

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

PRODUCT CHANGE NOTIFICATION

PCN: PCN181106

Date: March 19, 2018

Subject: Qualification of ASE Kaohsiung (ASE-KH) as an Additional Assembly Site for Select 44-Lead, 64-Lead and 100-Lead TQFP Pb-Free Products

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

Change Type: Major

Description of Change:

Cypress announces the qualification of Advanced Semiconductor Engineering-Kaohsiung (ASE-KH) as an additional assembly site for select 44-Lead, 64-Lead and 100-Lead TQFP Pb-Free products. These products are RoHS and REACH compliant.

The 44-Lead TQFP Pb-Free packages (10x10 mm) are assembled at ASE-KH using the following Bill of Materials:

Material	ASE-KH Bill of Materials	JCET Bill of Materials
Mold Compound	Sumitomo G631SH	Kyocera KE-G6000
Lead Frame	Matte Sn	NiPdAu
Die Attach Film	Hitachi FH-900	Henkel QMI-509
Bond Wire	0.8mil Au	1.0mil/0.9mil Au

The 64-Lead TQFP Pb-Free packages (14x14 mm) are assembled at ASE-KH using the following Bill of Materials:

Material	ASE-KH Bill of Materials	JCET Bill of Materials
Mold Compound	Sumitomo G631SH	Kyocera KE-G6000
Lead Frame	Matte Sn	NiPdAu
Die Attach Film	Hitachi FH-900	Henkel QMI-509
Bond Wire	0.8mil CuPdAu	0.8mil CuPd

The 100-Lead TQFP Pb-Free packages (14x14 mm) are assembled at ASE-KH using the following Bill of Materials:

Material	ASE-KH Bill of Materials	JCET Bill of Materials
Mold Compound	Sumitomo G631SH	Kyocera KE-G6000
Lead Frame	Matte Sn	NiPdAu
Die Attach Epoxy	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8mil Au	1.0mil Au

The 100-Lead TQFP Pb-Free packages (14x20 mm) are assembled at ASE-KH using the following Bill of Materials:

Material	ASE-KH Bill of Materials	JCET Bill of Materials
Mold Compound	Sumitomo G631SH	Kyocera KE-G6000
Lead Frame	Matte Sn	NiPdAu
Die Attach Epoxy	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8mil Au	0.9 mil Au

The 100-Lead TQFP Pb-Free packages (14x20 mm) are assembled at ASE-KH using the following Bill of Materials:

Material	ASE-KH Bill of Materials	JCET Bill of Materials
Mold Compound	Sumitomo G631SH	Kyocera KE-G6000
Lead Frame	Matte Sn	NiPdAu
Die Attach Epoxy	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8mil CuPdAu	0.8 mil CuPd

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: 94

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:

This package has been qualified through a series of tests documented in the Qualification Test Plans QTP#174402, QTP#174303, QTP#175002 and QTP#174610. These qualification reports can be found as attachments to this PCN or by visiting <u>www.cypress.com</u> and typing the QTP number in the keyword search window.

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 the affected part numbers in the attached file will be assembled at ASE-KH 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 <u>pcn_adm@cypress.com</u>.

Sincerely,

Cypress PCN Administration