



# 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](mailto:PCN@silabs.com)

## User Registration

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## 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<br>MSL2: 260°C<br>85°C / 60%RH / 168 Hr | 3 lot, N=>25  | Q050458         | 0/33             | 1     | 3 lots<br>0/106 | Pass   |
|                                                     |                                                     |               | Q050459         | 0/37             | 1     |                 |        |
|                                                     |                                                     |               | Q050460         | 0/36             | 1     |                 |        |
| Temp Cycle                                          | JESD22-A104<br>Cond N: -65°C to 150°C<br>500 cycles | 3 lot, N=>25  | Q050461         | 0/33             | 1     | 3 lot<br>0/104  | Pass   |
|                                                     |                                                     |               | Q050462         | 0/35             | 1     |                 |        |
|                                                     |                                                     |               | Q050464         | 0/36             | 1     |                 |        |

### Notes:

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

This report is representative to the following part numbers:

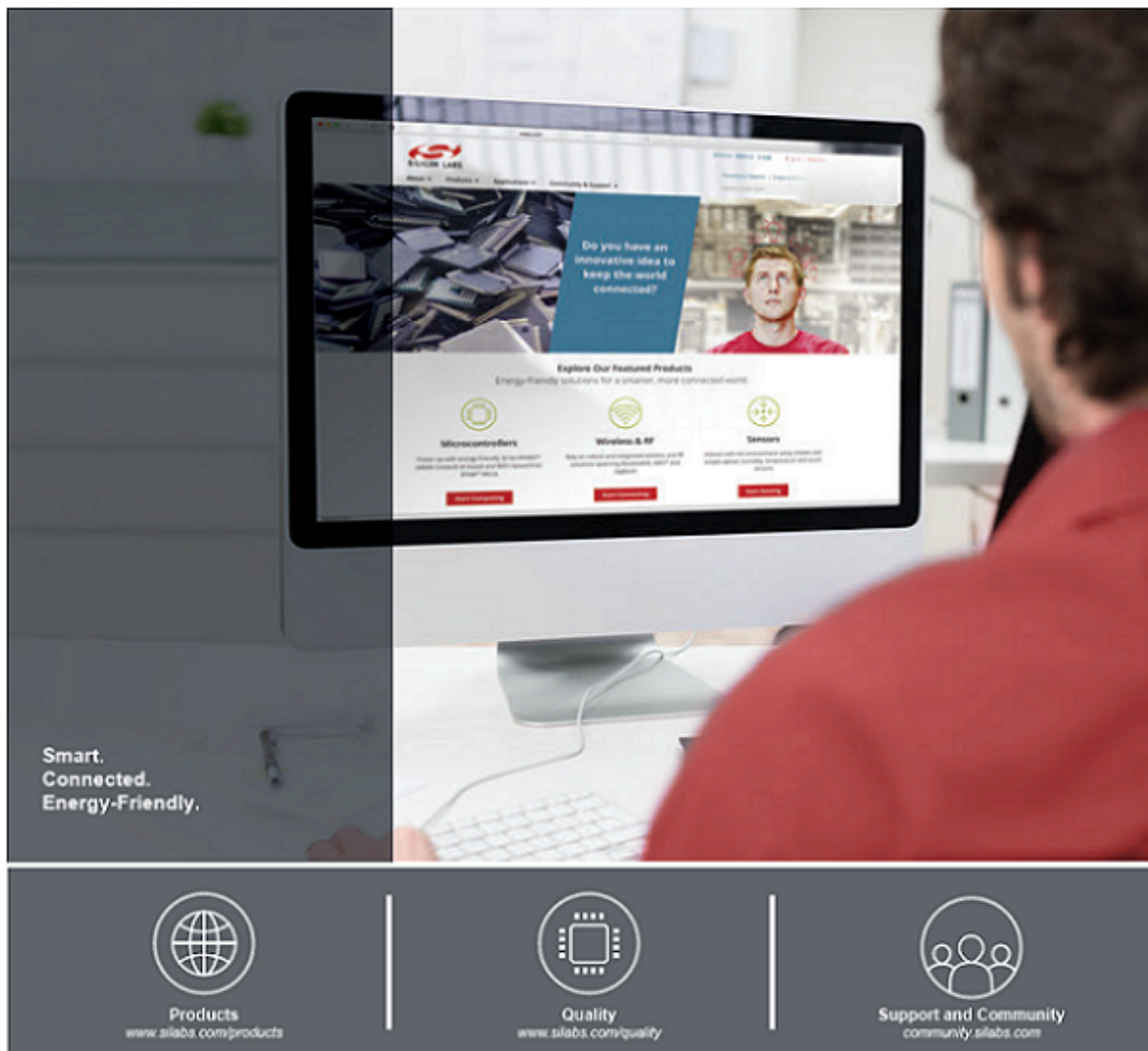
|               |                 |                 |
|---------------|-----------------|-----------------|
| C8051F007-GQ  | C8051F346-GQ    | C8051F368-C-GQ  |
| C8051F007-GQR | C8051F346-GQR   | C8051F368-C-GQR |
| C8051F221-GQ  | C8051F347-GQ    |                 |
| C8051F221-GQR | C8051F347-GQR   |                 |
| 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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