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

PRODUCT CHANGE NOTIFICATION

PCN: PCN181203 **Date:** March 21, 2018

Subject: Qualification of Texas Instruments' DMOS6 as an Additional Wafer Fab Site, Cypress's Test 25 as an Additional Wafer Sort Site, OSE-Taiwan as an Additional Assembly Site for 32TSOP Package with Copper-Palladium-Gold Wire for Select 1Mb Parallel and Copper-Palladium Wire at UTAC-Thailand for Select 512Kb/1Mb Serial Industrial-Grade Products

To:

Change Type: Major

Description of Change:
Parallel: Cypress announces the qualification of TI's DMOS6 as an additional wafer fab site and Cypress's Test 25 as an additional wafer sort site for select 1Mb Parallel industrial-grade F-RAM products. Cypress also announces the qualification of Orient Semiconductor Electronics (OSE), Taiwan as an additional assembly site for 32TSOP package with Copper-Palladium-Gold (CuPdAu) wire bonds for select 1Mb parallel industrial-grade F-RAM products, using the Bill of Materials shown below:

Material	OSE Bill of Materials (New)	JCET Bill of Materials (Current)
Mold Compound	Sumitomo EMEG631SH	Kyocera KEG6000DA
Lead Frame	Pure Sn	Ni/Pd/Au
Die Attach Epoxy	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8mil CuPdAu	0.8mil Au

Serial (I2C/SPI): Cypress announces the qualification of TI's DMOS6 as an additional wafer fab site and Cypress's Test 25 as an additional wafer sort site for select 512kb/1Mb SPI and I2C industrial-grade F-RAM products. Cypress also announces the qualification of Copper-Palladium (CuPd) wire bonds for the 8-Lead SOIC and PDIP packages for select 512kb/1Mb SPI and I2C industrial-grade F-RAM products at United Test and Assembly Center Co., Ltd. (UTAC), Thailand, using the Bill of Materials shown below:

Material	CuPd Wire (New)	Au Wire (Current)
Mold Compound	Sumitomo G600	Sumitomo G600
Lead Finish	Matte Sn	Matte Sn
Die Attach Epoxy	Henkel 8200T	Henkel 8200T
Bond Wire	0.8 mil CuPd	0.8 mil Au

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 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: 12
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.

Qualification	QTP Report Number
512Kb/1Mb FM25V*G/GTR Device Family at DMOS6	163901
512Kb/1Mb FM24V*, FM28V* Device Family at DMOS6	180203
Cypress Test 25 as an Additional Sort Site	170503
8L SOIC CuPd Wire Qualification at UTAC	140502
8L PDIP CuPd Wire Qualification at UTAC	140501
32 TSOP1 Qualification at OSE-Taiwan as New Assembly Site	180701

Sample Status:
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 UTAC (I2C/SPI) and OSE (Parallel). If you require qualification samples, please contact your local Cypress sales representative as soon as possible, and no later than 30 days from the date of this PCN, to place your order.

Approximate Implementation Date:
Effective 90 days from the date of this notification or upon customer approval, whichever comes first, all shipments 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 I2C and SPI parts will be assembled at UTAC and will transition to CuPd wire. The Parallel 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 CuPd/CuPdAu wires are completely compatible with the existing product from form, fit, functional, parametric and quality performance perspectives.

Method of Identification:
Cypress maintains traceability of product to wafer level, including wafer fabrication location, through the lot number marked on the package and through a revision letter on the die.

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

Item	Marketing Part Number	Sample Order Part Number
1	FM24V05-G	FM24V057-G
2	FM24V05-GTR	FM24V057-G
3	FM24V10-G	FM24V107-G
4	FM24V10-GTR	FM24V107-G
5	FM24VN10-G	FM24VN107-G
6	FM24VN10-GTR	FM24VN107-G
7	FM25V05-PGC	FM25V057-PGC
8	FM25V10-PG	FM25V107-PG
9	FM28V100-TG	FM28V1007-TG
10	FM28V100-TGTR	FM28V1007-TG
11	CG8019AA	FM28V1007-TG
12	CG8019AAT	FM28V1007-TG