



# Process Change Notice #1412234

## 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>

<b>PCN Date:</b> 12/23/2014		<b>Effective Date:</b> 3/27/2015	
<b>Title:</b> Si5100/10, Si5320/21/64, Si5374/75/76 PBGA Mold Compound Change			
<b>Originator:</b> Paranidharan		<b>Phone:</b> +65 6511 7735	<b>Dept:</b> Supplier Management
<b>Customer Contact:</b> Kathy Haggar		<b>Phone:</b> (512) 532-5261	<b>Dept:</b> Sales
<b>PCN Type:</b>			
<input type="checkbox"/> Datasheet	<input type="checkbox"/> Foundry	<input type="checkbox"/> Packing	
<input type="checkbox"/> Product Revision	<input checked="" type="checkbox"/> Assembly	<input type="checkbox"/> Labeling	
<input type="checkbox"/> Discontinuance	<input type="checkbox"/> Test	<input type="checkbox"/> Other	
<b>Last Order Date:</b> Not Applicable			
<b>PCN Details</b>			
<b>Description of Change:</b>			
Silicon Labs is pleased to announce the availability of a new mold compound for Timing PBGA-based products. The mold compound is changing from Hitachi-GE-506 to Panasonic-CV8710 to better accommodate a change in assembly tooling.			
	Current	Proposed	
Mold Compound	HITACHI-GE-506	PANASONIC-CV8710	
<b>Reason for Change:</b>			
For better cycle time & higher quality.			
<b>Impact on Form, Fit, Function, Quality, Reliability:</b>			
No change in Form, Fit, Function, Quality & Reliability.			



## Process Change Notice #1412234

### Product Identification:

Part Number
-------------

SI5100-H-GL
-------------

Si5100-H-BL
-------------

SI5100-H-XL4
--------------

SI5110-H-XL4
--------------

SI5320-H-XL3
--------------

SI5320-H-ZL3
--------------

SI5321-H-BL
-------------

SI5321-H-GL
-------------

SI5321-H-XL4
--------------

SI5321-H-ZL4
--------------

SI5364-H-BL
-------------

SI5364-H-GL
-------------

SI5364-H-XL5
--------------

SI5374B-A-GL
--------------

Si5374B-A-BL
--------------

SI5374C-A-GL
--------------

Si5374C-A-BL
--------------

SI5375B-A-BL
--------------

SI5375B-A-GL
--------------

SI5376B-A-BL
--------------

SI5376B-A-GL
--------------

SI5110-H-BL
-------------

SI5110-H-GL
-------------

SI5320-H-BL
-------------

Si5320-H-GL
-------------

SI5321-H-ZL2
--------------

SI5364-H-ZL5
--------------

**Last Date of Unchanged Product:** 3/27/2015

**Qualification Samples:**

Available upon request.



## Process Change Notice #1412234

Specific conditions of acceptance of this change will be considered on a case by case basis if written notice is submitted within 30 days of this notice. To request further data or inquire about this notification, please contact your local Silicon Labs sales representative. A list of Silicon Labs sales representatives is available at [www.silabs.com](http://www.silabs.com).

In some cases rejection of a change notice may impact Silicon Labs product pricing, delivery, quality, or reliability.

### Customer Early Acceptance Sign Off:

Customers may approve early PCN acceptance by completing the information below:

Early Acceptance:    Date: \_\_\_\_\_

   Name: \_\_\_\_\_

   Company: \_\_\_\_\_

Email your early Acceptance approval to: [katherine.haggard@silabs.com](mailto:katherine.haggard@silabs.com)

### Qualification Data:

See Appendix.

## Appendix

## Si537x 80-Pin 10x10 mm BGA Qualification Report



W7101F1 Product Qualification Plan and Report Rev. E

The information contained in this document is PROPRIETARY to Silicon Laboratories, Inc. and shall not be reproduced or used in part or whole without Silicon Laboratories' written consent. The document is uncontrolled if printed or electronically saved.

Part Rev A, TSMC Fabrication, SPIL Assembly except as 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	JA110 110 °C, 85%RH Vcc=2.5V, 264 hours	3 lots, N=>25	Q85729	0/25	1		
			Q85617	0/25	1	3 lots	Pass
			Q85730	0/25	1	0/75	
Temp Cycle	JA104 Cond B: -65°C to 150°C 500 cycles	3 lots, N=>25	Q86378	0/25	1		
			Q86379	0/25	1	3 lots	
			Q86380	0/25	1	0/75	Pass
HTSL	JA103 150 °C, 500 hours	3 lots, N=>25	Q86381	0/25	1		
			Q86382	0/23	1	3 lots	
			Q86383	0/25	1	0/73	Pass
Test Group B - Accelerated Lifetime Simulation Tests							
HTOL	JA108 125 °C, Dynamic Vcc=2.5V, 1000 hours	3 lots, N=>77	Q80474	0/80	2		
			Q25592	0/80	2	3 lots	
			Q25904	0/80	2	0/240	Pass
ELFR	JA108 125 °C, Dynamic Vcc=2.5V, 48 hours	3 lots, N=>500	Q80433	0/502	2		
			Q25539	0/511	2	3 lots	
			Q26187	0/504	2	0/1517	Pass
Test Group E - Electrical Verification							
ESD-HBM	JA114	1 lot, N=>3	Q29471		2		2.5 kV 700V (Clk pins)
ESD-CDM	JC101	1 lot, N=>3	Q29472		2		250 V 150V (Clk pins)
ESD-AMA	JA115	1 lot, N=>3	Q29470		2		200 V 150V (Clk pins)
Latch Up	JE5D78 ±200 mA Overvoltage = 4.2V	1 lot, N=>6	Q80317	25 C	2		Pass



Si537x 80-Pin 10x10 mm BGA Qualification Report



W7101F1 Product Qualification Plan and Report Rev. E

The information contained in this document is PROPRIETARY to Silicon Laboratories, Inc. and shall not be reproduced or used in part or whole without Silicon Laboratories' written consent. The document is uncontrolled if printed or electronically saved.

Part Rev A, TSMC Fabrication, SPIL Assembly except as noted							
Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status

Notes:

1. Parts are Pre-conditioned at MSL3/260°C
2. Leveraged die family data

This report applies to the following part numbers:				
Si5374B-A-BL	Si5374B-A-GL	Si5375B-A-BL	Si5375B-A-GL	Si5376B-A-BL
Si5376B-A-GL				