



Cypress Semiconductor Corporation – An Infineon Technologies Company
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PRODUCT CHANGE NOTIFICATION

PCN: PCN210503

Date: March 22, 2021

Subject: Qualification of Copper Palladium Gold Wire (CuPdAu) and Shinetsu KMC3580LVA Mold Compound for FBGA Packages Assembled at Cypress Bangkok

To:

Change Type: Major

Description of Change:

Cypress announces the qualification of Copper Palladium Gold (CuPdAu) wire and Shinetsu KMC3580LVA mold compound for FBGA packages assembled at Cypress Bangkok.

This new bond wire type is consistent with industry standards per AEC-Q006 requirements. This mold compound is consistent with Cypress' drive to Green and Pb-free RoHS compliant packages. In addition, this Green and Pb-free (Shinetsu KMC3580LVA) mold compound is compatible with industry standard reflow temperatures for applicable package volume, thickness and lead finish.

The FBGA packages are assembled at Cypress Bangkok using the following Bill of Materials:

Material	Cypress Bangkok BOM (New)	Cypress Bangkok BOM (Current)
Mold Compound	Shinetsu KMC3580LVA	Hitachi CEL9200ZHF10FAU 6.0G
Substrate	Cu/Ni/Au	Cu/Ni/Au
Solder Ball	Sn96.5%Ag3%Cu0.5% (SAC305)	Sn96.5%Ag3%Cu0.5% (SAC305)
Die Attach Material	Henkel QMI546/ Hitachi EN4310	Henkel QMI546/Hitachi EN4310
Bond Wire	0.8mil CuPdAu wire	0.8 mil/0.9 mil/1.0 mil Au wire

Benefit of Change:

The conversion to CuPdAu wire bond will keep Cypress in alignment with the overall industry trend towards copper wire bond. The qualification of the Shinetsu KMC3580LVA allows for an improvement in product reliability and/or product cycle time.

Part Numbers Affected: 91

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:

This change has been qualified through a series of tests documented in the Qualification Test Plans QTP#191504 and QTP#194111. 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.

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 Cypress Bangkok 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 Cypress Bangkok or other approved assembly sites.

Anticipated Impact:

