



Cypress Semiconductor Corporation, 198 Champion Court, San Jose, CA 95134. Tel: (408) 943-2600

## PRODUCT CHANGE NOTIFICATION

**PCN:** PCN190302

**Date:** January 21, 2019

**Subject:** Qualification of G700LA Mold Compound, Pure Sn Leadfinish and CuPdAu Wire for Select QFN Pb-Free Packages Assembled at ASE-KH

**To:** GENERAL INBOX  
PREMIER FARNELL  
ProductChangeNotices@premierfarnell.com

**Change Type:** Major

### Description of Change:

Cypress announces the qualification of G700LA mold compound, Pure Sn leadfinish and CuPdAu wire for select QFN Pb-Free 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 Pb-Free 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 Copper (Cu)

The 48-Lead QFN Pb-Free 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 Copper (Cu)

The 32-Lead QFN Pb-Free 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 Copper (Cu)

**Benefit of Change:**

The qualification of the G700LA mold compound and Pure Sn leadfinish allows 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: 15**

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](http://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-KH
183315	48L QFN BOM Change Qual and CuPdAu Wire Phase-in at ASE-KH
184103	32L QFN BOM Change Qual and CuPdAu Wire Phase-in at ASE-KH

**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](mailto:pcn_adm@cypress.com).

Sincerely,

Cypress PCN Administration