

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

# **PRODUCT CHANGE NOTIFICATION**

**PCN:** PCN162502

Date: June 24, 2016

**Subject:** Qualification of Cypress Bangkok as an Additional Assembly Site for Select 48 and 121 Ball Grid Array (BGA) Products

To: TOKYO ELECTRON DEVICE

## Change Type: Major

## **Description of Change:**

Cypress announces the qualification of Cypress Bangkok (formerly Spansion Bangkok) for the assembly of select 48 and 121 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. 48 and 121 BGA packages assembled at Cypress Bangkok will use the following Bill of Materials (BoM).

48BGA				
Assembly Site	CY Philippines	ASE Taiwan	CY Bangkok	
Mold Compound	Henkel GR9810	Kyocera KEG2250	ShinEtsu KMC-3580	
Die Attach	Henkel QMI 506	Henkel 2025D	Sumitomo CRM-1577DB	
	Henkel 2035SC		Henkel QMI 546	
Bond Wire	0.8 mil Cu-Pd	0.8 mil Cu-Pd	0.8 mil Cu-Pd	
Solder Ball	98.5% Sn, 1.0% Ag, 0.5%Cu	98.5% Sn, 1.0% Ag, 0.5% Cu	98.5% Sn, 1.0% Ag, 0.5% Cu	

121BGA				
Assembly Site	CY Philippines	ASE Taiwan	CY Bangkok	
Mold Compound	Henkel GR9810	Kyocera KEG2250	ShinEtsu KMC-3580	
Die Attach	Henkel QMI 506	Henkel 2100A	Sumitomo CRM-1577DB	
			Henkel QMI 546	
Bond Wire	0.8 mil Cu-Pd	0.8 mil Cu-Pd	0.8 mil Cu-Pd	
Solder Ball	98.5% Sn, 1.0% Ag, 0.5%Cu	98.5% Sn, 1.0% Ag, 0.5% Cu	98.5% Sn, 1.0% Ag, 0.5% Cu	

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

### Benefit of Change:

This qualification is part of Cypress's continuous improvement in our flexible manufacturing initiative providing Cypress with the added capability to meet upside market demand, reduce business continuity risk, and ensure consistent and reliable delivery to customers in dynamic, changing market conditions.

#### Affected Part Numbers: 75

**Affected Parts:** See the attached 'Affected Parts List' file for the list of part numbers affected by this change. Note that any new 48 or 121 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 below. The qualification report can be found as an attachment to this notification.

QTP No.	Change
160703	Qualification of CY Bangkok 48 FBGA
162304	Qualification of CY Bangkok 121 FBGA
Q100048	Qualification of QMI 546 Die Attach Material in
Q100052a	BGA Package

#### Sample Status:

Qualification samples are not built ahead of time for all part numbers affected by this change. Please review the attached 'Affected parts list' file for the 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:**

Please acknowledge receipt of this PCN, and submit any sample or additional information requests, within 30 days of this notification. Lack of acknowledgement will constitute acceptance of this change, which will be implemented 90 days from this notification.

For additional information regarding this change, contact your local sales representative or contact the PCN Administrator at <u>pcn\_adm@cypress.com</u>.

Sincerely,

Cypress PCN Administration