



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

## PRODUCT CHANGE NOTIFICATION

**PCN:** PCN153902

**Date:** September 24, 2015

**Subject:** 16Mb FAST Asynchronous SRAM Products: Technology Transition from 150- and 90-nanometer to 65-nanometer Technology

**To:** TOKYO ELECTRON DEVICE  
cy-pcn@teldevice.co.jp

### Description of Change:

Cypress is pleased to announce the transition of 16Mb FAST Asynchronous SRAM Products from the 150- and 90-nanometer to the 65-nanometer technology node at our partner fab-United Micro Electronics Corporation (UMC) in Tainan, Taiwan. This change is consistent with Cypress's product roadmap of moving to the latest technology.

Cypress will be discontinuing the existing 150- and 90-nanometer products. The new 65-nanometer products are drop-in replacement parts and form, fit, and function compatible with the 150- and 90-nanometer products. The list of affected part numbers, replacement part numbers, next best alternatives, Last Time Buy (LTB) and Last Time Ship (LTS) dates are provided in the attached 'Affected Parts List' file.

### Benefit of Change:

65-nanometer 16Mb Asynchronous SRAM devices use (38 and 32) Hamming Code for single-bit error detection and correction. A hardware ECC block performs all ECC-related functions in line, without the user intervention and without affecting the access-time performance of the devices. The single-bit error detection and correction capability is supplemented by a 16-bit interleaving scheme to prevent the occurrence of multi-bit errors. Together, these features provide significant improvement in Soft Error Rate (SER) performance and product reliability, resulting in FIT rates less than 0.1 FIT/Mbit.

### Affected Part Numbers: 28

**Affected Parts:** Please refer to attached 'Affected Parts List' file.

### Qualification Status:

The 65-nanometer products have been qualified through a series of tests identified in the Qualification Test Plan (QTP) Report 124902. The qualification report can be found as an attachment to this notification or by visiting [www.cypress.com](http://www.cypress.com) and typing the QTP number in the keyword search window.

**Sample Status:**

Samples are available for the 65-nanometer products. Please contact your Sales Representative as soon as possible within 30 days of the date of this PCN, to place any sample orders.

**Approximate Implementation Date:**

This change will be implemented from the date of this notification. 16Mb 150- and 90-nanometer FAST Asynchronous SRAM Products listed in attached file are subject to End of Life (EOL) with the Last Time Buy (LTB) and Last Time Ship (LTS) dates.

**Anticipated Impact:**

The 65-nanometer product are completely compatible with existing product from a functional, parametric, quality and reliability performance perspective, however the customer will need to update their ordering process for the 65-nanometer ordering part numbers as found in the attached spreadsheet.

Cypress also recommends that customers take this opportunity to review the product datasheet and any applicable application notes to their system design and environment conditions to assess any impact to their application.

**Method of Identification:**

65-nanometer ordering part numbers will include a 'G' next to the base part number. For example, the 65-nanometer replacement of the 90-nanometer part CY7C1069DV33-10BVXI will be the CY7C1069G30-10BVXI Please refer to [www.cypress.com/products](http://www.cypress.com/products) for datasheets and a complete listing of the 65-nanometer 16Mb FAST Asynchronous SRAM Products.

Cypress maintains traceability of product to the wafer level, including wafer fabrication location, through the lot number marked on the package.

**Response Required:**

No response is required. Customers are encouraged to take note of the LTB and LTS dates indicated in the attachment, and plan to convert to the 65-nanometer products prior to the obsolescence of the 150- and 90-nanometer products.

For additional information regarding this change, contact your local Sales Representative or contact the PCN Administrator at [pcn\\_adm@cypress.com](mailto:pcn_adm@cypress.com).

Sincerely,

Cypress PCN Administration