



2308091470 Qualification of New Lead Frame for C8051F0xx, C8051F2xx and C8051F3xx series in 32-L

PCN Issue Date: Aug 09, 2023

Effective Date: Nov 15, 2023

PCN Type: Assembly

Description of Change

Silicon Labs is pleased to announce the successful qualification of a new lead frame for C8051F0xx, C8051F2xx and C8051F3xx series in 32-LQFPM-7x7 packages. The current lead frame supplier has announced manufacturing EOL due to raw material shortage. The new lead frame has the exact same dimensions, material and plating properties as the current lead frame.

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

HDS declared the discontinuation of the lead frame due to raw material supply shortage.

Impact on Form, Fit, Function, Quality, Reliability

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

Product Identification

Existing Part #
C8051F007-GQ
C8051F007-GQR
C8051F221-GQ
C8051F221-GQR
C8051F231-GQ
C8051F231-GQR
C8051F342-GQ
C8051F342-GQR
C8051F343-GQ
C8051F343-GQR
C8051F346-GQ
C8051F346-GQR
C8051F347-GQ
C8051F347-GQR
C8051F361-C-GQ
C8051F361-C-GQR
C8051F364-C-GQ
C8051F364-C-GQR
C8051F366-C-GQ
C8051F366-C-GQR
C8051F368-C-GQ
C8051F368-C-GQR

Last Date of Unchanged Product: Nov 15, 2023

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

Register today to create your account on Silabs.com. Your personalized profile allows you to receive technical document updates, new product announcements, “how-to” and design documents, product change notices (PCN) and other valuable content available only to registered users. <http://www.silabs.com/profile>

Qualification Data

Attached to this PCN Notification

C8051F340-1 Qualification Report



ASECL, C8051F347-GQ							
Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
Test Group A – Accelerated Environment Stress Tests							
Preconditioning	JESD22-A113	3 lot, N=>25	Q050458	0/33	1	3 lots 0/106	Pass
	MSL2: 260°C		Q050459	0/37	1		
	85°C / 60%RH / 168 Hr		Q050460	0/36	1		
Temp Cycle	JESD22-A104	3 lot, N=>25	Q050461	0/33	1	3 lot 0/104	Pass
	Cond N: -65°C to 150°C		Q050462	0/35	1		
	500 cycles		Q050464	0/36	1		

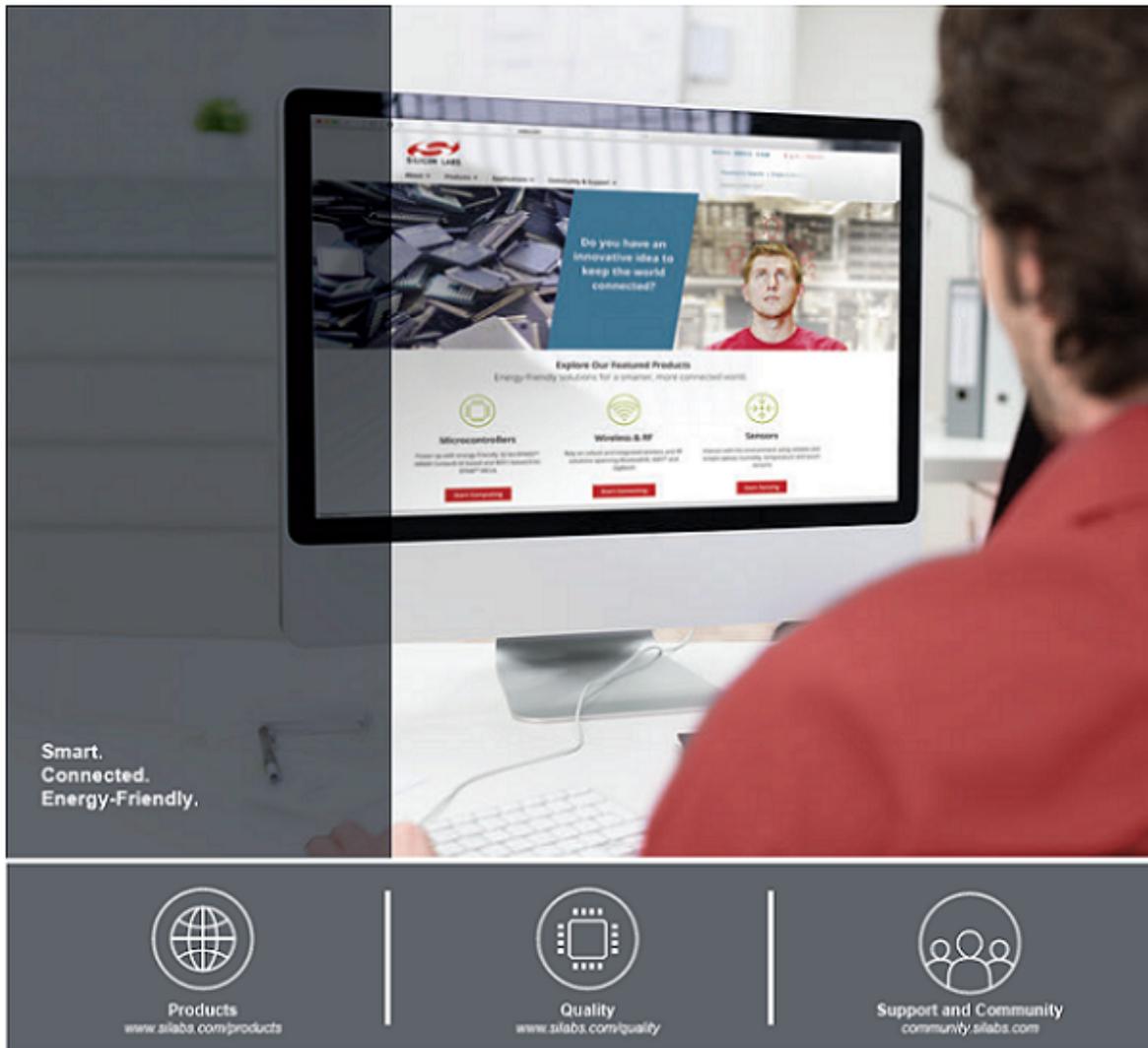
- Notes:
 1. Parts are Pre-conditioned at MSL2/260°C

This report is representative to the following part numbers:		
C8051F007-GQ	C8051F346-GQ	C8051F368-C-GQ
C8051F007-GQR	C8051F346-GQR	C8051F368-C-GQR
C8051F221-GQ	C8051F347-GQ	
C8051F221-GQR	C8051F347-GQR	
C8051F231-GQ	C8051F361-C-GQ	
C8051F231-GQR	C8051F361-C-GQR	
C8051F342-GQ	C8051F364-C-GQ	
C8051F342-GQR	C8051F364-C-GQR	
C8051F343-GQ	C8051F366-C-GQ	
C8051F343-GQR	C8051F366-C-GQR	

Approved by: Frank Mu

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Prepared on: 24-Jul-23



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