

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

PRODUCT CHANGE NOTIFICATION

PCN: PCN192401A

Date: July 08, 2019

Subject: Addendum to PCN192401 - Qualification of Nitto EM-760 Die Attach Film and Die Thickness Change for 44-Lead TSOP II 2-Die Stack Packages Assembled at OSE-Taiwan

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

Change Type: Major

Description of Change:

The purpose of this addendum is to update the affected parts list communicated in the initial PCN192401.

Cypress announced the qualification of Nitto EM-760 Die Attach Film and die thickness change for 44-Lead TSOP II 2-Die Stack Pb Free Packages Assembled at OSE Taiwan.

This new die attach material is compatible with industry standard reflow conditions for applicable package volume, thickness and lead finish. There is no change in the moisture sensitivity level, product performance or ordering part numbers.

The 44-Lead TSOP II 2-Die Stack, 400 Mils, Pb-Free packages are assembled at OSE Taiwan using the following Bill of Materials:

Material	New OSE Taiwan BOM	Current OSE Taiwan BOM
Mold Compound	Hitachi CEL 9200HF-U	Hitachi CEL 9200HF-U
Leadframe	Cu Lead Frame	Cu Lead Frame
Die Attach Material	Nitto EM760	Hitachi HR5104
Bond Wire	1.0mil Au wire	1.0mil Au wire
Die thickness	3 mils	4 mils

Benefit of Change:

The qualification of the Nitto EM-760 die attach film and die thickness change allows for an improvement in product reliability and/or product cycle time.

Part Numbers Affected: 25

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 change has been qualified through a series of tests documented in the Qualification Test Plan QTP#190802. This qualification report can be found as an attachment 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 OSE-Taiwan 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 Commercial, Industrial and Automotive non-PPAP part numbers in the attached file will be assembled at OSE-Taiwan or other approved assembly sites.

Anticipated Impact:

Products assembled with the Nitto EM-760 die attach film and new die thickness 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