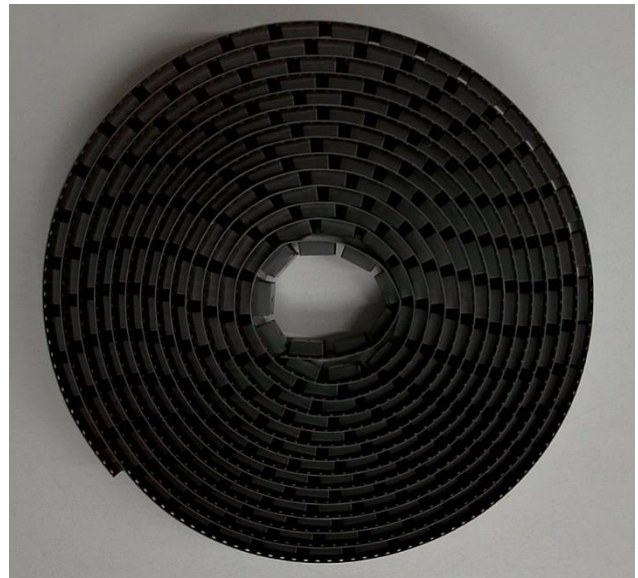


Job Number:	AT22737	Customer:	Serendipity	Date:	2/9/2023
Part No:	LMZ31707RVQR	Cust Part No:	N/A	PO #	139903
Manufacturer:	TI	Date/Lot Code:	8AW	Quantity:	250

Process	General Results Summary
Anomaly Analysis / External Visual	Accept
Physical Dimension Verification	Accept
Anloy Resistance To Solvents	Accept
Xray Inspection	Accept
Die Extraction for Identification	Information Provided for Customer Evaluation

Job Number:	AT22737	Customer:	Serendipity	Date:	2/9/2023
Part No:	LMZ31707RVQR	Cust Part No:	N/A	PO #	139903
Manufacturer:	TI	Date/Lot Code:	8AW	Quantity:	250

Packaging / Factory Label Photo if Applicable

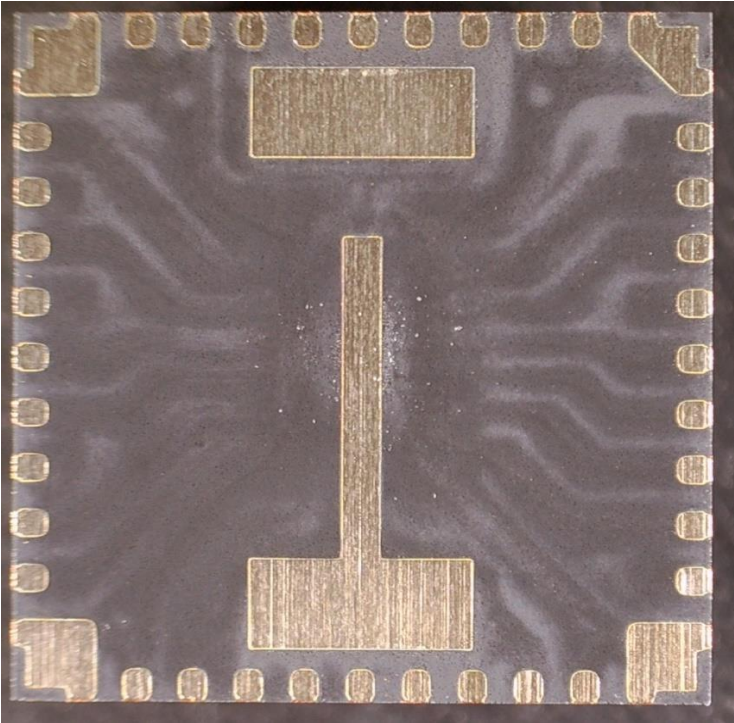


Yes	No	Inc.	N/A	
☐	☐	☐	☒	Lots Separated?
☐	☒	☐	☐	Date Codes Identified?
☐	☒	☐	☐	Lot Codes Identified?
☐	☒	☐	☐	Applicable QC Stamps visible?

Yes	No	Inc.	N/A	
☐	☒	☐	☐	Factory Label Present?
☐	☐	☐	☒	Factory Labels Unmodified?
☐	☒	☐	☐	Labels Redacted?
☐	☒	☐	☐	Other Problems?

