Process Change Notification

PCN Number: PCN-2020-131 **PCN Notification Date:** 08/31/2020

Final PCN

Lead Frame Supplier Source change to support the 40 VQFN component material

Dear Customer,

We are pleased to announce the successful completion of the qualification for the Lead Frame Supplier SH Electronics Suzhou Co., Ltd (Jiangsu Suzhou CHINA) an affiliate of Chang Wah Technology Co., Ltd. to support the 40 VQFN component material.

This document serves as the Final PCN notification for the use and migration to the 40 VQFN Lead Frame Supplier SH Electronics Suzhou Co., Ltd (Jiangsu Suzhou CHINA) an affiliate of Chang Wah Technology Co., Ltd. This described change is effective immediately based on the successful completion of the qualification to ensure continuity of supply without disruption.

Cirrus Logic would like to take this opportunity to thank our customers for their cooperation and assistance in this respective matter. Any specific or immediate inquiries should be directed to your local Field Sales Representative.

Sincerely,

Quality Systems Administrator
Cirrus Logic Corporate Quality
Phone: +1(512) 851-4000

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Products Affected:

The devices listed on this page are the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

Technical details of this Process / Product Change follow on the next page(s).

Title:	Lead Frame Supplier Source change to support the 40 VQFN component material				
Customer Contact:	Local Field Sales Representative	**Phone:**	(512) 851-4000	**Dept:**	Corporate Quality
Proposed 1st Ship Date:	August 2020	**Estimated Sample Availability Date:**		July 2020	

	Assembly Site		Assembly Process		Assembly Materials
	Wafer Fab Site		Wafer Fab Process		Wafer Fab Materials
	Wafer Bump Site		Wafer Bump Process		Wafer Bump Material
	Test Site		Test Process		Design
	Electrical Specification	X	Mechanical Specification		Part Number
	Packing/Shipping/Labeling	X	Other		Data Sheet

Comments: Lead Frame Material Supplier

PCN Details

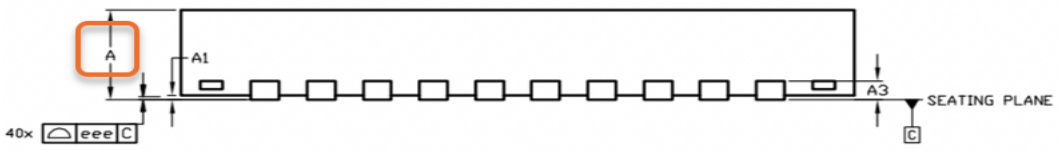
Description of Change:

- **Lead Frame Supplier:**
  - **From:** Dynacraft Industries Sdn. Bhd. (Penang, Malaysia)
  - **To:** SH Electronics Suzhou Co., Ltd (Jiangsu Suzhou CHINA) an affiliate of Chang Wah Technology Co., Ltd.
    - **Note:** SH Electronics Suzhou Co., Ltd. is a qualified lead frame supplier

- **Lead Frame POD** (Package Outline Drawing) **Dimension(s)**:
  (Reference Appendix A: Dimensional Comparison Drawing)

		CURRENT			NEW		
	Dim	Min	Nom	Max	Min	Nom	Max
Pkg Height	**A**	0.85	0.90	0.95	0.80	0.85	0.90

Note: POD Remains Consistent with JEDEC Standard. Data sheet update not required.



SIDE VIEW

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Special Note: Items Remaining the Same

- **All other POD (Package Outline Drawing) Dimensions**
  Remain the same: **Reference Appendix A**
- **Lead Frame Material:**
  Remains the same: C194
- **Mold Compound Material:**
  Remains the same: Hitachi CEL 9240
- **DIE Attach Material:**
  Remains the same: Ablebond 8290
- **Moisture Sensitivity Level (MSL):**
  Remains the same: MSL 3

Reason for Change:

Maintain continuity of material supply.

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

No anticipated adverse impact to the quality and/or reliability of said product.

Anticipated Impact on Material Declaration:

☒ No Impact to the Material Declaration

☐ Material Declarations or Product Content reports are driven from production data and will be available following the production release.

Product Affected:

Device	Cirrus Logic Part Number
1	CS42L52-CNZ
2	CS42L52-CNZR
3	CS43L22-CNZ
4	CS43L22-CNZR

Changes To Product Identification Resulting From This PCN:

There are no changes to the production identification

The Qualification Plans are designed using JEDEC and other applicable industry standards. An overall summary of the Qualification results will be submitted upon completion.

