200526786 BGM13P/MGM13P Datasheet v1.2 for MGM13P and v1.21 for BGM13P

PCN Issue Date: 5/26/2020 **Effective Date:** 9/1/2020

PCN Type: Datasheet

Description of Change

Silicon Labs is pleased to announce new data sheet versions v1.2 for MGM13P and v1.21 for BGM13P. The updates include new package and landing pattern dimensions and addition of the certification ID in Korea

For the BGM13P compared to the previous datasheet version 1.2, the changes in v1.21 datasheet are
- In the front page block diagram, the lowest energy mode for LETIMER updated.
- Removed Wake On Radio references wherever applicable since this feature is not supported by the software.
- In section 3.6.4, Low Energy Timer (LETIMER) lowest energy mode updated
- PTI description in section 7.3.2 Packet Trace Interface (PTI) updated
- In section, 9.1 package outline updated.
- In sections 9.2, the dimensions for recommended PCB Land Pattern updated
- In sectiond 9.3, package marking images and description updated
- The text in section 11.3 about CE marking updated
- In section 11.7 KC South Korea certification updated

For the MGM13P v1.2 the changes are
- In the front page block diagram, the lowest energy mode for LETIMER updated.
- Removed Wake On Radio references wherever applicable since this feature is not supported by the software. • Removed multiprotocol from protocol stack Table 2.1 Ordering Information on page 3.
- In section 3.2, Radio overview updated.
- In section 3.6.4 Low Energy Timer (LETIMER) lowest energy mode updated.
- DCDC Low Power Mode configuration note in Table 4.4 and Current Consumption 3.3 V using DC-DC Converter updated on page 21.
- Wording in Table 4.23 Voltage Monitor (VMON) on page 33 updated.
- VDAC test conditions for EM2 current consumption Table 4.26 Digital to Analog Converter (VDAC) updated on page 39.
- Register name IREFPROG for CSEN test conditions Table 4.28 Capacitive Sense (CSEN) updated on page 44.
- Insection 7.3.2, PTI description Packet Trace Interface (PTI).
- Package drawing and specifications in section 9.1 Package Outline updated.
- In section 9.2, the dimensions of recommended PCB land pattern updated.
- In section 9.3, Package Marking images and description updated.
- Additional text in section 10, Soldering Recommendations.
- The text in section 11.3 CE certification updated.
- Added Certification number in section 11.7 KC South Korea certification.
- Minor wording change regarding peripheral modules

Reason for Change

Datasheet revision update. See description section above on the changed details.

Impact on Form, Fit, Function, Quality, Reliability

There is no impact on Form, Function, Quality and Reliability. Customer is advised to review the change in recommended Land Pattern in the datasheet.

Product Identification

Existing Part #

BGM13P22F512GA-V2
BGM13P22F512GA-V2R
BGM13P22F512GE-V2
BGM13P22F512GE-V2R
BGM13P32F512GA-V2
BGM13P32F512GA-V2R
BGM13P32F512GE-V2
BGM13P32F512GE-V2R
BGM13S22F512GA-V3
BGM13S22F512GA-V3R
BGM13S22F512GN-V2
BGM13S22F512GN-V2R
BGM13S22F512GN-V3
BGM13S22F512GN-V3R
BGM13S32F512GA-V3
BGM13S32F512GA-V3R
BGM13S32F512GN-V2
BGM13S32F512GN-V2R
BGM13S32F512GN-V3
BGM13S32F512GN-V3R
MGM13P02F512GA-V2
MGM13P02F512GA-V2R
MGM13P02F512GE-V2
MGM13P02F512GE-V2R
MGM13P12F512GA-V2
MGM13P12F512GA-V2R
MGM13P12F512GE-V2
MGM13P12F512GE-V2R
MGM13S02F512GA-V2
MGM13S02F512GA-V2R
MGM13S02F512GA-V3
MGM13S02F512GA-V3R
MGM13S02F512GN-V2
MGM13S02F512GN-V2R
MGM13S02F512GN-V3
MGM13S02F512GN-V3R
MGM13S12F512GA-V2
MGM13S12F512GA-V2R
MGM13S12F512GA-V3
MGM13S12F512GA-V3R
MGM13S12F512GN-V2
MGM13S12F512GN-V2R
MGM13S12F512GN-V3
MGM13S12F512GN-V3R

Last Date of Unchanged Product: 9/1/2020

Qualification 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.