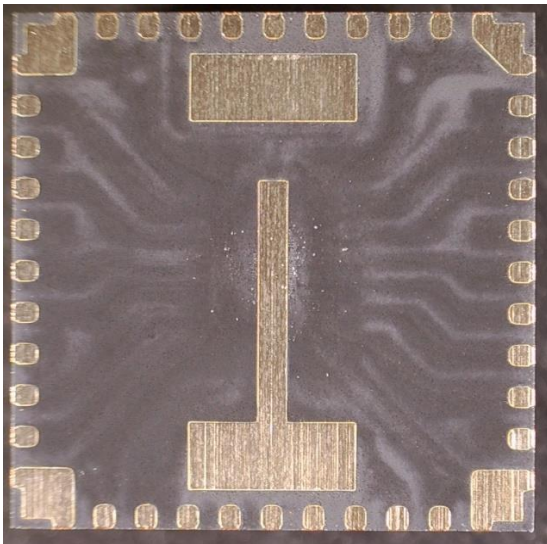
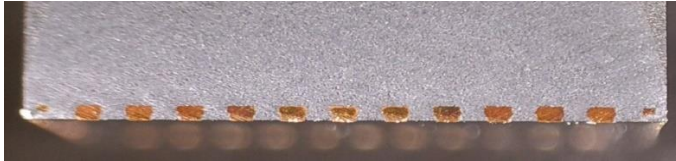
Notes:

Job Number:	AT22737	Customer:	Serendipity	Date:	2/9/2023
Part No:	LMZ31707RVQR	Cust Part No:	N/A	PO #	139903
Manufacturer:	TI	Date/Lot Code:	8AW	Quantity:	250

Sample Topside Device Photo	Detail Inspection Information																																																																																					
 (54020, LMZ31707)	Manufacturer Determined: By Bag: ☒ Marking: ☒ Other: _____ Date Code Determined: By Bag: ☒ Marking: ☐ Other: _____ Quantity Determined: By Bag: ☒ Counted: ☒ Other: _____ <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 5%;">Yes</th> <th style="width: 5%;">No</th> <th style="width: 5%;">Inc.</th> <th style="width: 5%;">N/A</th> <th></th> </tr> </thead> <tbody> <tr><td>☒</td><td>☐</td><td>☐</td><td>☐</td><td>Part Number Matches Label</td></tr> <tr><td>☒</td><td>☐</td><td>☐</td><td>☐</td><td>Package Type Correct?</td></tr> <tr><td>☒</td><td>☐</td><td>☐</td><td>☐</td><td>Terminal Count Consistent?</td></tr> <tr><td>☒</td><td>☐</td><td>☐</td><td>☐</td><td>Pin 1 orientation constant?</td></tr> <tr><td>☒</td><td>☐</td><td>☐</td><td>☐</td><td>No Missing/Damaged Pins?</td></tr> <tr><td>☐</td><td>☒</td><td>☐</td><td>☐</td><td>Topside and Bottom side Texture Similar?</td></tr> <tr><td>☒</td><td>☐</td><td>☐</td><td>☐</td><td>Consistent Topside Indentations?</td></tr> <tr><td>☒</td><td>☐</td><td>☐</td><td>☐</td><td>Consistent Topside Marking?</td></tr> <tr><td>☐</td><td>☐</td><td>☒</td><td>☐</td><td>Consistent Backside Indentations?</td></tr> <tr><td>☐</td><td>☐</td><td>☒</td><td>☐</td><td>Consistent Backside Markings?</td></tr> <tr><td>☒</td><td>☐</td><td>☐</td><td>☐</td><td>No previous marking visible?</td></tr> <tr><td>☒</td><td>☐</td><td>☐</td><td>☐</td><td>No aftermarket markings visible?</td></tr> <tr><td>☒</td><td>☐</td><td>☐</td><td>☐</td><td>General package thickness consistent?</td></tr> <tr><td>☒</td><td>☐</td><td>☐</td><td>☐</td><td>No significant scratches?</td></tr> <tr><td>☒</td><td>☐</td><td>☐</td><td>☐</td><td>No visible unidirectional abrasion?</td></tr> <tr><td>☐</td><td>☒</td><td>☐</td><td>☐</td><td>Other Problems?</td></tr> </tbody> </table> Notes: 18 + Date code provided on PO (not a legit date code) Anloy processed by part marking of 8AW. Sample Size 10 devices Results: Accept Anomaly Analysis is the inspection for non typical manufacturers practices including but not limited to those items listed above. Acceptance in this section is based on visual inspection of the indicated sample size with maximum magnification of 40x unless otherwise noted.	Yes	No	Inc.	N/A		☒	☐	☐	☐	Part Number Matches Label	☒	☐	☐	☐	Package Type Correct?	☒	☐	☐	☐	Terminal Count Consistent?	☒	☐	☐	☐	Pin 1 orientation constant?	☒	☐	☐	☐	No Missing/Damaged Pins?	☐	☒	☐	☐	Topside and Bottom side Texture Similar?	☒	☐	☐	☐	Consistent Topside Indentations?	☒	☐	☐	☐	Consistent Topside Marking?	☐	☐	☒	☐	Consistent Backside Indentations?	☐	☐	☒	☐	Consistent Backside Markings?	☒	☐	☐	☐	No previous marking visible?	☒	☐	☐	☐	No aftermarket markings visible?	☒	☐	☐	☐	General package thickness consistent?	☒	☐	☐	☐	No significant scratches?	☒	☐	☐	☐	No visible unidirectional abrasion?	☐	☒	☐	☐	Other Problems?
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Sample Bottom side Device Photo 																																																																																						

