



2311151482 Additional Assembly, Test & Ship Site for EFM32PG23, EFR32FG23/SG23/ZG23

PCN Issue Date: Nov 15, 2023

Effective Date: Feb 21, 2024

PCN Type: Assembly; Test

Description of Change

Silicon Labs is pleased to announce the successful qualification of UTAC Thailand (UTL) as an additional assembly, test and ship site for EFM32PG23, EFR32FG23, EFR32SG23, EFR32ZG23. UTL is an existing assembly and test site for Silicon Labs, and is certified to ISO9001, ISO14001 and IATF 16949.

UTL 1 Address - Assembly Site
UTAC Thai Limited (UTL 1)
237 Lasalle Rd. (Sukhumvit 105)
Bangna, Bangkok 10260, Thailand

UTL3 Address - Assembly, Test and Ship Site
UTAC Thai Limited (UTL3)
73 Moo5, Wellgrow Industrial Estate
Bangsamak, Bangpakong,
Chachoengsao, 24180, Thailand

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

Reason for Change

Additional ship site for capacity expansion

Impact on Form, Fit, Function, Quality, Reliability

There is no impact on form, fit, function, quality, and reliability. The devices shipped from UTAC will comply with Silicon Labs' relevant datasheets and quality levels.

Product Identification

Existing Part #
EFM32PG23B200F128IM40-C
EFM32PG23B200F128IM40-CR
EFM32PG23B200F256IM40-C
EFM32PG23B200F256IM40-CR
EFM32PG23B200F512IM40-C
EFM32PG23B200F512IM40-CR
EFM32PG23B200F64IM40-C
EFM32PG23B200F64IM40-CR
EFM32PG23B210F128IM48-C
EFM32PG23B210F128IM48-CR
EFM32PG23B210F256IM48-C
EFM32PG23B210F256IM48-CR
EFM32PG23B210F512IM48-C
EFM32PG23B210F512IM48-CR
EFM32PG23B210F64IM48-C
EFM32PG23B210F64IM48-CR
EFM32PG23B310F128IM48-C

EFM32PG23B310F128IM48-CR
EFM32PG23B310F256IM48-C
EFM32PG23B310F256IM48-CR
EFM32PG23B310F512IM48-C
EFM32PG23B310F512IM48-CR
EFM32PG23B310F64IM48-C
EFM32PG23B310F64IM48-CR
EFR32FG23A010F256GM40-C
EFR32FG23A010F256GM40-CR
EFR32FG23A010F256GM48-C
EFR32FG23A010F256GM48-CR
EFR32FG23A010F512GM40-C
EFR32FG23A010F512GM40-CR
EFR32FG23A010F512GM48-C
EFR32FG23A010F512GM48-CR
EFR32FG23A010PZ047GM48-C
EFR32FG23A010PZ047GM48-CR
EFR32FG23A011F512GM40-C
EFR32FG23A011F512GM40-CR
EFR32FG23A020F256GM40-C
EFR32FG23A020F256GM40-CR
EFR32FG23A020F256GM48-C
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EFR32FG23B020F512IM40-CR
EFR32FG23B020F512IM48-C
EFR32FG23B020F512IM48-CR
EFR32FG23B020PZ032GM40-C
EFR32FG23B020PZ032GM40-CR
EFR32FG23B021F512IM40-C
EFR32FG23B021F512IM40-CR
EFR32FG23B021F512IM48-C
EFR32FG23B021F512IM48-CR
EFR32FG23B021M1740IM40-C
EFR32FG23B021M1740IM40-CR
EFR32SG23B020F512IM40-C
EFR32SG23B020F512IM40-CR
EFR32ZG23A010F512GM40-C
EFR32ZG23A010F512GM40-CR
EFR32ZG23A010F512GM48-C
EFR32ZG23A010F512GM48-CR
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EFR32ZG23B021F512IM40-C
EFR32ZG23B021F512IM40-CR

