

QC Report Sample:

Work Order No : QC01188/ **Sales Order No :**FCPI202503250028

Product Manufacturer :TI/ **Manufacturer Part No :**TCAN1042HGVDRQ1

IT:P Internal Lot No : WH/IN/00233-95388

Component Lot No :1340229WDH

Component Lot Quantity : 2504

Date Code : 2143+

Country of Origin :MEXICO

External Visual Inspection on 100PCS sample marked with D/C 2143. No secondary coating, sanding marks, crack or chips were observed on all inspected.

Samples pass chemical MPT for remarking, indicating that the samples are not remarked.

10PCS samples X-ray analysis reveals consistent internal structure within the tested samples. The samples do not exhibit internal connection defects, voids or other apparent anomalies.

Inspection Report:

#	Packaging Inspection	Sample Size	Result
1	Verify product condition – any damage on product or packaging	2504	Pass
2	Verify package structural integrity	2500	Pass
3	Verify labels – any signs of tampering	2500	Pass
4	Verify packaging ESD compliance	2500	Pass
5	Verify if humidity control package (dry pack) is in good condition	/	Pass
6	Verify condition of humidity sensitivity card	/	Pass

7	Verify consistency of inner and outer packaging label	2500	Pass
8	Verify tape leader and trailer for factory sealed tape and reel products	2500	Pass
9	Verify PIN#1 orientation with respect to specific packaging type	2500	Pass

#	Component Surface Inspection	Sample Size	Result
1	Inspect parts surfaces have not been mechanically, resurfaced, or re-stamped	100	Pass
2	Inspect for blacktopping, overspray, surface sanding or uneven thickness	100	Pass
3	Inspect for minor cracks on the surface of the parts	100	Pass
4	Check for ink marks, colored dots and sticker on components indicating previous programming	100	Pass
5	PIN#1 indicator is consistent within the lot	100	Pass
6	Inspect for any type of residue—dirt, debris, flux, foreign objects, glue, or stickers	100	Pass
7	Inspect for evidence of tool/pull marks or heat-sink witness marking	100	Pass

#	Marking Inspection	Sample Size	Result
1	All markings are clear	100	Pass
2	Verify if markings on top and bottom of parts are consistent throughout the entire lot—font color and size orientation	100	Pass
3	Verify if marking of part number, datecode, country of origin or lot number are consistent	100	Pass
4	Check for evidence of test dots or engineering sample	100	Pass

#	Lead Inspection	Sample Size	Result
1	Verify any bent, damaged, or missing lead	100	Pass
2	Check lead alignment	100	Pass
3	Verify leads for scratches on outer in inner lead surfaces.	100	Pass
4	Inspect consistency of lead with respect to color, gloss/dull and texture	100	Pass
5	Inspect if leads exhibit any corrosion, discoloration, or oxidation	100	Pass
6	Inspect if leads have been used or trimmed	100	Pass

#	Acetone Test	Test Result
1	Rub part surface with cotton bud dipped in acetone solvent. Check for transfer of Black coating on cotton bud.	3 - PASS

#	Measurements and Pin Count	Test Result	
1	Counting number of pins per part - Verify if number of pins on component matches manufacturer's specifications	SOIC8	
Sample	Length	Width	Height
1	4.99mm	6.10mm	1.64mm
2	4.99mm	6.10mm	1.64mm
3	4.99mm	6.10mm	1.64mm