Job Number:	AT22737	Customer:	Serendipity	Date:	2/9/2023
Part No:	LMZ31707RVQR	Cust Part No:	N/A	PO #	139903
Manufacturer:	TI	Date/Lot Code:	8AW	Quantity:	250

Device Leads Photo



Lead Condition Information

Yes	No	Inc.	N/A	
☒	☐	☐	☐	No Lead Discoloration Visible?
☒	☐	☐	☐	No Insertion Marks Visible?
☒	☐	☐	☐	Exposed Base metal at Lead tip visible?
☒	☐	☐	☐	No excessive or uneven plating visible?
☒	☐	☐	☐	No visible evidence of general corrosion.
☒	☐	☐	☐	Lead Plating Appears Original?
☐	☐	☒	☐	No visible solder mask damage
☐	☐	☒	☐	No visible discoloration on Balls.
☐	☐	☒	☐	No visible Residue/Dirt on balls
☐	☐	☒	☐	No crushed/Flattened BGA balls visible?
☐	☐	☒	☐	No evidence of Reballing visible?
☐	☐	☒	☐	Size/Shape of solder spheres consistent?
☐	☒	☐	☐	Other Problems?

Results:

Accept

Post Resistance to Solvents Photo



Resistance To Solvents Summary

Pass	Fail	Inc.	N/A	
☒	☐	☐	☐	Solution 1 on Marking Isopropyl Alcohol, >90% @ 25°C
☒	☐	☐	☐	Solution 2 on Marking Mineral Spirits /Isopropyl Alcohol 3:1 @ 25°C
☒	☐	☐	☐	Solution 3 on Surface Acetone @ 25°C
☒	☐	☐	☐	Chemical X on Surface (Anloy Proprietary) @ 25°C
☒	☐	☐	☐	Chemical X on Marking Chemical X (Anloy Proprietary) @ 25°C

Sample Size

1

Notes: Parts are laser marked.

Results:

