



# 2608261841 Alternate PCB Core Material Qualification for MGM12P & xGM13P Modules

**PCN Issue Date:** Aug 26, 2026

**Effective Date:** Dec 03, 2026

**PCN Type:** Assembly

## Description of Change

Silicon Labs is pleased to announce the successful qualification of a new PCB core material S1150G for the MGM12P and xGM13P module families to replace the existing core material TUC-742, which is approaching End of Life (EOL).

As of the PCN Effective Date, Silicon Labs will begin shipping the modules listed below using the newly qualified PCB core material.

## Software Impact Description

None

## Reason for Change

Qualify a new PCB core material to maintain product continuity due to the End of Life (EOL) of the TUC-742 core material.

## Impact on Form, Fit, Function, Quality, Reliability

No change to Form, Fit, Function, Quality or Reliability.

## Product Identification

Existing Part #  
MGM12P02F1024GA-V4  
MGM12P02F1024GA-V4R  
MGM12P02F1024GE-V4  
MGM12P02F1024GE-V4R  
MGM12P22F1024GA-V4  
MGM12P22F1024GA-V4R  
MGM12P22F1024GE-V4  
MGM12P22F1024GE-V4R  
MGM12P32F1024GA-V4  
MGM12P32F1024GA-V4R  
MGM12P32F1024GE-V4  
MGM12P32F1024GE-V4R  
MGM13P02F512GA-V2  
MGM13P02F512GA-V2R  
MGM13P12F512GA-V2  
MGM13P12F512GA-V2R  
BGM13P22F512GE-V2  
BGM13P22F512GE-V2R  
BGM13P32F512GE-V2  
BGM13P32F512GE-V2R

**Last Date of Unchanged Product:** Dec 03, 2026

## 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 <https://www.silabs.com>.

Customers may approve early PCN acceptance by emailing approval, along with PCN # to [PCN@silabs.com](mailto:PCN@silabs.com)

## User Registration

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## Qualification Data

Qualification report is attached.

## MGM12P, MGM13P Qualification Report



### W7104F1 - Module Product Qualification Report Record Rev. A

| MGM12P, MGM13P, Ryder China, CDTech China and Ryder Vietnam |                                                     |               |                 |                  |       |         |        |
|-------------------------------------------------------------|-----------------------------------------------------|---------------|-----------------|------------------|-------|---------|--------|
| Test Name                                                   | Test Condition                                      | Qualification | Lot ID or Start | Fail/Pass or End | Notes | Summary | Status |
| Test Group A – Accelerated Environment Stress Tests         |                                                     |               |                 |                  |       |         |        |
| Temp Cycle                                                  | JESD22-A104<br>Cond G: -40°C to 125°C<br>850 cycles | 1 lot, N=>10  | Q041001         | 0/10             | 1,2   | 3 lots  | Pass   |
|                                                             |                                                     |               | Q052095         | 0/10             | 1,4   | 0/30    |        |
|                                                             |                                                     |               | Q053269         | 0/10             | 1,2   |         |        |
|                                                             |                                                     |               |                 |                  |       |         |        |
| Temp Cycle                                                  | JESD22-A104<br>Cond N: -40°C to 85°C<br>1500 cycles | 1 lot, N=>10  | Q040997         | 0/10             | 1,2   | 4 lots  | Pass   |
|                                                             |                                                     |               | Q046455         | 0/10             | 1,3   | 0/40    |        |
|                                                             |                                                     |               | Q046456         | 0/10             | 1,3   |         |        |
|                                                             |                                                     |               | Q052054         | 0/10             | 1,2   |         |        |
| Test Group C – Package Assembly Integrity Tests             |                                                     |               |                 |                  |       |         |        |
| Mechanical Shock                                            | JESD22-B110, Cond. D (200g)                         | 1 lot, N=>10  | Q040999         | 0/10             | 2     | 4 lots  | Pass   |
|                                                             |                                                     |               | Q046434         | 0/10             | 3     | 0/40    |        |
|                                                             |                                                     |               | Q052031         | 0/10             | 4     |         |        |
|                                                             |                                                     |               | Q053266         | 0/10             | 2     |         |        |
| Mechanical Vibration                                        | JESD22-B103, Cond. 1 (20-2000Hz)                    | 1 lot, N=>10  | Q040998         | 0/10             | 2     | 4 lots  | Pass   |
|                                                             |                                                     |               | Q046435         | 0/10             | 3     | 0/40    |        |
|                                                             |                                                     |               | Q052032         | 0/10             | 4     |         |        |
|                                                             |                                                     |               | Q053267         | 0/10             | 2     |         |        |

**Notes:**

1. Parts are Pre-conditioned at MSL3/260°C
2. Parts are assembled at Ryder China
3. Parts are assembled at CDTech China
4. Parts are assembled at Ryder Vietnam

| This report applies to the following part numbers: |                 |
|----------------------------------------------------|-----------------|
| MGM12P32GA-Vx/R                                    | MGM12P22GE-Vx/R |
| MGM12P32GE-Vx/R                                    | MGM12P02GA-Vx/R |
| MGM12P22GA-Vx/R                                    | MGM12P02GE-Vx/R |
| MM13P02HGE-Vx/R                                    | MM13P12HGE-Vx/R |
| MM13P02HGA-Vx/R                                    | MM13P12HGA-Vx/R |

