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## PRODUCT CHANGE NOTIFICATION

**PCN:** PCN194202

**Date:** October 16, 2019

**Subject:** Qualification of New Bill of Materials for QFN Pb-Free Packages Assembled at Cypress Philippines

**To:** TOKYO ELECTRON DEVICE  
TELDEVICE  
cy-inside@teldevice.co.jp

**Change Type:** Major

### Description of Change:

Cypress announces the qualification of new bill of materials (BOM) for QFN Pb-Free packages assembled at Cypress Philippines (CML, Gateway Business Park, SEPZA, Javalera, Gen. Trias Cavite, Philippines).

These changes have been done to simplify the process flow or control resulting in better product quality, field reliability and continuity of supply. This in turn provides the means for Cypress to continue to meet our customers' requirements and meet our delivery commitments in dynamic market conditions. These products are ROHS compliant.

The QFN Pb-Free packages are assembled at Cypress Philippines using the following Bill of Materials:

Material	New BOM (CML-Phil)	Current BOM (CML-Phil)
Mold Compound	Kyocera KEG3000NA-S	Hitachi CEL9220-HF13 Hitachi GE7470LA Sumitomo G700Y
Leadfinish	NiPdAu: Pd thickness: 0.2 $\mu$ inch	NiPdAu: Pd thickness: 0.5 ~ 0.8 $\mu$ inch
Die Attach Material	Sumitomo CRM1577E (non-conductive)	Henkel QMI519 (conductive)
Die Thickness	5 mils I	7 mils and 11 mils
Bond Wire	0.8 mil and 0.9 mil CuPdAu wire	0.8 mil Copper (Cu) wire 0.8 and 0.9 mil CuPd wire

**Benefit of Change:**

The qualification of the new bill of materials on existing qualified packages allows to simplify the process flow or control by improving the product cycle time. The bill of material conversion will keep Cypress in alignment with the overall industry trend towards Copper Palladium Gold (CuPdAu) wire bonds.

**Part Numbers Affected: 518**

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
190704	QFN Thin Packages Qual Report
190705	QFN Thick Packages Qual Report

**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 I sample ordering part numbers. Sample ordering part numbers are all 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 Philippines or other approved assembly sites.

**Anticipated Impact:**

Products assembled with the new bill of Material 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 and assembly location, through the lot number marked on the package. There will be no changes to the ordering codes or marking on production material shipped after the change implementation date.

**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