Appendixes



Outer Packaging



Outer Label 1



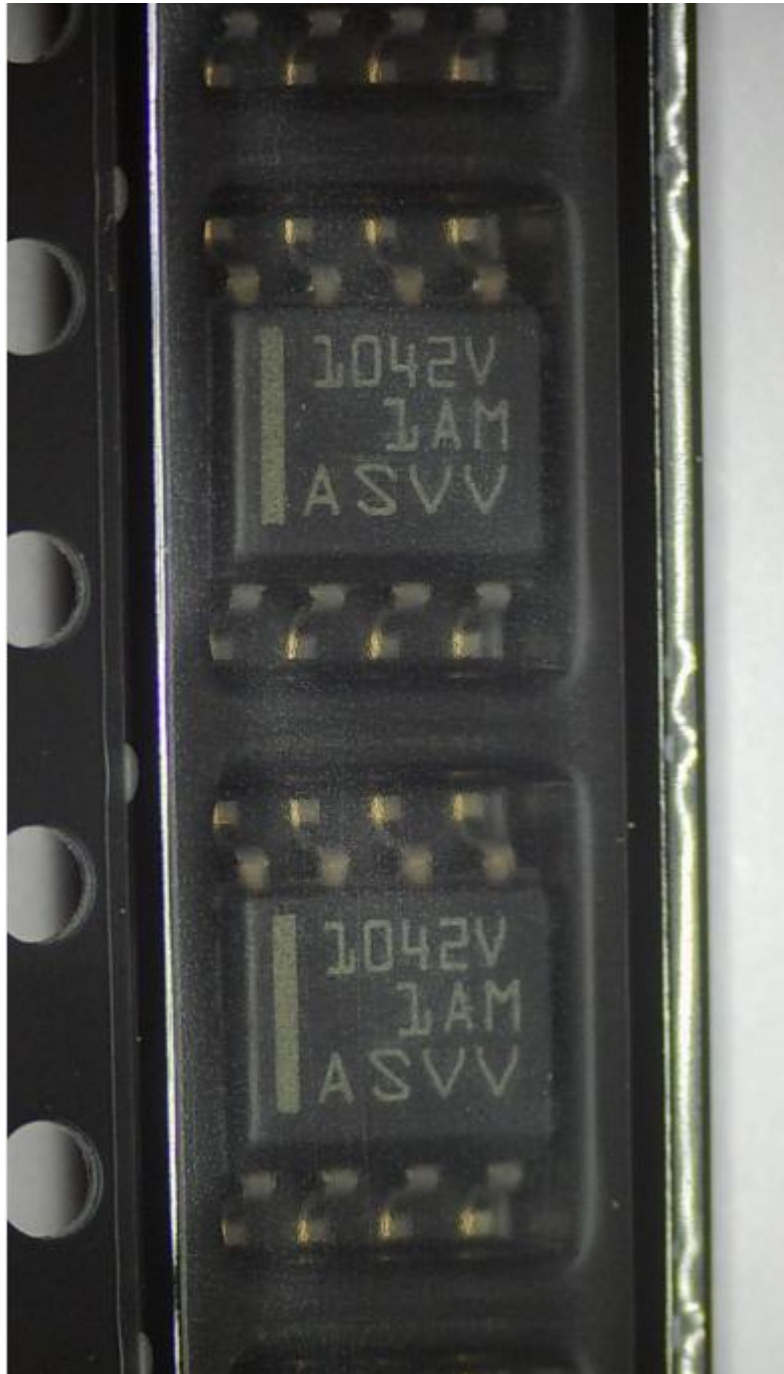
Outer Label 2



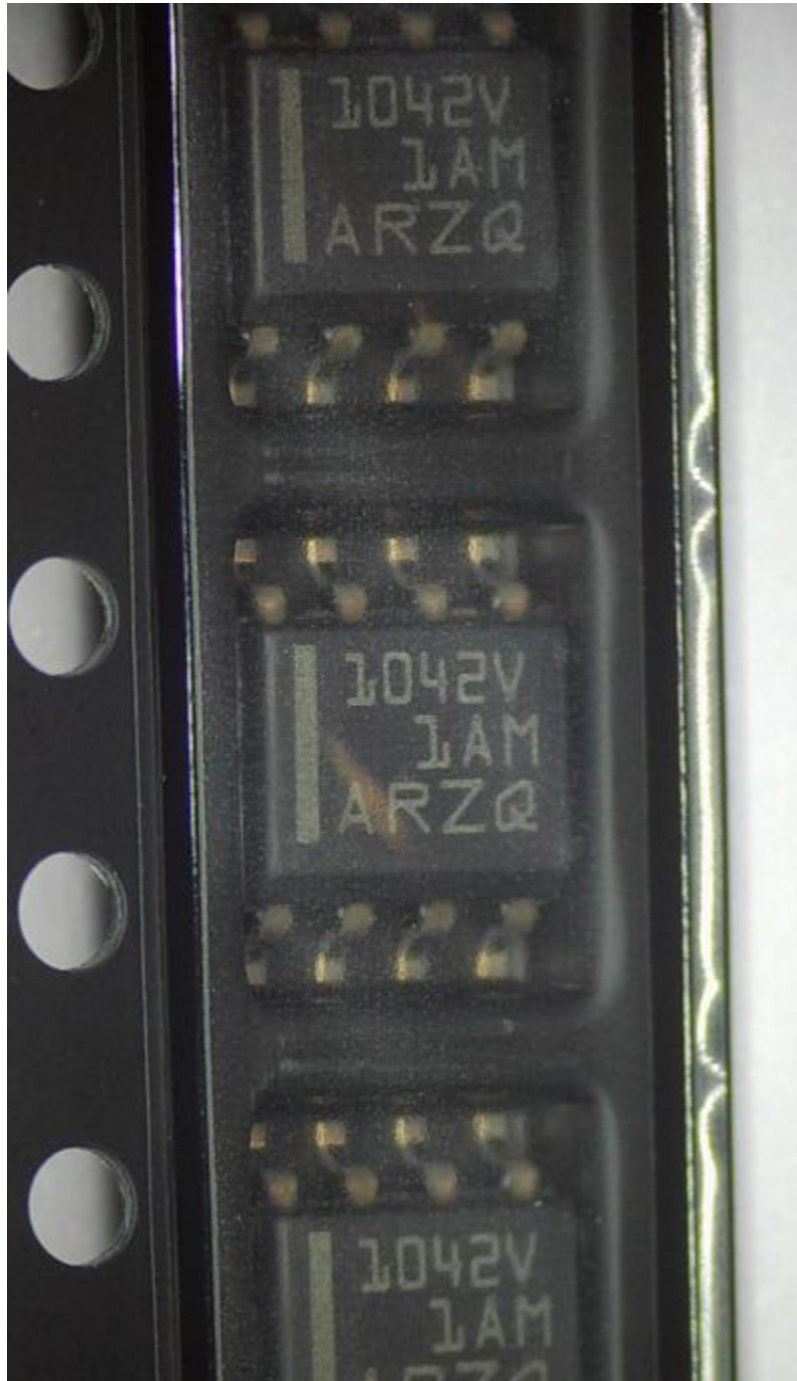
Inner Packaging



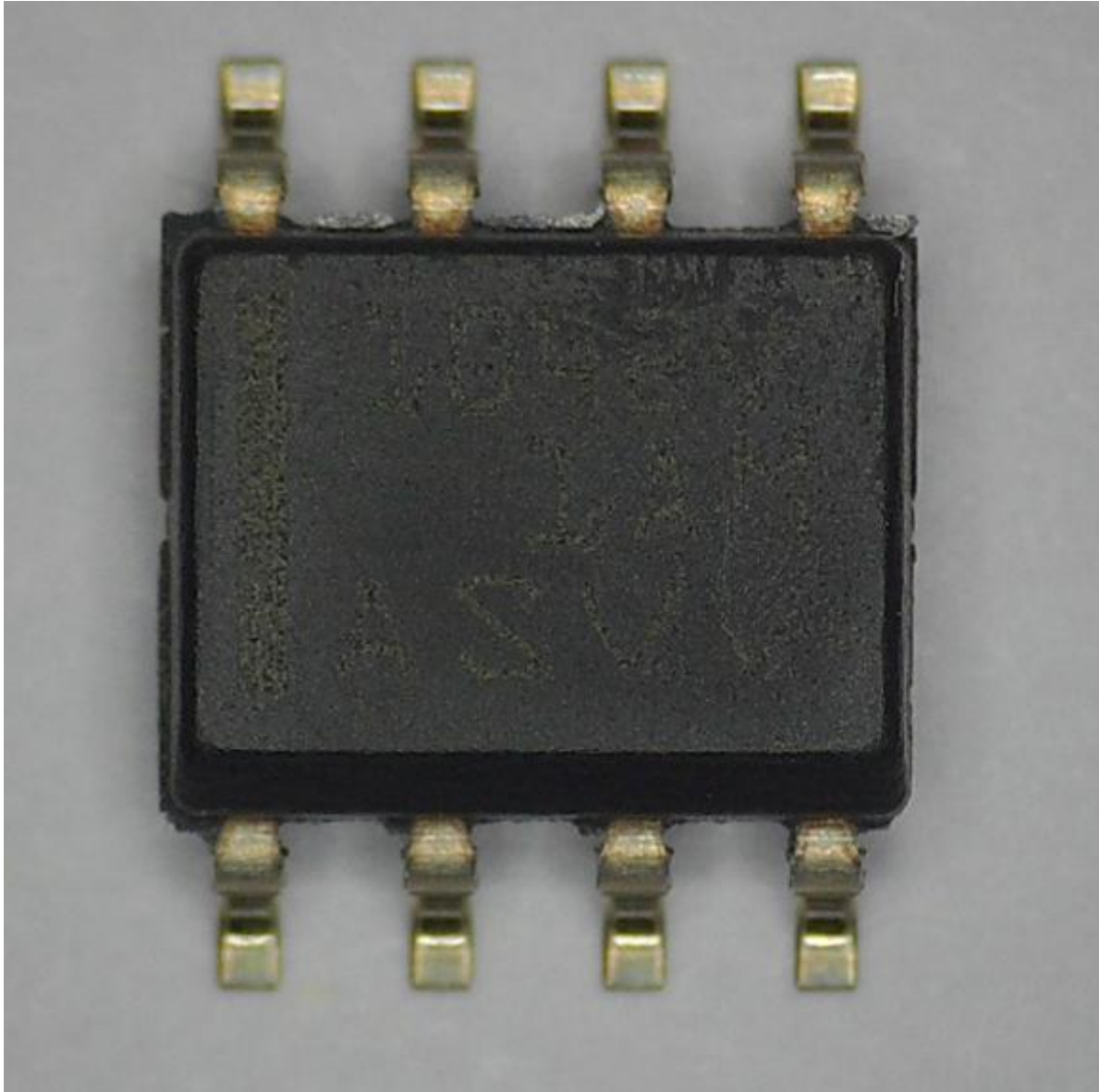
Inner Label



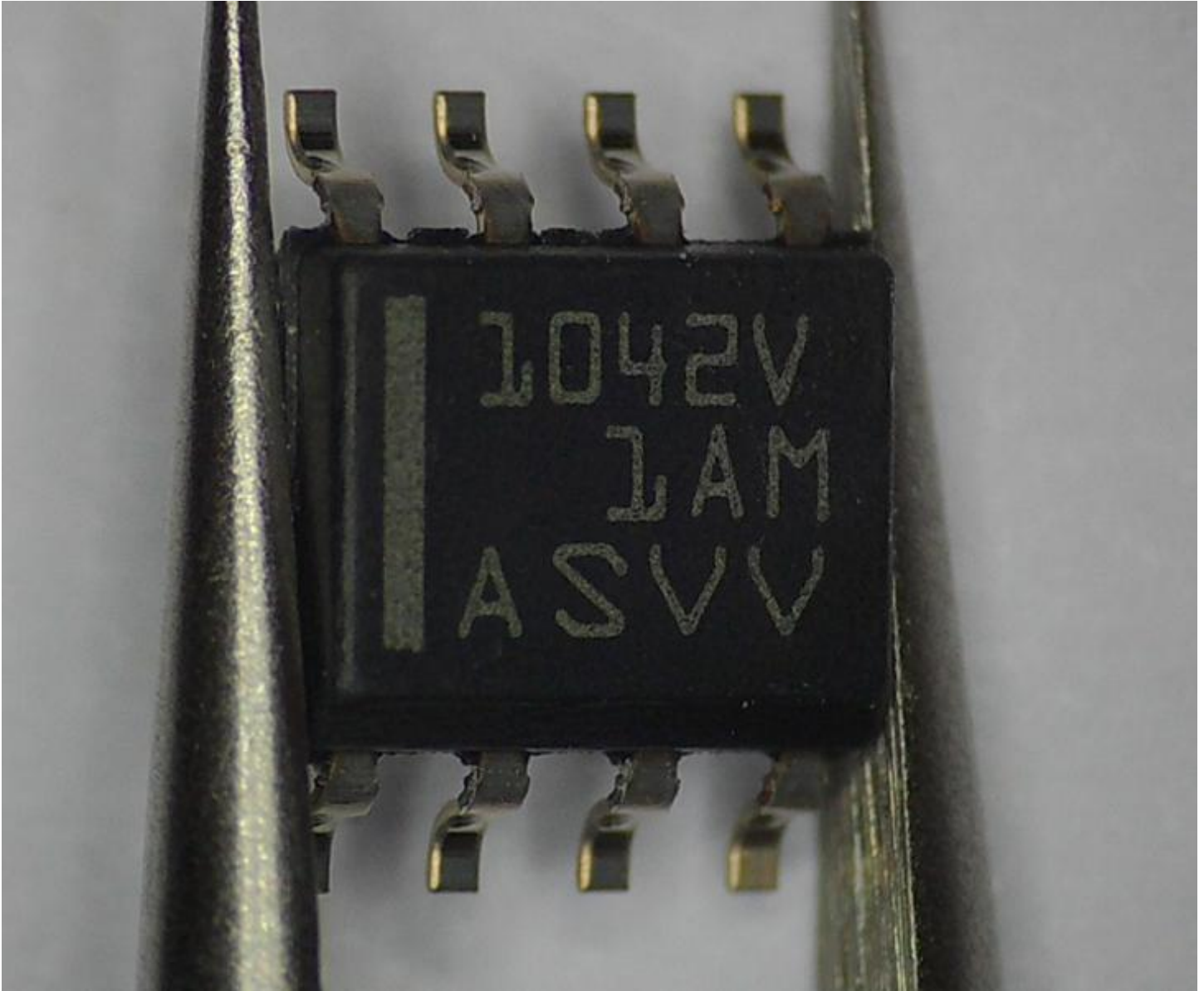
Inner Packaging (ASVV+)



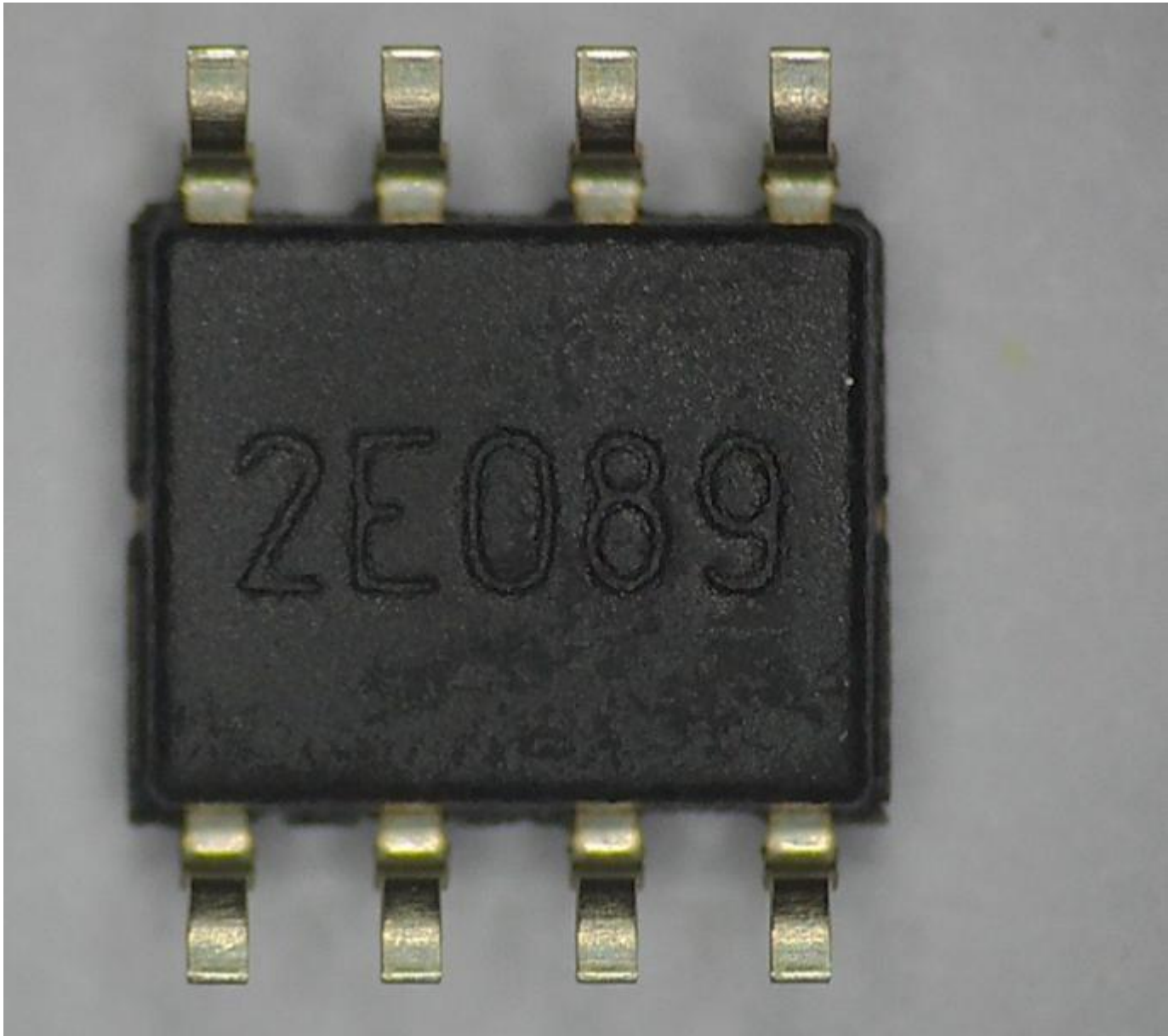
Inner Packaging (ARZQ+)