Last Date of Unchanged Product: Feb 21, 2024

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 PCN@silabs.com

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Qualification Data

See attached



EFR32xG23 AEC-Q100 UTATCH Assembly Qualification Report

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Part Rev C, TSMC Fabrication, UTATCH Assembly 48 QFN 6x6 unless 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	AEC-Q006 130°C, 85%RH Vcc=3.63V, 192 hours	3 lots, N=>77	Q050004	0/69	1		Pass
			Q050262	0/5	1		
			Q050003	0/70	1	5 lots	
			Q050004	0/70	1	0/214	
UHAST	AEC/JESD22-A118 130°C, 85%RH 96 hours	3 lots, N=>77	Q050010	0/80	1		Pass
			Q050009	0/80	1	3 lots	
			Q050008	0/80	1	0/240	
Temp Cycle	AEC-Q006 Cond C: -65°C to 150°C 1000 cycles	3 lots, N=>77	Q050007	0/74	1		Pass
			Q050006	0/74	1	3 lots	
			Q050005	0/74	1	0/222	
HTSL	AEC-Q006 150°C, 2000hr	1 lot, N=>45	Q050001	0/48	1		Pass
			Q050000	0/48	1	3 lots	
			Q049999	0/48	1	0/144	
Test Group C – Package Assembly Integrity Tests							
Wire Bond Shear	AEC-Q100-001	5 units, N=>30	SLEQP0023.1	0/30			Pass
			SLEQP0024.1	0/30		4 lots	
			SLEQP0025.1	0/30		0/120	
			SLEEQ0004.1	0/30	2		
Wire Bond Pull	AEC-Q006 Performed post-TC	5 units, N=>30	Q050007	0/30			Pass
			Q050006	0/30		3 lots	
			Q050005	0/30		0/90	
Physical Dimensions	JB100	3 lots, N=>10	SLEQP0023.1	0/30			Pass
			SLEQP0024.1	0/30		4 lots	
			SLEQP0025.1	0/30		0/120	
			SLEEQ0004.1	0/30	2		
Solderability	J-STD-002	1 lot, N=>15	SLEQP0023.1	0/10			Pass
			SLEQP0024.1	0/10		4 lots	
			SLEQP0025.1	0/10		0/40	
			SLEEQ0004.1	0/10	2		



