



# 2106221009 EFM32 QFN6x6 & QFN 9x9 Additional Assembly, Test, Ship Site and MPQ Change

**PCN Issue Date:** Jun 22, 2021

**Effective Date:** Sep 28, 2021

**PCN Type:** Assembly

## Description of Change

Silicon Labs is pleased to announce the successful qualification of an additional assembly and test-ship site, ASE Chung-Li (ASECL), for EFM32x QFN 6x6 and QFN 9x9 package. Minimum Packing Quantity (MPQ) will also be changed from 1000/reel to 3000/reel for both packages.

ASECL is an existing qualified assembly and test-ship site for Silicon Labs and is certified to ISO9001, ISO14001 and IATF16949. Same loadboard, test platform and test program are used in the new site, ASECL, as the existing.

As of the effective date of the PCN, Silicon Labs may assemble, test and ship from either of the qualified Assembly, Test and Ship sites. Orders will be fulfilled with 3000/reel after 1000/reel material is depleted after the effective date.

## Reason for Change

Additional assembly and test capacity for supply continuity. Higher MPQ to improve productivity.

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

There is no impact on Form, Fit, Function, Quality and Reliability. Customers may notice a slight visual difference on the edge of the package but both versions are within specifications.

## Product Identification

Existing Part #  
EFM32G200F16G-E-QFN32  
EFM32G200F16G-E-QFN32R  
EFM32G200F32G-E-QFN32  
EFM32G200F32G-E-QFN32R  
EFM32G200F64G-E-QFN32  
EFM32G200F64G-E-QFN32R  
EFM32G210F128G-E-QFN32  
EFM32G210F128G-E-QFN32R  
EFM32G210P\*F128G-E  
EFM32G210P\*F128G-ER  
EFM32G230F32G-E-QFN64  
EFM32G230F32G-E-QFN64R  
EFM32G230F64G-E-QFN64  
EFM32G230F64G-E-QFN64R  
EFM32G230F128G-E-QFN64  
EFM32G230F128G-E-QFN64R  
EFM32G30F128G-E-QFN64  
EFM32G30F128G-E-QFN64R  
EFM32G840F32G-E-QFN64  
EFM32G840F32G-E-QFN64R  
EFM32G840F64G-E-QFN64  
EFM32G840F64G-E-QFN64R  
EFM32G840F128G-E-QFN64  
EFM32G840F128G-E-QFN64R

EFM32GG230F512G-E-QFN64  
EFM32GG230F512G-E-QFN64R  
EFM32GG230F1024G-E-QFN64  
EFM32GG230F1024G-E-QFN64R  
EFM32GG330F512G-E-QFN64  
EFM32GG330F512G-E-QFN64R  
EFM32GG330F1024G-E-QFN64  
EFM32GG330F1024G-E-QFN64R  
EFM32GG840F512G-E-QFN64  
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EFM32HG210F64G-C-QFN32R  
EFM32HG210F64N-C-QFN32  
EFM32HG210F64N-C-QFN32R  
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EFM32HG310F64N-C-QFN32  
EFM32HG310F64N-C-QFN32R  
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EFM32LG230C\*F256G-FR  
EFM32LG230F64G-F-QFN64  
EFM32LG230F64G-F-QFN64R  
EFM32LG230F128G-F-QFN64  
EFM32LG230F128G-F-QFN64R  
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EFM32TG230F16-D-QFN64R  
EFM32TG230F32-D-QFN64  
EFM32TG230F32-D-QFN64R  
EFM32TG840F8-D-QFN64  
EFM32TG840F8-D-QFN64R  
EFM32TG840F16-D-QFN64  
EFM32TG840F16-D-QFN64R  
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EFM32TG840F32-D-QFN64R  
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EFM32ZG210F32-QFN32  
EFM32ZG210F4-B-QFN32  
EFM32ZG210F4-B-QFN32R  
EFM32ZG210F8-B-QFN32  
EFM32ZG210F8-B-QFN32R  
EFM32ZG210F16-B-QFN32  
EFM32ZG210F16-B-QFN32R  
EFM32ZG210F32-B-QFN32  
EFM32ZG210F32-B-QFN32R

**Last Date of Unchanged Product:** Sep 28, 2021

### 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](mailto:PCNEarlyAcceptance@silabs.com)

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## Qualification Data

Please refer to the qualification report below



### EFM32 QFN ASECL Qualification Report

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TSMC Fabrication, ASECL 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>							
HAST	JA110 130°C, 85%RH Vcc=3.8V, 96 hours	3 lots, N=>25	Q046347	0/30	1, 2	6 lots 0/0	Pass
			Q046348	0/30	1, 2		
			Q046349	0/30	1, 2		
			Q046446	0/30	1, 2		
			Q046447	0/30	1, 2		
			Q046448	0/30	1, 2		
UHAST	JA118 130°C, 85%RH	3 lots, N=>25	Q047652	0/30	1, 3	5 lots 0/0	Pass
			Q046605	0/25	1, 2		
			Q046608	0/25	1, 2		
			Q046611	0/25	1, 2		
			Q046744	0/30	1, 2		
Temp Cycle	JA104 Cond C: -65°C to 150°C 500 cycles	3 lots, N=>25	Q046298	0/25	1, 3	17 lots 0/0	Pass
			Q047653	0/30	1, 3		
			Q047660	0/30	1, 3		
			Q047663	0/30	1, 3		
			Q046300	0/25	1, 2		
			Q046606	0/25	1, 2		
			Q046609	0/25	1, 2		
			Q046612	0/25	1, 2		
			Q046680	0/30	1, 2		
			Q046681	0/30	1, 2		
			Q046682	0/30	1, 2		
			Q046745	0/30	1, 2		
			Q046746	0/30	1, 2		
			Q046747	0/30	1, 2		
			Q047209	0/30	1, 2		
			Q047212	0/30	1, 2		
			Q047215	0/30	1, 2		

