



171106150 Si823x Lower Prop Delay & UTAC 16 WB SOIC Assembly Qualification

PCN Issue Date: 11/6/2017

Effective Date: 2/9/2018

PCN Type: Assembly; Datasheet

Description of Change

Silicon Labs is pleased to announce:

1. The propagation delay maximum specification has been lowered from 60 ns to 45 ns for all Si823x material shipped after 12/15/2017
2. The successful qualification of UTAC Thailand (UTL) as an additional Assembly site for Si823x 16 WB SOIC packages. UTL is an existing assembly site for Silicon Labs and is certified to ISO9001, ISO14001 and ISO/TS16949

UTL address:

UTAC Thai Limited
78/1 Moo 5, Wellgrow Industrial Estate
Bangsamask, Bangpakong
Chachoengsao 24180
Thailand

As of the effective date of this PCN, Silicon Labs may assemble from either of the qualified Assembly sites.

Reason for Change

Adding second source for packaging; Test program limits tightened.

Impact on Form, Fit, Function, Quality, Reliability

None for packaging second source, propagation delay specification limits now guarantee tighter limits than before - no impact on form and reliability.

Product Identification

Existing Part #
SI82305B-D-IS1
SI82305B-D-IS1R
SI82308B-D-IS
SI82308B-D-IS1
SI82308B-D-IS1R
SI82308B-D-ISR
SI8230AB-D-IS
SI8230AB-D-IS1
SI8230AB-D-IS1R
SI8230AB-D-ISR
SI8230AD-D-IS
SI8230AD-D-IS3
SI8230AD-D-IS3R
SI8230AD-D-ISR
SI8230BB-D-IS
SI8230BB-D-IS1
SI8230BB-D-IS1R
SI8230BB-D-ISR
SI8230BD-D-IS
SI8230BD-D-IS3
SI8230BD-D-IS3R
SI8230BD-D-ISR
SI8231AB-D-IS

SI8231AB-D-IS1
SI8231AB-D-IS1R
SI8231AB-D-ISR
SI8231AD-D-IS
SI8231AD-D-IS3
SI8231AD-D-IS3R
SI8231AD-D-ISR
SI8231BB-D-IS
SI8231BB-D-IS1
SI8231BB-D-IS1R
SI8231BB-D-ISR
SI8231BD-D-IS
SI8231BD-D-IS3
SI8231BD-D-IS3R
SI8231BD-D-ISR
SI8232AB-D-IS
SI8232AB-D-IS1
SI8232AB-D-IS1R
SI8232AB-D-ISR
SI8232AD-D-IS
SI8232AD-D-IS3
SI8232AD-D-IS3R
SI8232AD-D-ISR
SI8232BB-D-IS
SI8232BB-D-IS1
SI8232BB-D-IS1R
SI8232BB-D-ISR
SI8232BD-D-IS
SI8232BD-D-IS3
SI8232BD-D-IS3R
SI8232BD-D-ISR
SI8232DB-D-IS
SI8232DB-D-ISR
SI8233AB-D-IM
SI8233AB-D-IM1
SI8233AB-D-IM1R
SI8233AB-D-IMR
SI8233AB-D-IS
SI8233AB-D-IS1
SI8233AB-D-IS1R
SI8233AB-D-ISR
SI8233AD-D-IS
SI8233AD-D-IS3
SI8233AD-D-IS3R
SI8233AD-D-ISR
SI8233BB-D-IM
SI8233BB-D-IM1
SI8233BB-D-IM1R
SI8233BB-D-IMR
SI8233BB-D-IS
SI8233BB-D-IS1
SI8233BB-D-IS1R
SI8233BB-D-ISR
SI8233BD-D-IS
SI8233BD-D-IS3
SI8233BD-D-IS3R
SI8233BD-D-ISR
SI8233CB-D-IM
SI8233CB-D-IMR
SI8234AB-D-IM
SI8234AB-D-IM1
SI8234AB-D-IM1R
SI8234AB-D-IMR
SI8234AB-D-IS
SI8234AB-D-IS1
SI8234AB-D-IS1R
SI8234AB-D-ISR