EFR32xG23 AEC-Q100 UTATCH Assembly Qualification Report

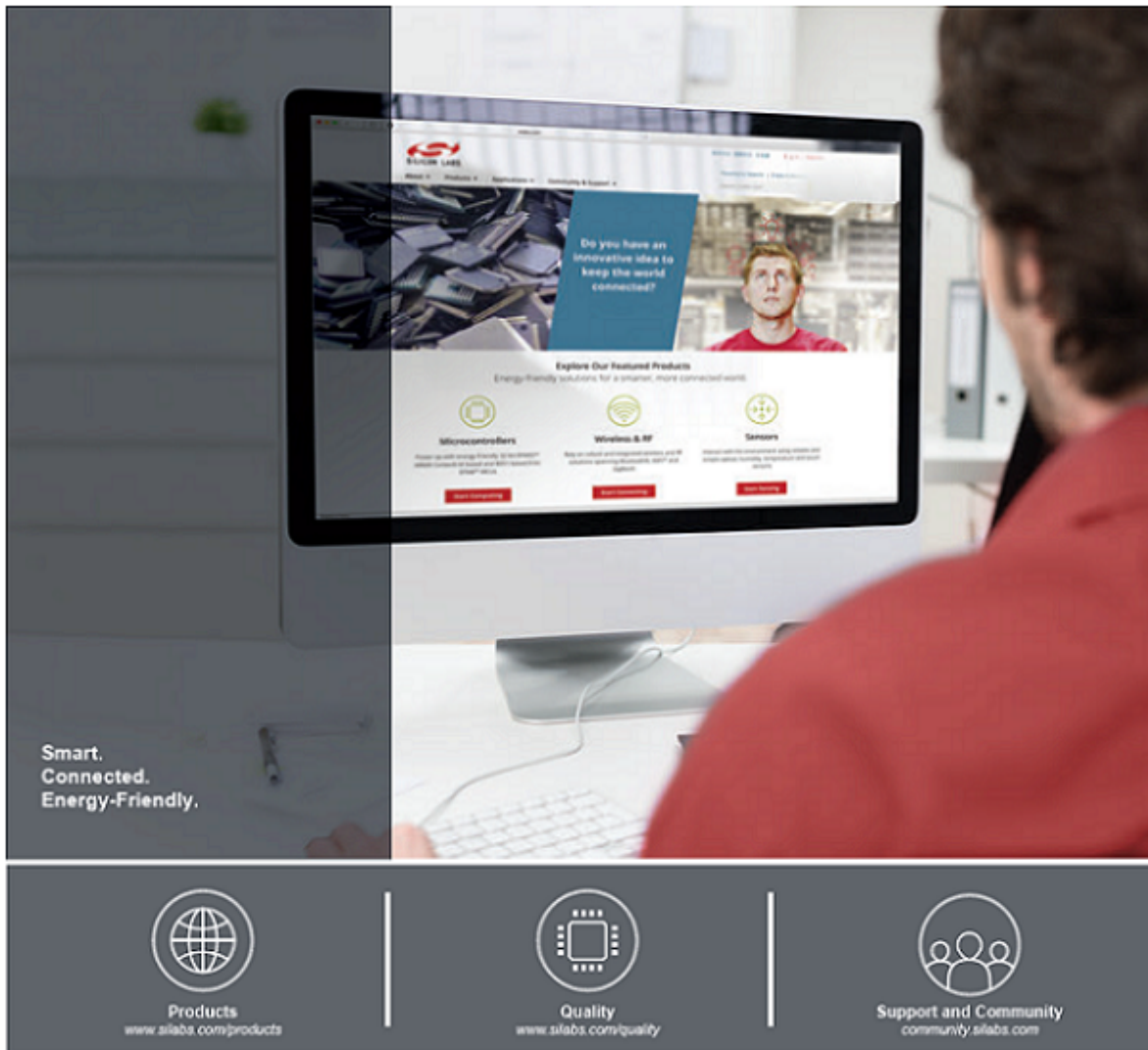
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Part Rev C, TSMC Fabrication, UTATCH Assembly 48 QFN 6x6 unless noted							
Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
Test Group E – Electrical Verification							
ESD-CDM	AEC-Q100-011	1 lot, N=>3	Q050121			TC 250	Class C1
			Q050138		2	TC 500	Class C2
Electromagnetic Compatibility	SAE J1752	1 lot, N=>1	Q050187 Q050215		2		Pass

Notes:

- Parts are Pre-conditioned at MSL2/260°C
- 40 QFN 5x5

This report applies to the following part numbers:		
EFM32PG23B200F128IM40-CR	EFR32FG23A010F256GM48-CR	EFR32FG23B020F512IM40-CR
EFM32PG23B200F256IM40-CR	EFR32FG23A010F512GM40-CR	EFR32FG23B020F512IM48-CR
EFM32PG23B200F512IM40-CR	EFR32FG23A010F512GM48-CR	EFR32FG23B021F512IM40-CR
EFM32PG23B200F64IM40-CR	EFR32FG23A011F512GM40-CR	EFR32FG23B021F512IM48-CR
EFM32PG23B210F128IM48-CR	EFR32FG23B020F128GM40-CR	EFR32SG23B020F512IM40-CR
EFM32PG23B210F256IM48-CR	EFR32FG23A020F256GM40-CR	EFR32ZG23A010F512GM40-CR
EFM32PG23B210F512IM48-CR	EFR32FG23A020F256GM48-CR	EFR32ZG23A010F512GM48-CR
EFM32PG23B210F64IM48-CR	EFR32FG23A020F512GM40-CR	EFR32ZG23A020F512GM40-CR
EFM32PG23B310F128IM48-CR	EFR32FG23A020F512GM48-CR	EFR32ZG23A020F512GM48-CR
EFM32PG23B310F256IM48-CR	EFR32FG23A021F512GM40-CR	EFR32ZG23B010F512IM40-CR
EFM32PG23B310F512IM48-CR	EFR32FG23B010F128GM40-CR	EFR32ZG23B010F512IM48-CR
EFM32PG23B310F64IM48-CR	EFR32FG23B010F512IM40-CR	EFR32ZG23B011F512IM40-CR
EFR32FG23A010F256GM40-CR	EFR32FG23B010F512IM48-CR	EFR32ZG23B020F512IM48-CR
		EFR32ZG23B021F512IM40-CR



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