Products assembled with the CuPdAu wire and Shinetsu KMC3580LVA mold compound 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	Family	Sample Order Part Number	Sample Availability
1	S29AL008J55BFIR22	NOR	S29AL008J55BFIR20-007	Subject to leadtime
2	S29AL008J70BAI020	NOR	S29AL008J70BAI020-007	Subject to leadtime
3	S29AL008J70BAN020	NOR	S29AL008J70BAN020-007	Subject to leadtime
4	S29AL016J70BFN010	NOR	S29AL016J70BFN010-007	Subject to leadtime
5	S29AL016J70FFI010	NOR	S29AL016J70FFI010-007	Subject to leadtime
6	S29AL016J70FFI022	NOR	S29AL016J70FFI020-007	Subject to leadtime
7	S29AS016J70BFI030	NOR	S29AS016J70BFI030-007	Subject to leadtime
8	S29AS016J70BFI040	NOR	S29AS016J70BFI040-007	Subject to leadtime
9	S29CD032J0PFFI010	NOR	S29CD032J0PFFI010-007	Subject to leadtime
10	S29GL032N11FFIS10	NOR	S29GL032N11FFIS10-007	Subject to leadtime
11	S29GL032N11FFIS40	NOR	S29GL032N11FFIS40-007	Subject to leadtime
12	S29GL032N11FFIV10	NOR	S29GL032N11FFIV10-007	Subject to leadtime
13	S29GL032N90BAI030	NOR	S29GL032N90BAI030-007	Subject to leadtime
14	S29GL032N90BAI040	NOR	S29GL032N90BAI040-007	Subject to leadtime
15	S29GL032N90BFI033	NOR	S29GL032N90BFI030-007	Subject to leadtime
16	S29GL032N90BFI040	NOR	S29GL032N90BFI040-007	Subject to leadtime
17	S29GL032N90DFI020	NOR	S29GL032N90DFI020-007	Subject to leadtime
18	S29GL032N90FAI020	NOR	S29GL032N90FAI020-007	Subject to leadtime
19	S29GL032N90FAI040	NOR	S29GL032N90FAI040-007	Subject to leadtime
20	S29GL032N90FFI010	NOR	S29GL032N90FFI010-007	Subject to leadtime
21	S29GL032N90FFI030	NOR	S29GL032N90FFI030-007	Subject to leadtime
22	S29GL032N90FFI032	NOR	S29GL032N90FFI032-007	Subject to leadtime
23	S29GL032N90FFI042	NOR	S29GL032N90FFI040-007	30-Apr-21
24	S29GL032N90FFIS12	NOR	S29GL032N90FFIS10-007	Subject to leadtime
25	S29GL032N90FFIS20	NOR	S29GL032N90FFIS20-007	Subject to leadtime
26	S29GL032N90FFIS30	NOR	S29GL032N90FFIS30-007	Subject to leadtime
27	S29GL064N11FFIV10	NOR	S29GL064N11FFIV10-007	30-Apr-21
28	S29GL064N90BFI030	NOR	S29GL064N90BFI030-007	30-Apr-21
29	S29GL064N90BFI040	NOR	S29GL064N90BFI040-007	Subject to leadtime
30	S29GL064N90FAI010	NOR	S29GL064N90FAI010-007	Subject to leadtime
31	S29GL064N90FAI030	NOR	S29GL064N90FAI030-007	Subject to leadtime
32	S29GL064N90FAI040	NOR	S29GL064N90FAI040-007	Subject to leadtime
33	S29GL064N90FFI010	NOR	S29GL064N90FFI010-007	Subject to leadtime
34	S29GL064N90FFI012	NOR	S29GL064N90FFI012-007	Subject to leadtime
35	S29GL064N90FFI033	NOR	S29GL064N90FFI030-007	Subject to leadtime
36	S29GL064N90FFI040	NOR	S29GL064N90FFI040-007	Subject to leadtime
37	S29GL064N90FFIS10	NOR	S29GL064N90FFIS10-007	Subject to leadtime
38	S29GL064N90FFIS30	NOR	S29GL064N90FFIS30-007	Subject to leadtime
39	S29GL064N90FFIS40	NOR	S29GL064N90FFIS40-007	Subject to leadtime
40	S29GL128N11FFI010	NOR	S29GL128N11FFI010-007	Subject to leadtime
41	S29GL128P10FAI010	NOR	S29GL128P10FAI010-007	Subject to leadtime
42	S29GL128P10FAI022	NOR	S29GL128P10FAI020-007	Subject to leadtime
43	S29GL128P10FFI010	NOR	S29GL128P10FFI010-007	30-Apr-21
44	S29GL128P10FFI020	NOR	S29GL128P10FFI020-007	Subject to leadtime
45	S29GL128P10FFIS10	NOR	S29GL128P10FFIS10-007	Subject to leadtime
46	S29GL128P11FAI010	NOR	S29GL128P11FAI010-007	Subject to leadtime
47	S29GL128P11FAI020	NOR	S29GL128P11FAI020-007	Subject to leadtime
48	S29GL128P11FAIV10	NOR	S29GL128P11FAIV10-007	Subject to leadtime
49	S29GL128P11FAIV20	NOR	S29GL128P11FAIV20-007	Subject to leadtime
50	S29GL128P11FFI010	NOR	S29GL128P11FFI010-007	Subject to leadtime

