



# 191125673 Additional 10MSOP Leadframe Supplier for Si5350\_51

**PCN Issue Date:** 11/25/2019

**Effective Date:** 3/2/2020

**PCN Type:** Assembly

## Description of Change

Silicon Labs is pleased to announce the successful qualification of ASM lead frame for Si5350\_51 10MSOP package devices. Currently, Si5350\_51 10MSOP package devices use Rokko lead frame. Both Rokko & ASM are qualified lead frame suppliers.

There is no change between Rokko & ASM lead frame in terms of material type, properties, dimensions, or a change in other Bill of Materials, Assembly Process, Assembly Flow, etc.

As of the effective date of the PCN, Silicon Labs will continue to fulfill orders using the lead frames from both Rokko & ASM. The package qualification report is attached.

## Reason for Change

Lead frame tool is expiring at current lead frame supplier (Rokko) site

## Impact on Form, Fit, Function, Quality, Reliability

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

## Product Identification

Existing Part #  
SI5350-B-ZXT  
SI5350A-B-ZXT  
SI5350A-B01396-GT  
SI5350A-B01396-GTR  
SI5350A-B01961-GT  
SI5350A-B01961-GTR  
SI5350A-B02480-GT  
SI5350A-B02480-GTR  
SI5350A-B02481-GT  
SI5350A-B02481-GTR  
SI5350A-B02973-GT  
SI5350A-B02973-GTR  
SI5350A-B03316-GT  
SI5350A-B03316-GTR  
SI5350A-B03451-GT  
SI5350A-B03451-GTR  
SI5350A-B03491-GT  
SI5350A-B03491-GTR  
SI5350A-B04040-GT  
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SI5350A-B04110-GT  
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SI5350A-B04603-GTR  
SI5350A-B04696-GT  
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SI5351A-B10406-GT  
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SI5351A-B10517-GTR  
SI5351A-B10522-GT  
SI5351A-B10522-GTR

**Last Date of Unchanged Product:** 3/2/2020

### **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](mailto:PCNEarlyAcceptance@silabs.com)

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### **Qualification Data**

Qualification report attached



## Si5350\_51 Qualification Report

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Part Rev B, TSMC Fabrication, UNISEM Assembly except as noted							
Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
<b>Test Group A – Accelerated Environment Stress Tests - 20-Pin 4x4 mm QFN</b>							
HAST	JA110 130°C, 85%RH Vcc=3.6V, 96 hours	3 lots, N=>25	Q026134	0/78	1, 2	3 lots 0/234	Pass
			Q026139	0/78	1, 2		
			Q026210	0/78	1, 2		
Temp Cycle	JA104 Cond C: -85°C to 150°C 500 cycles	3 lots, N=>25	Q026133	0/78	1, 2	3 lots 0/234	Pass
			Q026141	0/78	1, 2		
			Q026209	0/78	1, 2		
HTSL	JA103 150°C, 1000hr	3 lots, N=>25	Q027668	0/25	1, 2	3 lots 0/183	Pass
			Q026138	0/78	1, 2		
			Q026298	0/80	1, 2		
<b>Test Group A – Accelerated Environment Stress Tests - 10-Pin 3x3 mm MSOP</b>							
HAST	JA110 130°C, 85%RH Vcc=3.6V, 96 hours	3 lots, N=>25	Q030047	0/30	1, 2	3 lots 0/84	Pass
			Q031809	0/27	1, 2		
			Q031811	0/27	1, 2		
UHAST	JA118 130°C, 85%RH	3 lots, N=>25	Q045101	0/25	1	3 lots 0/75	Pass
			Q045102	0/25	1		
			Q045103	0/25	1		
Temp Cycle	JA104 Cond C: -85°C to 150°C 500 cycles	3 lots, N=>25	Q045097	0/25	1	3 lots 0/75	Pass
			Q045098	0/25	1		
			Q045099	0/25	1		
HTSL	JA103 150°C, 1000hr	3 lots, N=>25	Q030244	0/28	1, 2	3 lots 0/82	Pass
			Q031707	0/27	1, 2		
			Q031708	0/27	1, 2		
<b>Test Group B – Accelerated Lifetime Simulation Tests</b>							
HTOL	JA108 T <sub>j</sub> ≥ 125°C, Dynamic Vcc=3.6V, 1000 hours	3 lots, N=>77	Q029643	0/80	3	3 lots 0/240	Pass
			Q031667	0/80	3		
			Q031666	0/80	3		
LTOL	JA108 T <sub>A</sub> = -10°C, Dynamic Vcc=3.6V, 1000 hours	1 lot, N=>32	Q025648	0/35	3	1 lots 0/35	Pass
ELFR	JA108 T <sub>j</sub> ≥ 125°C, Dynamic Vcc=3.6V, 48 hours	3 lots, N=>500	Q032874	0/504	3	3 lots 0/1512	Pass
			Q031622	0/504	3		
			Q031623	0/504	3		





