

210209987 Revised Addendum to 201104879 8/16L-SOIC-150mils Additional Assembly, Test

PCN Issue Date: 2/9/2021

Effective Date: 2/10/2021

PCN Type: Addendum; Assembly

Description of Change

This previous addendum (see PCN 210119976) to PCN 201104879 did not include the qualification report. This revised addendum for PCN 201104879 Si82xx/Si84xx/Si86xx 8/16L-SOIC-150mils Additional Assembly, Test and Ship Site includes the qualification report and also includes the removal of the Si822x products from the affected list in the Product Identification Section. The correction is listed in the Product Identification section of this PCN. The qualification report is included in the appendix. The original PCN is listed below:

Silicon Labs is pleased to announce the successful qualification of UTAC Thailand (UTL) as an additional assembly, test and shipping site for Si82xx/Si84xx/Si86xx, 8/16L-SOIC-150mils. UTL is an existing assembly, test and shipping site for Silicon Labs, and is certified to ISO9001, ISO14001 and IATF16949.

UTL Ship Address: UTAC Thai Limited Wellgrow Industrial Estate, 73 Moo 5, Bangna-Trad (KM.36) T.Bangsamak, Bangpakong Chachoengsao 24180 Thailand Bangkok Zip code: 24180

As of the effective date of the PCN, Silicon Labs may assemble, test and ship from either of the qualified assembly, test and shipping sites.

Reason for Change

The additional assembly and test locations will provide additional capacity for supply assurance.

Impact on Form, Fit, Function, Quality, Reliability

There is no impact on form, fit, function, quality, or reliability. The devices assembled and tested at UTL will comply with Silicon Labs' relevant datasheets and quality levels.

The same test equipment including ATE, test load board hardware, and test application software will be used at both locations.

Product Identification

Existing Part # SI82305B-D-IS1 SI82305B-D-IS1R SI82308B-D-IS1 SI82308B-D-IS1 SI8230AC-D-IS1 SI8230AC-D-IS1 SI8230BC-D-IS1 SI8230BC-D-IS1 SI8231AC-D-IS1 SI8231AC-D-IS1 SI8231BC-D-IS1

Process Change Notice #2021-02-09-987

SI8231BC-D-IS1R SI8232AC-D-IS1 SI8232AC-D-IS1R SI8232BC-D-IS1 SI8232BC-D-IS1R SI8233AB-D-IS1 SI8233AB-D-IS1R SI8233AC-D-IS1 SI8233AC-D-IS1R SI8233BC-D-IS1 SI8233BC-D-IS1R SI8234AC-D-IS1 SI8234AC-D-IS1R SI8234BC-D-IS1 SI8234BC-D-IS1R SI8235AC-D-IS1 SI8235AC-D-IS1R SI8235BC-D-IS1 SI8235BC-D-IS1R SI8237AC-D-IS1 SI8237AC-D-IS1R SI8237BC-D-IS1 SI8237BC-D-IS1R SI8238AC-D-IS1 SI8238AC-D-IS1R SI8238BC-D-IS1 SI8238BC-D-IS1R SI8400AB-A-IS SI8400AB-A-ISR SI8400AB-B-IS SI8400AB-B-ISR SI8401AB-B-IS SI8401AB-B-ISR SI8405AB-B-IS1 SI8405AB-B-IS1R SI8420BB-D-IS SI8420BB-D-ISR SI8421AB-D-IS SI8421AB-D-ISR SI8422AB-D-IS SI8422AB-D-ISR SI8423ETA-D-IS SI8423ETA-D-ISR SI8440BA-D-IS1 SI8440BA-D-IS1R SI8600AB-B-IS SI8600AB-B-ISR SI8605AB-B-IS1 SI8605AB-B-IS1R SI8605AC-B-IS1 SI8605AC-B-IS1R SI8610BC-B-IS SI8610BC-B-ISR SI8620BB-B-IS SI8620BB-B-ISR SI8620BC-B-IS SI8620BC-B-ISR SI8621BC-B-IS SI8621BC-B-ISR SI8621EC-B-IS SI8621EC-B-ISR SI8622BC-B-IS SI8622BC-B-ISR SI8622EC-B-IS SI8622EC-B-ISR SI8640EC-B-IS1 SI8640EC-B-IS1R

SI8641EC-B-IS1 SI8642AB-B-IS1 SI8642AB-B-IS1 SI8642AB-B-IS1 SI8645BA-B-IS1 SI8645BA-B-IS1 SI8651EC-B-IS1 SI8651EC-B-IS1 SI8660AB-B-IS1 SI8660BA-B-IS1 SI8660BA-B-IS1

Last Date of Unchanged Product: 2/10/2021

Qualification Samples

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

User Registration

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Qualification Data

Please see Qualification Report below.



Si84xxyy / Si86xxyy AEC-Q100 Qualification Report 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.

Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
Test Group A – Acce	lerated Environment Stres	is Tests - 08-SOIC	-150mil (UT/	4C)			
	JA110		Q045941	0/77	2		
HAST	130°C, 85%RH	3 lots, N=>77	Q045942	0/77	2	3 lots	Pass
	Vcc=5V, 96 hours		Q045943	0/77	2	0/231	
UHAST	JA110		Q045905	0/87	2		
	130°C, 85%RH	3 lots, N=>77	Q045906	0/87	2	3 lots	Pass
	96 hours		Q045907	0/87	2	0/261	
Temp Cycle	JA104		Q045902	0/84	2		
	Cond C: -65°C to 150°C	3 lots, N=>77	Q045903	0/86	2	3 lots	Pass
	500 cycles		Q045904	0/88	2	0/258	
HTSL	JA103		Q045899	0/35	2		
	150°C, 1000hr	1 lot, N=>45	Q045900	0/35	2	3 lots	Pass
			Q045901	0/35	2	0/105	
Test Group C – Pack	age Assembly Integrity Te	sts - 08-SOIC-150	mil (UTAC)				
Wire Bond Shear	AEC-Q100-001		1014121	0/5			
		5 units, N=>30	1014123	0/5		3 lots	Pass
			1014125	0/5		0/15	
Wire Bond Pull	M-STD-883		1014121	0/5			
	Performed post-TC	5 units, N=>30	1014123	0/5		3 lots	Pass
			1014125	0/5		0/15	
Physical Dimensions	JB100		1014121	0/30			
		3 lots, N=>10	1014123	0/30		3 lots	Pass
			1014125	0/30		0/90	
Solderability	JB102		1014121	0/10			
		1 lot, N=>15	1014123	0/10		3 lots	Pass
			1014125	0/10		0/30	
Test Group E – Elect	rical Verification			I			
ESD-CDM	AEC-Q100-011	1 lot, N=>3	Q045849	08-SOIC-150	UTAC	1.25 kV	Class C

2. Parts are Pre-conditioned at MSL 2 @ 260°C



Si823x AEC-Q100 Qualification Report

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Test Name	ard Fabrication, ASECL	Qualification	Lot ID or Start	or End	Notes	Summary	Status
	lerated Environment Stres		-150mil (UT)	AC)			
HAST	JA110		Q045925	0/77	2,4		
	130°C, 85%RH	3 lots, N=>77	Q045926	0/77	2,4	3 lots	Pass
	Vcc=5.5V, 96 hours	a na cake hundh k	Q045927	0/77	2,4	0/231	
UHAST	JA110		Q045937	0/87	2,4		
	130°C, 85%RH	3 lots, N=>77	Q045938	0/87	2.4	3 lots	Pass
	96 hours		Q045939	0/85	2,4	0/259	
Temp Cycle	JA104		Q045934	0/87	2,4		
	Cond C: -65°C to 150°C	3 lots, N=>77	Q045935	0/87	2,4	3 lots	Pass
	500 cycles		Q045936	0/87	2.4	0/261	
HTSL	JA103		Q045928	0/35	2,4		
	150°C, 1000hr	1 lot, N=>45	Q045929	0/35	2,4	3 lots	Pass
			Q045930	0/35	2,4	0/105	
Test Group C – Pack	age Assembly Integrity Te	sts - 16-SOIC-150	mil (UTAC)	·			
Wire Bond Shear	AEC-Q100-001		1024227	0/5			
		5 units, N=>30	1024228	0/5		3 lots	Pass
		Contraction of the second second	1024229	0/5		0/15	
Wire Bond Pull	M-STD-883		1024227	0/5			
	Performed post-TC	5 units, N=>30	1024228	0/5		3 lots	Pass
			1024229	0/5		0/15	
Physical Dimensions	JB100		1024227	0/30			
		3 lots, N=>10	1024228	0/30		3 lots	Pass
			1024229	0/30		0/90	
Solderability	JB102		1024227	0/10			
	1740034663K	1 lot, N=>15	1024228	0/10		3 lots	Pass
			1024229	0/10		0/30	
Test Group E – Elect	rical Verification						
ESD-CDM	AEC-Q100-011	1 lot, N=>3	Q046091	16-SOIC-150	UTAC	1.25 kV	Class C3

Notes:

2. Parts are Pre-conditioned at MSL 2 @ 260°C

4. New Polyimide material used



Si84xxyy / Si86xxyy AEC-Q100 Qualification Report

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Test Name	Test Condition	Qualification	Start	or End	Notes	Summary	Status
	lerated Environment Stres	s Tests - 16-SOIC	-150mil (UTA	AC)			
HAST	JA110		Q045909	0/77	2		
	130°C, 85%RH	3 lots, N=>77	Q045910	0/77	2	3 lots	Pass
	Vcc=5V, 96 hours		Q045911	0/77	2	0/231	
UHAST	JA110		Q045921	0/87	2		
	130°C, 85%RH	3 lots, N=>77	Q045922	0/87	2	3 lots	Pass
	96 hours		Q045923	0/87	2	0/261	
Temp Cycle	JA104		Q045918	0/87	2		
	Cond C: -65°C to 150°C	3 lots, N=>77	Q045919	0/87	2	3 lots	Pass
	500 cycles		Q045920	0/87	2	0/261	
HTSL	JA103		Q045912	0/35	2		
	150°C, 1000hr	1 lot, N=>45	Q045913	0/35	2	3 lots	Pass
			Q045914	0/35	2	0/105	
Test Group C – Pack	age Assembly Integrity Te	sts - 16-SOIC-150	mil (UTAC)				
Wire Bond Shear	AEC-Q100-001	1	1024230	0/5			
		5 units, N=>30	1024231	0/5		3 lots	Pass
			1024232	0/5		0/15	
Wire Bond Pull	M-STD-883		1024230	0/5			
	Performed post-TC	5 units, N=>30	1024231	0/5		3 lots	Pass
			1024232	0/5		0/15	
Physical Dimensions	JB100		1024230	0/30			
		3 lots, N=>10	1024231	0/30		3 lots	Pass
		F 25 FF 10 10 10 10 10	1024232	0/30		0/90	1242424
Solderability	JB102		1024230	0/10			
		1 lot, N=>15	1024231	0/10		3 lots	Pass
			1024232	0/10		0/30	
Test Group E - Elect	rical Verification						
ESD-CDM	AEC-Q100-011	1 lot, N=>3	Q046092	16-SOIC-150	UTAC	1.25 kV	Class C3

2. Parts are Pre-conditioned at MSL 2 @ 260°C



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