800 W. 6th Street, Austin, TX 78701

PCN-2014-549
Assembly and Test Site Transfer from StatsChipPac Kuala Lumpur, Malaysia (SCM) to ASE-Chung Li (ASE-CL) Taiwan for the CS4353_CNZ(R) component

Process/Product Change Notification
(Reference Advance PCN-2014-530)

Date: June 2014

Dear Customer:

This is a Final Announcement of the Assembly and Test Site Transfer from StatsChipPac Kuala Lumpur, Malaysia to ASE-Chung Li (ASE-CL) Taiwan for the CS4353_CNZ(R) component that is currently offered by Cirrus Logic. This Final announcement is a follow on to the Advance PCN notification communicated to all customers in February of this calendar year 2014. The details of this Assembly and Test Site Transfer are outlined on the following pages.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the lifetime buy offering/discontinuance plan.

The described change(s) within this PCN will not be realized or take effect any earlier than **60** days from the date of this notification, unless a customer agreement has been reached on an earlier implementation of the change or successful completion of the defined qualification has been realized.

Please note that the notification period has been reduced from 90 days to 60 days as the SCM site recently informed Cirrus that the closure date has been moved forward from December 31st, 2014 to September 30th, 2014. Cirrus has no control over any changes to the site closure date.

Any negotiated alternative change requirements will be provided via the customer's defined process. Customers with previously negotiated, special requirements will be handled separately. 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,

PCN Coordinator
Cirrus Logic Corporate Quality
Phone: +1(512) 851-4000

Attachment: 1

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).

Initial PCN Number:	2014-549			**PCN Date:**	June 2014
Title:	Assembly and Test Site Transfer from StatsChipPac Kuala Lumpur, Malaysia to ASE-Chung Li (ASE-CL) Taiwan for the CS4353_CNZ(R) component				
Customer Contact:	Local Field Sales Representative		**Phone:**	**(512) 851-4000**	**Dept:** **Corporate Quality**
Proposed 1st Ship Date:	August 2014		**Estimated Sample Availability date:**		May 2014
Change Type:	Assembly and Test Site Transfer to an existing Qualified Cirrus Logic Site Location: Change Type = Major				

☒	**Assembly Site**	☐	**Assembly Process**	☒	**Assembly Materials**
☐	**Design**	☐	**Electrical Specification**	☐	**Mechanical Specification**
☒	**Test Site**	☐	**Packing/Shipping/Labeling**	☐	**Test Process**
☐	**Wafer Bump Site**	☐	**Wafer Bump Material**	☐	**Wafer Bump Process**
☐	**Wafer Fab Site**	☐	**Wafer Fab Materials**	☐	**Wafer Fab Process**

PCN Details

Description of Change:

Cirrus Logic's package Assembly and Test Supplier, StatsChipPac, has announced their site in Kuala Lumpur, Malaysia will close by September 30th, 2014.

Cirrus Logic is qualifying and will move these products to the existing qualified subcontractor (ASE-CL) site location in Chung Li Taiwan.

Below you will find an outline of the described changes for these components:

CS4353_CNZ(R)

- **Assembly and Test Site Change:**
  From: **StatsChipPac Kuala Lumpur, Malaysia** → To: **ASE-Chung Li (ASE-CL) Taiwan**
- **PackMark COO Symbolization:**
  From: **MYS** → To: **TWN**
- **Mold Compound:**
  From: **Sumitomo EME-G770** → To: **Hitachi CEL-9240HF**
- **DIE Attach:**
  From: **Ablebond 8290** → To: **Hitachi En4900**

Reason for Change:

Cirrus Logic's package Assembly and Test Supplier, StatsChipPac, has announced their site in Kuala Lumpur, Malaysia will close by September 30th, 2014.

Cirrus Logic is qualifying and will move these products to the existing qualified subcontractor (ASE-CL) site location in Chung Li Taiwan.

Special Note:

As a full services supplier and in order to ensure continuity of supply as well as sustain quality an accelerated timeframe has been established for the full transfer of said product no later than September 30th, 2014.

Earlier production level material may be available from the qualified subcontractor (ASE-CL) site location in Chung Li Taiwan, but shipment(s) from Cirrus Logic are contingent on successful completion of the designated site transfer qualification.

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

Anticipated No Adverse Impact to the Quality & Reliability of said product; as Transfer Site is an existing Cirrus Logic qualified subcontractor (ASE-Chung Li) site location in Taiwan and considered low risk.

