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PRODUCT CHANGE NOTIFICATION

PCN: PCN145279

Date: March 17, 2014

Subject: Addendum to PCN 135245: Qualification of Manufacturing and Design Changes for PSoC 3 Products

To: PCN ADMINISTRATOR CYPRESS PCN ADMIN pcn_adm@cypress.com

Description of Change:

Cypress announces a new revision of masks for devices in the PSoC 3 family. These new devices improve HBM Electro-Static Discharge performance from 750 V to 2,000 V and improve Single-Event Latchup to <10 FIT.

These new devices are drop-in replacements which are form, fit, and function compatible with existing PSoC 3 devices. Product data sheets have been updated to reflect the changed specifications.

Additionally, Cypress is implementing a manufacturing change that will result in a temperature restriction on the IMO 3MHz spec to +/- 1.5% below 0 deg C and above 70 deg C. This spec remains at +/- 1% at all other operational temperatures.

This addendum covers 24 additional parts that were not included in the PCN135245.

Benefit of Change:

The PSoC 3 manufacturing and design changes provide improved specifications and performance for all PSoC 3 products.

Part Numbers Affected: 77 (53 from PCN 135245 plus 24 from this addendum notice) **Affected Parts:** Refer to following table for 24 parts affected by this notice. Refer to attached 'Affected part list' file for complete list of 77 parts.

Item	Cypress Part
	Number
1	CG7434AMT
2	CG7503AMT
3	CG7504AMT
4	CG7434AM
5	CG7503AM
6	CG7504AM
7	CG7764AA
8	CG7764AAT
9	CG7784AA
10	CG7784AAT
11	CG7984AA
12	CG7984AAT
13	CP7458BT
14	CP7458BTT
15	CP7458CT
16	CP7458CTT
17	CP7502AT
18	CP7502ATT
19	CP7502BT
20	CP7502BTT
21	CP7627AT
22	CP7627ATT
23	CS7486AM
24	CS7486AMT

Qualification Status:

As per Cypress' specified list of changes, these new parts have been qualified through a series of tests identified in Qualification Test Plan (QTP) No. 101101 section 133003.

The improved devices will be available in 48-QFN, 68-QFN, and 100-TQFP packages with copper palladium wire bonds. Qualification information for each package and packaging site are listed in the table below. The QTP reports can be found in the attachment to this notification or by visiting <u>www.cypress.com</u> and typing the QTP number in the Keyword Search window.

In alignment with industry trends Cypress is moving forward with copper palladium wires for sample and production shipments.

Package Description	Cypress Philippines	ASE Taiwan
48 lead 7x7x1 mm QFN	133308	133309
68 lead 8x8x1 mm QFN	133308	133309
100 lead 14x14x1.4 mm TQFP	133307	133306

Sample Status:

Qualification samples are not built ahead of time for all part numbers affected by this change.

Please review the following table for a list of affected part numbers with their associated sample ordering part numbers. Samples for products listed below are available. If you require qualification samples, please contact your sales representative.

Item	Cypress Part Number	Sample Ordering Part Number
1	CG7434AM	CY8C3866AXI-040ES5
2	CG7434AMT	CY8C3866AXI-040ES5
3	CG7503AM	Not available at this time
4	CG7503AMT	Not available at this time
5	CG7504AM	CY8C3866LTI-030ES5
6	CG7504AMT	CY8C3866LTI-030ES5
7	CG7764AA	CY8C3866LTI-030ES5
8	CG7764AAT	CY8C3866LTI-030ES5
9	CG7784AA	CY8C3866LTI-030ES5
10	CG7784AAT	CY8C3866LTI-030ES5
11	CG7984AA	CY8C3866AXI-040ES5
12	CG7984AAT	CY8C3866AXI-040ES5
13	CP7458BT	Not available at this time
14	CP7458BTT	Not available at this time
15	CP7458CT	Not available at this time
16	CP7458CTT	Not available at this time
17	CP7502AT	Not available at this time
18	CP7502ATT	Not available at this time
19	CP7502BT	Not available at this time
20	CP7502BTT	Not available at this time
21	CP7627AT	CY8C3866AXI-040ES5
22	CP7627ATT	CY8C3866AXI-040ES5
23	CS7486AM	CY8C3866LTI-030ES5
24	CS7486AMT	CY8C3866LTI-030ES5

Approximate Implementation Date:

Effective with the date of this notification, Cypress will start to transition to shipments of the affected part numbers with the manufacturing and design changes.