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Prepared on: 2021-05-13 by J. Engel

## Qualification Report



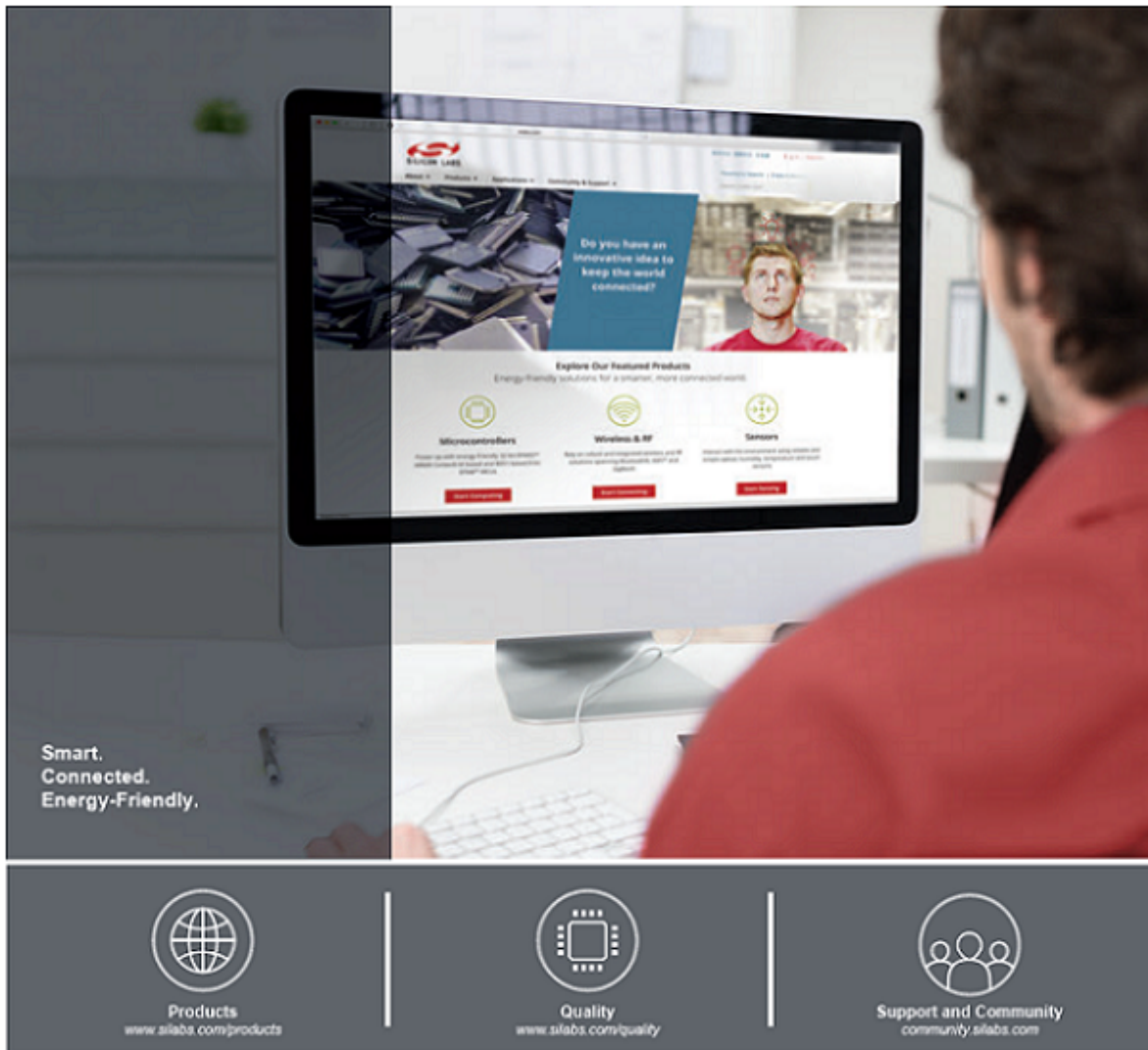
### EFM32 QFN ASECL Qualification Report

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TSMC Fabrication, ASECL Assembly except as noted							
Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
HTSL	JA103 150°C, 1000hr	3 lots, N=>25	Q047654	0/30	1, 3		
			Q047661	0/30	1, 3		
			Q047664	0/30	1, 3		
			Q046683	0/30	1, 2		
			Q046684	0/30	1, 2		
			Q046685	0/30	1, 2		
			Q046748	0/30	1, 2		
			Q046749	0/30	1, 2	9 lots	Pass
			Q046750	0/30	1, 2	0/0	
Test Group E – Electrical Verification							
ESD-CDM	JS-002	1 lot, N=>3	Q046120		3	TC 750	Class C2b
			Q047308		3	TC 1500	Class C3
			Q046230		2	TC 750	Class C2b
			Q046290		2	TC 500	Class C2a
			Q047015		2	TC 750	Class C2b
			Q046761		2	TC 500	Class C2a

- Notes:
1. Parts are Pre-conditioned at MSL3/260°C
  2. Performed in 64-QFN-9x9
  3. Performed in 32-QFN-6x6

## Qualification Report



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