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

PRODUCT CHANGE NOTIFICATION

PCN: PCN152802 **Date:** July 07, 2015

Subject: Qualification of the New Automotive-Grade 256Kb and 128Kb SPI and I2C F-RAM Product Series

To: TOKYO ELECTRON DEVICE
MITSUBISHI SANDA
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Change Type: Major

Description of Change:
Cypress is pleased to announce the qualification of a new automotive-grade 256Kb and 128Kb Serial Peripheral Interface (SPI) and an Inter-Integrated Circuit (I2C) interface F-RAM product series. The new devices will be assembled at our currently qualified assembly site UTAC Thailand Ltd. (UTL) and at newly qualified assembly site Cypress Manufacturing Limited (CML), Philippines. Samples and production orders are now available from UTL. Samples and production orders from CML will be available in Q4 2015.

The new automotive-grade 256Kb and 128Kb SPI and I2C F-RAM product series will have gold (Au) wire bonds and will be packaged and rated as Moisture Sensitivity Level 3 (MSL 3). The new die will have a top-passivation layer and include laser grooving in the die singulation process at both assembly sites.

New datasheets have been issued for these parts. The new datasheets as well as the datasheet changes are attached to this notification. Additionally, datasheets for both the old and the new part numbers are available for download in the Cypress web site by going to www.cypress.com/nonvolatile/ and clicking on the “Datasheets” link in the “Related Documentation” section on the right-hand side of the webpage.

Cypress will discontinue the existing automotive-grade 256Kb and 128Kb SPI and I2C F-RAM product series. The list of affected part numbers with replacement part numbers, Last Time Buy (LTB), and Last Time Ship (LTS) dates are provided in the attached ‘Affected Parts List’ file.

Affected Part Numbers: 8

Affected Parts: Refer to attached ‘Affected Parts List’ file

Benefit of Change:
The new products will provide a higher level of quality and reliability. They will incorporate a previously qualified, additional passivation layer to protect wire bonding pads and minimize wafer handling scratches during die preparation, transit, and assembly. Adding laser grooving prior to mechanical wafer sawing will reduce the risk of all-layer peeling, chipping and die cracking.

Qualification Status:
The new products have been qualified through a series of tests documented in the Qualification Test Plan (QTP) reports listed in the table below. The QTP reports can be found as attachments to this notification or by visiting www.cypress.com and typing the QTP number into the keyword search window.

Qualification Description	QTP Number
Automotive Die	142401
Automotive Package at UTL	141703
Laser Grooving at UTL	144703
Automotive Package and Laser Grooving at CML	150403

Sample Status:
Samples for the replacement products listed in the attached “Affected Parts List” file are available now. Please contact your sales representative as soon as possible and no later than 30 days from this notification to place sample orders.

Approximate Implementation Date:
The new products are available with the date of this notification. The previous 256Kb and 128Kb SPI and I2C F-RAM products listed in the ‘Affected Parts List’ file are subject to End of Life (EOL) with the Last Time Buy (LTB) and Last Time Ship (LTS) dates.

Anticipated Impact:
The new products are drop-in, form, fit, function and pin-to-pin compatible with the existing parts.

Cypress 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 our products to the wafer level, including wafer fabrication location, through the lot number marked on the package.

Response Required:
Please acknowledge receipt of this PCN, and submit any sample or additional information requests, within 30 days of this notification.

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