Effective 90 days from the date of this notification or upon customer approval, Cypress will transition to shipments of the affected part numbers with copper palladium wire bonds.

Anticipated Impact:

Products manufactured are completely compatible with existing products from a functional, parametric, and quality performance perspective.

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 to this notice is required. For additional information regarding this change, please contact your local Cypress sales representative or contact the Cypress PCN Administrator at pcn_adm@cypress.com.

Sincerely,

Cypress PCN Administration

ltem	Marketing Part Number	Sample Ordering Part Number	Remarks
1	CG7434AM	CY8C3866AXI-040ES5	Part affected by Addendum notice
2	CG7434AMT	CY8C3866AXI-040ES5	Part affected by Addendum notice
3	CG7503AM	Not available at this time	Part affected by Addendum notice
4	CG7503AMT	Not available at this time	Part affected by Addendum notice
5	CG7504AM	CY8C3866LTI-030ES5	Part affected by Addendum notice
6	CG7504AMT	CY8C3866LTI-030ES5	Part affected by Addendum notice
7	CG7764AA	CY8C3866LTI-030ES5	Part affected by Addendum notice
8	CG7764AAT	CY8C3866LTI-030ES5	Part affected by Addendum notice
9	CG7784AA	CY8C3866LTI-030ES5	Part affected by Addendum notice
10	CG7784AAT	CY8C3866LTI-030ES5	Part affected by Addendum notice
11	CG7984AA	CY8C3866AXI-040ES5	Part affected by Addendum notice
12	CG7984AAT	CY8C3866AXI-040ES5	Part affected by Addendum notice
13	CP7458BT	Not available at this time	Part affected by Addendum notice
14	CP7458BTT	Not available at this time	Part affected by Addendum notice
15	CP7458CT	Not available at this time	Part affected by Addendum notice
16	CP7458CTT	Not available at this time	Part affected by Addendum notice
17	CP7502AT	Not available at this time	Part affected by Addendum notice
18	CP7502ATT	Not available at this time	Part affected by Addendum notice
19	CP7502BT	Not available at this time	Part affected by Addendum notice
20	CP7502BTT	Not available at this time	Part affected by Addendum notice
21	CP7627AT	CY8C3866AXI-040ES5	Part affected by Addendum notice
22	CP7627ATT	CY8C3866AXI-040ES5	Part affected by Addendum notice
23	CS7486AM	CY8C3866LTI-030ES5	Part affected by Addendum notice
24	CS7486AMT	CY8C3866LTI-030ES5	Part affected by Addendum notice
25	CY8C3244AXI-153	CY8C3866AXI-040ES5	Part affected by PCN135245
26	CY8C3245AXI-158	CY8C3866AXI-040ES5	Part affected by PCN135245
27	CY8C3245AXI-166	CY8C3866AXI-040ES5	Part affected by PCN135245
28	CY8C3246AXI-131	CY8C3866AXI-040ES5	Part affected by PCN135245
29	CY8C3246AXI-138	CY8C3866AXI-040ES5	Part affected by PCN135245
30	CY8C3445AXI-104	CY8C3866AXI-040ES5	Part affected by PCN135245
31	CY8C3445AXI-108	CY8C3866AXI-040ES5	Part affected by PCN135245
32	CY8C3446AXI-099	CY8C3866AXI-040ES5	Part affected by PCN135245
33	CY8C3446AXI-105	CY8C3866AXI-040ES5	Part affected by PCN135245
34	CY8C3665AXI-198	CY8C3866AXI-040ES5	Part affected by PCN135245
35	CY8C3666AXI-036	CY8C3866AXI-040ES5	Part affected by PCN135245
36	CY8C3666AXI-037	CY8C3866AXI-040ES5	Part affected by PCN135245

