



# 2501221526 Additional Assembly, test and ship site for BGM220S SiP Modules

**PCN Issue Date:** Jan 22, 2025

**Effective Date:** Apr 28, 2025

**PCN Type:** Assembly; Test

## Description of Change

Silicon Labs is pleased to announce the successful qualification of SPIL as an additional assembly and KYEC as an additional test and ship site for BGM220S SiP modules. SPIL and KYEC are existing assembly and test sites for Silicon Labs, and are certified to ISO9001, ISO14001 and IATF16949.

As of the effective date of this PCN, Silicon Labs may assembly, test and ship from either of the qualified sites.

KYEC Ship Address:  
KYEC (King Yuan Electronics Company)  
No. 8 Tongke North Road,  
Tongluo Township,  
Miao-Li County 366,  
Taiwan R.O.C

## Reason for Change

The additional assembly and test location will provide additional capacity for supply assurance.

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

There is no change on form, fit, function, quality or reliability

## Product Identification

Existing Part #  
BGM220SC12WGA2  
BGM220SC12WGA2R  
BGM220SC22HNA2  
BGM220SC22HNA2R  
BGM220SC22WGA2  
BGM220SC22WGA2R  
BM22S1WPZ033A2  
BM22S1WPZ033A2R  
BM22S1WPZ063A2  
BM22S1WPZ063A2R  
BM22S2HXZ019A2  
BM22S2HXZ019A2R  
BM22S2WPZ035A2  
BM22S2WPZ035A2R  
BM22S2WPZ062A2  
BM22S2WPZ062A2R

**Last Date of Unchanged Product:** Apr 28, 2025

## 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 [PCN@silabs.com](mailto:PCN@silabs.com)

## User Registration

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## Qualification Data

See attached



### BGM220S Qualification Report

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Part Rev A, TSMC Fabrication, ASEKR Assembly except as noted							
Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
<b>Test Group A – Accelerated Environment Stress Tests</b>							
THB	JA101 85°C, 85%RH Vcc=3.8V, 1000 hours	3 lots, N=>25	Q045403	0/25	1	3 lots 0/75	Pass
			Q045407	0/25	1		
			Q045411	0/25	1		
Temp Cycle	JA104 Cond C: -65°C to 150°C 500 cycles	3 lots, N=>25	Q045402	0/25	1	3 lots 0/75	Pass
			Q045406	0/25	1		
			Q045410	0/25	1		
HTSL	JA103 150°C, 1000hr	3 lots, N=>25	Q045401	0/25	1	3 lots 0/75	Pass
			Q045405	0/25	1		
			Q045409	0/25	1		
<b>Test Group A – Accelerated Environment Stress Tests SPIL</b>							
THB	JA101 85°C, 85%RH Vcc=3.8V, 1000 hours	3 lots, N=>25	Q051384	0/25	1	3 lots 0/75	Pass
			Q051386	0/25	1		
			Q051722	0/25	1		
Temp Cycle	JA104 Cond C: -65°C to 150°C 500 cycles	4 lots, N=>25	Q051391	0/30	1	4 lots 0/120	Pass
			Q051392	0/30	1		
			Q051393	0/30	1		
			Q051397	0/30	1		
HTSL	JA103 150°C, 1000hr	3 lots, N=>25	Q051394	0/30	1	3 lots 0/90	Pass
			Q051395	0/30	1		
			Q051396	0/30	1		
<b>Test Group B – Accelerated Lifetime Simulation Tests</b>							
HTOL	JA108 T <sub>J</sub> ≥ 125°C, Dynamic Vcc=3.8V, 1000 hours	3 lots, N=>77	Q044684	0/80	2	3 lots 0/239	Pass
			Q045026	0/80	2		
			Q044996	0/79	2		
LTOL	JA108 T <sub>A</sub> = -10°C, Dynamic Vcc=3.8V, 1000 hours	1 lot, N=>32	Q042871	0/59	2	1 lots 0/59	Pass
ELFR	JA108 T <sub>J</sub> ≥ 125°C, Dynamic Vcc=3.8V, 48 hours	3 lots, N=>500	Q044727	0/500	2	3 lots 0/1526	Pass
			Q044800	0/523	2		
			Q045302	0/503	2		
NVM Endurance, Retention and Operating Life	JESD22-A117 25°C 500 hours	3 lots, N=>39	Q044729	0/40	2	3 lots 0/120	Pass
			Q044970	0/40	2		
			Q045423	0/40	2		
NVM Endurance, Retention and Operating Life	JESD22-A117 JESD22-A103 150°C, 1000 hours	3 lots, N=>39	Q044728	0/40	2	3 lots 0/120	Pass
			Q044906	0/40	2		
			Q045425	0/40	2		



