



2408281528 Qualification of New Leadframe for 20-QFN-3x3 8bit MCUs

PCN Issue Date: Aug 28, 2024

Effective Date: Dec 04, 2024

PCN Type: Assembly

Description of Change

Silicon Labs is pleased to announce the successful qualification of a new lead frame at ASECL for C8051F85x, CP2102N, EFM8BB, EFM8UB series in 20-QFN-3x3 package.

There are no additional changes required in the assembly manufacturing process to accommodate the new lead frame.

As of the effective date of the PCN, Silicon Labs will start to fulfill orders using the new lead frame.

Reason for Change

Supply continuation and process enhancement

Impact on Form, Fit, Function, Quality, Reliability

No impact to Form, Fit, Function, Quality & Reliability.

Product Identification

Existing Part #
C8051F850-C-GM
C8051F850-C-GMR
C8051F850-C-IM
C8051F850-C-IMR
C8051F853-C-GM
C8051F853-C-GMR
CP2102N-A02-GQFN20
CP2102N-A02-GQFN20R
EFM8BB10F2G-A-QFN20
EFM8BB10F2G-A-QFN20R
EFM8BB10F2I-A-QFN20
EFM8BB10F2I-A-QFN20R
EFM8BB10F4G-A-QFN20
EFM8BB10F4G-A-QFN20R
EFM8BB10F4I-A-QFN20
EFM8BB10F4I-A-QFN20R
EFM8BB10F8G-A-QFN20
EFM8BB10F8G-A-QFN20R
EFM8BB10F8I-A-QFN20
EFM8BB10F8I-A-QFN20R
EFM8BB10M1069F8GM-A
EFM8BB10M1069F8GM-AR
EFM8BB10P1211F2GM-A
EFM8BB10P1211F2GM-AR
EFM8BB10P1646F8GM-A
EFM8BB10P1646F8GM-AR
EFM8BB21F16A-C-QFN20
EFM8BB21F16A-C-QFN20R
EFM8BB21F16G-C-QFN20
EFM8BB21F16G-C-QFN20R

EFM8BB21F16I-C-QFN20
EFM8BB21F16I-C-QFN20R
EFM8UB10C1095F16GM-C
EFM8UB10C1095F16GM-CR
EFM8UB10C1498F16GM-C
EFM8UB10C1498F16GM-CR
EFM8UB10F16G-C-QFN20
EFM8UB10F16G-C-QFN20R
EFM8UB10F8G-C-QFN20
EFM8UB10F8G-C-QFN20R
EFM8UB10P1098F16GM-C
EFM8UB10P1098F16GM-CR
EFM8UB10P1425F16GM-C
EFM8UB10P1425F16GM-CR

Last Date of Unchanged Product: Dec 04, 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

User Registration

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Qualification Data

Attached to this PCN Notification.



EFM8UB1x/BB21x and CP2102 AEC-Q100 Qualification Report for Shinko Leadframe 20-QFN

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Part Rev A4, HHGrace Fabrication, ASECL Assembly							
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	JA104	3 lots, N=>77	Q050851	0/76	1	3 lots 0/233	Pass
	Cond C: -65°C to 150°C		Q050852	0/78	1		
	500 cycles		Q050853	0/79	1		
Test Group C – Package Assembly Integrity Tests							
Wire Bond Pull	M-STD-883	5 units, N=>30	Q050854	0/5		1 lots 0/5	Pass
	Performed post-TC						

Notes:
1. Parts are Pre-conditioned at MSL2/260°C

This report applies to the following part numbers:	
EFM8BB21x	CP2102N-A02-GQFN20
EFM8UB10x	



EFM8BB10x & C8051F85x AEC-Q100 Qualification Report for Shinko Leadframe 20-QFN

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Part Rev A2, HHGrace Fabrication, ASECL Assembly

