



190510540 MGM12P Modules Product Revision and Datasheet Update

PRCN Issue Date: 5/10/2019

Effective Date: 8/15/2019

PCN Type: Datasheet; Product Revision

Description of Change

Silicon Labs is pleased to announce revision -V4 of the MGM12P modules.

The EFR32MG12 SoC used by the MGM12P is being updated from revision B to revision C. Revision C introduces fixes for the following erratum:

- * ADC_E224 - ADC Warm-Up Ready Can Cause IDAC, ACMP, or CSEN to Not Function
- * RMU_E203 - AVDD Ramp Issue

MGM12P modules with the new SoC will have the revision digits in their Ordering Part Number (OPN) updated to -V4. Module versions -V2 and -V3 with the old SoC will transition to an End of Life (EOL) status and, therefore, are not recommended for new designs.

Silicon Labs is also pleased to announce version 1.3 of the datasheet for MGM12P modules which includes the following changes:

- * Updated Ordering Information section with -V4 OPNs
- * Updated MGM12P Package Marking section with -V4 top mark diagrams
- * Updated RF Receiver Characteristics for 1 Mbps Bluetooth LE

Minor changes in RF Receiver Characteristics for 1 Mbps Bluetooth LE are due to a radio configuration update unrelated to the change in SoC revisions. The 1 Mbps Bluetooth sensitivity figure for MGM12P22 and MGM12P32 devices is changing from -101.6 dBm to -100.5 dBm devices, and from -95 dBm to -94.4 dBm for MGM12P02 devices.

Reason for Change

The module is being updated with new SoC revision that resolves known erratum. Module datasheet is also being updated to track SoC revision change and to reflect radio configuration update impacting 1 Mbps Bluetooth LE receiver characteristics.

Impact on Form, Fit, Function, Quality, Reliability

Function is impacted as described in Change Description. No change to form, fit, quality or reliability.

Product Identification

Existing Part #	Replacement Part #	DropInCompInd.
MGM12P02F1024GA-V2	MGM12P02F1024GA-V4	Yes
MGM12P02F1024GA-V2R	MGM12P02F1024GA-V4R	Yes
MGM12P02F1024GE-V2	MGM12P02F1024GE-V4	Yes
MGM12P02F1024GE-V2R	MGM12P02F1024GE-V4R	Yes
MGM12P22F1024GA-V2	MGM12P22F1024GA-V4	Yes
MGM12P22F1024GA-V2R	MGM12P22F1024GA-V4R	Yes
MGM12P22F1024GA-V3	MGM12P22F1024GA-V4	Yes
MGM12P22F1024GA-V3R	MGM12P22F1024GA-V4R	Yes
MGM12P22F1024GE-V2	MGM12P22F1024GE-V4	Yes
MGM12P22F1024GE-V2R	MGM12P22F1024GE-V4R	Yes
MGM12P32F1024GA-V2	MGM12P32F1024GA-V4	Yes
MGM12P32F1024GA-V2R	MGM12P32F1024GA-V4R	Yes

MGM12P32F1024GE-V2 MGM12P32F1024GE-V4 Yes
MGM12P32F1024GE-V2R MGM12P32F1024GE-V4R Yes

Last Date of Unchanged Product: 8/15/2019

Qualification Samples

Samples available upon request.

Customer Response

Lack of acknowledgment of the PCN within 30 days constitutes acceptance of the change, Ref. JEDEC-J-STD-046.

To request further data or inquire about this notification, please contact your Silicon Labs sales representative. A list of Silicon Labs sales representatives is available at <http://www.silabs.com>.

Customers may approve early PCN acceptance by emailing approval, along with PCN # to PCNEarlyAcceptance@silabs.com

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Qualification Data

N/A



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