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## PRODUCT INFORMATION NOTIFICATION

**PIN:** PIN195104

**Date:** December 18, 2019

**Subject:** Datasheet Update for 2-Mbit (256K x 8) Serial (SPI) F-RAM Products

**Change Type:** Minor

### Description of Change:

Cypress announces the datasheet changes for the 2-Mbit (256K x 8) Serial (SPI) F-RAM as captured in the table below. For the part FM25V20A-DGQ\* with extended industrial temperature, the first three parameters related to  $V_{DD}$  supply current in the table below do not apply.

Parameter	Description	Old value	New value
$I_{DD}$ , $f_{SCK} = 40\text{MHz}$ (typ.) <sup>[1]</sup>	$V_{DD}$ supply current at 25 °C, $V_{DD} = V_{DD}$ (typ.)	1.4 mA	2.4 mA
$I_{DD}$ , $f_{SCK} = 1\text{MHz}$ (typ.) <sup>[1]</sup>		0.13 mA	0.5 mA
$I_{DD}$ , $f_{SCK} = 1\text{MHz}$ (max.) <sup>[1]</sup>	$V_{DD}$ supply current at 85 °C, $V_{DD} = V_{DD}$ (max.)	0.30 mA	0.80 mA
$t_R$	Data in rise time	50 ns	Parameter Removed
$t_F$	Data in fall time	50 ns	Parameter Removed

<sup>[1]</sup>These changes do not apply to part numbers FM25V20A-DGQ\*

Typical values of  $I_{DD}$  and the 2 timing parameters are guaranteed-by-characterization and thus are not production tested specs. The maximum value of the  $I_{DD}$  at 40 MHz remains unchanged at 3 mA. The intent behind these changes is to ensure consistency in the current 2-Mbit SPI F-RAM products and future 2-Mbit SPI F-RAM products in development. There is no change to manufacturing sites.

The updated product datasheet is attached to this notification and can be downloaded from the Cypress Website ([www.cypress.com](http://www.cypress.com)).

**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 PIN will include all changes outlined in this PIN.

**Approximate Implementation Date:**

This change will be implemented effective with the date of this notification. Revised datasheets are now live on [www.cypress.com](http://www.cypress.com). Please visit the corresponding product page to download the latest copy.

**Anticipated Impact:**

Products manufactured with revised datasheet parameter are completely compatible with existing product from fit, form, functional, and quality performance perspectives.

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

**Response Required:**

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

**Marketing Part Number**

FM25V20A-DG

FM25V20A-DGQ

FM25V20A-DGQTR

FM25V20A-DGTR

FM25V20A-G

FM25V20A-GTR