

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

# PRODUCT CHANGE NOTIFICATION

Subject: Qualification of Cypress Bangkok as an additional Assembly Site for Select 165 Ball Grid

Array (BGA) Products

To: TOKYO ELECTRON DEVICE

cy-pcn@teldevice.co.jp

Change Type: Major

## **Description of Change:**

Cypress announces the qualification of Cypress Bangkok (formerly Spansion Bangkok) for the assembly of select 165 Ball Grid Array (BGA) products. Cypress Bangkok is a world-class assembly facility, qualified to build standard grade as well as automotive grade products consistent with AEC-Q100. Cypress Bangkok is certified to several international quality standards, including ISO/TS16949, OHSAS18001 and ANSI/ESD S20.20. The qualification of this facility will enable Cypress to tailor assembly operations to meet our customers' stringent quality and reliability requirements in our effort to continually provide world-class service. 165 BGA packages assembled at Cypress Bangkok will use the following Bill of Materials (BOM).

165BGA			
Assembly Site	CY Philippines	ASE Taiwan	CY Bangkok
Mold Compound	Henkel GR9810	Kyocera KEG2250	ShinEtsu KMC-3580
Die Attach	Henkel ATB-125US1	Henkel ATB-125	Hitachi HR9050G
Bond Wire	0.8 mil Cu-Pd	0.8 mil Cu-Pd	0.8 mil Cu-Pd
Solder Ball	95.5% Sn, 4.0% Ag, 0.5% Cu	95.5% Sn, 4.0% Ag, 0.5% Cu	95.5% Sn, 4.0% Ag, 0.5% Cu
	62.0% Sn, 36.0% Pb, 2.0% Ag	63.0% Sn, 37.0% Pb	63.0% Sn, 37.0% Pb

There are no changes to ordering part numbers. Product datasheets remain the same and can be downloaded from the Cypress Website (www.cypress.com).

## **Benefit of Change:**

The addition of Cypress Bangkok as a manufacturing location allows Cypress to leverage additional manufacturing expertise and quality focus. This in turn provides the means for Cypress to continue to meet our customers' requirements and meet our delivery commitments in dynamic market conditions.

### **Affected Part Numbers: 383**

**Affected Parts:** See the attached file for a list of all part numbers affected by this change. Note that any new 165 BGA parts that are introduced after the publication of this PCN may also be manufactured at the Cypress Bangkok facility.

#### **Qualification Status:**

Cypress Bangkok has been qualified through a series of tests documented in the Qualification Test Plan (QTP) report 153602. The qualification report can be found as an attachment to this notification or by visiting <a href="https://www.cypress.com">www.cypress.com</a>, typing the QTP number in the search window and clicking on the magnifying glass icon.

## Sample Status:

Qualification samples are not built ahead of time for all part numbers affected by this change. Please review the attached file for a list of affected part numbers with their associated sample ordering part numbers. Sample requests for products without sample order part numbers are not built ahead of time, they will be built to order and subject to standard lead times. Please contact your sales representative as soon as possible, but 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 the affected part numbers in the attached file will be supplied from Cypress Bangkok or any other approved assembly sites.

#### **Anticipated Impact:**

Products manufactured at Cypress Bangkok are completely compatible with existing product from a functional, parametric, and quality performance perspective.

Cypress 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:

There will be no changes to the part number. Cypress maintains traceability of product to wafer level, including wafer fabrication location, through the lot number marked on the package.

#### Response Required:

Cypress will assume you accept this change and associated implementation schedule if we do not receive your response in writing within 30 days. The notice, policies and procedures stated here will supersede any previous agreements you may have with Cypress with respect to product change notifications (PCNs). If you wish to request qualification samples, please enter your request within 30 days of this PCN date. If you need to request a restriction to prevent shipment of the changed product, the following policies and procedures will apply: [1] Within 30 days from the date of the PCN, you must notify Cypress that you will require more than 90 days to accept this change. [2] Within 30 days from the date of the PCN, request a restricted part number through your local sales office. Restricted part numbers are temporary and limit shipments to the old location or process. These are considered custom and temporary and subject to additional non-standard terms and conditions. [3] Within 60 days from the PCN date, you must issue a revised purchase order (PO) to convert your order backlog from the affected part number to the restricted part number. Beginning 90 days from this PCN date, for backlog not converted to the restricted part number, you may receive changed product. [4] Products ordered on restricted part numbers are considered custom and subject to the following additional terms and conditions: [4a] All orders placed on restricted part numbers are non-cancelable, non-returnable, and non-rescheduleable. [4b] Up to 30 percent price premium may apply. [4c] Lead times may be extended from standard

product lead times. [4d] Upside demand re-promise may be subject to an expedite charge. [4e] Restricted part numbers are temporary and subject to Last Time Buy (LTB) 180 days from the PCN date; Last Time Ship (LTS) 90 days from LTB date.

For additional information regarding this change, contact your local sales representative or contact the PCN Administrator at <a href="mailto:pcn\_adm@cypress.com">pcn\_adm@cypress.com</a>.

Sincerely,

Cypress PCN Administration