Approved by: Kelvin Lee

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Prepared on: 12-Aug-26

mgm12p-mgm13p\_qual\_report.png

## BGM13P Qualification Report



### W7104F1 - Module Product Qualification Report Record Rev. A

| BGM13P Qualification report, Ryder and CDTech       |                                  |               |                 |                  |       |                |        |
|-----------------------------------------------------|----------------------------------|---------------|-----------------|------------------|-------|----------------|--------|
| Test Name                                           | Test Condition                   | Qualification | Lot ID or Start | Fail/Pass or End | Notes | Summary        | Status |
| Test Group A – Accelerated Environment Stress Tests |                                  |               |                 |                  |       |                |        |
| Temp Cycle                                          | JESD22-A104                      | 1 lot, N=>10  | Q041672         | 0/10             | 1,2   | 3 lots<br>0/34 | Pass   |
|                                                     | Cond N: -40°C to 85°C            |               | Q046457         | 0/12             | 1,3   |                |        |
|                                                     | 1500 cycles                      |               | Q046458         | 0/12             | 1,3   |                |        |
| Temp Cycle                                          | JESD22-A104                      | 1 lot, N=>10  | Q052280         | 0/10             | 1,4   | 2 lots<br>0/20 | Pass   |
|                                                     | Cond G: -40°C to 125°C           |               | Q053270         | 0/10             | 1,2   |                |        |
|                                                     | 850 cycles                       |               |                 |                  |       |                |        |
| Test Group C – Package Assembly Integrity Tests     |                                  |               |                 |                  |       |                |        |
| Mechanical Shock                                    | JESD22-B110, Cond. D (200g)      | 1 lot, N=>10  | Q041676         | 0/10             | 2     | 4 lots<br>0/40 | Pass   |
|                                                     |                                  |               | Q046434         | 0/10             | 3     |                |        |
|                                                     |                                  |               | Q052265         | 0/10             | 4     |                |        |
|                                                     |                                  |               | Q053266         | 0/10             | 2     |                |        |
| Mechanical Vibration                                | JESD22-B103, Cond. 1 (20-2000Hz) | 1 lot, N=>10  | Q041674         | 0/10             | 2     | 4 lots<br>0/40 | Pass   |
|                                                     |                                  |               | Q046435         | 0/10             | 3     |                |        |
|                                                     |                                  |               | Q052266         | 0/10             | 4     |                |        |
|                                                     |                                  |               | Q053267         | 0/10             | 2     |                |        |

#### Notes:

1. Parts are Pre-conditioned at MSL3/260°C
2. Parts are assembled at Ryder SZ
3. Parts are assembled at CDTech
4. Parts are assembled at Ryder Vietnam

This report applies to the following part numbers:

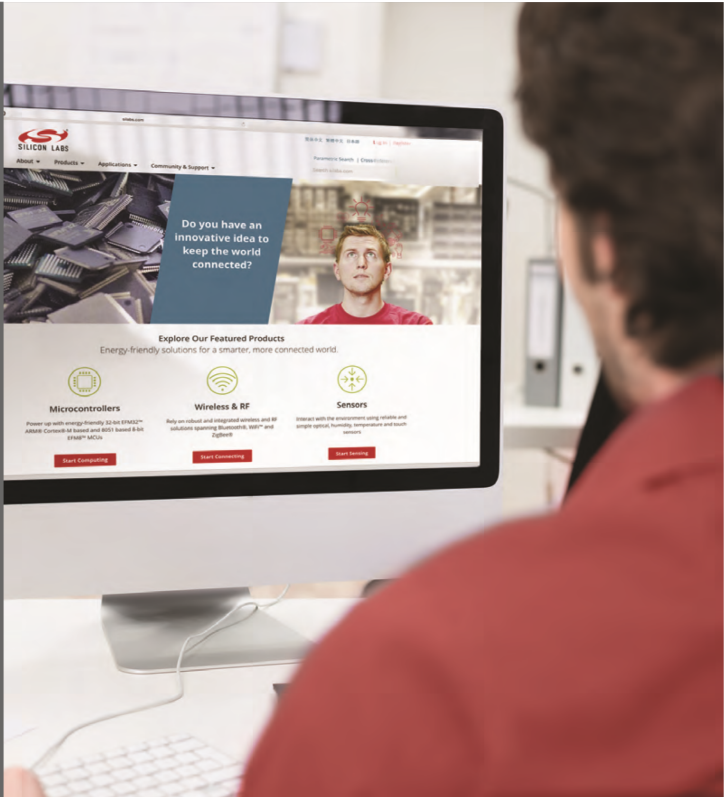
BGM13P22xGA  
BGM13P22xGE  
BGM13P32xGA  
BGM13P32xGE

Approved by: Kelvin Lee

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Prepared on: 12-Aug-26

bgm13p\_qual\_report.png



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