SI8234AD-D-IS
SI8234AD-D-IS3
SI8234AD-D-IS3R
SI8234AD-D-ISR
SI8234BB-D-IM
SI8234BB-D-IM1
SI8234BB-D-IM1R
SI8234BB-D-IMR
SI8234BB-D-IS
SI8234BB-D-IS1
SI8234BB-D-IS1R
SI8234BB-D-ISR
SI8234BD-D-IS
SI8234BD-D-IS3
SI8234BD-D-IS3R
SI8234BD-D-ISR
SI8234CB-D-IS
SI8234CB-D-ISR
SI8235AB-D-IM
SI8235AB-D-IM1
SI8235AB-D-IM1R
SI8235AB-D-IMR
SI8235AB-D-IS
SI8235AB-D-IS1
SI8235AB-D-IS1R
SI8235AB-D-ISR
SI8235AD-D-IS
SI8235AD-D-IS3
SI8235AD-D-IS3R
SI8235AD-D-ISR
SI8235BA-D-IS1
SI8235BA-D-IS1R
SI8235BB-D-IM
SI8235BB-D-IM1
SI8235BB-D-IM1R
SI8235BB-D-IMR
SI8235BB-D-IS
SI8235BB-D-IS1
SI8235BB-D-IS1R
SI8235BB-D-ISR
SI8235BD-D-IS
SI8235BD-D-IS3
SI8235BD-D-IS3R
SI8235BD-D-ISR
SI8236AA-D-IM
SI8236AA-D-IMR
SI8236BA-D-IM
SI8236BA-D-IMR
SI8236BB-D-IM
SI8236BB-D-IMR
SI8237AB-D-IS1
SI8237AB-D-IS1R
SI8237AD-D-IS
SI8237AD-D-IS3
SI8237AD-D-IS3R
SI8237AD-D-ISR
SI8237BB-D-IS1
SI8237BB-D-IS1R
SI8237BD-D-IS
SI8237BD-D-IS3
SI8237BD-D-IS3R
SI8237BD-D-ISR
SI8238AB-D-IS1
SI8238AB-D-IS1R
SI8238AD-D-IS
SI8238AD-D-IS3
SI8238AD-D-IS3R

SI8238AD-D-ISR
SI8238BB-D-ISR
SI8238BB-D-ISR1R
SI8238BD-D-ISR
SI8238BD-D-ISR3
SI8238BD-D-ISR3R
SI8238BD-D-ISR

2. Packaging second source

Existing Part #

SI82308B-D-ISR
SI82308B-D-ISR
SI8230AB-D-ISR
SI8230AB-D-ISR
SI8230AD-D-ISR
SI8230AD-D-ISR
SI8230BB-D-ISR
SI8230BB-D-ISR
SI8230BD-D-ISR
SI8230BD-D-ISR
SI8231AB-D-ISR
SI8231AB-D-ISR
SI8231AD-D-ISR
SI8231AD-D-ISR
SI8231BB-D-ISR
SI8231BB-D-ISR
SI8231BD-D-ISR
SI8231BD-D-ISR
SI8232AB-D-ISR
SI8232AB-D-ISR
SI8232AD-D-ISR
SI8232AD-D-ISR
SI8232BB-D-ISR
SI8232BB-D-ISR
SI8232BD-D-ISR
SI8232BD-D-ISR
SI8232DB-D-ISR
SI8232DB-D-ISR
SI8233AB-D-ISR
SI8233AB-D-ISR
SI8233AD-D-ISR
SI8233AD-D-ISR
SI8233BB-D-ISR
SI8233BB-D-ISR
SI8233BD-D-ISR
SI8233BD-D-ISR
SI8234AB-D-ISR
SI8234AB-D-ISR
SI8234AD-D-ISR
SI8234AD-D-ISR
SI8234BB-D-ISR
SI8234BB-D-ISR
SI8234BD-D-ISR
SI8234BD-D-ISR
SI8234CB-D-ISR
SI8234CB-D-ISR
SI8235AB-D-ISR
SI8235AB-D-ISR
SI8235AD-D-ISR
SI8235AD-D-ISR
SI8235BB-D-ISR
SI8235BB-D-ISR
SI8235BD-D-ISR
SI8235BD-D-ISR
SI8237AD-D-ISR
SI8237AD-D-ISR
SI8237BD-D-ISR

SI8237BD-D-ISR
SI8238AD-D-IS
SI8238AD-D-ISR
SI8238BD-D-IS
SI8238BD-D-ISR

Last Date of Unchanged Product: 2/9/2018

Qualification Samples

Available upon request.

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 <http://www.silabs.com>.