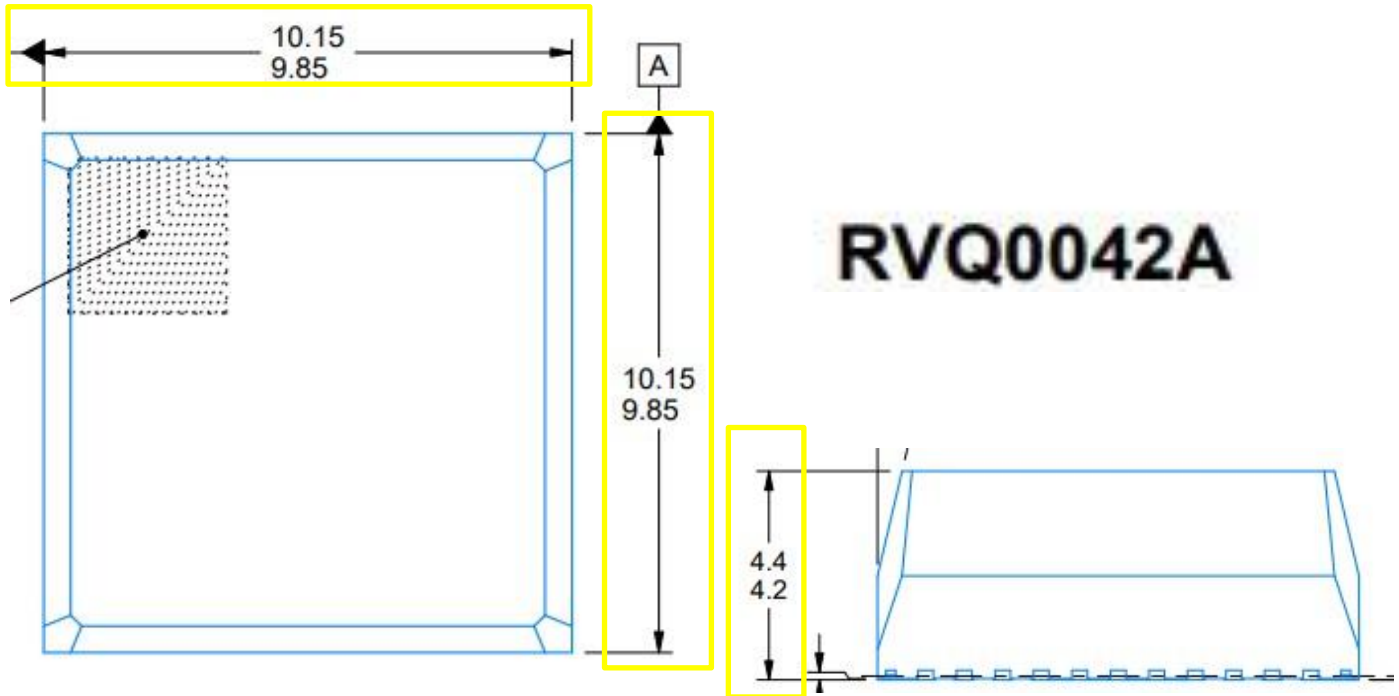
Accept

Step by step photographs are not provided in this report. The process and is performed in the sequence listed unless otherwise stated. The photo provided is of the last step performed, in the event of any step failure evidence is will be provided.

The process uses cotton swab with firm pressure. Marking based tests are not applicable on Laser Marked products, and Surface based tests are not applicable for metal surfaces.

Job Number:	AT22737	Customer:	Serendipity	Date:	2/9/2023
Part No:	LMZ31707RVQR	Cust Part No:	N/A	PO #	139903
Manufacturer:	TI	Date/Lot Code:	8AW	Quantity:	250

Package Drawing Excerpt / Measurement Table



Measurements With Limits Defined

Dimension:	Measurement	Min	Max	Result
W	10.02	9.85	10.15	Pass
L	10.03	9.85	10.15	Pass
T	4.31	4.2	4.4	Pass

Nominal Measurements with No Limit Defined (Default 10% Tolerance)

Dimension:	Measurement	Typ	Tolerance	Result
			10%	
			10%	
			10%	
			10%	
			10%	

Default Unit of Measure: Millimeters

Sample Size 3

Notes:

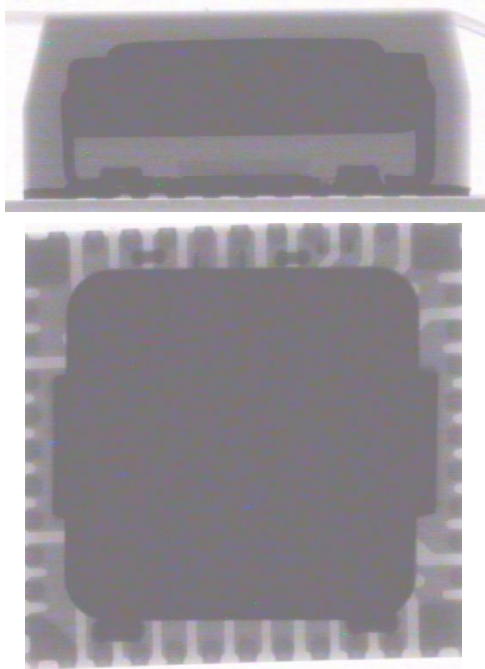
Results:

