Customer Information Notification

202302043I : MGD3160 Silicon Design Change With Updated Data Sheet Revisions 10.0/11.0 and Safety Manual Rev 4.2

Note: This notice is NXP Company Proprietary.

Issue Date: May 19, 2023 **Effective date:**Jul 24, 2023

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Management summary
New MGD3160 silicon revision for design and manufacturability improvements, along with data sheet and safety manual updates.

Change Category

[ ]Wafer Fab Process	[ ]Assembly Process	[ ]Product Marking	[ ]Test Process	[X]Design
[ ]Wafer Fab Materials	[ ]Assembly Materials	[ ]Mechanical Specification	[ ]Test Equipment	[ ]Errata
[ ]Wafer Fab Location	[ ]Assembly Location	[X]Packing/Shipping/Labeling	[ ]Test Location	[X]Electrical spec./Test coverage
[ ]Firmware	[ ]Other			

PCN Overview

Description

NXP Semiconductors announces the release of new silicon revision for the GD3160 family of devices associated with this notification, to introduce design and manufacturability improvements, along with data sheet and safety manual updates. Please see new Data Sheet update revisions 10.0 / 11.0, and Safety Manual update revision 4.2. There is no impact on hardware or software between previous silicon revision and new silicon revision. The revision history included in the updated documents provides a detailed description of the changes.

New silicon revision change impacts the following part numbers:
MGD3160AM515EK
MGD3160AM535EK
MGD3160AM315EK
MGD3160AM335EK
MGD3160AM518EK
MGD3160AM538EK
MGD3160AM318EK

MGD3160AM338EK

New silicon revision design change consists of the below items. Please see attachment for details.
1. No WDFLT fault reported when CSB shorted low
2. VCCREG voltage selection available in real time
3. VCCREG mask behavior regarding VCCREGM=0 and VCC

In addition, to achieve improvements in manufacturability and throughput, NXP is implementing minor adjustments to the specification limits on two of the GD3160 product parameters.
Based on extensive analysis, no impact on application performance is anticipated.
1. VCCREGOUT (VCCREG regulated output voltage for VCCREG[2:0] = '000' setting only)
2. VVREF (VREF regulated voltage)

In order to phase out little-used packing configuration of Tube shipments, NXP introduced the MGD3160 in Tray. This notification serves as a communication to customers that Tube orderable part numbers will be phased out as shipments decrease.

New GD3160 data sheet revisions 10.0 / 11.0 and Safety Manual revision 4.2 can be obtained at NXP secure DocStore: https://www.docstore.nxp.com/products/product-hierarchy?query=GD3160#or-download-states:pathGroup=.PROD_57167e8d-564a-426f-ad53-47ddff33337c|button-filter-group-kind:selected=.objectMetadata|paging:currentPage=0|paging:number=12

Please see the attached documents for change details, including qualification results.

Corresponding ZVEI Delta Qualification Matrix ID: SEM-DE-02 and SEM-DS-02

Reason

NXP announces the successful qualification and release of new silicon revision GD3160 products for design and manufacturability improvements, along with new data sheet and safety manual updates. New package and packing configuration is also included in this CIN, as described in attachment information.

Identification of Affected Products

No change to orderable part numbers, except where noted for new package release (8mm clearance and Material Group I), and new packing configuration (Tray) introduction.
Product Device ID updates per attached change details.
Products with date code 2330 and greater will contain new silicon design revision.

Anticipated Impact on Form, Fit, Function, Reliability or Quality

No Impact on form, fit, reliability or quality.
Impact on function as described within, but no impact on final application.
Furthermore, software backward compatibility, except with change in Device ID.

Data Sheet Revision

A new datasheet will be issued

Additional information

Additional documents: view online

Contact and Support

For all inquiries regarding the ePCN tool application or access issues, please contact NXP "Global Quality Support Team".

For all Quality Notification content inquiries, please contact your local NXP Sales Support team.

For specific questions on this notice or the products affected please contact our specialist directly:

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At NXP Semiconductors we are constantly striving to improve our product and processes to ensure they reach the highest possible Quality Standards. Customer Focus, Passion to Win.

NXP Quality Management Team.

About NXP Semiconductors

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