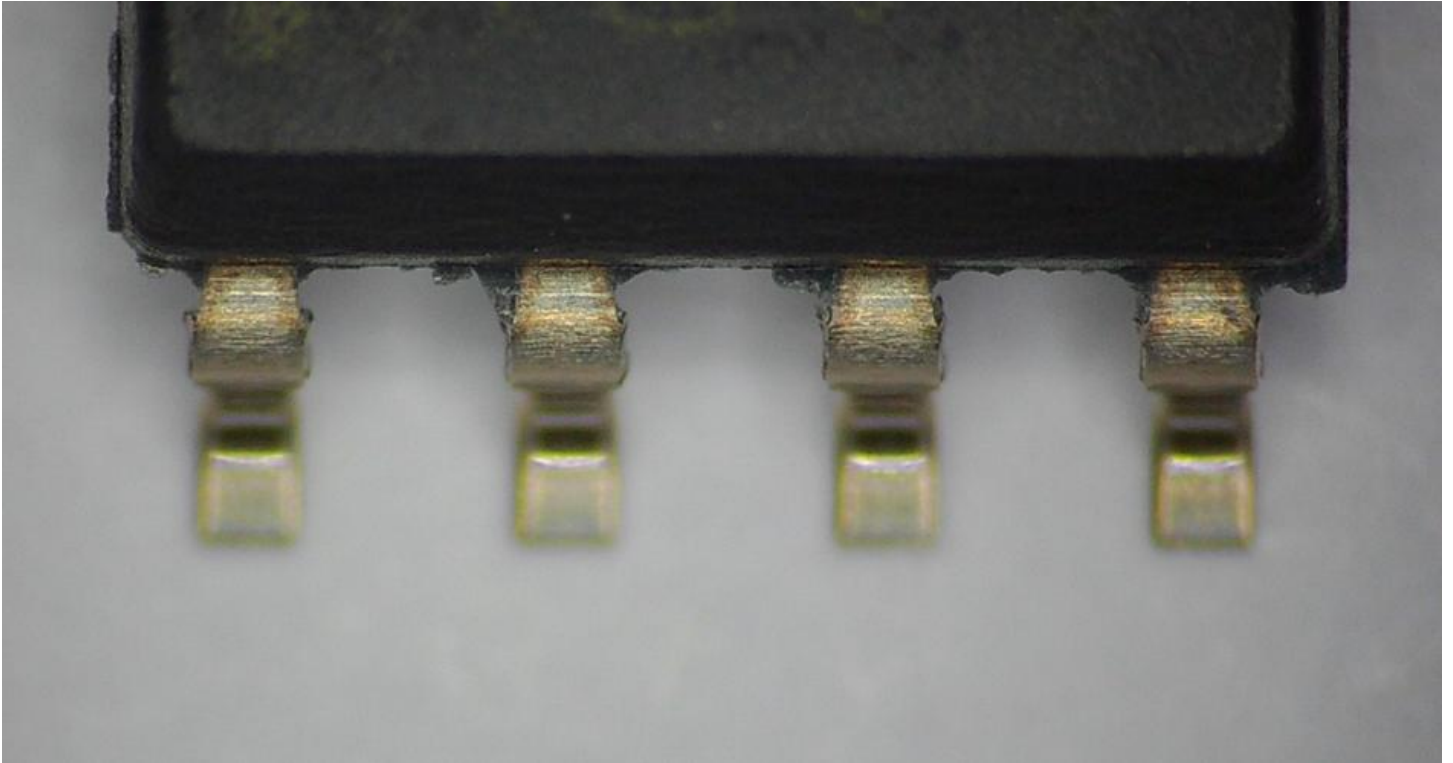
Top View



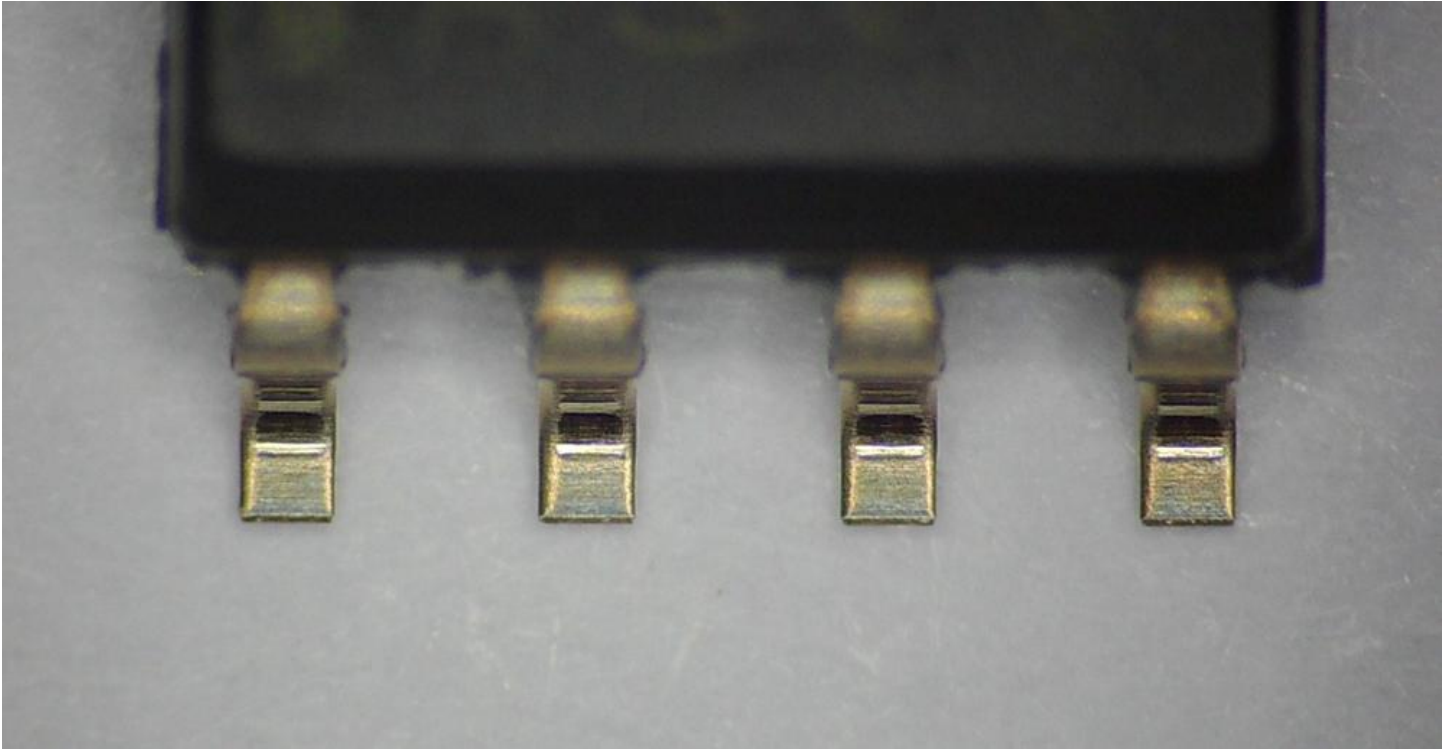
Top Marking



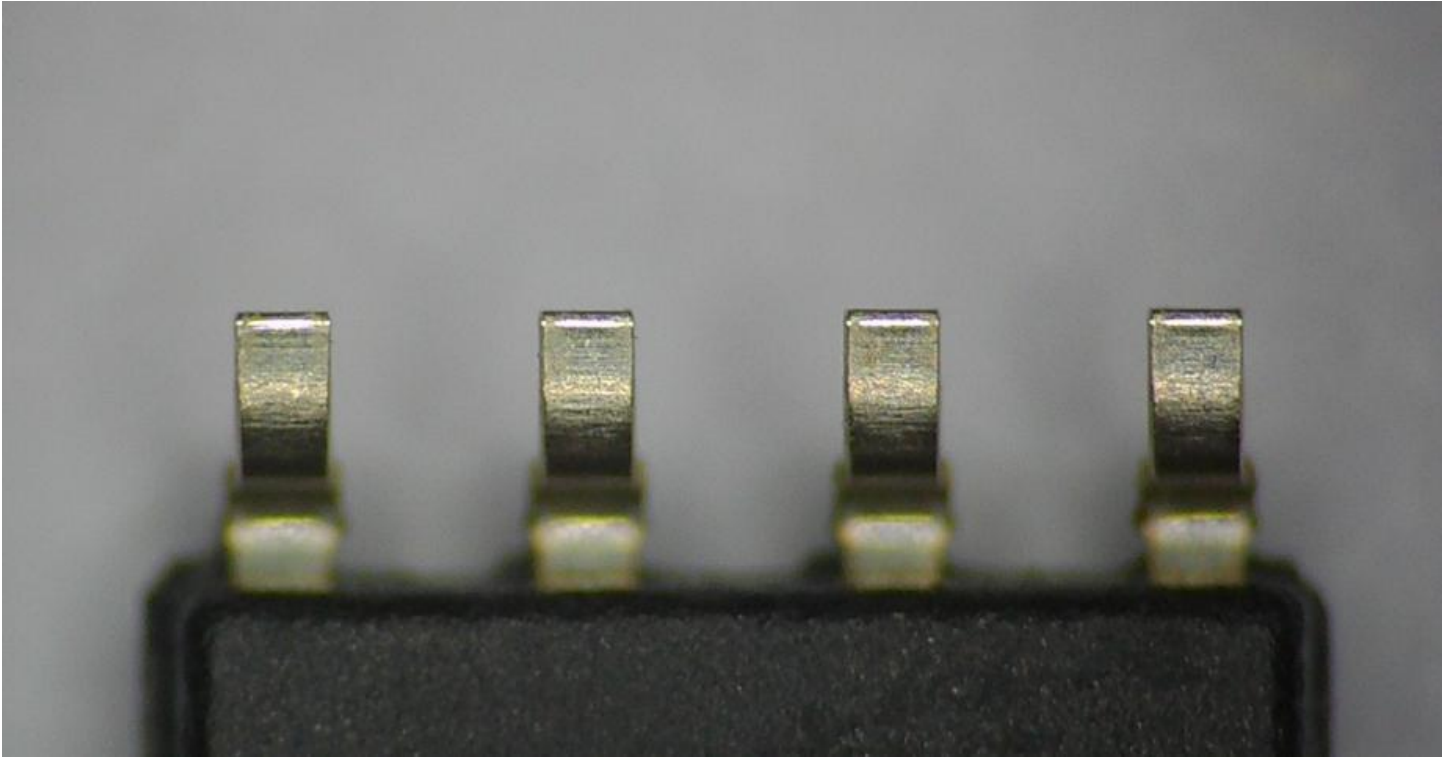
Bottom View



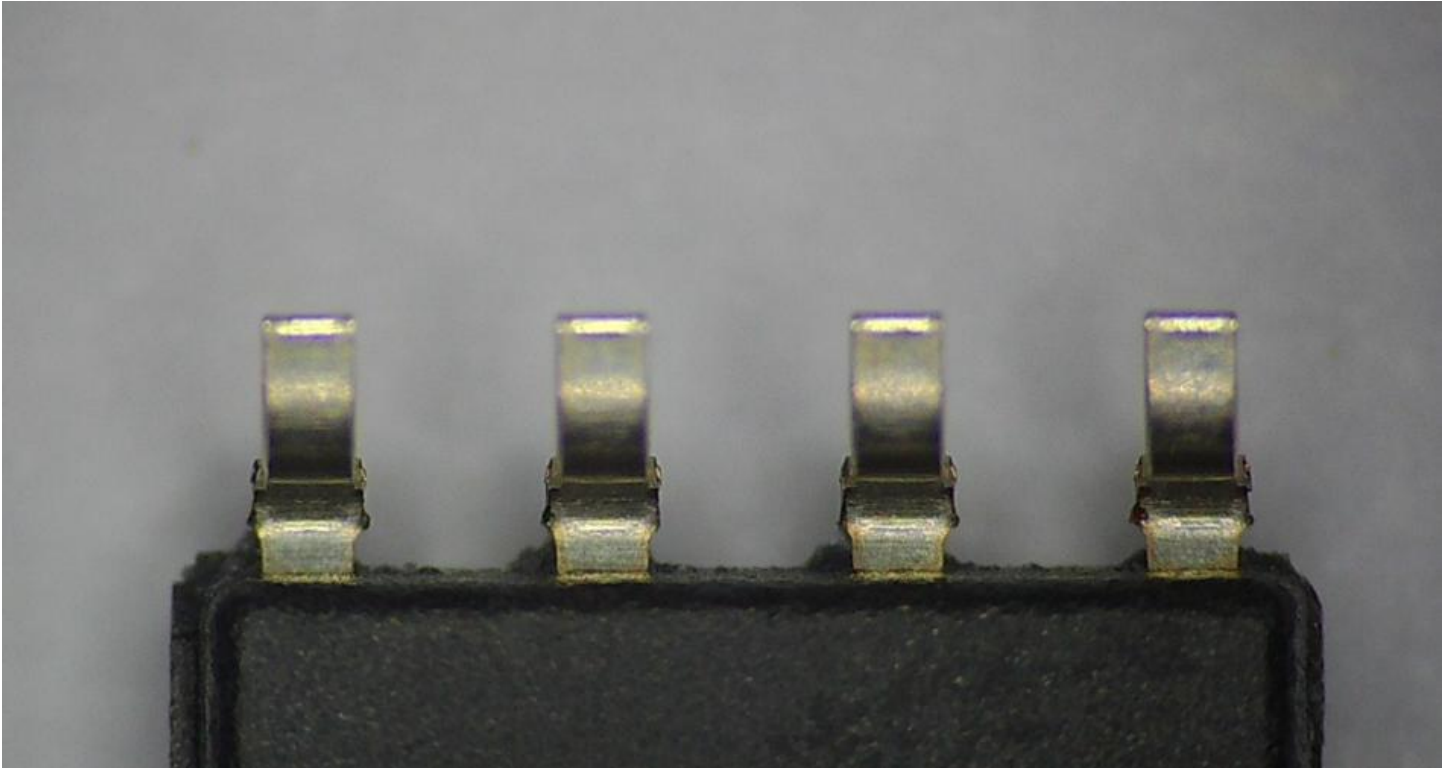
Top Leads 1



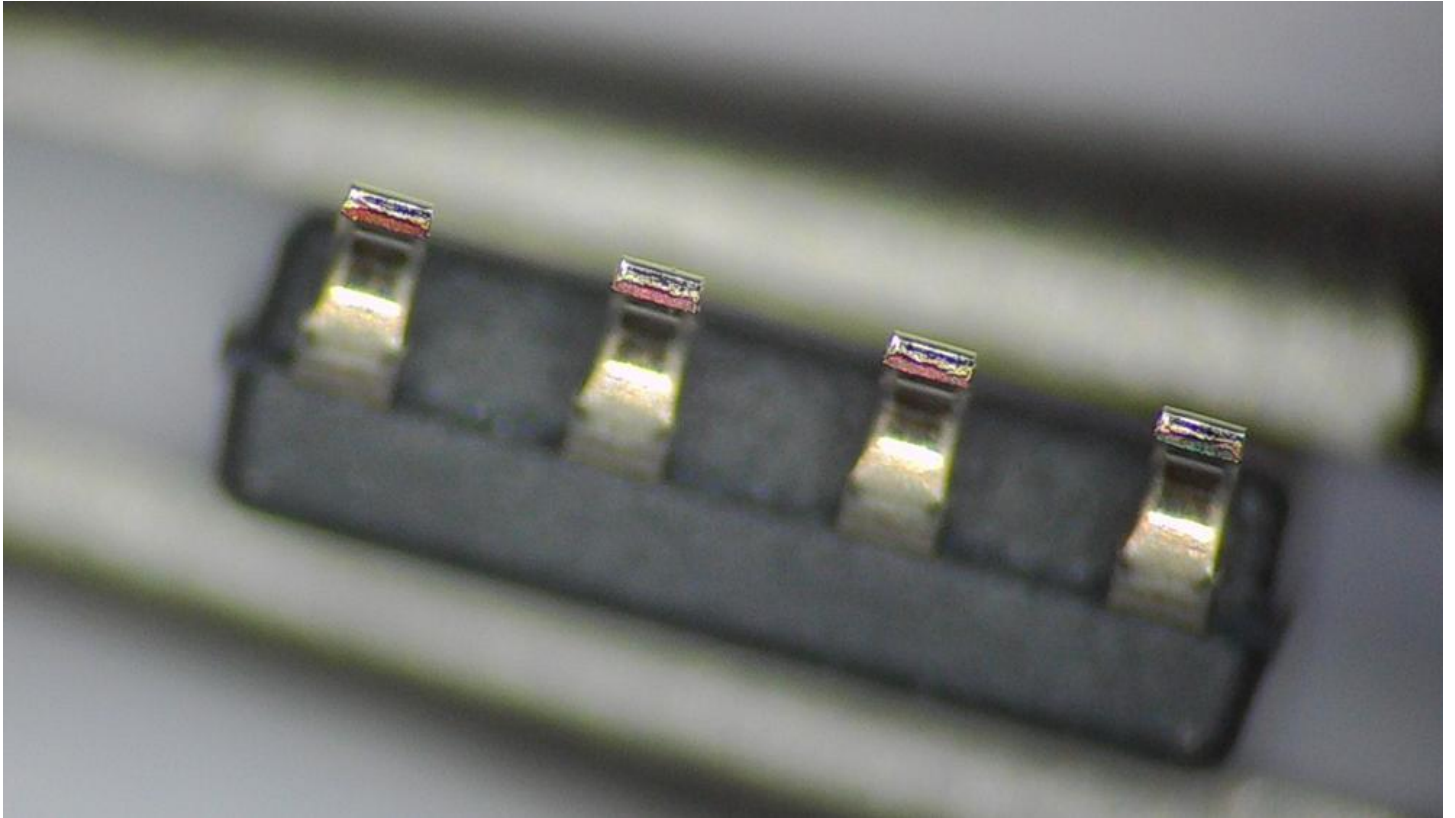
Top Leads 2



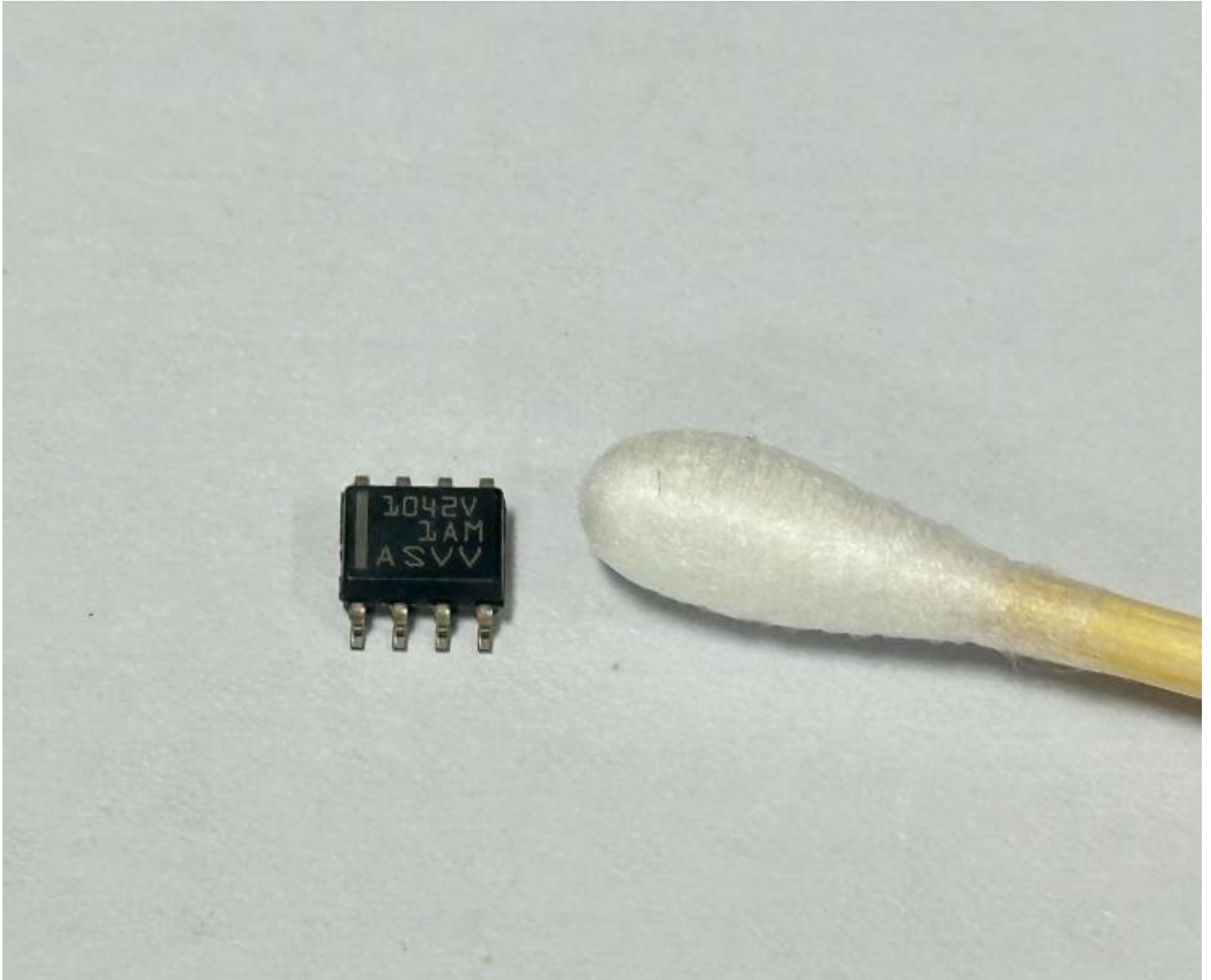
Bottom Leads 1



Bottow Leads 2



Side of View



Acetone Test

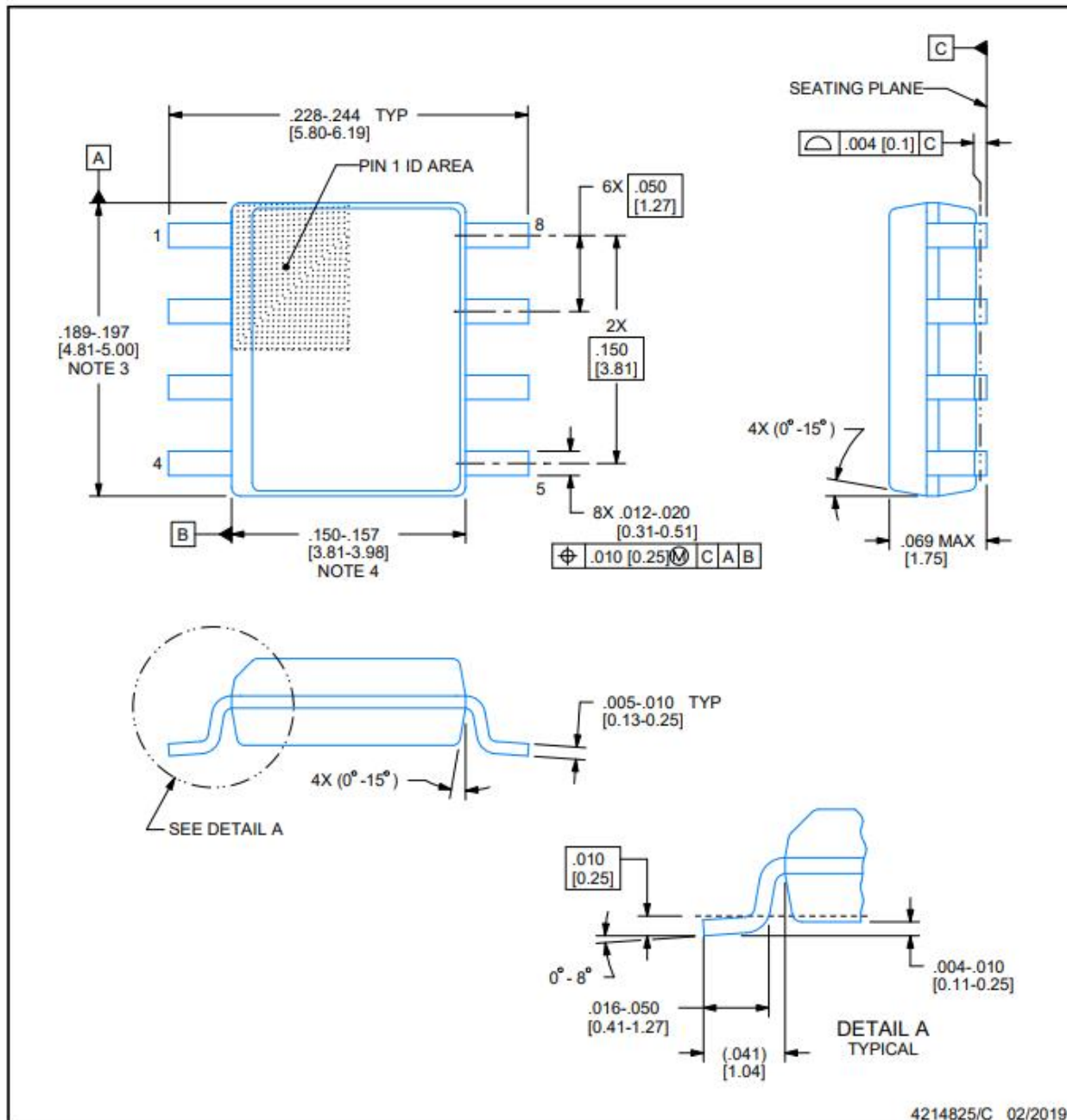


D0008A

PACKAGE OUTLINE

SOIC - 1.75 mm max height

SMALL OUTLINE INTEGRATED CIRCUIT





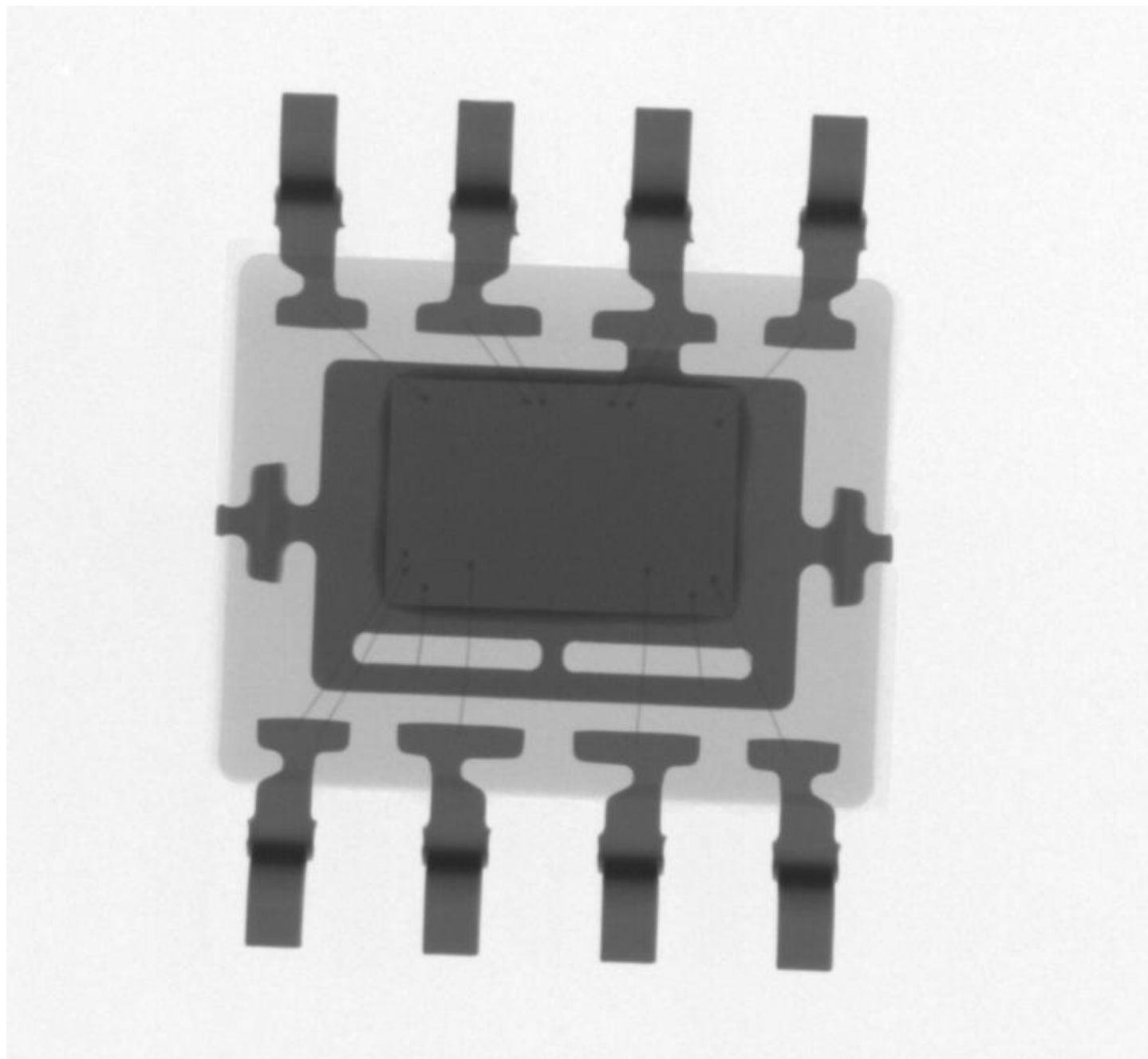
Length



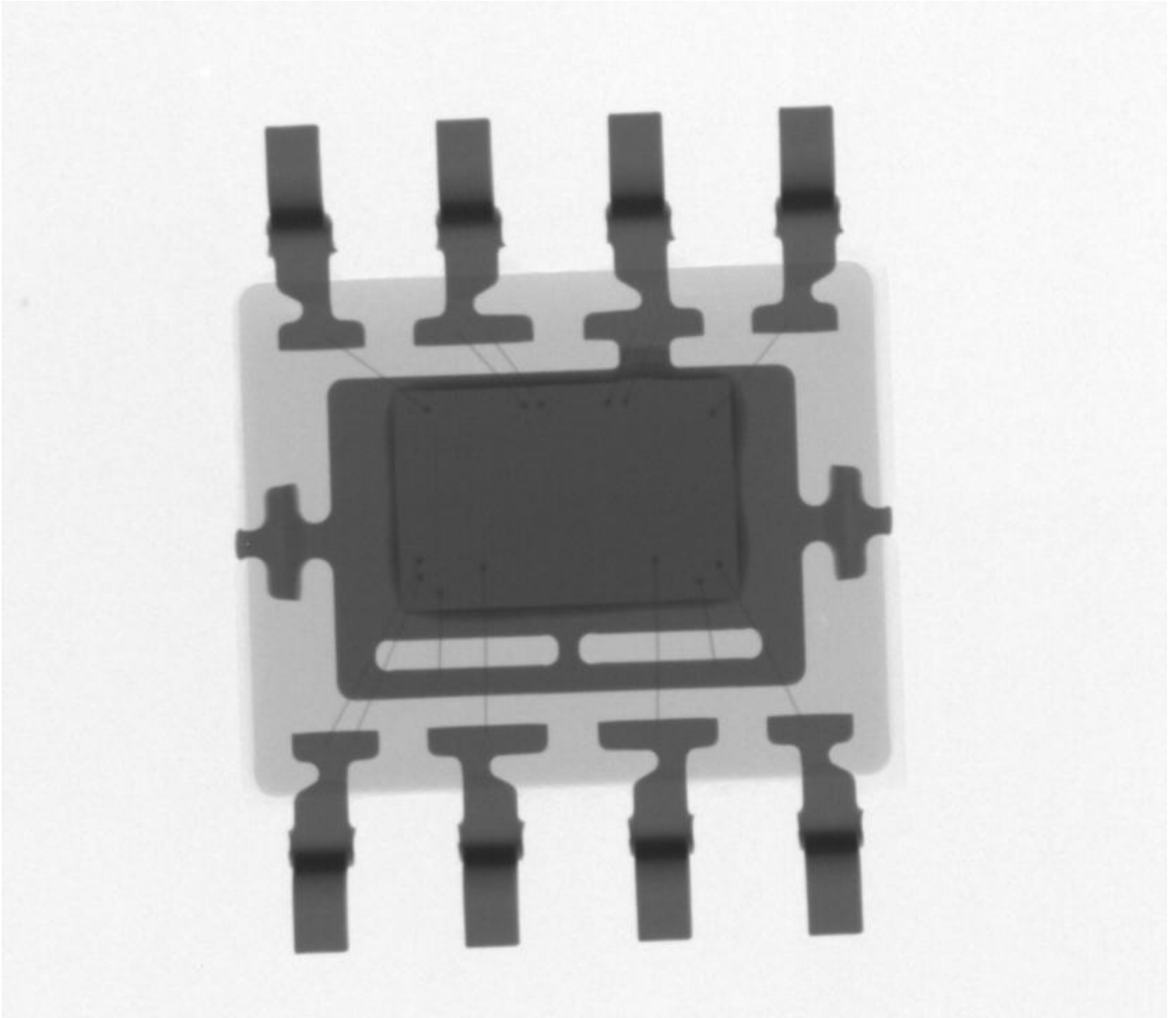
Width



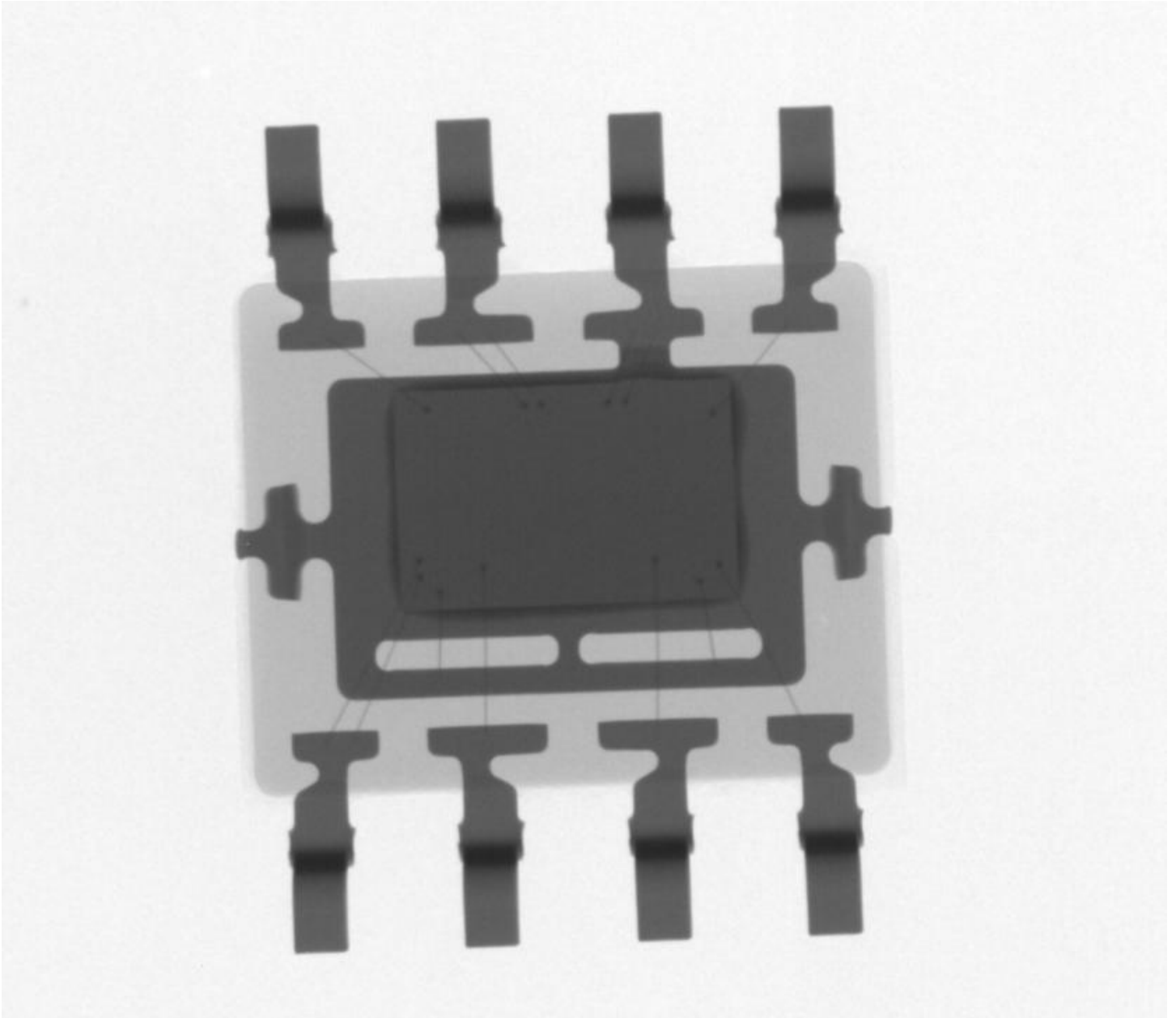
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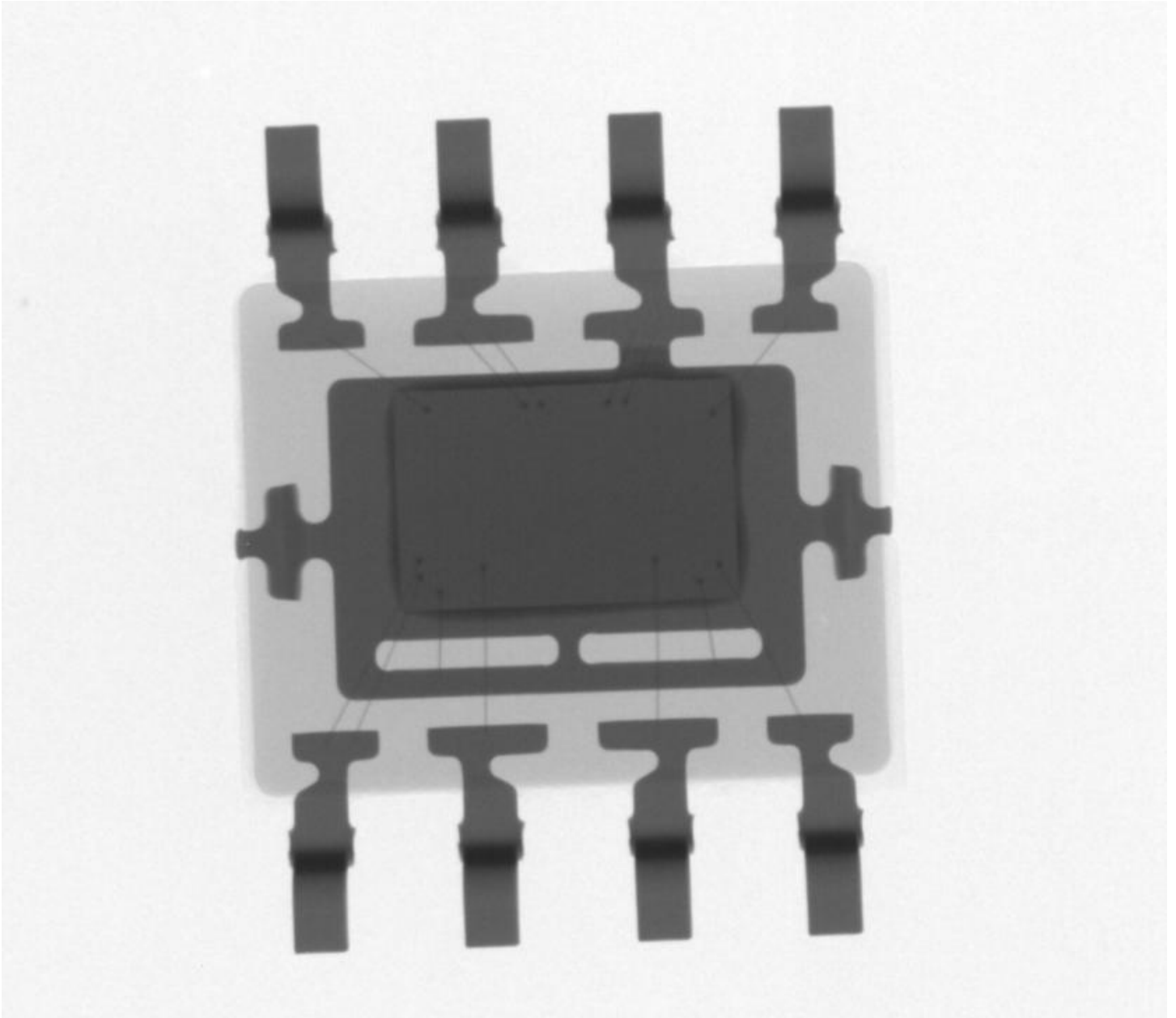
