



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

PRODUCT CHANGE NOTIFICATION

PCN: PCN193801

Date: September 16, 2019

Subject: Qualification of PTI-SG as an Additional Bumping, Backend and Finish Site for Select 28nm Plated Bump WLCSP Products

To: PCN Coordinator PCN Coordinator
FUTURE
PCN.System@Future.ca

Change Type: Major

Description of Change:

Cypress announces the qualification of Powertech Technology Inc. Singapore (PTI-SG – 12 Ang Mo Kio Street 65, Singapore 569060) as an additional bumping, backend and finish site for select 28nm plated bump WLCSP products. This is part of the ongoing flexible manufacturing initiative announced by Cypress.

PTI-SG is the only 300mm wafer bumping facility in Singapore. This qualification will allow Cypress to leverage PTI-SG’s manufacturing expertise and quality focus. PTI-SG is certified on several international quality standards: ISO 9001, ISO14001 and OHSAS18001.

The plated bump WLCSP products are bumped at PTI-SG using the following Bill of Materials:

Material	PTI-SG Bill of Materials	ASE-KH Bill of Materials
Polyimide	HD-4104E	HD-4104E
UBM Seed Layer	Titanium (Ti)	Titanium (Ti)
UBM Seed Layer	Copper (Cu)	Copper (Cu)
UBM	Nickel (Ni)	Nickel (Ni)
Solder Bump	Tin-Silver1.8%	Tin-Silver1.8%

Benefit of Change:

Qualification of alternate manufacturing sites is part of the ongoing flexible manufacturing initiative announced by Cypress. The goal of the flexible manufacturing initiative is to provide the means for Cypress to continue to meet delivery commitments through dynamic, changing market conditions.

Part Numbers Affected: 1

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.

Marketing Part Number	Sample Order Part Number	Package
CYW43012C0WKWBGT	CYW43012C0WKWB GT	251-Ball WLCSP



Material Composition Declaration

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This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lower level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.

Adobe Reader version 7.0.5 is required to complete this declaration.

IPC Web Site for Information on IPC-1752 Standard
<http://www.ipc.org/IPC-175x>

Form Type *

Declaration Class *

Supplier Information

Company Name *	Company Unique ID	Unique ID Authority	Response Date *	Response Document ID				
Contact Name *	Title - Contact	Phone - Contact *	Email - Contact *					
Authorized Representative *	Title - Representative	Phone - Representative *	Email - Representative *	Supplier Comments or URL for Additional Information				
Requester Item Number	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight *	UOM	Unit Type
Alternate Recommendation				Alternate Item Comments				

Manufacturing Process Information

Terminal Plating / Grid Array Material	Terminal Base Alloy	J-STD-020 MSL Rating	Peak Process Body Temperature	Max Time at Peak Temperature	Number of Reflow Cycles
			C	seconds	

Comments

Save the fields in
this form to a file

Import fields from a
file into this form

Clear all of the
fields on this form

Lock the fields on this
form to prevent changes

RoHS Material Composition Declaration

Declaration Type *

RoHS Definition: Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE) and quantity limit of 0.01% by mass (100 PPM) of homogeneous material for Cadmium

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RoHS Declaration *

Supplier Acceptance *

Exemptions: If the declared item does not contain RoHS restricted substances per the definition above except for defined RoHS exemptions, then select the corresponding response in the RoHS Declaration above and choose all applicable exemptions.

Declaration Signature

Instructions: Complete all of the required fields on all pages of this form. Select the "Accepted" on the Supplier Acceptance drop-down. This will display the signature area. Digitally sign the declaration (if required by the Requester) and click on Submit Form to have the form returned to the Requester.

Supplier Digital Signature

Homogeneous Material Composition Declaration for Electronic Products

SubItem Instructions: The presence of any JIG Level A or B substances must be declared. [1] indicate the subpart in which the substance is located, [2] provide a description of the homogeneous material [3], enter the weight of the homogeneous material.

Substance Instructions: [A] select the Level (JIG A, JIG B, Requester or Supplier) [B] select the substance category (JIG or Requester) or enter a value (Supplier). [C] select the substance (JIG) or enter the substance and CAS (Other). [D] select a RoHS exemption, if applicable [E] enter the weight of the substance or the PPM concentration [F] Optionally enter the positive (+) and negative (-) tolerance in percent (Note: percent tolerance values are expected to cover a 3 sigma range of distribution unless otherwise noted).

Line Functions: +I Inserts a New Item /SubItem +M Inserts a new Material +C Inserts a new Substance Category +S Inserts a new Substance - Deletes the element line

Item/SubItem Name	Homogeneous Material	Weight	Unit of Measure	Level	Substance Category	Substance	CAS	Exempt	Weight	Unit of Measure	Tolerance		PPM
											-	+	

* Required Field

CAS Registry Number(R) is a Registered Trademark of the American Chemical Society

Form enabled by Adobe

Qualification Status:

This assembly site has been qualified through a series of tests documented in the Qualification Test Plan QTP#192001. This qualification report can be found as an attachment to this PCN.

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 PTI-SG sample ordering part numbers. Sample order part numbers are subject to leadtime. 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 PTI-SG or other approved assembly sites.

Anticipated Impact:

Products assembled at the new site 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