Accept

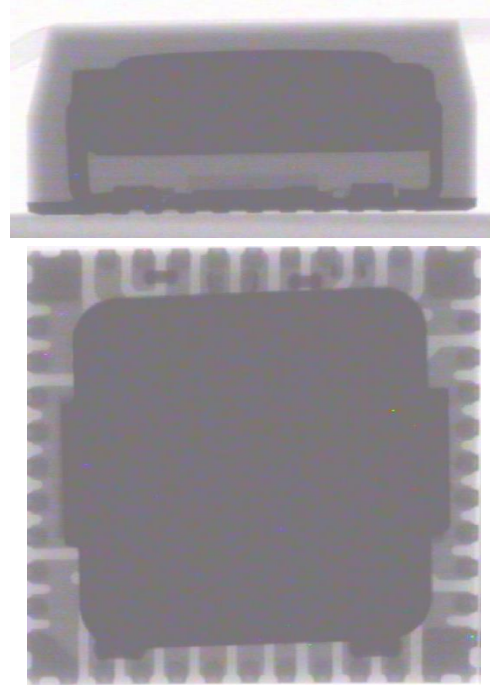
Only the dimensions listed under the "Dimensions" portion have been verified on the inspection sample. Sample size is as shown to the right. Standard Processing is for Go/No Go results without Read and Record data.

Job Number:	AT22737	Customer:	Serendipity	Date:	2/9/2023
Part No:	LMZ31707RVQR	Cust Part No:	N/A	PO #	139903
Manufacturer:	TI	Date/Lot Code:	8AW	Quantity:	250