X-RayTopView-Sample1



X-RayTopView-Sample2



X-RayTopView-Sample3



X-RayTopView-Sample4

Test Report

Sample Name: _____ The integrated circuit _____

Part Number: _____ TCAN1042HGVDRQ1 _____

Manufacturer: _____ TI _____

Customer: _____ JANtronic GmbH _____

Shenzhen Chuangxin Online Testing Service Co., Ltd.



Test Report

Customer: JANtronic GmbH

Customer Address: N/A

Sample Name: The integrated circuit

Part Number: TCAN1042HGVDRQ1

Manufacturer: TI

Date Code: 2143

Package Type: SOIC-8

Quantity Received: 4 PCS

Quantity Inspected: 2 PCS

Date Received: 03/27/2025

Date Tested: 03/27/2025/17:00 - 03/28/2025/14:20



Tested by Allen

Inspected by Nacy

Approved by Leo

Test Items

☐ External visual inspection

☐ Pin correlation test

☐ Programming test

☒ Solderability analysis

☐ Radiography(X-ray)

☐ XRF test

☐ Key functional test(KFT)

☐ Baking

☐ Tape and reel

☐ Top permanency test

☒ Internal visual inspection

☐ SAT test

☐ Cross section

Methods & Equipment

1.1 Test standard:

- **AS6081A-2023**
- **J-STD-002E-2017**

1.2 Optical microscope:

- Equipment spec:

Optical microscope: SEZ-260 X7-X45(Due date: 07/17/2025)

Metalloscope: FJ-5A X50-X1000 (Due date: 07/17/2025)

1.3 Tin melting furnace:

- Equipment spec:

Tin melting furnace: BK-207(Due date: 07/17/2025)

Flux: No. 2 standard active rosin flux

1.4 Laser lid opener:

- Equipment spec:

Laser lid opener: DM300-IC(Due date: 07/17/2025)

1.5 Datasheet Reference:

- 《TI TCAN1042HGVDRQ1》:

https://www.ti.com/cn/lit/ds/symlink/tcan1042hgv-q1.pdf?ts=1743154498039&ref_url=https%253A%252F%252Fso.szlcsc.com%252F



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Analysis Summary

Solderability analysis:

Applicable standard: **J-STD-002E-2017**

Solderability tested were performed on 2 PCS samples(#1-#2) using the dip and look methods. 2 PCS pass solderability test. The dipped portion of the terminations is more than 95% covered by a continuous new solder coating.

Internal visual inspection:

Applicable standard: **AS6081A-2023**

Internal visual inspection was verified on 2 PCS samples(#1-#2). The 2 PCS samples have the same structure. Manufacturer TI marking with 2016 copyright year and die marking HVDA5543_2P3 were found on the die surface.

