



PRODUCT / PROCESS CHANGE NOTIFICATION

PCN-000329

Date: 9/9/2015

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<input checked="" type="checkbox"/> Semtech Corporation, 200 Flynn Road, Camarillo CA 93012
<input type="checkbox"/> Semtech Canada Corporation, 4281 Harvester Road, Burlington, Ontario L7L 5M4 Canada
<input type="checkbox"/> Semtech Irvine, 5141 California Ave., Suite 100, Irvine CA 92617
<input type="checkbox"/> Semtech Neuchatel Sarl, Route des Gouttes d'Or 40, CH-2000 Neuchatel Switzerland
<input type="checkbox"/> Nanotech Semiconductor, Semtech Corporation, 2 West Point Court, Bristol, United Kingdom, BS32 4PY
<input type="checkbox"/> Semtech Corpus Christi SA de CV, Carretera Matamorros Edificio 7, Reynosa, Tamaulipas, Mexico 88780
<input type="checkbox"/>

Change Details

Part Number(s) Affected: RClamp3328P.TNT RClamp3328P.TZT	Customer Part Number(s) Affected: <input checked="" type="checkbox"/> N/A
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Description, Purpose and Effect of Change:

As part of Semtech continuous process improvement, Semtech is changing the die attach material for 2 outer die from Henkel QMI519LB epoxy to Henkel 8008MD conductive wafer backside coating (CWBC) on RClamp3328P (refer to Attachment 1). This change will improve the robustness of the die attach process.

Change Classification	<input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor	Impact to Form, Fit, Function	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Impact to Data Sheet	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	New Revision or Date	<input checked="" type="checkbox"/> N/A

Impact to Performance, Characteristics or Reliability: None.

Implementation Date	12/7/2015	Work Week	5015
Last Time Ship (LTS) Of unchanged product	1/31/2016	Affecting Lot No. / Serial No. (SN)	N/A
Sample Availability	8/24/2015	Qualification Report Availability	5/15/2015

Supporting Documents for Change Validation/Attachments:

- Rel Report for Rel Job #5911

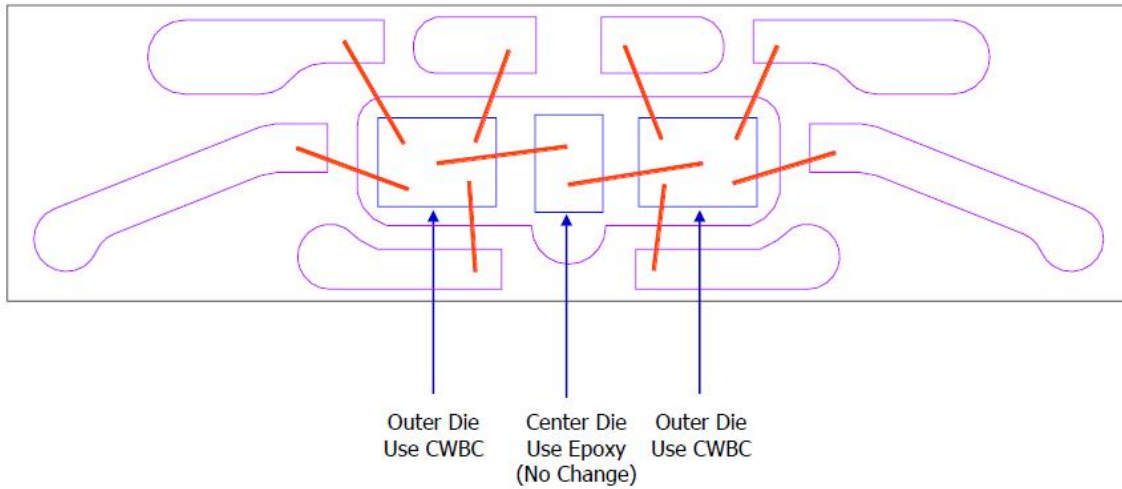
Issuing Authority

Semtech Business Unit:	Protection	
Semtech Contact Info:	Les Fang Yuen Semtech Corporation Sr. Eng Manager, QA 200 Flynn Road Camarillo, CA 93012 Email: lfangyuen@semtech.com Phone: (949) 269-4443 [office]	

FOR FURTHER INFORMATION & WORLDWIDE SALES COVERAGE: <http://www.semtech.com/contact/index.html#support>

Attachment 1: Locations of CWBC implementation.

