



200630810 Change Die Attach Epoxy for 48-pin QFN Video Products

PCN Issue Date: 6/30/2020

Effective Date: 10/6/2020

PCN Type: Assembly

Description of Change

Silicon Labs is pleased to announce the successful qualification of die attach material of EN-4900GC for 4x4 TV Tuner. Die attach epoxy will change from Henkel 8290 to Hitachi EN-4900GC for material standardization with TV demod 7x7QFN built in JCET.

As of the effective date, Silicon Labs will phase in the new die attach material once the current assembly materials are depleted.

Reason for Change

Material standardization for die attach epoxy at JCET

Impact on Form, Fit, Function, Quality, Reliability

There is no change on form, fit, function, quality or reliability.

Product Identification

Existing Part #
SI2137-A30-GM
SI2137-A30-GMR
SI2147-A30-GM
SI2147-A30-GMR
SI2157-A30-GM
SI2157-A30-GMR
SI2158-B45-ZM3
SI2158-B45-ZM3R
SI2158-B50-ZM3
SI2158-B50-ZM3R
SI2177-A30-GM
SI2177-A30-GMR
SI2178-B50-GM
SI2178-B50-GMR
SI2190-B30-ZM7
SI2190-B30-ZM7R
SI2190-B30-ZM8
SI2190-B30-ZM8R

Last Date of Unchanged Product: 10/6/2020

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

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>

Qualification Data

See attached Qualification Report.



Si2127, Si2137, Si2147, Si2157, Si2158, Si2177, Si2178 Qualification Report

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Part Rev B, SMIC Fabrication, JCET 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 130°C, 85%RH Vcc=3.6V, 96 hours	3 lots, N=>25	Q041867	0/25	1		
			Q041865	0/25	1	3 lots	Pass
			Q041866	0/25	1	0/75	
Temp Cycle	JA104 Cond C: -65°C to 150°C 500 cycles	3 lots, N=>25	Q046212	0/25	1		
			Q046262	0/25	1	3 lots	Pass
			Q046263	0/25	1	0/75	
HTSL	JA103 150°C, 1000hr	3 lots, N=>25	Q041891	0/25	1		
			Q041892	0/25	1	3 lots	Pass
			Q041893	0/25	1	0/75	
uHAST	JA110 130°C, 85%RH 96 hours	3 lots, N=>25	Q046213	0/25	1		
			Q046260	0/25	1	3 lots	Pass
			Q046261	0/25	1	0/75	
Test Group E – Electrical Verification							
ESD-CDM	JESD22-C101	1 lot, N=>3	Q041525	0/3		750 V	Class III

Notes:

- Parts are Pre-conditioned at MSL2/260°C

This report applies to the following part numbers:

Si2127-A30-GM	Si2127-A30-GMR
Si2137-A30-GM	Si2137-A30-GMR
Si2147-A30-GM	Si2147-A30-GMR
Si2157-A30-GM	Si2157-A30-GMR
Si2177-A30-GM	Si2177-A30-GMR
Si2158-B40-GM	Si2158-B40-GMR
Si2178-B40-GM	Si2178-B40-GMR
Si2178-B50-GM	Si2178-B50-GMR



Si2158 Qualification Report

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Part Rev B, SMIC Fabrication, JCET 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 130°C, 85%RH Vcc=3.6V, 96 hours	3 lots, N=>25	Q041867	0/25	1	3 lots 0/75	Pass
			Q041865	0/25	1		
			Q041866	0/25	1		
Temp Cycle	JA104 Cond C: -65°C to 150°C 500 cycles	3 lots, N=>25	Q046212	0/25	1	3 lots 0/75	Pass
			Q046262	0/25	1		
			Q046263	0/25	1		
HTSL	JA103 150°C, 1000hr	3 lots, N=>25	Q041891	0/25	1	3 lots 0/75	Pass
			Q041892	0/25	1		
			Q041893	0/25	1		
uHAST	JA110 130°C, 85%RH 96 hours	3 lots, N=>25	Q046213	0/25	1	3 lots 0/75	Pass
			Q046260	0/25	1		
			Q046261	0/25	1		
Test Group E – Electrical Verification							
ESD-CDM	JESD22-C101	1 lot, N=>3	Q041525	0/3		750 V	Class III

Notes:

- Parts are Pre-conditioned at MSL2/260°C

This report applies to the following part numbers:

