAT	69	CY8C4014LQI-421	110	CY8C4124LQI-S432T	151	CY8C4146AZI-S433T
29	CG8341AM	70	CY8C4014LQI-421T	111	CY8C4124LQI-S433	152	CY8C4146FNI-S423T
30	CG8341AMT	71	CY8C4014LQI-422	112	CY8C4124LQI-S433T	153	CY8C4146FNI-S433T
31	CG8356AA	72	CY8C4014LQI-422T	113	CY8C4125AXI-S423	154	CY8C4146LQI-S422
32	CG8356AAT	73	CY8C4014LQI-SLT1	114	CY8C4125AXI-S433	155	CY8C4146LQI-S422T
33	CG8470AM	74	CY8C4014LQI-SLT2	115	CY8C4125AZI-S413	156	CY8C4146LQI-S423
34	CG8470AMT	75	CY8C4014PVI-412	116	CY8C4125AZI-S413T	157	CY8C4146LQI-S423T
35	CG8609AM	76	CY8C4014PVI-422	117	CY8C4125AZI-S423	158	CY8C4146LQI-S432
36	CG8609AMT	77	CY8C4014PVI-422T	118	CY8C4125AZI-S423T	159	CY8C4146LQI-S432T
37	CG8632AA	78	CY8C4014SXI-411	119	CY8C4125AZI-S433	160	CY8C4146LQI-S433
38	CG8632AAT	79	CY8C4014SXI-411T	120	CY8C4125AZI-S433T	161	CY8C4146LQI-S433T
39	CG8638AM	80	CY8C4014SXI-420	121	CY8C4125FNI-S413T	162	CY8C4146WI-S423
40	CG8638AMT	81	CY8C4014SXI-420T	122	CY8C4125FNI-S423T	163	CG8784AM
41	CG8653AA	82	CY8C4014SXI-421	123	CY8C4125FNI-S433T	164	CG8784AMT