



# Process Change Notification

PCN Number: PCN-000011

PCN Notification Date: 08/04/2023

## Informational PCN

GPM (Gallant Precision Machine Co., Ltd.) – GF-3111 Dejunk / Trim and Form Machine Addition

Dear Customer,

This Informational PCN notification is to advise you of the following change(s):

- A GPM GF-3111 DeJunk / Trim and Form Machine has been added to our production level process to ensure continuity of supply for CS5490-ISZ[R] 16L SOIC material.
- There is no anticipated adverse impact to the Fit, Function, Quality and/or Reliability of said product as the given process is mature.
- However, the aesthetic Form changes with exposed copper on the Gull Wing component leads that extend out of the shoulder of the package body. (Reference Page 3 Detail)

The change is effective immediately, is a running integration into our existing process and the existing equipment will be phase out during 2024 due to lack of operational support. You will find all relevant details below within the contents of this notification.

If you have any questions, please contact your Sales Representative.

Sincerely,

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



# Process Change Notification

PCN Number: PCN-000011

PCN Notification Date: 08/04/2023

**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).

<b>Title:</b>		GPM (Gallant Precision Machine Co., Ltd.) – GF-3111 Dejunk / Trim and Form Machine Addition			
<b>Customer Contact:</b>		Local Field Sales Representative	<b>Phone:</b>	(512) 851-4000	<b>Dept:</b> Corporate Quality
<b>Proposed 1<sup>st</sup> Ship Date:</b>		Immediate	<b>Estimated Sample Availability Date:</b>		Not Applicable
<b>Change Type:</b>					
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Process	<input type="checkbox"/>	Wafer Fab Materials
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Process	<input type="checkbox"/>	Wafer Bump Material
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Design
<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Part Number
<input type="checkbox"/>	Packing/Shipping/Labeling	X	Other	<input type="checkbox"/>	
<b>Comments:</b>		Addition of GPM GF-3111 Dejunk / Trim and Form Machine			

## PCN Details

**Description of Change:**

Addition of the GPM (Gallant Precision Machine Co., Ltd.) – GF-3111 Dejunk / Trim and Form Machine

The following items remain the same:

- Strip Size
- POD (Package Outline Drawing) consistent with Data Sheet
- Packaging BOM (Bill of Materials)
- Optical Inspection method
- Packaging (Tubes)

However, the backend process flow for the GPM GF-3111 Dejunk / Trim and Form Machine is unique from the existing equipment: (Reference Flow Cartoon Below)

**From:**



**To:**



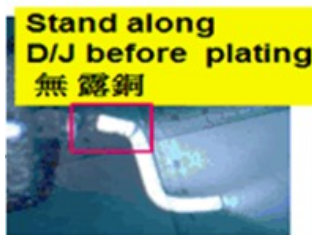
**Reason for Change:**

Serves as an additional qualified process tool to facilitate maintaining continuity of supply and mitigate the phased out of operational support of existing equipment.

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

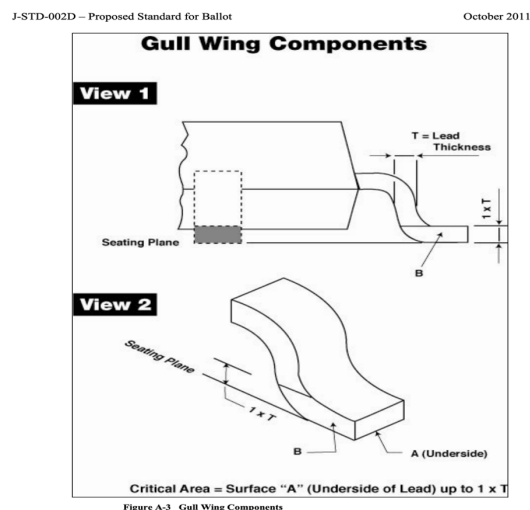
No anticipated adverse impact to the Fit, Function, Quality and/or Reliability of said product as the given process is mature.

However, the aesthetic Form changes with exposed copper on the Gull Wing component leads that extend out of the shoulder of the package. Reference example imagery below:

**Before:**

**After:**

**Per JEDEC established standard J-STD-002D Section 4.2.1.6.2 Accept/Reject/Criteria:**

4.2.1.6.2 Accept/Reject Criteria **All leads shall exhibit a continuous solder coating free from defects for a minimum of 95% of the critical area of any individual lead.** For exposed pad packages the exposed pad surfaces shall exhibit a continuous solder coating free from defects for a minimum of 80% of the critical area of those surfaces. **Anomalies other than dewetting, nonwetting, and pin holes are not cause for rejection (see Appendices A and B).** Exposed terminal metal is allowable on surface mount components at the toe end and on the vertical surfaces that are either unplated or sheared during component fabrication.

**Critical Area(s) depicted from Appendices A and B for Gull Wing components below:**




# Process Change Notification

PCN Number: PCN-000011

PCN Notification Date: 08/04/2023

## 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	CS5490-ISZ
2	CS5490-ISZR

## Changes To Product Identification Resulting From This PCN:

No change to product identification

PCN Number: PCN-000011

PCN Notification Date: 08/04/2023

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

## CS5490-ISZ - Qualification

CS5490-ISZ Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results			
Reliability Test	Standard	Conditions	Sample Size (PASS/FAIL)
<b>HTSL</b> (High Temperature Storage Life)	JESD22 A103	+150°C for 1000 hrs (3 Lots) – 77 units/Lot	231 / 0
<b>Pre-Conditioning</b>	JEDEC J-STD-020 JESD22-A113	MSL3 (85°C/85% RH, 168hrs) (3 Lots) – 231 units/Lot	693 / 0
<b>Temperature Cycle</b>	JESD22 A104	-65°C to +150°C for 500 cycles (3 Lots) – 77 units/Lot	231 / 0
<b>uHAST</b> (Unbiased HAST)	JESD22 A118	+110°C/85% RH, 264 hrs (3 Lots) – 77 units/Lot	231 / 0
<b>bHAST</b> (Biased HAST)	JESD22 A110	+110°C/85% RH, 264 hrs (3 Lots) – 90 units/Lot	231 / 0
<b>WBP</b> (Wire Bond Pull)	MIL-STD-883 Method 2011	Paragraph 3 (Procedure) (3 Lots – 5 units / Lot)	15 / 0
<b>WBS</b> (Wire Bond Shear)	JESD22 B116	Paragraph 4 (Procedure) (3 Lots – 5 units / Lot)	15 / 0
<b>SD</b> (Solderability)	JESD22 B102	245°C / 8 hr steam age before SD (3 Lot – 5 units)	15 / 0
<b>PD</b> (Physical Dimensions)	JESD22 B100 + B108	Package outline per JESD95 Cpk > 1.50 per JESD95 (30 - Units)	15 / 0
<p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>Qualification tests “pass” on zero fails for each test</li> </ul> <p><b>Reliability Qualification Results:</b></p> <ul style="list-style-type: none"> <li>Successful completion of Qualification</li> </ul>			