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

PRODUCT CHANGE NOTIFICATION

PCN: PCN182409 **Date:** June 17, 2018

Subject: Qualification of Texas Instruments' DMOS6 as an Additional Wafer Fab Site, Test 25 as an Additional Wafer Sort Site, OSE-Taiwan as an Additional Assembly Site for 44-TSOP II Package with Copper Wire for the 4Mb Parallel Industrial-Grade Product Family

To: PRICE CONTROL
NEWARK
pricecontrol@newark.com

Change Type: Major

Description of Change:

Cypress announces the qualification of TI's DMOS6 as an additional wafer fab site and Test 25 as an additional wafer sort site for 4Mb Parallel industrial-grade F-RAM product family. Cypress also announces the qualification of Orient Semiconductor Electronics (OSE-T), Taiwan as an additional assembly site for the 44-TSOP II package with Copper wire bonds for select 4Mb parallel industrial-grade F-RAM products, using the Bill of Materials shown below:

Material	OSE-T Bill of Materials (New)	JCET Bill of Materials (Current)
Mold Compound	Sumitomo EME-G631	Sumitomo G620B
Lead Frame	Matte Sn	Matte Sn
Die Attach Epoxy	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8mil CuPdAu	0.8mil CuPd

The 48-BGA package will continue to be manufactured at ASE-KH.

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.

All of these changes must be qualified simultaneously in order to ensure continuity of supply given the tight capacity situation. DMOS6, Test 25 and Cu/CuPd/CuPdAu wires are already being used to fabricate, sort and assemble other F-RAM products in densities ranging from 4Kb to 2Mb.

Part Numbers Affected: 6
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:
These products have been qualified through a series of tests documented in the Qualification Test Plans summarized in the table below. These qualification reports can be found as attachments to this PCN or by visiting www.cypress.com and typing the QTP number in the keyword search window.

QTP Number	Qualification
172204	4Mb FM22L16-55*/FM22LD16-55* Device Family at DMOS6
170503	Cypress Test 25 as an Additional Sort Site
180419	44 TSOPII Qualification at OSE-Taiwan as New Assembly Site

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 sample ordering part numbers. The sample orders will be built at DMOS6, sorted at either KYEC or Test 25 and assembled at ASE-KH (48-BGA) and OSE-T (44-TSOP II). 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 supplied from DMOS6 or other approved wafer fabrication sites and will be sorted at Test 25 or other approved wafer sort sites. The 44-TSOP II parts will be built at OSE–Taiwan and will transition to CuPdAu wire.

Anticipated Impact:
Products fabricated at DMOS6, sorted at Test 25, assembled at OSE-Taiwan and with CuPdAu wires are completely compatible with the existing product 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 pcn_adm@cypress.com.

Sincerely,

Cypress PCN Administration