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PRODUCT INFORMATION NOTIFICATION

PIN: PIN172101

Date: May 30, 2017

Subject: Qualification of Hwa Shu Tape & Reel Materials for DFN and QFN Packages at ASE-Kaohsiung (ASE-KH)

To: GENERAL INBOX PREMIER FARNELL ProductChangeNotices@premierfarnell.com

Change Type: Minor

Description of Change:

Cypress has qualified new tape & reel materials at Subcon ASE Kaohsiung (ASE-KH) for Dual Flat No-Lead (DFN) and Quad Flat No-lead (QFN) products. The new tape & reel materials have the applications below:

MATERIAL	SUPPLIER	APPLICATION	WIDTH
Carrier Tape	Hwa Shu	14 DFN 2.5x3.5x0.60mm package	12.0mm
Carrier Tape	Hwa Shu	24 QFN 4x4x0.55mm package	12.0mm
Carrier Tape	Hwa Shu	32 QFN 5x5x0.55mm package	12.0mm
Carrier Tape	Hwa Shu	32 QFN 5x5x1.00mm package	12.0mm
Carrier Tape	Hwa Shu	36 QFN 5x5x0.60mm package	12.0mm
Carrier Tape	Hwa Shu	40 QFN 6x6x0.60mm package	16.0mm
Carrier Tape	Hwa Shu	40 QFN 6x6x0.90mm package	16.0mm
Carrier Tape	Hwa Shu	40 QFN 6x6x1.00mm package	16.0mm
Carrier Tape	Hwa Shu	44 QFN 5x5x0.60mm package	12.0mm
Carrier Tape	Hwa Shu	48 QFN 6x6x0.60mm package	16.0mm
Carrier Tape	Hwa Shu	48 QFN 6x6x1.00mm package	16.0mm
Carrier Tape	Hwa Shu	48 QFN 7x7x1.00mm package	16.0mm
Carrier Tape	Hwa Shu	56 QFN 6x6x0.60mm package	16.0mm
Carrier Tape	Hwa Shu	56 QFN 7x7x0.60mm package	16.0mm
Carrier Tape	Hwa Shu	56 QFN 8x8x1.00mm package	16.0mm
Carrier Tape	Hwa Shu	68 QFN 8x8x0.85mm package	16.0mm
Carrier Tape	Hwa Shu	68 QFN 8x8x1.00mm package	16.0mm
Carrier Tape	Hwa Shu	88 QFN 10x10x1.00mm package	24.0mm
Cover Tape	Hwa Shu	Applicable to all DFN and QFN packages that	9.3mm
		uses 12.0mm, 16.0mm and 24.0mm carrier tape	13.3mm

		width	21.3mm
Lock Reel	Hwa Shu	Applicable to all DFN and QFN packages that uses 12.0mm, 16.0mm and 24.0mm carrier tape width	

The newly qualified carrier tapes (Hwa Shu) have identical pocket designs and dimensions with the current carrier tapes (Advantek).

No changes were made to the following attributes:

- Unit orientation on carrier pocket
- Color of carrier tape
- Length and width
- EIA compliance

The newly qualified cover tape (Hwa Shu) has minor differences from the current cover tape (Advantek) as below:

- The color of the newly qualified cover tape is transparent allowing for better inspection of units inside the sealed carrier tape.
- The widths of the newly qualified cover tapes (9.2mm versus 9.3mm and 21.0mm versus 21.3mm) are wider to have more sealing area.

These minor differences have no effect on the application of the cover tapes. The newly qualified cover tapes pass the peel back force test requirement, and follow the EIA standard. This newly qualified cover tape is available in the standard 300m length. Refer to the below cover tape comparison:

	CURRENT COVER TAPE	NEWLY QUALIFIED COVER TAPE
Cover Tape Supplier	Advantek	Hwa Shu
Material Type	Anti-static, heat activated	Anti-static, heat activated
Material Thickness	0.056 ± 0.005mm	0.056 ± 0.005mm
Cover Tape Width	9.2 ± 0.10mm	9.3 ± 0.10mm
	13.3 ± 0.10mm	13.3 ± 0.10mm
	21.0 ± 0.10mm	21.3 ± 0.10mm
Inside Core Diameter	76.20mm	76.20mm
Color	Transparent pale blue	Transparent

The newly qualified Hwa Shu lock reels are thinner than the current Advantek lock reels, with no effect on functionality. The new lock reels pass the drop test requirement, and are compliant to the EIA standard.

	CURRENT LOCK REEL	NEWLY QUALIFIED LOCK REEL
Lock Reel Supplier	Advantek	Hwa Shu
Material Type	Polystyrene, anti-static	Polystyrene, anti-static
Reel Thickness	2.30 ± 0.20mm	1.80 ± 0.20mm
Color	Black	Black
Lock Reel Diameter	13 inch	13 inch
Hub Diameter	4 inch & 7 inch	4 inch & 7 inch

The new materials (carrier tape, cover tape and lock reel) have been qualified to have a second source local supplier for DFN and QFN products at ASE Kaohsiung.

Benefit of Change:

The new tape & reel materials supplier provides better technical support and shorter material delivery time. The Hwa Shu factory is located in Kaohsiung Taiwan. The local vendor can provide immediate support for any technical or material shipment problem that may cause production downtime.

Affected Part Numbers: 702

Affected Parts: See the attached 'Affected Parts List' file for a list of all part numbers affected by this notification. Note that any new parts that are introduced after the publication of this PIN will include all changes outlined in this PIN.

Qualification Status:

The changes listed in this PIN have been qualified through a series of tests documented in the Qualification Test Plan (QTP) report 170101. The report can be found as an attachment to this notification.

Approximate Implementation Date:

This change will be implemented from the date of this notification.

Anticipated Impact:

No anticipated impact. The new materials have been certified to be equivalent to the current materials from a functional and quality performance perspective.

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:

This is an information-only announcement. 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