RClamp3328P Epoxy to CWBC Conversion





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Attachment 2: Reliability Report - Rel Job #5911

Rel Job Detail Report

by Sublot, by Sequence
 Contact: Gurmail Sajjan
 (805) 480 2142
 gsajjan@semtech.com

Businessunit	Protection			
Reljob#	Part_Number, Job Name/Type	Fab, Package	Rel Job Status	Key Dates:
5911	RClamp3328P	ASMC21 TVS	Rel Testing Complete Passes All Requirements	Job Accepted: 21-Jan-2015
	Conductive WBC package qual	SGP3810N9		Requested CD:
	New Product on qualified process and qualified package			Actual Start Date: 18-Nov-2014
				ECD for Conditional:
				Job ECD: 15-May-2015

Completed Tasks

1.0	Lot	AER2119	AssemblyLot	AER2119	DateCode	1445		
Seq	TaskCode	SampleSize	Criteria	Complete	Failures	DataSource	Results/Comments	
1	Data-Prep	None	None	12-Mar-2015		Camarillo		
2	HTRB_Pre_Elect_150°C_RT24	105	Pass on Zero Fails	08-Apr-2015	0	Camarillo		
3	HTRB_150°C_Real Time_0024	105	Pass on Zero Fails	09-Apr-2015	0	Camarillo		
4	HTRB_Pre_Elect	105	Pass on Zero Fails	18-Mar-2015	0	Camarillo		
5	BI_BD_Valid	NA	Meet HTOL Schematics	19-Mar-2015	0	Camarillo		
6	HTRB_150°C_0072	105	Pass on Zero Fails	23-Mar-2015	0	Camarillo		
7	HTRB_150°C_0408	105	Pass on Zero Fails	07-Apr-2015	0	Camarillo		
8	HTS_Pre_Elect	77	Pass on Zero Fails	16-Mar-2015	0	Camarillo		
9	HTS_0188	77	Pass on Zero Fails	23-Mar-2015	0	Camarillo		
10	HTS_0500	77	Pass on Zero Fails	08-Apr-2015	0	Camarillo		
11	HTS_1000	77	Pass on Zero Fails	27-Apr-2015	0	Camarillo		
12	Pre_Elect_Precond	154	Pass on Zero Fails	17-Mar-2015	0	Camarillo		
13	Precond_Temp_Cyc_5cyc	154	Pass on Zero Fails	17-Mar-2015	0	Camarillo		
14	Precond_HTS_24hr	154	Pass on Zero Fails	18-Mar-2015	0	Camarillo		
15	Precond_85/85_NoElec188hr	154	Pass on Zero Fails	25-Mar-2015	0	Camarillo		



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16 Precond_260°C_IR_Ref_Char	154	Pass on Zero Fails	25-Mar-2015	0	Camarillo
17 T/C_Pre_Elect	77	Pass on Zero Fails	25-Mar-2015	0	Camarillo
18 T/C_wPre_0250	77	Pass on Zero Fails	31-Mar-2015	0	Camarillo
19 T/C_wPre_0500	77	Pass on Zero Fails	06-Apr-2015	0	Camarillo
20 T/C_wPre_1000	77	Pass on Zero Fails	15-Apr-2015	0	Camarillo
21 85/85_W/Pre_Pre Elec	77	Pass on Zero Fails	25-Mar-2015	0	Camarillo
22 85/85_on/off__168hrs	77	Pass on Zero Fails	09-Apr-2015	0	Camarillo
23 85/85_on/off__500hrs	77	Pass on Zero Fails	24-Apr-2015	0	Camarillo
24 85/85_on/off_1000hrs	77	Pass on Zero Fails	14-May-2015	0	Camarillo
25 Construct_Package	5 unique packaged devices minimum.	No Major Findings. Q&R to review construction analysis report.	10-Apr-2015	0	Camarillo
26 CSAM Analysis	22	Pass on Zero Fails	17-Mar-2015	0	Camarillo
27 Precond_Temp_Cyc_5cyc	22	Pass on Zero Fails	18-Mar-2015	0	Camarillo
28 Precond_HTS_24hr	22	Pass on Zero Fails	19-Mar-2015	0	Camarillo
29 Precond_85/85_NoElec168hr	22	Pass on Zero Fails	25-Mar-2015	0	Camarillo
30 Precond_260°C_IR_Ref_Char	22	Pass on Zero Fails	25-Mar-2015	0	Camarillo
31 CSAM Analysis	22	Pass on Zero Fails	30-Mar-2015	0	Camarillo
32 Pack_Clos	0	0	15-May-2015		Camarillo

