Littelfuse
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Mar. 7th, 2014

RE: LFPCN41213

To: our valued customers

From: Littelfuse Product Management Team

Subject : LFPCN41213- SOT23-6 Package alternative Backend assembly site approval

Littelfuse would like to notify you that HANA-AYT Thailand factory will be fully approved as an alternative SOT23-6 Package assembly site , and HANA-AYT Thailand as an alternative assembly site qualification is completed on Feb 25th 2014 . Please refer to next page for qualification report.

There will be no changes to fit, form, shape and function of the finished product in accordance with established performance and reliability qualification criteria.

Please see the attached documentation for change detail and affected part numbers.

Form, fit, function changes: None
Part number changes: None
Effective date: June 1st, 2014
Replacement products: N/A
Last time buy: N/A

This notification is for your information and acknowledgement. If you have any other questions or concerns, please contact Meng Wang, Assistant Product Manager.

We value your business and look forward to assisting you

Best Regards,
Meng Wang
Assistant Product Marketing Manager,
Tel: +86 510 85277701, extension 7955
Mwang3@littelfuse.com

Affected Parts number as below.

SDP0240T023G6RP
P834SDP0240T023G6

800 E. Northwest Highway Des Plaines, IL 60016

Product/Process Change Notice (PCN)

PCN#: LFPCN41213 Date: Mar 7th 2013

Product Identification:

SDP Biased series

Implementation Date for Change:

June 1st 2014

Contact Information

Name: Meng Wang

Title: Assistant Product Manager

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Category of Change:

- ☐ Assembly Process
- ☐ Data Sheet
- ☐ Technology
- ☐ Discontinuance/Obsolescence
- ☐ Equipment
- ☒ Manufacturing Site
- ☐ Raw Material
- ☐ Testing
- ☐ Fabrication Process
- ☐ Other: _____

Description of Change:

Through this PCN, Littelfuse would seek approval from customer to qualify HANA-Ayt Thailand as alternative SOT23-6 assembly manufacturing site .

Important Dates:

- ☒ Qualification Samples Available: Mar 7th 2014
- ☐ Final Qualification Data Available: Mar 7st 2014
- ☐ Date of Final Product Shipment: N/A
- ☐ Last Time Buy: N/A

Method of Distinguishing Changed Product

- ☐ Product Mark, N/A
- ☒ Date Code, 4F
- ☐ Other,

Demonstrated or Anticipated Impact on Form, Fit, Function or Reliability:

N/A

LF Qualification Plan/Results:

availabe on Mar 7th 2014

Customer Acknowledgement of Receipt: Littelfuse requests you acknowledge receipt of this PCN. In your acknowledgement, you can grant approval or request additional information. Littelfuse will assume the change is acceptable if no acknowledgement is received within 30 days of this notice. Lack of any additional response within 90 days of PCN issuance further constitutes acceptance of the change.

PCN Report
ETR # Various

Prepared By : Jordan Hsieh-SPA Product Engineering Manager,
: Light Hsieh-SPA Product Engineer
Date : Feb/25/2014
Device : SDPxxxxT023G6RP series products
Revision : B

1.0 Objective:

The purpose of this project is to qualify a second / alternate location for SDPxxxxT023G6RP series products supplier. Succeeding pages summarize the physical, electrical and reliability test performed in qualification lots.

2.0 Applicable Devices:

Part Numbers	Part Numbers
SDP0240T023G6RP	
P834SDP0240T023G6	

3.0 Assembly, Process & Material Differences/Changes:

3.1 Assembly and Process Changes

There are no changes in the assembly and process method.

3.2 Material Changes

Material	SDP0240T023G6RP				
	Original		New		Changed?
	Material Name	Supplier	Material Name	Supplier	
Leadframe	Ni-Fe Alloy-A42	PSMC	F456	SANSUNG	Yes
Die Attach Material	84-1LMISR4	HENKEL	ABLEBOND 2200D	HENKEL	Yes
Au Wire	1.65 COPPER	HERAEUS	1.50 COPPER	HEAREUS	Yes
Molding Compound	EME-G600	SUMITOMO	EME-G600	SUMITOMO	No
Lead Finish	Pure Tin	REDRING	Pure Tin	Thaisarco	Yes

4.0 Packing Method

There will be no changes in the packing method.

5.0 Physical Differences/Changes:

There is no change in mechanical specification or package outline dimension (POD).

6.0 Reliability Test Results Summary:

Test Items	Condition	S/S	Results	ETR #
Precondition	(1) Bake 24hr @ 150°C (2) 168hrs @ 85% RH and 85°C (3) IR Reflow, 3 reflows, Peak Temperature of 260°C	80	0/80	ETR 51954
DC Blocking(HTRB)	Bias = Rated Voltage Ta = 125°C Duration = 168 Hours	80	0/80	
Temperature Cycle	Ta = -65°C to +150°C Duration = 200 Cycles	80	0/80	
Temperature/Humidity (H^3TRB)	Ta = 85°C, 85% RH Duration = 168 Hours	80	0/80	
Autoclave	Ta = 121°C, 100%RH, 15psi Duration = 168 Hours	80	0/80	
High Temperature Storage	Ta = 150°C Duration = 168 Hours	80	0/80	
Moisture Sensitivity Level(MSL)	Refer to Precondition Test	11	0/11	
Solderability	**Refer to Precondition Test**	**22**	0/22	
Resistance to Solder Heat	Ta = 260°C Duration = 10s	**80**	0/80	

7.0 Electrical Characteristic Summary:

There is no change in electrical characteristics. Characterization data is available upon request.

8.0 Changed Part Identification:

There is no change in the SDPxxxxT023G6RP series products manufactured by currently location.

9.0 Recommendations & Conclusions:

Based on the test results, it is determined that the second/alternative assembly is qualified and certified for production of Littelfuse SDPxxxxT023G6RP series products.

10.0 Approvals:

Jordan Hsieh
SPA Product Engineering Manager
Littelfuse, Hsinchu