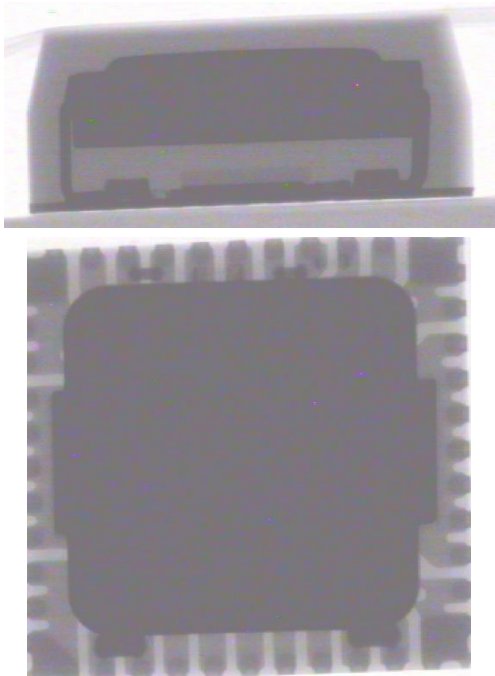
Sample X-ray Photo 1



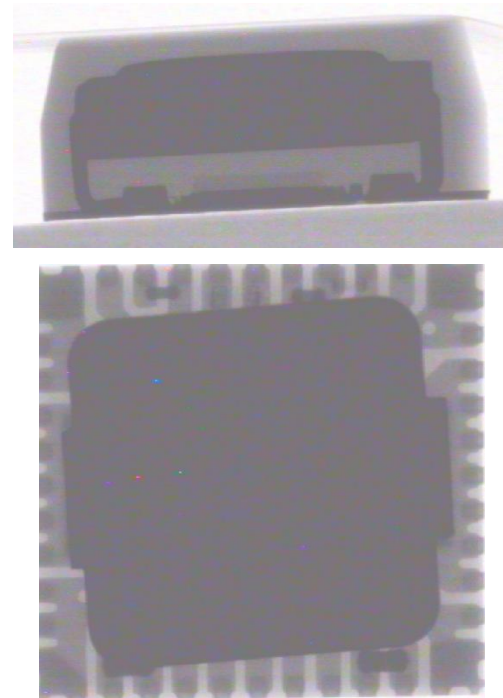
Sample X-ray Photo 2



Sample X-ray Photo 3

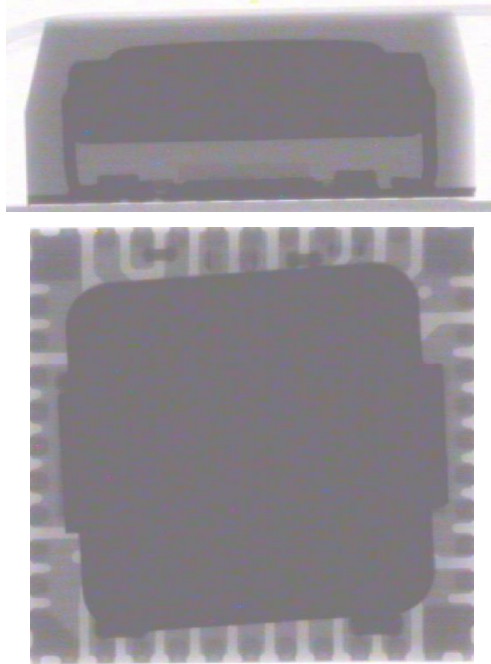


Sample X-ray Photo 4

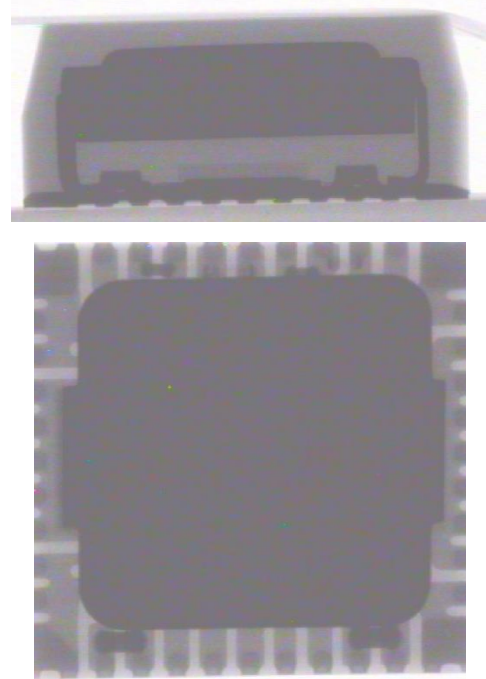


Job Number:	AT22737	Customer:	Serendipity	Date:	2/9/2023
Part No:	LMZ31707RVQR	Cust Part No:	N/A	PO #	139903
Manufacturer:	TI	Date/Lot Code:	8AW	Quantity:	250