2.0	Lot	AER2120	AssemblyLot	AER2120	DateCode	1445
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Seq	TaskCode	SampleSize	Criteria	Complete	Failures	DataSource	Results/Comments
1	Data-Prep	None	None	12-Mar-2015		Camarillo	
2	HTRB_Pre_Elect_150°C_RT24	105	Pass on Zero Fails	08-Apr-2015	0	Camarillo	
3	HTRB_150°C_Real Time_0024	105	Pass on Zero Fails	09-Apr-2015	0	Camarillo	
4	HTRB_Pre_Elect	105	Pass on Zero Fails	18-Mar-2015	0	Camarillo	
5	BI_BD_Valid	NA	Meet HTOL Schematics	19-Mar-2015	0	Camarillo	
6	HTRB_150°C_0072	105	Pass on Zero Fails	23-Mar-2015	0	Camarillo	



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7	HTRB_150°C_0408	105	Pass on Zero Fails	07-Apr-2015	0	Camarillo
8	HTS_Pre_Elect	77	Pass on Zero Fails	16-Mar-2015	0	Camarillo
9	HTS_0168	77	Pass on Zero Fails	23-Mar-2015	0	Camarillo
10	HTS_0500	77	Pass on Zero Fails	06-Apr-2015	0	Camarillo
11	HTS_1000	77	Pass on Zero Fails	27-Apr-2015	0	Camarillo
13	Pre_Elect_Precond	154	Pass on Zero Fails	17-Mar-2015	0	Camarillo
14	Precond_Temp_Cyc_5cyc	154	Pass on Zero Fails	17-Mar-2015	0	Camarillo
15	Precond_HTS_24hr	154	Pass on Zero Fails	18-Mar-2015	0	Camarillo
16	Precond_85/85_NoElec168hr	154	Pass on Zero Fails	25-Mar-2015	0	Camarillo
17	Precond_IR_Ref1_Char	154	Pass on Zero Fails	25-Mar-2015	0	Camarillo
18	T/C_Pre_Elect	77	Pass on Zero Fails	25-Mar-2015	0	Camarillo
19	T/C_wPre_0250	77	Pass on Zero Fails	25-Mar-2015	0	Camarillo
20	T/C_wPre_0500	77	Pass on Zero Fails	06-Apr-2015	0	Camarillo
21	T/C_wPre_1000	77	Pass on Zero Fails	15-Apr-2015	0	Camarillo
22	85/85_W/Pre_Elec	77	Pass on Zero Fails	25-Mar-2015	0	Camarillo
23	85/85_on/off__168hrs	77	Pass on Zero Fails	09-Apr-2015	0	Camarillo
24	85/85_on/off__500hrs	77	Pass on Zero Fails	24-Apr-2015	0	Camarillo
25	85/85_on/off_1000hrs	77	Pass on Zero Fails	14-May-2015	0	Camarillo
26	Pack_Clos	0	0	15-May-2015		Camarillo

3.0	Lot	AER2121	AssemblyLot	AER2121	DateCode	1445
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Seq	TaskCode	SampleSize	Criteria	Complete	Failures	DataSource	Results/Comments
1	Data-Prep	None	None	12-Mar-2015		Camarillo	
2	HTRB_Pre_Elect_150°C_RT24	105	Pass on Zero Fails	08-Apr-2015	0	Camarillo	
3	HTRB_150°C_Real Time_0024	105	Pass on Zero Fails	10-Apr-2015	0	Camarillo	
4	HTRB_Pre_Elect	105	Pass on Zero Fails	19-Mar-2015	0	Camarillo	
5	BI_BD_Valid	NA	Meet HTOL Schematics	19-Mar-2015	0	Camarillo	
6	HTRB_150°C_0072	105	Pass on Zero Fails	23-Mar-2015	0	Camarillo	