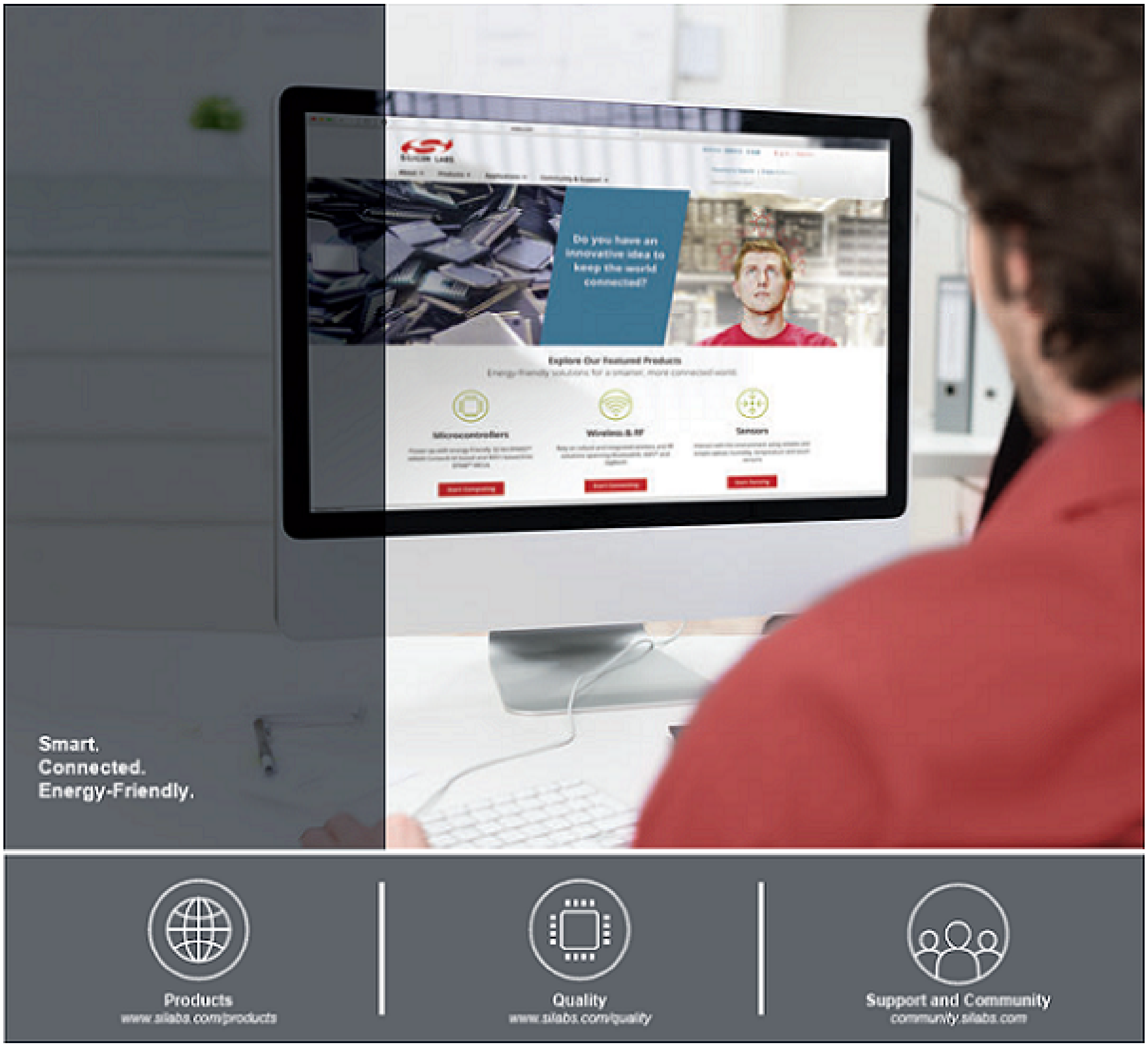
Customers may approve early PCN acceptance by emailing approval, along with PCN # to PCNEarlyAcceptance@silabs.com

User Registration

Register today to create your account on Silabs.com. Your personalized profile allows you to receive technical document updates, new product announcements, “how-to” and design documents, product change notices (PCN) and other valuable content available only to registered users. **http://www.silabs.com/profile**

Qualification Data

N/A



Disclaimer
Silicon Labs intends to provide customers with the latest, accurate, and in-depth documentation of all peripherals and modules available for system and software implementers using or intending to use the Silicon Labs products. Characterization data, available modules and peripherals, memory sizes and memory addresses refer to each specific device, and "Typical" parameters provided can and do vary in different applications. Application examples described herein are for illustrative purposes only. Silicon Labs reserves the right to make changes without further notice and limitation to product information, specifications, and descriptions herein, and does not give warranties as to the accuracy or completeness of the included information. Silicon Labs shall have no liability for the consequences of use of the information supplied herein. This document does not imply or express copyright licenses granted hereunder to design or fabricate any integrated circuits. The products are not designed or authorized to be used within any Life Support System without the specific written consent of Silicon Labs. A "Life Support System" is any product or system intended to support or sustain life and/or health, which, if it fails, can be reasonably expected to result in significant personal injury or death. Silicon Labs products are not designed or authorized for military applications. Silicon Labs products shall under no circumstances be used in weapons of mass destruction including (but not limited to) nuclear, biological or chemical weapons, or missiles capable of delivering such weapons.

Trademark Information
Silicon Laboratories Inc.® , Silicon Laboratories®, Silicon Labs®, SiLabs® and the Silicon Labs logo®, Bluegiga®, Bluegiga Logo®, Clockbuilder®, CMEMS®, DSPLL®, EFM®, EFM32®, EFR, Ember®, Energy Micro, Energy Micro logo and combinations thereof, "the world's most energy friendly microcontrollers", Ember®, EZLink®, EZRadio®, EZRadioPRO®, Gecko®, ISOmodem®, Micrium, Precision32®, ProSLIC®, Simplicity Studio®, SiPHY®, Telegesis, the Telegesis Logo®, USBXpress®, Zentri and others are trademarks or registered trademarks of Silicon Labs. ARM, CORTEX, Cortex-M3 and THUMB are trademarks or registered trademarks of ARM Holdings. Keil is a registered trademark of ARM Limited. All other products or brand names mentioned herein are trademarks of their respective holders.

Silicon Laboratories Inc.
400 West Cesar Chavez
Austin, TX 78701

http://www.silabs.com