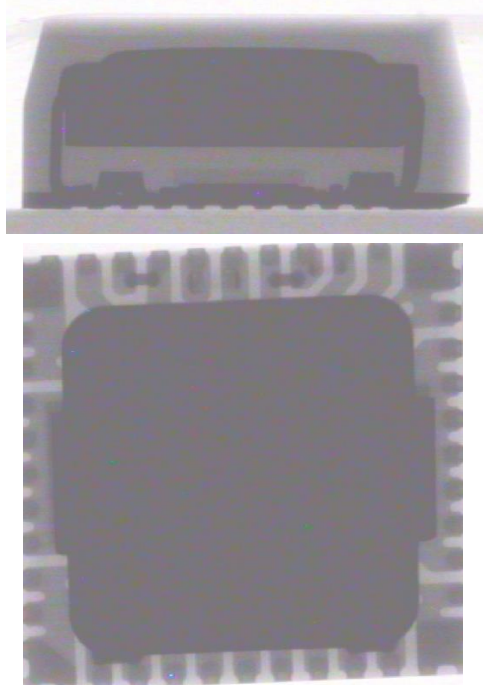
Sample X-ray Photo 5



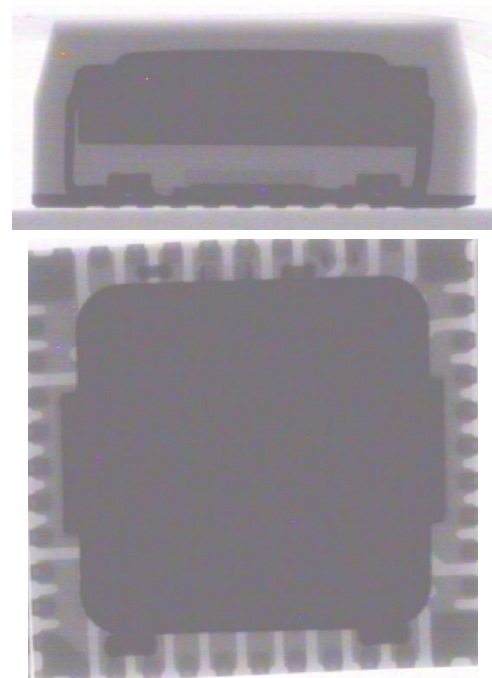
Sample X-ray Photo 6



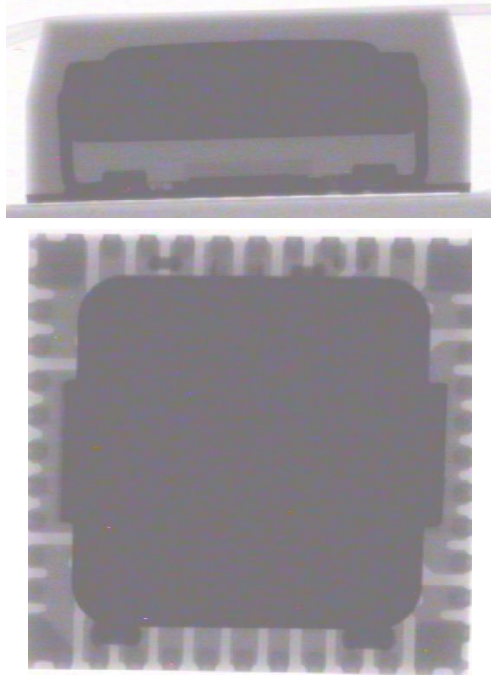
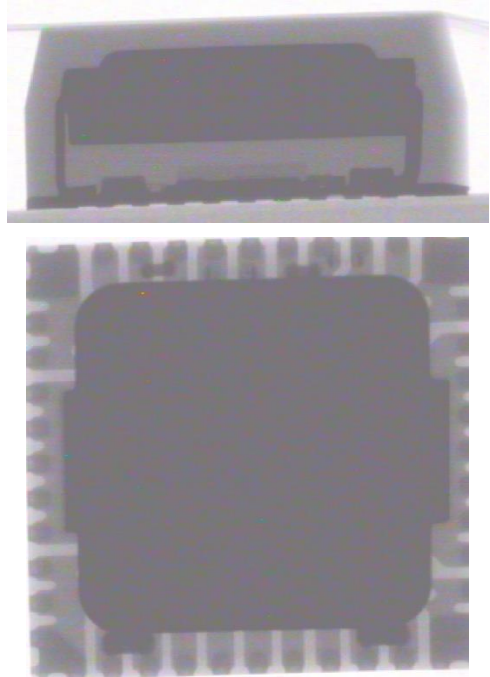
Sample X-ray Photo 7



Sample X-ray Photo 8



Job Number:	AT22737	Customer:	Serendipity	Date:	2/9/2023
Part No:	LMZ31707RVQR	Cust Part No:	N/A	PO #	139903
Manufacturer:	TI	Date/Lot Code:	8AW	Quantity:	250

Sample X-ray Photo 9	Sample X-ray Photo 10
	

Sample Size
10 devices

Notes:

Yes	No	Inc.	N/A	
☐	☒	☐	☐	Reference Device Provided?
☒	☐	☐	☐	Die Size Consistent?
☒	☐	☐	☐	Lead Frames Consistent?
☒	☐	☐	☐	No visible product inconsistencies?
☐	☐	☒	☐	Additional Photos Appended to Report?
☐	☒	☐	☐	Other problems?

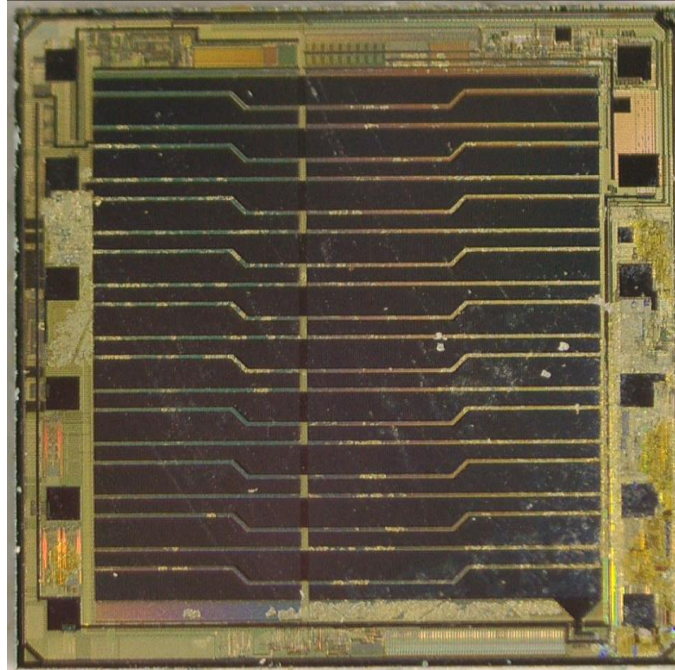
Results:

Accept

X-ray Inspection is an inspection for visible anomalies present in the sample of material inspected under the Anloy 80kV inspection system for up to 1 minute unless tagged otherwise.