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7 HTRB_150°C_0408	105	Pass on Zero Fails	07-Apr-2015	0	Camarillo
8 HTS_Pre_Elect	77	Pass on Zero Fails	17-Mar-2015	0	Camarillo
9 HTS_0108	77	Pass on Zero Fails	24-Mar-2015	0	Camarillo
10 HTS_0500	77	Pass on Zero Fails	07-Apr-2015	0	Camarillo
11 HTS_1000	77	Pass on Zero Fails	28-Apr-2015	0	Camarillo
13 Pre_Elect_Precond	154	Pass on Zero Fails	19-Mar-2015	0	Camarillo
14 Precond_Temp_Cyc_5cyc	154	Pass on Zero Fails	19-Mar-2015	0	Camarillo
15 Precond_HTS_24hr	154	Pass on Zero Fails	20-Mar-2015	0	Camarillo
16 Precond_85/85_NoElec108hr	154	Pass on Zero Fails	27-Mar-2015	0	Camarillo
17 Precond_IR_Ref1_Char	154	Pass on Zero Fails	27-Mar-2015	0	Camarillo
18 T/C_Pre_Elect	77	Pass on Zero Fails	27-Mar-2015	0	Camarillo
19 T/C_wPre_0250	77	Pass on Zero Fails	02-Apr-2015	0	Camarillo
20 T/C_wPre_0500	77	Pass on Zero Fails	07-Apr-2015	0	Camarillo
21 T/C_wPre_1000	77	Pass on Zero Fails	17-Apr-2015	0	Camarillo
22 85/85_W/Pre_Elec	77	Pass on Zero Fails	27-Mar-2015	0	Camarillo
23 85/85_on/off__108hrs	77	Pass on Zero Fails	09-Apr-2015	0	Camarillo
24 85/85_on/off__500hrs	77	Pass on Zero Fails	24-Apr-2015	0	Camarillo
25 85/85_on/off_1000hrs	77	Pass on Zero Fails	14-May-2015	0	Camarillo
26 Pack_Clos	0	0	15-May-2015		Camarillo



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4.0	Lot	AER2123	AssemblyLot	AER2123	DateCode	1445		
Seq	TaskCode	SampleSize	Criteria	Complete	Failures	DataSource	Results/Comments	
1	Data-Prep	None	None	12-Mar-2015		Camarillo		
2	HTRB_Pre_Elect_150°C_RT24	105	Pass on Zero Fails	08-Apr-2015	0	Camarillo		
3	HTRB_150°C_Real Time_0024	105	Pass on Zero Fails	10-Apr-2015	0	Camarillo		
4	HTRB_Pre_Elect	105	Pass on Zero Fails	19-Mar-2015	0	Camarillo		
5	BI_BD_Valid	NA	Meet HTOL Schematics	19-Mar-2015	0	Camarillo		
6	HTRB_150°C_0072	105	Pass on Zero Fails	23-Mar-2015	0	Camarillo		
7	HTRB_150°C_0408	105	Pass on Zero Fails	07-Apr-2015	0	Camarillo		
8	HTS_Pre_Elect	77	Pass on Zero Fails	17-Mar-2015	0	Camarillo		
9	HTS_0168	77	Pass on Zero Fails	24-Mar-2015	0	Camarillo		
10	HTS_0500	77	Pass on Zero Fails	07-Apr-2015	0	Camarillo		
11	HTS_1000	77	Pass on Zero Fails	28-Apr-2015	0	Camarillo		
13	Pre_Elect_Precond	154	Pass on Zero Fails	19-Mar-2015	0	Camarillo		
14	Precond_Temp_Cyc_5cyc	154	Pass on Zero Fails	19-Mar-2015	0	Camarillo		
15	Precond_HTS_24hr	154	Pass on Zero Fails	20-Mar-2015	0	Camarillo		
16	Precond_85/85_NoElec168hr	154	Pass on Zero Fails	27-Mar-2015	0	Camarillo		
17	Precond_IR_Refl_Char	154	Pass on Zero Fails	27-Mar-2015	0	Camarillo		
18	T/C_Pre_Elect	77	Pass on Zero Fails	27-Mar-2015	0	Camarillo		
19	T/C_wPre_0250	77	Pass on Zero Fails	02-Apr-2015	0	Camarillo		
20	T/C_wPre_0500	77	Pass on Zero Fails	07-Apr-2015	0	Camarillo		
21	T/C_wPre_1000	77	Pass on Zero Fails	17-Apr-2015	0	Camarillo		
22	85/85_W/Pre_Elec	77	Pass on Zero Fails	27-Mar-2015	0	Camarillo		
23	85/85_on/off__168hrs	77	Pass on Zero Fails	09-Apr-2015	0	Camarillo		
24	85/85_on/off__500hrs	77	Pass on Zero Fails	24-Apr-2015	0	Camarillo		
25	85/85_on/off_1000hrs	77	Pass on Zero Fails	14-May-2015	0	Camarillo		
26	Pack_Clos	0	0	15-May-2015		Camarillo		



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