PRODUCT INFORMATION NOTIFICATION

PIN: PIN145289 **Date:** April 07, 2014

Subject: Crystal Oscillator Load Change in F-RAM Processor Companion Products

To: PCN ADMIN
CYPRESS
pcn_adm@cypress.com

Change Type: Minor

Description of Change:
The production test was modified for F-RAM Processor Companion products shown in Table 1. An internal register bit was changed from '1' (1b) to '0' (0b). This bit change alters the built-in system load that is offered by the F-RAM crystal oscillator to the external crystal connected to it. The system load change is made to improve the Safety Factor (a measurement of the quality of oscillation as recommended by crystal manufacturers) of the oscillator circuit for recommended crystals in the F-RAM Processor Companion datasheets.

Please see attached Technical Document for detailed explanation of this change.

Table 1

Marketing Part Number	Description
FM31276-G	64Kb, I2C, 5V Processor Companion, 14 SOIC
FM31276-GTR	64Kb, I2C, 3V Processor Companion, 14 SOIC, Tape&Reel
FM31L276-G	256Kb, I2C, 5V Processor Companion, 14 SOIC
FM31L276-GTR	256Kb, I2C, 3V Processor Companion, 14 SOIC, Tape&Reel
FM31278-G	256Kb, I2C, 5V Processor Companion, 14 SOIC
FM31278-GTR	256Kb, I2C, 3V Processor Companion, 14 SOIC, Tape&Reel
FM31L278-G	256Kb, I2C, 5V Processor Companion, 14 SOIC
FM31L278-GTR	256Kb, I2C, 3V Processor Companion, 14 SOIC, Tape&Reel

Affected Part Numbers: 8
Affected Parts: See attached list of affected parts.

Approximate Implementation Date:
The modified production test was implemented for the date codes after WW1351.

Anticipated Impact:
This improvement modifies the oscillator circuit load which will slightly change the pre-calibration frequency. The slight change in frequency is within the post-assembly calibration correction range. This change will not affect the customers who are routinely running a post-assembly calibration to improve the oscillation accuracy from >20ppm (parts per million) to ±2.17ppm (at a given temperature). Any customer that does not run a post-assembly calibration correction or that has estimated a calibration value based on prior analysis of product with date codes WW1351 and before should expect a small change in the oscillation frequency.

Response Required:
This is an information only announcement. 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