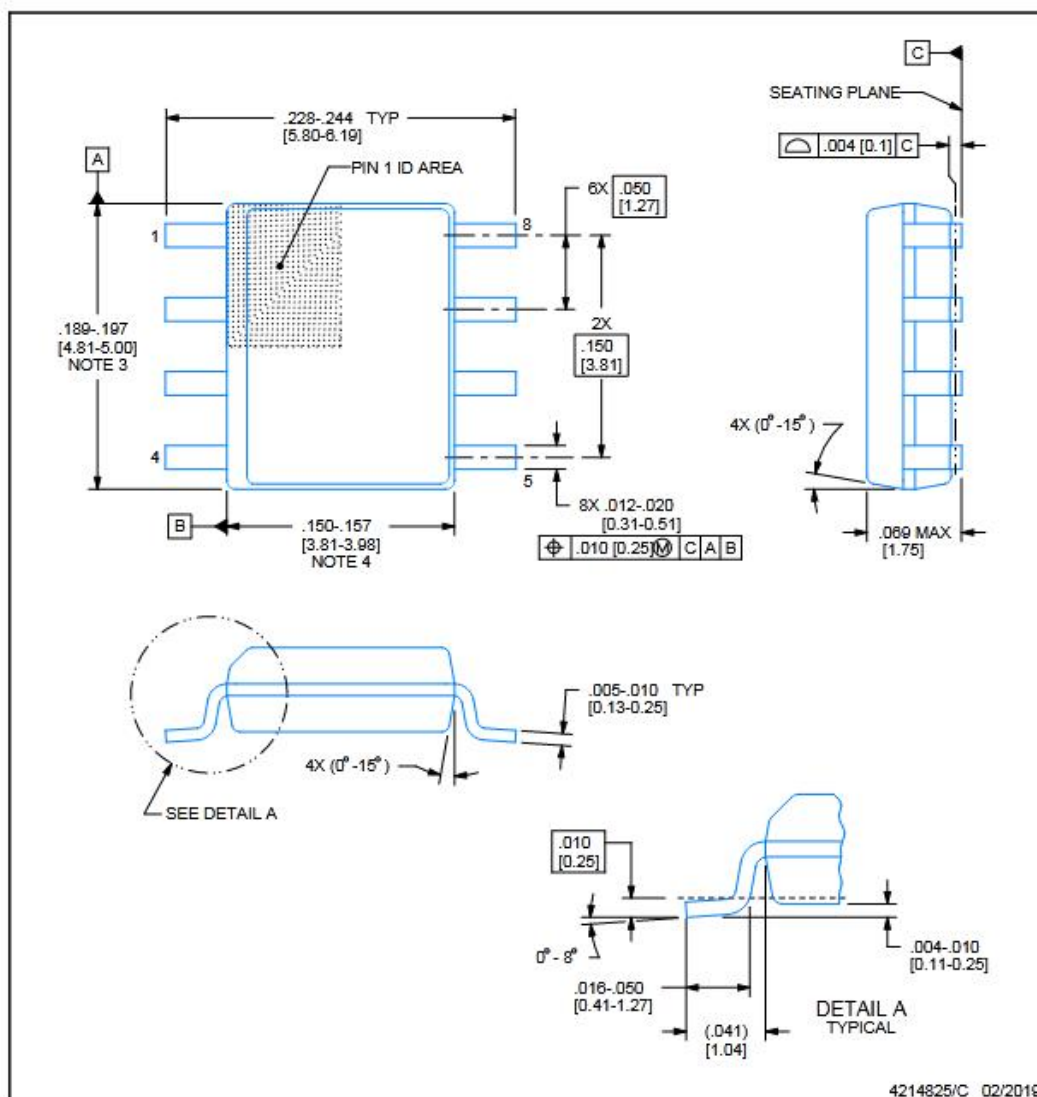
Devices confirmed to be the TI device.

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1. Device description:

This CAN transceiver family complies with the ISO1189-2 (2016) High Speed CAN (Controller Local Area Network) physical layer standard. All devices are designed for CAN FD networks with data rates up to 2Mbps(megabits per second).

2. Package dimensions:



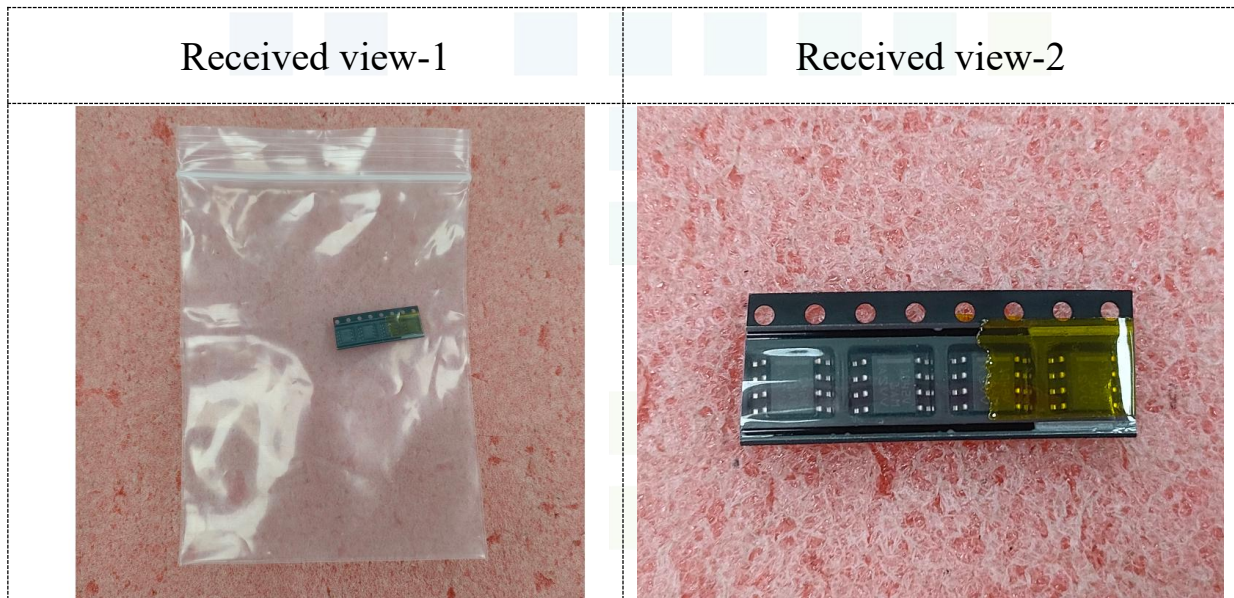
NOTES:

1. Linear dimensions are in inches [millimeters]. Dimensions in parenthesis are for reference only. Controlling dimensions are in inches. Dimensioning and tolerancing per ASME Y14.5M.
2. This drawing is subject to change without notice.
3. This dimension does not include mold flash, protrusions, or gate burrs. Mold flash, protrusions, or gate burrs shall not exceed .006 [0.15] per side.
4. This dimension does not include interlead flash.
5. Reference JEDEC registration MS-012, variation AA.

3. Documentation and packaging inspection:

Gross Weight	3.8 g	Quantity Received	4 PCS
Number of Boxes	N/A	Full Label	N/A
Package Type	Reel	Moisture Protection	N/A
MSL	N/A	ESD Protection	N/A

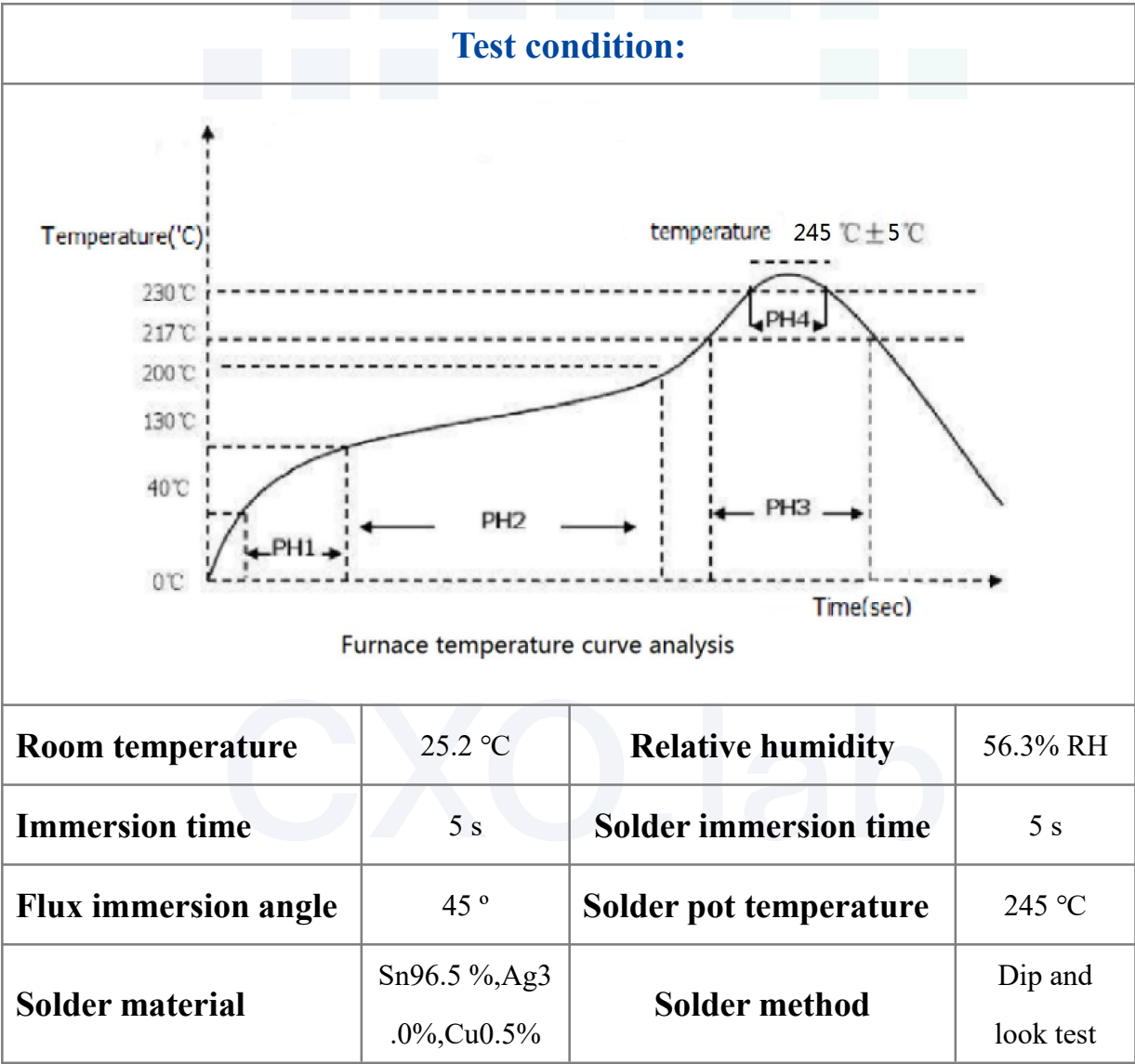
Note: All devices contain 4 PCS samples.



