



Process Change Notice #1405071

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PCN Date: 5/7/2014		Effective Date: 5/7/2014	
Title: 8-SOIC assembly site addition - ASECL			
Originator: Kyle Beckmeyer		Phone: 408-702-1244	Dept: Marketing
Customer Contact: Kathy Haggar		Phone: (512) 532-5261	Dept: Sales
PCN Type: <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			
Last Order Date: Not Applicable.			
PCN Details			
Description of Change: Silicon Labs is pleased to announce the successful qualification of Advanced Semiconductor Engineering ChungLi, Taiwan (ASECL) as an additional assembly site for the 8-SOIC packaged clock products. ASECL is added to existing assembly providers United Test and Assembly Center, Thailand (UTACTH) and SPEL Semiconductor (SPEL). ASECL is an existing assembly and test site for Silicon Labs, and is certified to ISO9001, ISO14001, and ISO/TS16949. Assembly Site Change: ASECL is a fully qualified supplier for the clock buffer product families in 8-pin SOIC package. Qualified Bill of Materials:			
Supplier	SPEL (Existing)	UTACTH (Existing)	ASECL (New)
Leadframe	Stamped, Alloy C194, Ag-Spot plated	Stamped, Alloy C194, Ag-Spot plated	Stamped, Matrix-Strip, Double-Ring Ag-plating
Die Attach	Sumitomo CRM 1076NS	Ablestik 8200T	Hitachi EN4900
Wire bond	1.0 mil Au wire	0.8 mil Au wire	0.8 mil Au wire
Mold Compound	Sumitomo G600	Sumitomo G600	Hitachi CEL9240
Lead finish	Sn 100 (Matte Tin)	Sn 100 (Matte Tin)	Sn 100 (Matte Tin)
Reason for Change: Silicon labs has added ASECL to support the supply continuity.			
Impact on Form, Fit, Function, Quality, Reliability: There is no impact on fit, function, quality. MSL reliability level changed to MSL2A. Form changed per the listed bill of materials. The clock buffer products manufactured/assembled at ASECL fully comply with datasheet parameters and quality levels.			
Product Identification: See Appendix-A for affected part numbers			



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Last Date of Unchanged Product: 5/7/2014

Qualification Samples:

ASECL samples are available now. Please contact your local Silicon Labs sales representative to order samples. A list of authorized representatives may be found at www.silabs.com

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.

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

Qualification Data:

See Appendix B for Assembly Qualification Report.

Material Environmental Test Reports and MDDS reports are available at www.silabs.com/Quality. If you have questions about this notification, please contact your Silicon Labs sales representative. A list of Silicon Labs sales representatives is available at www.silabs.com

Appendix A: Lists of Parts Affected

SL12804BSC	SL23EP04SI-1
SL12804BSCT	SL23EP04SI-1H
SL2305BSC-1H	SL23EP04SI-1HT
SL2305BSC-1HT	SL23EP04SI-1T
SL2305NZSC	SL23EP04SI-2
SL2305NZSCT	SL23EP04SI-2H
SL2305NZSI	SL23EP04SI-2HT
SL2305NZSIT	SL23EP04SI-2T
SL2305SC-1	SL23EP05BSC-1
SL2305SC-1H	SL23EP05BSC-1H
SL2305SC-1HT	SL23EP05BSC-1HT
SL2305SC-1T	SL23EP05BSC-1T
SL2305SI-1	SL23EP05SC-1
SL2305SI-1H	SL23EP05SC-1H
SL2305SI-1HT	SL23EP05SC-1HT
SL2305SI-1T	SL23EP05SC-1T
SL23EP04SC-1	SL23EP05SI-1
SL23EP04SC-1H	SL23EP05SI-1H
SL23EP04SC-1HT	SL23EP05SI-1HT
SL23EP04SC-1T	SL23EP05SI-1T
SL23EP04SC-2	
SL23EP04SC-2H	
SL23EP04SC-2HT	
SL23EP04SC-2T	

Appendix B: Qualification Report:

SL12804/SL2305/SL23EP0x Qualification Report



W7101F1 Product Qualification Plan and Report Rev. E

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Part Rev B, GSMC Fabrication, ASECL Assembly except as noted							
Test Name	Test Condition	Qualification	Lot ID or Start	Fai/Pass or End	Notes	Summary	Status
Test Group A - Accelerated Environment Stress Tests - 8-50IC							
HAST	JA110 130°C, 85%RH Vcc=5.0V, 96 hours	3 lots, N=>25	Q28932	0/80	1, 2		
			Q28935	0/77	1, 2	3 lots	
			Q30948	0/80	1, 2	0/237	Pass
Temp Cycle	JA104 Cond C: -65°C to 150°C 500 cycles	3 lots, N=>25	Q28934	0/80	1, 2		
			Q28937	0/80	1, 2	3 lots	
			Q30947	0/80	1, 2	0/240	Pass
HTSL	JA103 175°C, 500hr	3 lots, N=>25	Q28933	0/80	1, 2		
			Q28936	0/80	1, 2	3 lots	
			Q30949	0/80	1, 2	0/240	Pass
Test Group B - Accelerated Lifetime Simulation Tests							
HTOL	JA108 125°C, Dynamic Vcc=3.8V, 1000 hours	3 lots, N=>77	RDR10-31	0/77	3		
			RDR10-27	0/116	3	3 lots	
			RDR10-29	0/116	3	0/309	Pass
Test Group E - Electrical Verification							
ESD-HBM	JA114	1 lot, N=>3	RDR10-27		3		4 kV
ESD-MMM	JA115	1 lot, N=>3	QRDR10-27		3		250 V
ESD-CDM	JC101	1 lot, N=>3	Q31377		3		2 kV
Latch Up	JE5D78 ±200mA Overvoltage = 5.7V	1 lot, N=>6	RDR10-27	25 C	3		Pass

Notes:

1. Parts are Pre-conditioned at MSL2A/260°C
2. Leveraged package family qualification data
3. Leveraged die family qualification data

SL12804/SL2305/SL23EP0x Qualification Report



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Part Rev B, GSM C Fabrication, ASECL Assembly except as noted

Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
This report applies to the following part numbers:							
SL12804BSC	SL12804B5CT	SL2305B5C-1H		SL2305B5C-1HT		SL2305NZ5C	
SL2305NZ5CT	SL2305NZ5I	SL2305NZ5IT		SL23055C-1		SL23055C-1H	
SL23055C-1HT	SL23055C-1T	SL23055I-1		SL23055I-1H		SL23055I-1HT	
SL23055I-1T	SL23EP045C-1	SL23EP045C-1H		SL23EP045C-1HT		SL23EP045C-1T	
SL23EP045C-2	SL23EP045C-2H	SL23EP045C-2HT		SL23EP045C-2T		SL23EP045I-1	
SL23EP045I-1H	SL23EP045I-1HT	SL23EP045I-1T		SL23EP045I-2		SL23EP045I-2H	
SL23EP045I-2HT	SL23EP045I-2T	SL23EP05B5C-1		SL23EP05B5C-1H		SL23EP05B5C-1HT	
SL23EP05B5C-1HT	SL23EP05B5C-1T	SL23EP055C-1		SL23EP055C-1H		SL23EP055C-1HT	
SL23EP055C-1T	SL23EP055I-1	SL23EP055I-1H		SL23EP055I-1HT		SL23EP055I-1T	

Approved by: Noel Arguello

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Prepared on: 07-May-14