Product Affected: ☐ **Table I**

	Customer Part Number	**Cirrus Logic Part Number**
Device 1:		CS4353_CNZ(R)

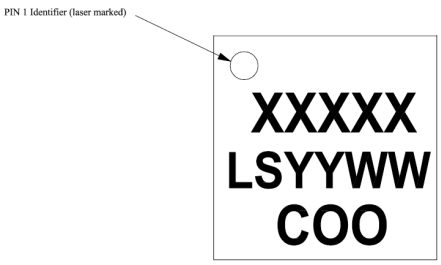
Changes to product identification resulting from this PCN:

The Cirrus Logic component symbolization on the external face of the device reflects the designated Country Of Origin.

Below you will find a representative example:

Our part: **CS4353_CNZ(R)**
Mark format: **261**
Mark change:
· Assembly vendor = None (not shown on mark)
· COO = changing From: **MYS** → TO: **TWN**

Line 1: Part Number (5 spaces max.)
Line 2: Package Mark (6 spaces max.)
Line 3: COO = Country Of Origin



With the Assembly and Test Site Transfer to ASE-Chung Li (ASE-CL) Taiwan, the material will receive the appropriate designation for the Country Of Origin.

Qualification Data:

This qualification has been specifically developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.

Qualification Schedule:	**Start:**	March 2014	**End:**	July 2014

Qualification Device Construction Details:

	Device 1	**Device 2**
Part Number(s):	CS4353_CNZ(R)	
Wafer Fab Site:	YF	
Wafer Technology:	0.35 um	
Die Size:	3.22 mm	
Assembly Site:	ASE-Chung Li (ASE-CL) Taiwan	
Package Type/Code:	24QFN4Z 4x4 VQFN	
Moisture Level:	MSL (Moisture Sensitivity Level) 2	
Package Pins:	24 NL QFN	
Lead Frame Material:	Cu (Copper)	
Mold Compound Supplier:	CEL–9240HF Hitachi	
Lead Finish:	Matte Sn Plate	
Die Attach Material	Hitachi En4900	
Wire Diameter:	0.8 mil	
Wire Base Metal:	Au (Gold)	

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

CS4353_CNZ(R) Qualification

CS4353_CNZ(R) Qualification: ☒ **Plan** ☐ **Test Results**		
Reliability Test		Sample Size (PASS/FAIL)
Pre-Conditioning	JEDEC J-STD-020A	MSL2 / 260°C (2 Lots)	462 / 0
BHAST (Biased HAST)	JESD22 A101	130C/85%RH/96 hrs (BHAST) Read Points (96 Hrs) (1 Lot)	77 / 0
Temperature Cycle	JESD22 A104	-65°C to +150°C for 500 cycles (1 Lot)	77 / 0
WBS (Wire Bond Shear)	JESD22 B116	Paragraph 4 (Procedure) (1 Lot)	5 units / lot
WBP (Wire Bond Pull)	MIL-STD-883 Method 2011	Paragraph 3 (Procedure) (1 Lot)	5 units / lot
SD (Solderability)	JESD22 B102	93°C / 8 hr steam age before SD (1 Lot)	15 Units / 0
PD (Physical Dimensions)	JESD22 B100 + B108	Package outline per JESD95 Cpk > 1.50 per JESD95 (1 Lot)	10 / 0
HTSL (High Temperature Storage Life)	JESD22 A103	150°C for 1000 hrs (1 Lot)	45 / 0

Notes:

- Qualification tests "pass" on zero fails for each test

Test Equipment Correlation Plan

Note:

- The Equipment Platform Technology, Hardware and Software remain the same.
- The Visual / Mechanical inspection and Tape and Reel operations are compliant to JEDEC industry standards

The Test Equipment Correlation plan involves the following:

- Running the new site program with an OPEN Socket (No Unit) to ensure "All" tests fail.

- Serializing Control (Known Good) Units and testing the material on both test platforms (Existing and New Location) at all applicable test temperatures utilizing the same load-board and test site(s). A correlation comparison will be made on "All" individual components. If there is a concern or discrepancy exists, a bench level correlation will be performed to ensure new site meets data sheet requirements.

- Running samples from 2 or more lots at the existing site and at new site location. The results from each site will be compared.

- Running (the same) sample non-continuity failures (different failing tests) and testing them at the existing site and at the new site. All units are expected to fail at the new site location.

- Performing GR&R (Gauge Repeatability & Reproducibility)