### BGM220S Qualification Report

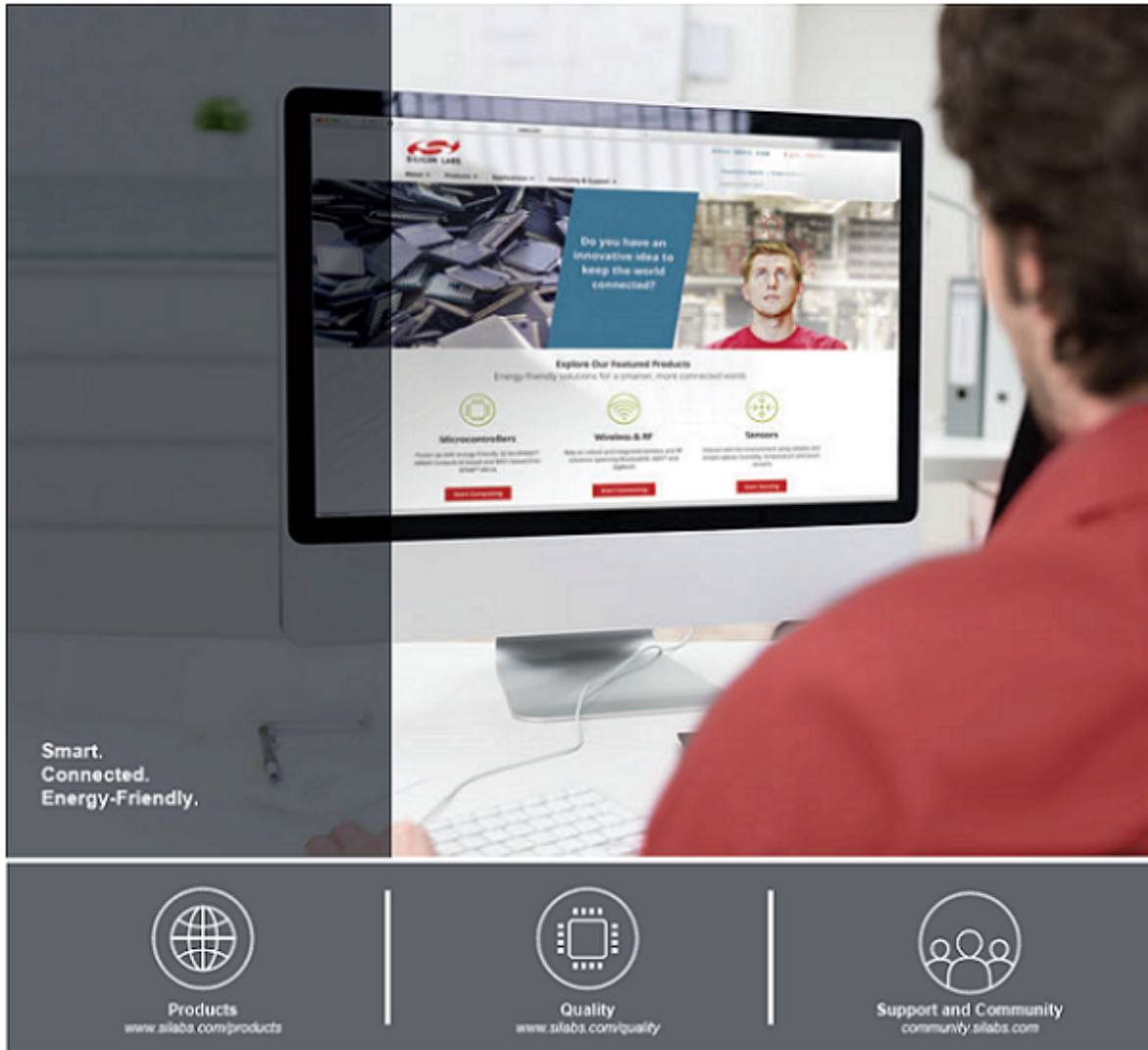
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Part Rev A, TSMC Fabrication, ASEKR Assembly except as noted							
Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
<b>Test Group E – Electrical Verification</b>							
ESD-HBM	JS-001	1 lot, N=>3	Q046046			2.5 kV	Class 2
ESD-CDM	JS-002	1 lot, N=>3	Q046045		3	TC 500V	Class C2a
			Q051379		4	TC 500V	
Latch Up	JESD78 ±100mA Overvoltage = 3.8V	1 lot, N=>3	Q045612	105 °C			Pass

**Notes:**

1. Parts are Pre-conditioned at MSL3/260°C
2. Leveraged Die Family Qualification Data
3. ASEKR Assembly
4. SPIL Assembly

This report applies to the following part numbers:			
BGM220SC12WGA2/R	BGM220SC22HNA2/R	BGM220SC22WGA2/R	BGX220S22HNA21/R



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