Si2158-B45-ZM3
Si2158-B50-ZM3

Si2158-B45-ZM3R
Si2158-B50-ZM3R



Si2190 Qualification Report

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Part Rev B, SMIC Fabrication, JCET 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	3 lots, N=>25	Q041860	0/25	1	3 lots 0/75	Pass
	130°C, 85%RH		Q041859	0/25	1		
	Vcc=3.45V, 96 hours		Q041861	0/25	1		
Temp Cycle	JA104	3 lots, N=>25	Q046212	0/25	1	3 lots 0/75	Pass
	Cond C: -65°C to 150°C		Q046262	0/25	1		
	500 cycles		Q046263	0/25	1		
HTSL	JA103	3 lots, N=>25	Q041889	0/25	1	3 lots 0/75	Pass
	150°C, 1000hr		Q041890	0/25	1		
			Q041862	0/25	1		
uHAST	JA110	3 lots, N=>25	Q046213	0/25	1	3 lots 0/75	Pass
	130°C, 85%RH		Q046260	0/25	1		
	96 hours		Q046261	0/25	1		
Test Group E – Electrical Verification							
ESD-CDM	JESD22-C101	1 lot, N=>3	Q041525	0/3		750 V	Class III

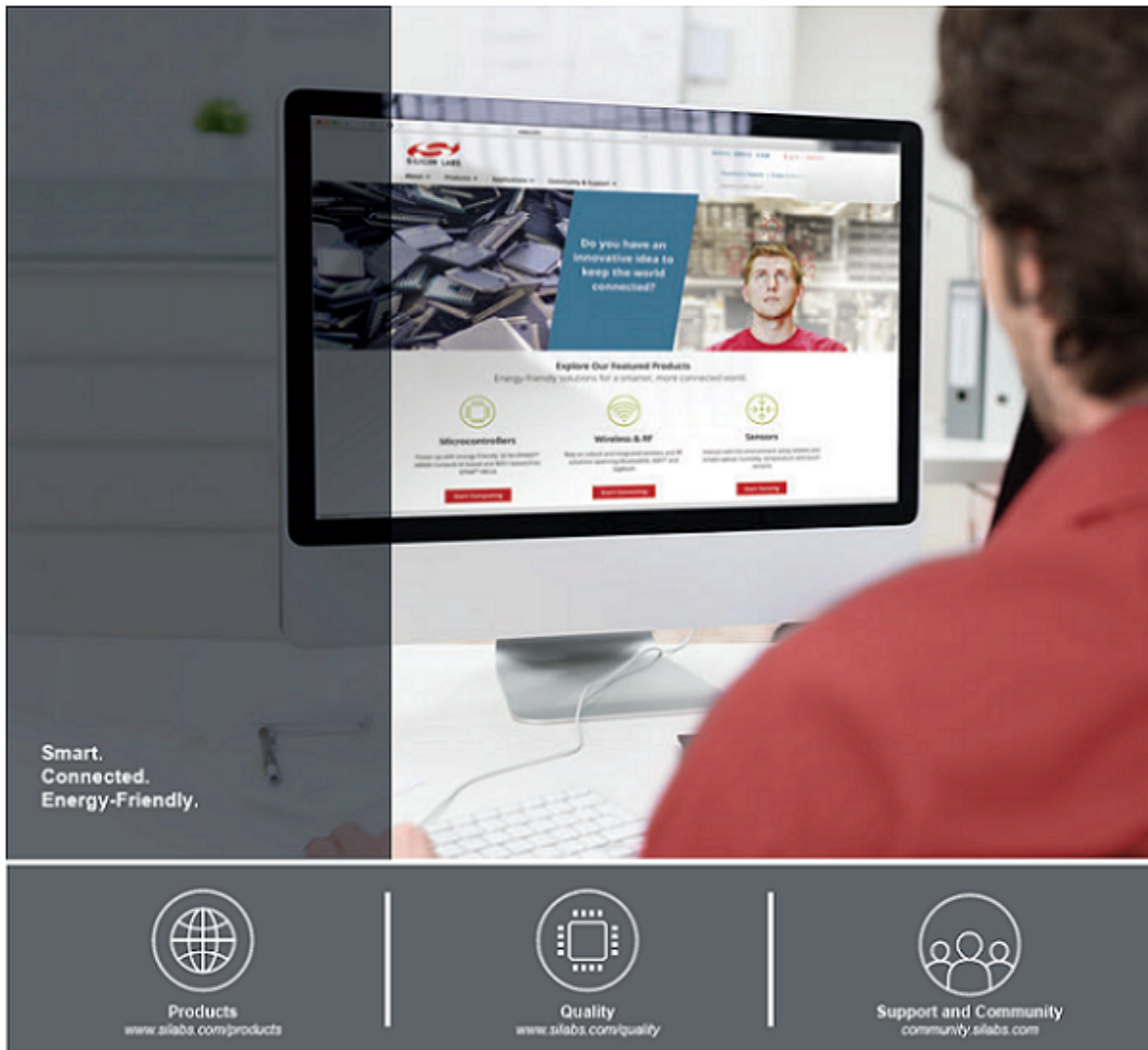
Notes:

- Parts are Pre-conditioned at MSL2/260°C

This report applies to the following part numbers:

Si2190-B30-ZM7
Si2190-B30-ZM8

Si2190-B30-ZM7R
Si2190-B30-ZM8R



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