37	CY8C3666AXI-052	CY8C3866AXI-040ES5	Part affected by PCN135245
38	CY8C3666AXI-200	CY8C3866AXI-040ES5	Part affected by PCN135245
39	CY8C3666AXI-202	CY8C3866AXI-040ES5	Part affected by PCN135245
40	CY8C3865AXI-019	CY8C3866AXI-040ES5	Part affected by PCN135245
41	CY8C3865AXI-204	CY8C3866AXI-040ES5	Part affected by PCN135245
42	CY8C3866AXI-035	CY8C3866AXI-040ES5	Part affected by PCN135245
43	CY8C3866AXI-039	CY8C3866AXI-040ES5	Part affected by PCN135245
44	CY8C3866AXI-040	CY8C3866AXI-040ES5	Part affected by PCN135245
45	CY8C3866AXI-206	CY8C3866AXI-040ES5	Part affected by PCN135245
46	CY8C3866AXI-208	CY8C3866AXI-040ES5	Part affected by PCN135245
47	CY8C3244LTI-130	CY8C3866LTI-030ES5	Part affected by PCN135245
48	CY8C3245LTI-163	CY8C3866LTI-030ES5	Part affected by PCN135245
49	CY8C3246LTI-128	CY8C3866LTI-030ES5	Part affected by PCN135245
50	CY8C3246LTI-149	CY8C3866LTI-030ES5	Part affected by PCN135245
51	CY8C3444LTI-110	CY8C3866LTI-030ES5	Part affected by PCN135245
52	CY8C3445LTI-079	CY8C3866LTI-030ES5	Part affected by PCN135245
53	CY8C3445LTI-081	CY8C3866LTI-030ES5	Part affected by PCN135245
54	CY8C3446LTI-074	CY8C3866LTI-030ES5	Part affected by PCN135245
55	CY8C3446LTI-085	CY8C3866LTI-030ES5	Part affected by PCN135245
56	CY8C3665LTI-044	CY8C3866LTI-030ES5	Part affected by PCN135245
57	CY8C3665LTI-199	CY8C3866LTI-030ES5	Part affected by PCN135245
58	CY8C3666LTI-027	CY8C3866LTI-030ES5	Part affected by PCN135245
59	CY8C3666LTI-201	CY8C3866LTI-030ES5	Part affected by PCN135245
60	CY8C3666LTI-203	CY8C3866LTI-030ES5	Part affected by PCN135245
61	CY8C3865LTI-014	CY8C3866LTI-030ES5	Part affected by PCN135245
62	CY8C3865LTI-205	CY8C3866LTI-030ES5	Part affected by PCN135245
63	CY8C3866LTI-030	CY8C3866LTI-030ES5	Part affected by PCN135245
64	CY8C3866LTI-207	CY8C3866LTI-030ES5	Part affected by PCN135245
65	CY8C3866LTI-209	CY8C3866LTI-030ES5	Part affected by PCN135245
66	CY8C3244LTI-123	Not Available at this Time	Part affected by PCN135245
67	CY8C3245LTI-139	Not Available at this Time	Part affected by PCN135245
68	CY8C3245LTI-144	Not Available at this Time	Part affected by PCN135245
69	CY8C3246LTI-125	Not Available at this Time	Part affected by PCN135245
70	CY8C3246LTI-162	Not Available at this Time	Part affected by PCN135245
71	CY8C3444LTI-119	Not Available at this Time	Part affected by PCN135245
72	CY8C3445LTI-078	Not Available at this Time	Part affected by PCN135245
73	CY8C3446LTI-073	Not Available at this Time	Part affected by PCN135245

74	CY8C3446LTI-083	Not Available at this Time	Part affected by PCN135245
75	CY8C3666LTI-050	Not Available at this Time	Part affected by PCN135245
76	CY8C3866LTI-067	Not Available at this Time	Part affected by PCN135245
77	CY8C3866LTI-068	Not Available at this Time	Part affected by PCN135245