51	S29GL128P11FFI020	NOR	S29GL128P11FFI020-007	Subject to leadtime
52	S29GL128P11FFIS30	NOR	S29GL128P11FFIS30-007	Subject to leadtime
53	S29GL128P11FFIS40	NOR	S29GL128P11FFIS40-007	Subject to leadtime
54	S29GL128P11FFIV10	NOR	S29GL128P11FFIV10-007	Subject to leadtime
55	S29GL128P11FFIV20	NOR	S29GL128P11FFIV20-007	30-Apr-21
56	S29GL128P90FAIR10	NOR	S29GL128P90FAIR10-007	Subject to leadtime
57	S29GL128P90FAIR20	NOR	S29GL128P90FAIR20-007	Subject to leadtime
58	S29GL128P90FFCR10	NOR	S29GL128P90FFCR10-007	Subject to leadtime
59	S29GL128P90FFCR20	NOR	S29GL128P90FFCR20-007	Subject to leadtime
60	S29GL128P90FFIR10	NOR	S29GL128P90FFIR10-007	Subject to leadtime
61	S29GL128P90FFIR20	NOR	S29GL128P90FFIR20-007	30-Apr-21
62	S29GL128P90FFSS00	NOR	S29GL128P90FFSS00-007	Subject to leadtime
63	S29GL128P90FFSS90	NOR	S29GL128P90FFSS90-007	Subject to leadtime
64	S29GL256N11FAI010	NOR	S29GL256N11FAI010-007	Subject to leadtime
65	S29GL256P10FAI010	NOR	S29GL256P10FAI010-007	Subject to leadtime
66	S29GL256P10FAI022	NOR	S29GL256P10FAI020-007	Subject to leadtime
67	S29GL256P10FFI010	NOR	S29GL256P10FFI010-007	Subject to leadtime
68	S29GL256P10FFI012	NOR	S29GL256P10FFI012-007	Subject to leadtime
69	S29GL256P10FFI022	NOR	S29GL256P10FFI020-007	30-Apr-21
70	S29GL256P11FAI010	NOR	S29GL256P11FAI010-007	Subject to leadtime
71	S29GL256P11FAI020	NOR	S29GL256P11FAI020-007	Subject to leadtime
72	S29GL256P11FAIV22	NOR	S29GL256P11FAIV20-007	Subject to leadtime
73	S29GL256P11FFI010	NOR	S29GL256P11FFI010-007	30-Apr-21
74	S29GL256P11FFI012	NOR	S29GL256P11FFI012-007	Subject to leadtime
75	S29GL256P11FFI020	NOR	S29GL256P11FFI020-007	30-Apr-21
76	S29GL256P11FFIV10	NOR	S29GL256P11FFIV10-007	Subject to leadtime
77	S29GL256P11FFIV20	NOR	S29GL256P11FFIV20-007	30-Apr-21
78	S29GL256P90FAIR10	NOR	S29GL256P90FAIR10-007	Subject to leadtime
79	S29GL256P90FAIR20	NOR	S29GL256P90FAIR20-007	Subject to leadtime
80	S29GL256P90FFCR10	NOR	S29GL256P90FFCR10-007	Subject to leadtime
81	S29GL256P90FFCR20	NOR	S29GL256P90FFCR20-007	Subject to leadtime
82	S29GL256P90FFIR10A	NOR	S29GL256P90FFIR10-007	Subject to leadtime
83	S29GL256P90FFIR22	NOR	S29GL256P90FFIR20-007	30-Apr-21
84	S29GL256P90FFSS70	NOR	S29GL256P90FFSS70-007	Subject to leadtime
85	S70GL0AGS00FHCR00	NOR	S70GL0AGS00FHCR00-007	Subject to leadtime
86	S99AL016J0320	NOR	S29AL016J70BFI010-007	Subject to leadtime
87	S99AL016J0330	NOR	S29AL016J70BFI020-007	Subject to leadtime
88	S99GL064N90BFI030	NOR	S99GL064N90BFI030-007	Subject to leadtime
89	S99GL064N90FFI010	NOR	S99GL064N90FFI010-007	Subject to leadtime
90	S99GL256P11FFI010	NOR	S99GL256P11FFI010-007	Subject to leadtime
91	S99PL032J0080	NOR	S29PL032J70BFI120-007	Subject to leadtime