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PRODUCT CHANGE NOTIFICATION

PCN: PCN190302A

Date: April 05, 2019

Subject: Addendum to PCN190302 - Qualification of G700LA Mold Compound, Pure Sn Leadfinish and CuPdAu Wire for Select QFN Packages Assembled at ASE-KH

To:

Change Type: Major

Description of Change:

The purpose of this addendum is to update the affected parts list communicated in the initial PCN190302.

Cypress announced the qualification of G700LA mold compound, Pure Sn leadfinish and CuPdAu wire for select QFN packages assembled at Advanced Semiconductor Engineering-Kaohsiung (ASE-KH, 26 Chin 3rd Rd., 811, Nantze Export Processing Zone Kaohsiung, Taiwan, R.O.C.).

This mold compound is consistent with Cypress' drive to Green and Pb-free RoHS compliant packages. In addition, this Green and Pb-free G700LA mold compound is compatible with industry standard reflow temperatures for applicable package volume, thickness and lead finish. Also, the new leadfinish and new bond wire type is compatible with industry standards.

The 56-Lead QFN packages are assembled at ASE-KH using the following Bill of Materials:

Material	New ASE-KH Bill of Materials	Current ASE-KH Bill of Materials
Mold Compound	Sumitomo G700LA	Sumitomo G631H
Leadfinish	Pure Sn	NiPdAu
Die Attach Material	Hitachi EN4900F	Hitachi EN4900F
Bond Wire	0.8 mil CuPdAu wire	0.8 mil bare Cu wire

The 48-Lead QFN packages are assembled at ASE-KH using the following Bill of Materials:

Material	New ASE-KH Bill of Materials	Current ASE-KH Bill of Materials
Mold Compound	Sumitomo G700LA	Sumitomo G631H
Leadfinish	Pure Sn	NiPdAu
Die Attach Material	Hitachi EN4900F	Hitachi EN4900F
Bond Wire	0.8 mil CuPdAu wire	0.8 mil bare Cu wire

The 32-Lead QFN packages are assembled at ASE-KH using the following Bill of Materials:

Material	New ASE-KH Bill of Materials	Current ASE-KH Bill of Materials
Mold Compound	Sumitomo G700LA	Sumitomo G631H
Leadfinish	Pure Sn	NiPdAu
Die Attach Material	Hitachi EN4900F	Hitachi EN4900F
Bond Wire	0.8 mil CuPdAu wire	0.8 mil bare Cu wire

Benefit of Change:

The qualification of the G700LA mold compound and Pure Sn leadfinish allows for an improvement in product reliability and/or product cycle time.

The conversion to CuPdAu wire bonds will keep Cypress in alignment with the overall industry trend towards copper wire bonds.

Part Numbers Affected: 71

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:

These changes have been qualified through a series of tests documented in the Qualification Test Plans summarized 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 Number	Qualification
182610	56L QFN 8x8x1mm BOM CHANGE QUAL AT ASE KAOHSIUNG TO MITIGATE DELAMINATION
183315	48L QFN BOM CHANGE QUAL AND CUPDAU WIRE PHASE-IN AT ASE KAOHSIUNG TO MITIGATE DELAMINATION
184103	32L QFN BOM CHANGE QUAL AND CUPDAU WIRE PHASE-IN AT ASE KAOHSIUNG TO MITIGATE DELAMINATION

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 ASE-KH 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 Commercial, Industrial and Automotive non-PPAP part numbers in the attached file will be assembled at ASE-KH or other approved assembly sites.