Qualification Plan

CS42L52-CNZ Qualification: ☐ **Plan** ☒ **Test Results**			
Reliability Test	**Standard**	**Conditions**	**Sample Size (PASS/FAIL)**
Pre-Conditioning	JEDEC J-STD-020A	MSL3 / 260°C (1 Lots)	**22 / 0**
Die Shear Strength	MIL-STD-883 METHOD 2019		**40 / 0**
WBS (Wire Bond Shear)	JESD22 B116	Paragraph 4 (Procedure) (# Lots)	**40 / 0**
WBP (Wire Bond Pull)	MIL-STD-883 Method 2011	Paragraph 3 (Procedure) (# Lots)	**40 / 0**
Plating Thickness		40 Units (10 units / Block)	**40 / 0**
SD (Solderability)	JESD22 B102	245°C / 8 hr steam age before SD (1 Lots)	**15 / 0**
PD (Physical Dimensions)	JESD22 B100 + B108	Package outline per JESD95 Cpk > 1.50 per JESD95 (1 Lots)	**40 / 0**

Notes:

- Qualification tests “pass” on zero fails for each test
- CS42L52-CNZ serves as the Qualification Vehicle for the 40 VQFN Lead Frame Material

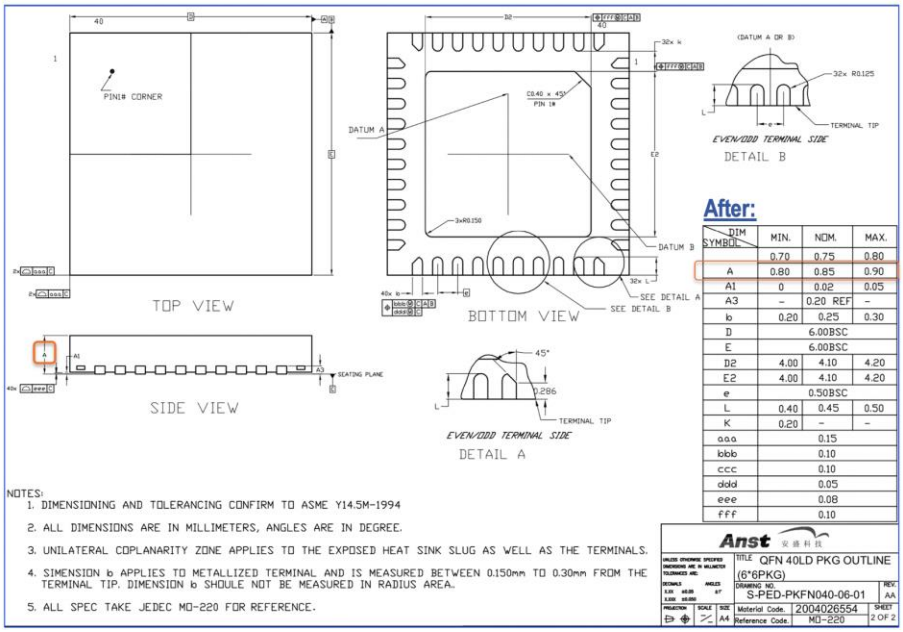
Reliability Qualification Results:

- The material has met all qualification requirements and is fit for use

APPENDIX A – POD (PACKAGE OUTLINE DRAWING) COMPARISON

Before:

DIM SYMBOL	MIN.	NOM.	MAX.
	0.70	0.75	0.80
A	0.85	0.90	0.95
A1	0	0.02	0.05
A3	–	0.20 REF	–
b	0.20	0.25	0.30
D	6.00BSC		
E	6.00BSC		
D2	4.00	4.10	4.20
E2	4.00	4.10	4.20
e	0.50BSC		
L	0.40	0.45	0.50
K	0.20	–	–
aaa	0.15		
bbb	0.10		
ccc	0.10		
ddd	0.05		
eee	0.08		
fff	0.10		



After:

DIM SYMBOL	MIN.	NOM.	MAX.
	0.70	0.75	0.80
A	0.80	0.85	0.90
A1	0	0.02	0.05
A3	–	0.20 REF	–
b	0.20	0.25	0.30
D	6.00BSC		
E	6.00BSC		
D2	4.00	4.10	4.20
E2	4.00	4.10	4.20
e	0.50BSC		
L	0.40	0.45	0.50
K	0.20	–	–
aaa	0.15		
bbb	0.10		
ccc	0.10		
ddd	0.05		
eee	0.08		
fff	0.10		