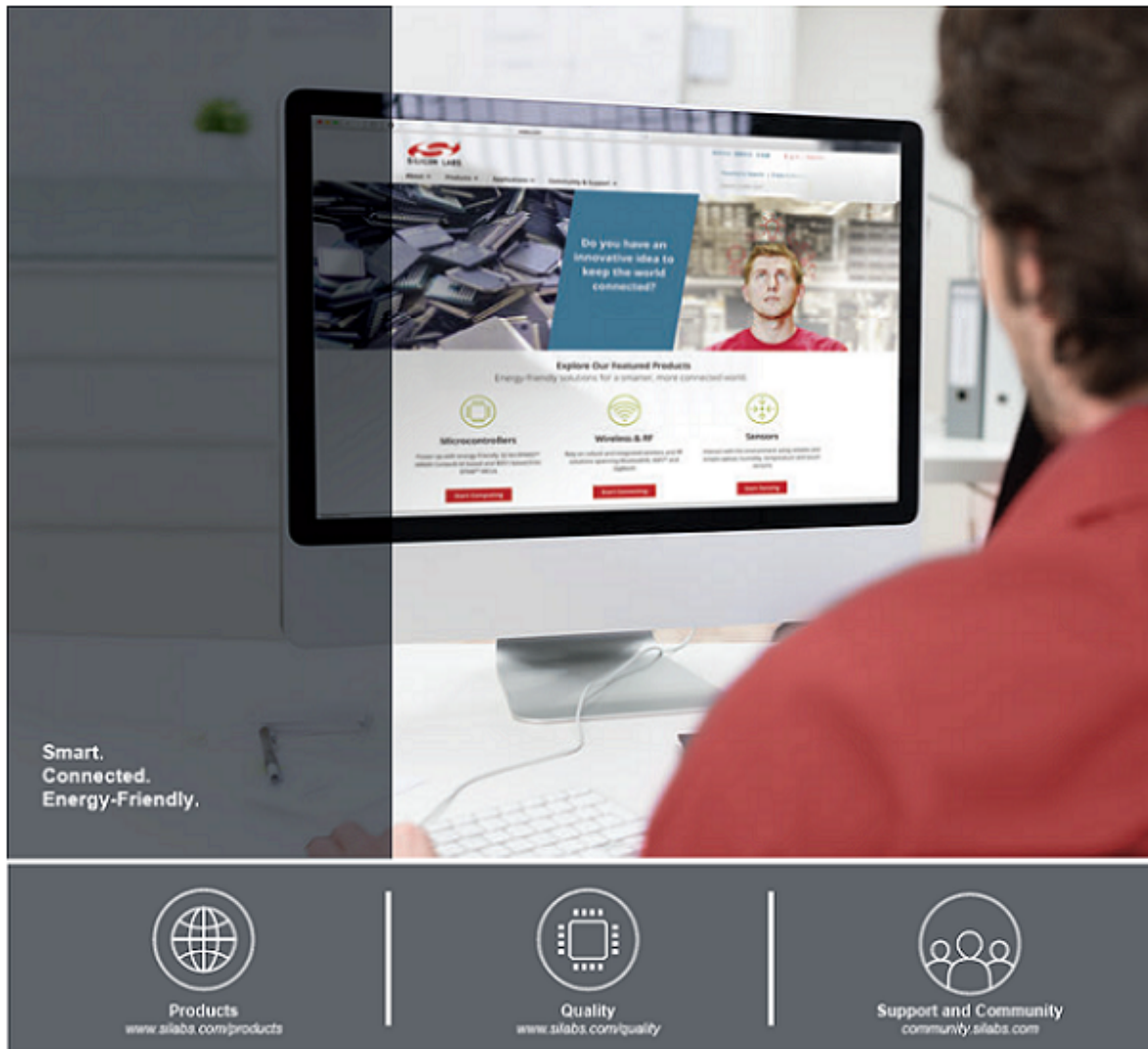
Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
Test Group A – Accelerated Environment Stress Tests							
Temp Cycle	JA104		Q050858	0/79	1		
	Cond C: -65°C to 150°C	3 lots, N=>77	Q050859	0/76	1	3 lots	Pass
	500 cycles		Q050860	0/80	1	0/235	
Test Group C – Package Assembly Integrity Tests							
Wire Bond Pull	M-STD-883						
	Performed post-TC	5 units, N=>30	Q050861	0/5		1 lots 0/5	Pass

Notes:

1. Parts are Pre-conditioned at MSL2/260°C

This report applies to the following part numbers:

EFM8BB10x
C8051F85x



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Silicon Laboratories Inc.
400 West Cesar Chavez
Austin, TX 78701

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