

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

PRODUCT CHANGE NOTIFICATION

PCN: PCN185102

Date: December 20, 2018

Subject: Qualification of JEDEC Shipping Tray for 14x20x2.75mm QFP Packages at TFME

Change Type: Minor

Description of Change:

Cypress announces the qualification of JEDEC standard outline shipping tray for 14x20x2.75mm QFP packages at TFME (TongFu Microelectronics Inc.). The newly qualified tray will replace the current tray.

The new tray will be used in TFME assembly, test and finish processes. The new tray has the following details.

Items	Current Tray	New Tray
Tray Manufacturer	MISHIMA	PEAK
Manufacturer Part No.	MQFP 14x20x2.75	ND 1420 2.7 0611 6 REV. G
Material Type	PPE	MPPO
Number of Units/Tray	66	66
1 st Pocket X Position	22.50 ± 0.13 mm	22.50 ± 0.13 mm
1 St Pocket Y Position	15.45 ± 0.13 mm	15.45 ± 0.13 mm
Pocket X Pitch	27.00 ± 0.13 mm	27.00 ± 0.13 mm
Pocket Y Pitch	21.00 ± 0.13 mm	21.00 ± 0.13 mm
Top Pocket Length	25.5 +0.1 / -0.0 mm	24.40 ± 0.1 mm
Top Pocket Width	19.5 +0.1 / -0.0 mm	18.40 ± 0.1 mm
Package Seating Height	3.63 +0.1 / -0.0 mm	2.9 ± 0.25 mm

REMARKS:

- PPE = Polyphenylene Ether
- MPPO = Modified Polyphenylene Oxide
- MPPO materials has a better overall strength and temperature performance compared to PPE materials.

No changes were made to the following attributes:

- Tray Length and Width
- Tray Stacking height
- Unit orientation in tray pocket
- Temperature Rating (improved to 150C)
- Color
- JEDEC compliance

Benefit of Change:

This change is part of Cypress supplier standardization. New supplier and material are the current Cypress Standards. This change will also improve the Temperature rating from 125C to 150C.

Part Numbers Affected: 30

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#181901. 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.

Approximate Implementation Date:

Effective 90 days from the date of this notification, Cypress will transition to shipments with the new tray. Current tray will be depleted before the implementation of the new tray. During the transition period, the affected part numbers will be supplied with either the current tray or new tray. No tray mixing will be allowed in one shipment.

Anticipated Impact:

Products using the new tray are completely compatible with existing products from form, fit, functional, parametric and quality performance perspectives.

Cypress also recommends that customers review these changes against their current pick and place programs and equipment parameters to assess if any minor adjustments are needed while using PEAK trays.

Method of Identification:

Trays from PEAK can be easily identified with their company name molded into the edge tab. There is no supplier name on the MISHIMA trays.

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

Item	Marketing Part Number
1	CY90F867APFR-G-SNE1
2	CY90F867ASPFR-G-JNE1
3	CY90F867ASPFR-G-N9E1
4	CY90F867ASPFR-G-SNE1
5	MB89063PF-G-158-BND-JNE1
6	MB90552BPF-G-321-JNE1
7	MB90803SPF-G-110-JNE1
8	MB90F058PF-G-NNE1
9	MB90F342APF-G-JNE1
10	MB90F342ASPF-G-JNE1
11	MB90F342CAPF-G-JNE1
12	MB90F342ESPF-G-JNE1
13	MB90F345CAPF-G-JNE1
14	MB90F345CAPF-G-SNE1
15	MB90F345CESPF-G-JNE1
16	MB90F347ASPF-G-JNE1
17	MB90F349CAPF-G-JNE1
18	MB90F349CASPF-G-JNE1
19	MB90F349CEPF-G-JNE1
20	MB90F349CESPF-G-JNE1
21	MB90F809SPF-G-JNE1
22	MB90F867APF-G-JNE1
23	MB90F867APFR-G-JNE1
24	MB90F867ESPF-G-JNE1
25	MB91101APF-G-JNE1
26	MB91101APFR-G-JNE1
27	MB91F264BPF-G-JNE1
28	MB91F264BPF-G-N9K4E1
29	MB91F264BTPF-G-N9E1
30	MB91F482PF-G-JNE1