## Si5350\_51 Qualification Report

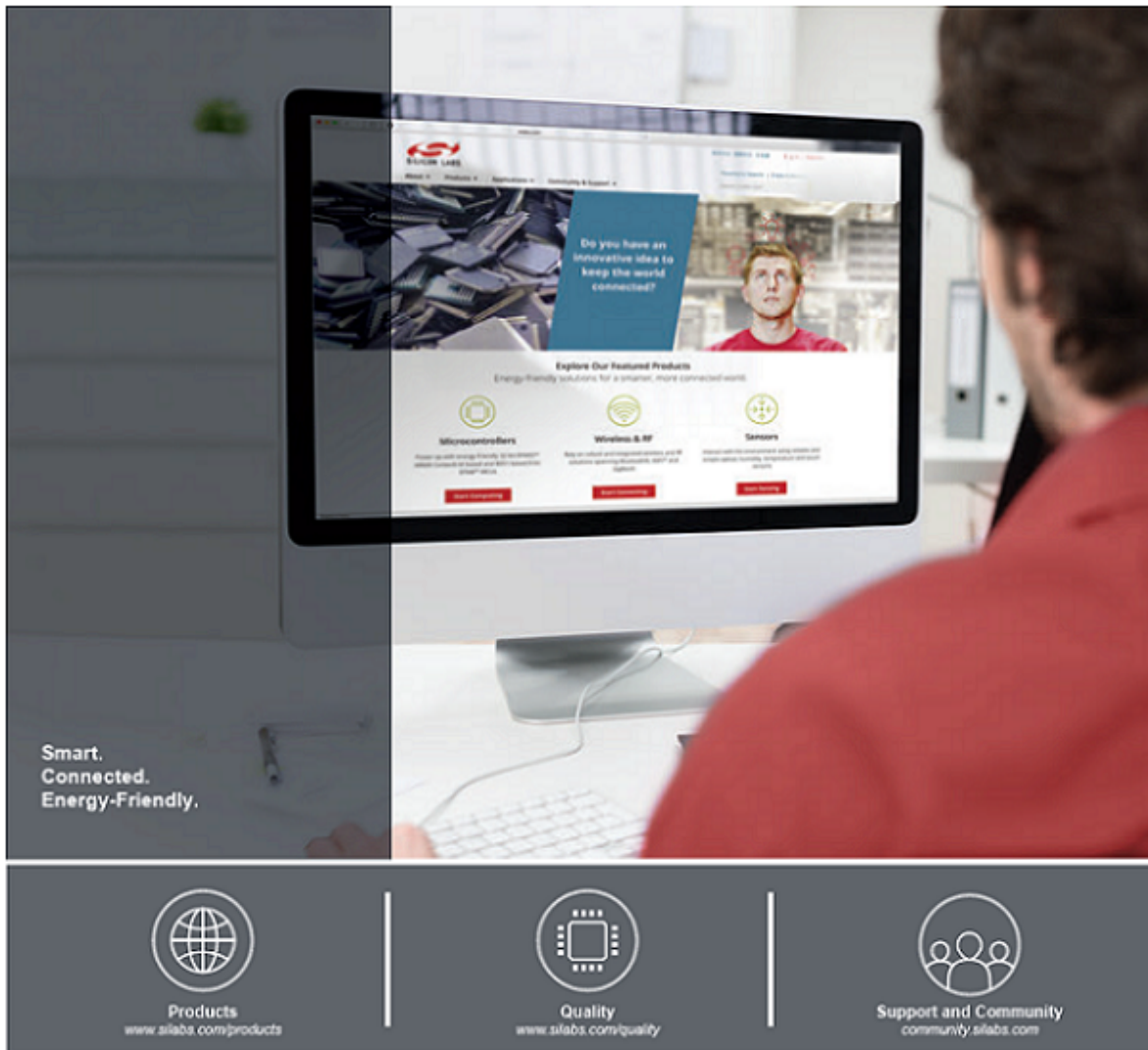
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Part Rev B, TSMC Fabrication, UNISEM Assembly except as noted							
Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
<b>Test Group E – Electrical Verification</b>							
ESD-HBM	JS-001	1 lot, N=>3	Q029708		3	2.5 kV	Class 2
ESD-CDM	JESD22-C101	1 lot, N=>3	Q032883		3	500 V	Class III
	20-Pin 4x4 mm QFN						
ESD-CDM	JESD22-C101	1 lot, N=>3	Q032882		3	500 V	Class III
	10-Pin 3x3 mm MSOP						
Latch Up	JESD78 ±100mA Overvoltage = 3.8V	1 lot, N=>3	Q029708	85 °C	3		Pass

**Notes:**

1. Parts are Pre-conditioned at MSL2/260°C
2. Leveraged package family qualification data
3. Leveraged die family qualification data

This report applies to the following part numbers:				
Si5350A-B-GM/R	Si5350B-B-GM/R	Si5350C-B-GM/R	Si5351A-B-GM/R	Si5351B-B-GM/R
Si5351C-B-GM/R	Si5350A-Bxxxxx-GM/R	Si5350B-Bxxxxx-GM/R	Si5350C-Bxxxxx-GM/R	Si5351A-Bxxxxx-GM/R
Si5351B-Bxxxxx-GM/R	Si5351C-Bxxxxx-GM/R	Si5351A-B-GT/R	Si5350A-Bxxxxx-GT/R	Si5350B-Bxxxxx-GT/R
Si5350C-Bxxxxx-GT/R	Si5351A-Bxxxxx-GT/R			



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