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## PRODUCT CHANGE NOTIFICATION

<b>PCN:</b> PCN135245	<b>Date:</b> September 14, 2013
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**Subject:** Qualification of Manufacturing and Design Changes for PSoC 3 Products

<b>To:</b>	
	DIGIKEY
	digiKey.supplierInfo@digikey.com

**Change Type:** Major

### 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 2000V 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 will be 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.

### Benefits of the Change:

These changes provide improved specifications and performance for all PSoC 3 family products.

**Part Numbers Affected:  
Affected Parts: 53**

Item	Cypress Part Number	Item	Cypress Part Number	Item	Cypress Part Number
1	CY8C3244AXI-153	19	CY8C3866AXI-039	37	CY8C3865LTI-014
2	CY8C3245AXI-158	20	CY8C3866AXI-040	38	CY8C3865LTI-205
3	CY8C3245AXI-166	21	CY8C3866AXI-206	39	CY8C3866LTI-030
4	CY8C3246AXI-131	22	CY8C3866AXI-208	40	CY8C3866LTI-207
5	CY8C3246AXI-138	23	CY8C3244LTI-130	41	CY8C3866LTI-209
6	CY8C3445AXI-104	24	CY8C3245LTI-163	42	CY8C3244LTI-123
7	CY8C3445AXI-108	25	CY8C3246LTI-128	43	CY8C3245LTI-139
8	CY8C3446AXI-099	26	CY8C3246LTI-149	44	CY8C3245LTI-144
9	CY8C3446AXI-105	27	CY8C3444LTI-110	45	CY8C3246LTI-125
10	CY8C3665AXI-198	28	CY8C3445LTI-079	46	CY8C3246LTI-162
11	CY8C3666AXI-036	29	CY8C3445LTI-081	47	CY8C3444LTI-119
12	CY8C3666AXI-037	30	CY8C3446LTI-074	48	CY8C3445LTI-078
13	CY8C3666AXI-052	31	CY8C3446LTI-085	49	CY8C3446LTI-073
14	CY8C3666AXI-200	32	CY8C3665LTI-044	50	CY8C3446LTI-083
15	CY8C3666AXI-202	33	CY8C3665LTI-199	51	CY8C3666LTI-050
16	CY8C3865AXI-019	34	CY8C3666LTI-027	52	CY8C3866LTI-067
17	CY8C3865AXI-204	35	CY8C3666LTI-201	53	CY8C3866LTI-068
18	CY8C3866AXI-035	36	CY8C3666LTI-203		

**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) 133003.

The improved devices will be available in 100 TQFP, 68 QFN and 48 QFN packages with Copper Palladium wire bonds. Qualification information for each package and packaging site are listed in the table below. The qualification reports can be found as attachments to this notification or by visiting [www.cypress.com](http://www.cypress.com), typing the QTP number in the search window and clicking on the magnifying glass icon.

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	CY8C3244AXI-153	CY8C3866AXI-040ES5
2	CY8C3245AXI-158	CY8C3866AXI-040ES5
3	CY8C3245AXI-166	CY8C3866AXI-040ES5

4	CY8C3246AXI-131	CY8C3866AXI-040ES5
5	CY8C3246AXI-138	CY8C3866AXI-040ES5
6	CY8C3445AXI-104	CY8C3866AXI-040ES5
7	CY8C3445AXI-108	CY8C3866AXI-040ES5
8	CY8C3446AXI-099	CY8C3866AXI-040ES5
9	CY8C3446AXI-105	CY8C3866AXI-040ES5
10	CY8C3665AXI-198	CY8C3866AXI-040ES5
11	CY8C3666AXI-036	CY8C3866AXI-040ES5
12	CY8C3666AXI-037	CY8C3866AXI-040ES5
13	CY8C3666AXI-052	CY8C3866AXI-040ES5
14	CY8C3666AXI-200	CY8C3866AXI-040ES5
15	CY8C3666AXI-202	CY8C3866AXI-040ES5
16	CY8C3865AXI-019	CY8C3866AXI-040ES5
17	CY8C3865AXI-204	CY8C3866AXI-040ES5
18	CY8C3866AXI-035	CY8C3866AXI-040ES5
19	CY8C3866AXI-039	CY8C3866AXI-040ES5
20	CY8C3866AXI-040	CY8C3866AXI-040ES5
21	CY8C3866AXI-206	CY8C3866AXI-040ES5
22	CY8C3866AXI-208	CY8C3866AXI-040ES5
23	CY8C3244LTI-130	CY8C3866LTI-030ES5
24	CY8C3245LTI-163	CY8C3866LTI-030ES5
25	CY8C3246LTI-128	CY8C3866LTI-030ES5
26	CY8C3246LTI-149	CY8C3866LTI-030ES5
27	CY8C3444LTI-110	CY8C3866LTI-030ES5
28	CY8C3445LTI-079	CY8C3866LTI-030ES5
29	CY8C3445LTI-081	CY8C3866LTI-030ES5
30	CY8C3446LTI-074	CY8C3866LTI-030ES5
31	CY8C3446LTI-085	CY8C3866LTI-030ES5
32	CY8C3665LTI-044	CY8C3866LTI-030ES5
33	CY8C3665LTI-199	CY8C3866LTI-030ES5
34	CY8C3666LTI-027	CY8C3866LTI-030ES5
35	CY8C3666LTI-201	CY8C3866LTI-030ES5
36	CY8C3666LTI-203	CY8C3866LTI-030ES5
37	CY8C3865LTI-014	CY8C3866LTI-030ES5
38	CY8C3865LTI-205	CY8C3866LTI-030ES5
39	CY8C3866LTI-030	CY8C3866LTI-030ES5
40	CY8C3866LTI-207	CY8C3866LTI-030ES5
41	CY8C3866LTI-209	CY8C3866LTI-030ES5
42	CY8C3244LTI-123	Not Available at this Time
43	CY8C3245LTI-139	Not Available at this Time
44	CY8C3245LTI-144	Not Available at this Time
45	CY8C3246LTI-125	Not Available at this Time
46	CY8C3246LTI-162	Not Available at this Time
47	CY8C3444LTI-119	Not Available at this Time
48	CY8C3445LTI-078	Not Available at this Time
49	CY8C3446LTI-073	Not Available at this Time
50	CY8C3446LTI-083	Not Available at this Time
51	CY8C3666LTI-050	Not Available at this Time
52	CY8C3866LTI-067	Not Available at this Time
53	CY8C3866LTI-068	Not Available at this Time

**Approximate Implementation Date:**

Effective 90 days from the date of this notification or upon customer approval, Cypress will transition to shipments of the affected part numbers with the improved design changes and with CuPd wire bonds.

**Anticipated Impact:**

Products manufactured are completely compatible with existing product 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](mailto:pcn_adm@cypress.com).

Sincerely,

Cypress PCN Administration