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Name: _____

Company: _____

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Qualification Data

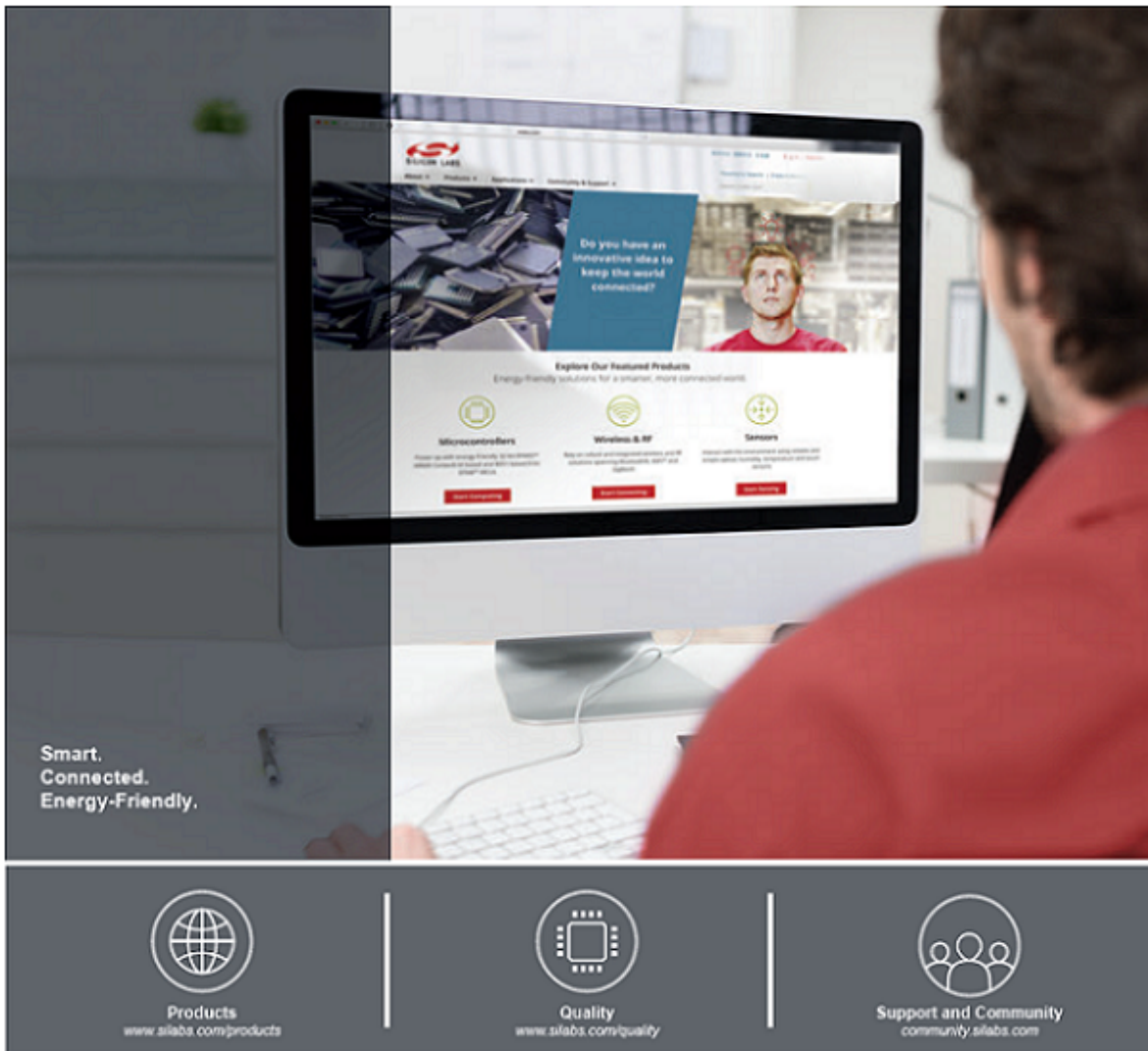
See below.

Test Group A – Accelerated Environment Stress Tests - 16-SOIC-300mil (UTAC)							
HAST	JA110		Q040885	0/92	2, 4		
	130°C, 85%RH	3 lots, N=>77	Q040833	0/92	2, 4	3 lots	Pass
	Vcc=5V, 96 hours		Q040807	0/92	2, 4	0/276	
UHAST	JA110		Q040884	0/92	2, 4		
	130°C, 85%RH	3 lots, N=>77	Q040834	0/92	2, 4	3 lots	Pass
	96 hours		Q040808	0/92	2, 4	0/276	
Temp Cycle	JA104		Q040883	0/92	2, 4		
	Cond C: -65°C to 150°C	3 lots, N=>77	Q040832	0/92	2, 4	3 lots	Pass
	500 cycles		Q040806	0/92	2, 4	0/276	
HTSL	JA103		Q040882	0/92	2, 4		
	150°C, 1000hr	1 lot, N=>45	Q040831	0/92	2, 4	3 lots	Pass
			Q040805	0/92	2, 4	0/276	

Notes:

1. Parts are Pre-conditioned at MSL 2a @ 260°C
2. Parts are Pre-conditioned at MSL 2 @ 260°C
3. Parts are Pre-conditioned at MSL 3 @ 260°C
4. New Polyimide material used

Test Group C – Package Assembly Integrity Tests - 16-SOIC-300mil (UTAC)							
Wire Bond Shear	AEC-Q100-001		796899	0/5			
		5 units, N=>30	796900	0/5		3 lots	Pass
			802562	0/5		0/15	
Wire Bond Pull	M-STD-883		796899	0/5			
	Performed post-TC	5 units, N=>30	796900	0/5		3 lots	Pass
			802562	0/5		0/15	
Physical Dimensions	JB100		796899	0/30			
		3 lots, N=>10	796900	0/30		3 lots	Pass
			802562	0/30		0/90	
Solderability	JB102		796899	0/10			
		1 lot, N=>15	796900	0/10		3 lots	Pass
			802562	0/10		0/30	



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