Anticipated Impact:

Products assembled with the G700LA mold compound, Pure Sn leadfinish and CuPdAu wire 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	Remarks
1	CY22391LTXC-06	Added to PCN190302A
2	CY22391LTXC-06T	Added to PCN190302A
3	CY22391LTXC-07	Added to PCN190302A
4	CY22391LTXC-07T	Added to PCN190302A
5	CY7C63833-LTXC	Added to PCN190302A
6	CY7C63833-LTXCT	Added to PCN190302A
7	CY7C65213-32LTXI	
8	CY7C65213-32LTXIT	Added to PCN190302A
9	CY7C65213A-32LTXI	Added to PCN190302A
10	CY7C65213A-32LTXIT	Added to PCN190302A
11	CY7C65215-32LTXI	Added to PCN190302A
12	CY7C65215-32LTXIT	Added to PCN190302A
13	CY7C65215A-32LTXI	Added to PCN190302A
14	CY7C65215A-32LTXIT	Added to PCN190302A
15	CY7C65620-56LTXC	
16	CY7C65620-56LTXCT	Added to PCN190302A
17	CY7C65620-56LTXI	Added to PCN190302A
18	CY7C65620-56LTXIT	Added to PCN190302A
19	CY7C65621-56LTXC	Added to PCN190302A
20	CY7C65621-56LTXCT	Added to PCN190302A
21	CY7C65621-56LTXI	
22	CY7C65621-56LTXIT	Added to PCN190302A
23	CY7C65630-56LTXC	
24	CY7C65630-56LTXCT	Added to PCN190302A
25	CY7C65630-56LTXI	Added to PCN190302A
26	CY7C65630-56LTXIT	Added to PCN190302A
27	CY7C65631-56LTXC	
28	CY7C65631-56LTXCT	Added to PCN190302A
29	CY7C65631-56LTXI	
30	CY7C65631-56LTXIT	Added to PCN190302A
31	CY7C68001-56LTXC	Added to PCN190302A
32	CY8C21434-24LTXI	
33	CY8C21434-24LTXIT	Added to PCN190302A
34	CY8C21434B-24LTXI	Added to PCN190302A
35	CY8C24423A-24LTXI	
36	CY8C24423A-24LTXIT	Added to PCN190302A
37	CY8C28643-24LTXI	Added to PCN190302A
38	CY8C28643-24LTXIT	Added to PCN190302A
39	CY8C28645-24LTXI	
40	CY8C28645-24LTXIT	Added to PCN190302A
41	CY8CLE01D01-56LTXI	Added to PCN190302A
42	CY8CLE01D01-56LTXQ	Added to PCN190302A
43	CY8CLE02D01-56LTXI	Added to PCN190302A
44	CY8CLE03D01-56LTXI	Added to PCN190302A
45	CY8CLE03D02-56LTXI	Added to PCN190302A
46	CY8CLE03G01-56LTXI	Added to PCN190302A
47	CY8CLE04D01-56LTXI	Added to PCN190302A

48	CY8CLE04D02-56LTXI	Added to PCN190302A
49	CY8CLE04DOCD1-56LTXI	Added to PCN190302A
50	CY8CLE04G01-56LTXI	Added to PCN190302A
51	CG7297AM	
52	CG7297AMT	Added to PCN190302A
53	CG7392AM	Added to PCN190302A
54	CG7392AMT	Added to PCN190302A
55	CG7558AA	
56	CG7558AAT	Added to PCN190302A
57	CG7680AA	Added to PCN190302A
58	CG7680AAT	Added to PCN190302A
59	CG7786AA	Added to PCN190302A
60	CG7786AAT	
61	CG7788AA	Added to PCN190302A
62	CG7788AAT	Added to PCN190302A
63	CP6759DM	Added to PCN190302A
64	CP6759DMT	Added to PCN190302A
65	CP8151AT	Added to PCN190302A
66	CP8151ATT	Added to PCN190302A
67	CP8688AT	Added to PCN190302A
68	CP8688ATT	Added to PCN190302A
69	CP8688BT	Added to PCN190302A
70	CP8688BTT	Added to PCN190302A
71	CS7453ATT	Added to PCN190302A
72	CS7224AA	Removed per PTN185104
73	CS7224AAT	Removed per PTN185104
74	CY7C65640A-LTXC	Removed per PTN185104
75	CY7C65640A-LTXCT	Removed per PTN185104