



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
EFM32GG840F512G-E-QFN64R
EFM32GG840F1024G-E-QFN64
EFM32GG840F1024G-E-QFN64R
EFM32GG940F512G-E-QFN64
EFM32GG940F512G-E-QFN64R
EFM32GG940F1024G-E-QFN64
EFM32GG940F1024G-E-QFN64R
EFM32HG210F32G-C-QFN32
EFM32HG210F32G-C-QFN32R
EFM32HG210F32N-C-QFN32
EFM32HG210F32N-C-QFN32R
EFM32HG210F64G-C-QFN32
EFM32HG210F64G-C-QFN32R
EFM32HG210F64N-C-QFN32
EFM32HG210F64N-C-QFN32R
EFM32HG310F32G-C-QFN32
EFM32HG310F32G-C-QFN32R
EFM32HG310F32N-C-QFN32
EFM32HG310F32N-C-QFN32R
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EFM32HG310F64N-C-QFN32
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EFM32LG230C*F256G-F
EFM32LG230C*F256G-FR
EFM32LG230F64G-F-QFN64
EFM32LG230F64G-F-QFN64R
EFM32LG230F128G-F-QFN64
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EFM32LG940F64G-F-QFN64R
EFM32LG940F128G-F-QFN64
EFM32LG940F128G-F-QFN64R
EFM32LG940F256G-F-QFN64
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EFM32TG210F32-QFN32T
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EFM32TG210F8-D-QFN32
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EFM32TG840F32-D-QFN64R
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EFM32WG940F256-B-QFN64
EFM32WG940F256-B-QFN64R
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EFM32ZG210F4-B-QFN32R
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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

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

Qualification Report



EFM32 QFN ASECL Qualification Report

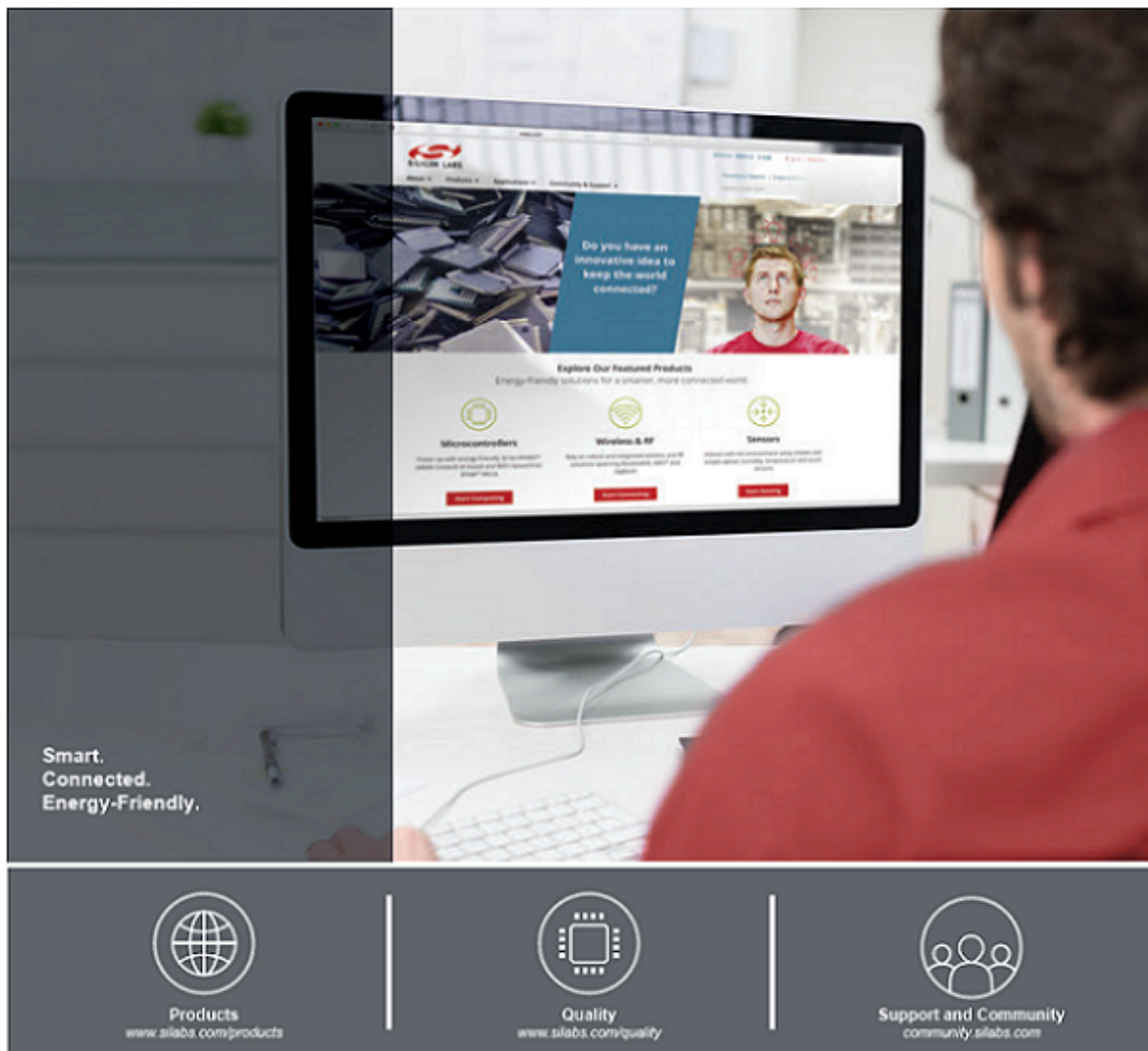
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TSMC Fabrication, ASECL Assembly except as noted							
Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
HTSL	JA103 150°C, 1000hr	3 lots, N=>25	Q047654	0/30	1, 3	9 lots 0/0	Pass
			Q047661	0/30	1, 3		
			Q047664	0/30	1, 3		
			Q046883	0/30	1, 2		
			Q046884	0/30	1, 2		
			Q046885	0/30	1, 2		
			Q046748	0/30	1, 2		
			Q046749	0/30	1, 2		
			Q046750	0/30	1, 2		
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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