Job Number:	AT22737	Customer:	Serendipity	Date:	2/9/2023
Part No:	LMZ31707RVQR	Cust Part No:	N/A	PO #	139903
Manufacturer:	TI	Date/Lot Code:	8AW	Quantity:	250

Full Die Photo



Detail Die Photo



Die Information:
TPS54020 PG2P7

Manufacturer:
TI 2011 Mensa

Other Die Markings:

Notes:

Sample Size

1 Devices

Results:
Information Provided for
Customer Evaluation

Job Number:	AT22737	Customer:	Serendipity	Date:	2/9/2023
Part No:	LMZ31707RVQR	Cust Part No:	N/A	PO #	139903
Manufacturer:	TI	Date/Lot Code:	8AW	Quantity:	250

Step	Anomaly Analysis		Results	Oper.	Date																																					
110	Inspection Sample Size: 10	<table border="1"> <thead> <tr> <th>Yes</th> <th>No</th> <th>Inc.</th> <th>N/A</th> </tr> </thead> <tbody> <tr><td>X</td><td></td><td></td><td></td></tr> <tr><td>X</td><td></td><td></td><td></td></tr> <tr><td>X</td><td></td><td></td><td></td></tr> <tr><td>X</td><td></td><td></td><td></td></tr> <tr><td>X</td><td></td><td></td><td></td></tr> <tr><td>X</td><td></td><td></td><td></td></tr> <tr><td>X</td><td></td><td></td><td></td></tr> <tr><td>X</td><td></td><td></td><td></td></tr> </tbody> </table>	Yes	No	Inc.	N/A	X				X				X				X				X				X				X				X				Overall Packaging Acceptable? Overall Topside Acceptable? Overall Bottomside Acceptable? Overall Leads Acceptable? Passes Resistance to Solvents? Generic Dimensions Acceptable? Other Problems?	Lot accepted: ☒ Lot rejected: ☐ Inconclusive: ☐	AW	2/9/23
Yes	No	Inc.	N/A																																							
X																																										
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Anomaly Analysis is a custom inspection on a sample of product for non-typical manufacturer processes, including but not limited to those listed on the report accompanying this order. Any evidence of this is justification of lot rejection without further testing.

Step	X-ray Inspection		Results	Oper.	Date																													
120	Xray Sample Size: 10	<table border="1"> <thead> <tr> <th>Yes</th> <th>No</th> <th>Inc.</th> <th>N/A</th> </tr> </thead> <tbody> <tr><td></td><td>X</td><td></td><td></td></tr> <tr><td>X</td><td></td><td></td><td></td></tr> <tr><td>X</td><td></td><td></td><td></td></tr> <tr><td>X</td><td></td><td></td><td></td></tr> <tr><td>X</td><td></td><td></td><td></td></tr> <tr><td>X</td><td></td><td></td><td></td></tr> </tbody> </table>	Yes	No	Inc.	N/A		X			X				X				X				X				X				Reference Device Provided? Die Size Consistent? Lead Frames Consistent? No visible product inconsistencies? Other problems?	Accepted: ☒ Rejected: ☐ Inconclusive: ☐	W	2/10/23
Yes	No	Inc.	N/A																															
	X																																	
X																																		
X																																		
X																																		
X																																		
X																																		

X-ray Inspection is an inspection for visible anomalies present in the sample of material inspected under the Anloy 80kV inspection system. The sample size is defined by the customer.

Step	Die Information after Extraction		Oper.	Date
130	Mask Info Die Manu Quantity	TPS54020 PG2P7 TI 2011 MENSA 1 pcs		2/10/23

Die verification not guaranteed on all orders due to the possible lack of available die mask information and/or lack of support by the manufacturer of the product. See Report for Die Information Analysis.

Certificate of Conformance

Anloy Technologies hereby certifies that the results of the processing traveler are authentic and all processes meet the processing standards and practices as defined by Anloy Technologies and the purchase order or associated contract. Please see the accompanying report for additional detailed information pertaining to processing performed for this order.

Manager Signature



Date:

2/10/23