4. Solderability analysis:

Applicable standard: J-STD-002E-2017

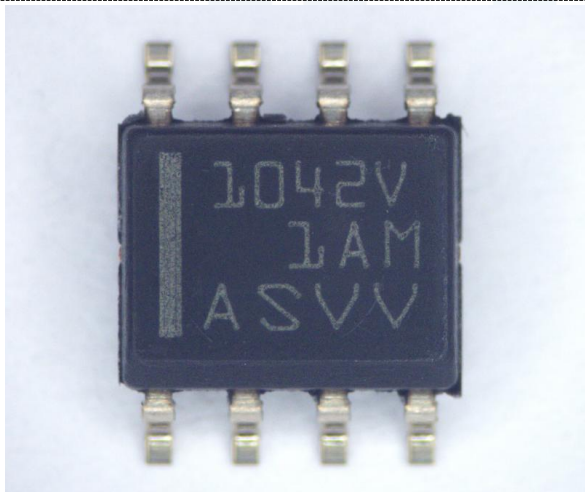
Solderability tested were performed on 2 PCS samples(#1-#2) using the dip and look methods. 2 PCS pass solderability test. The dipped portion of the terminations is more than 95% covered by a continuous new solder coating.



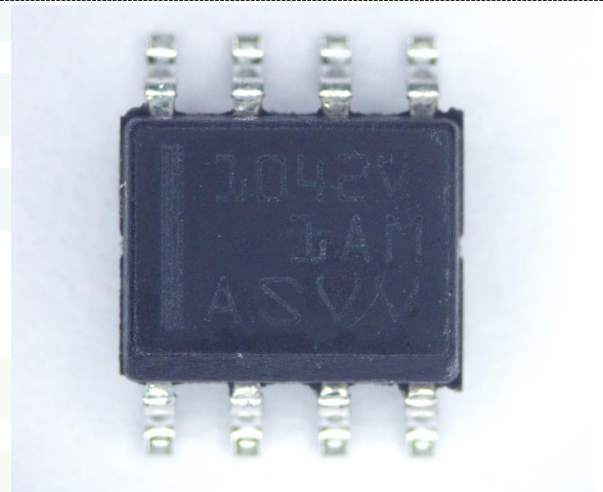
Tin furnace temperature



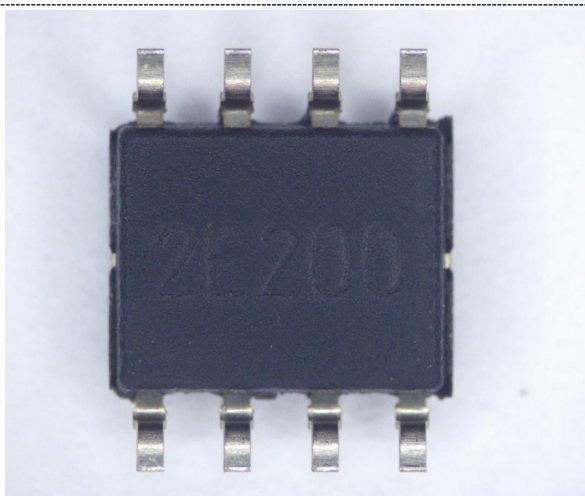
#1-Before top view



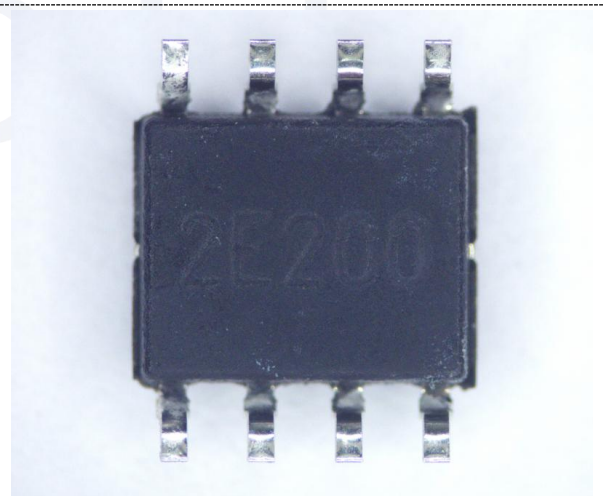
#1-After top view

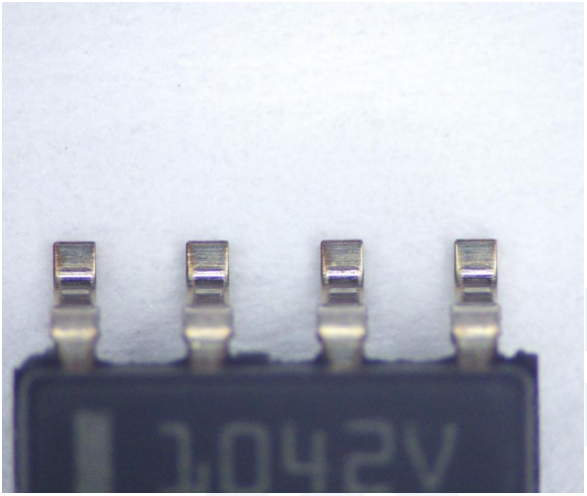
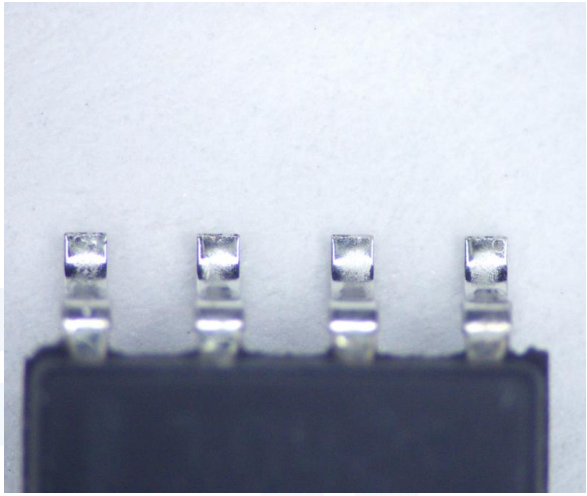
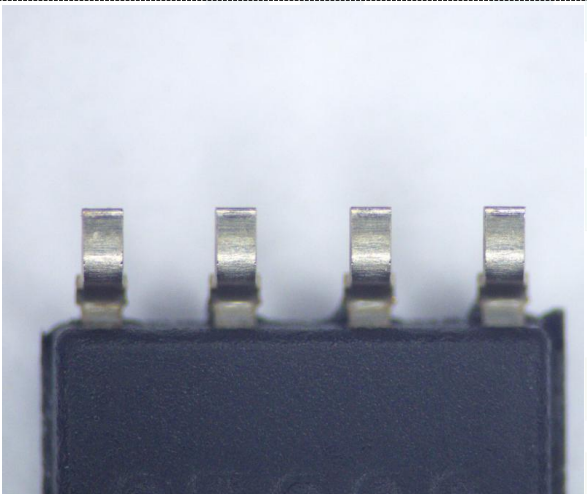
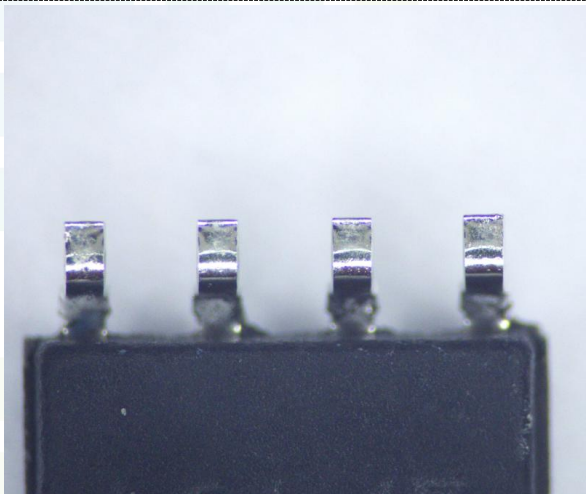
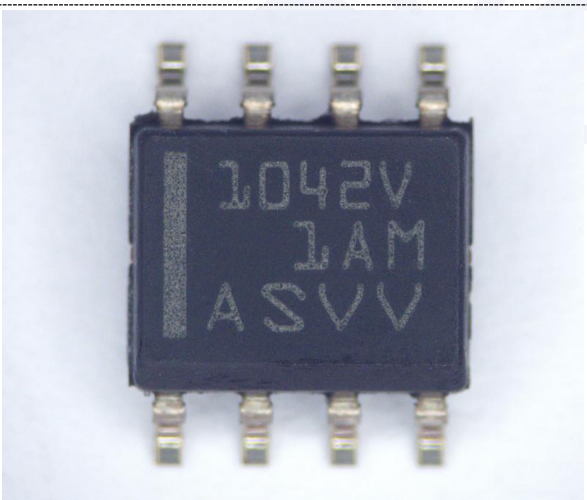
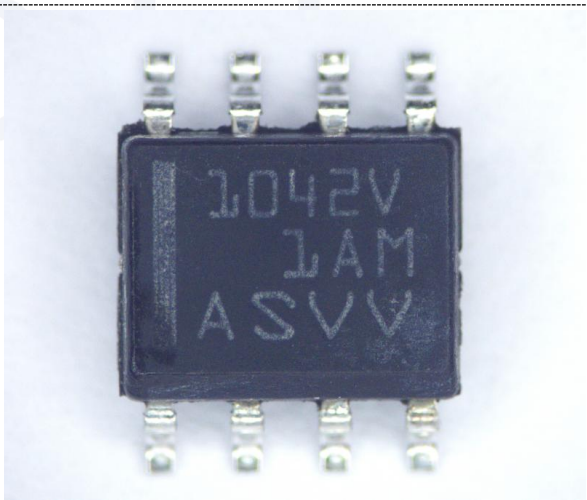


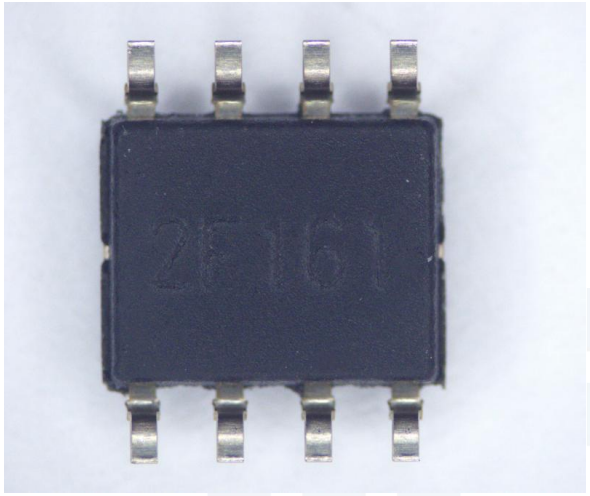
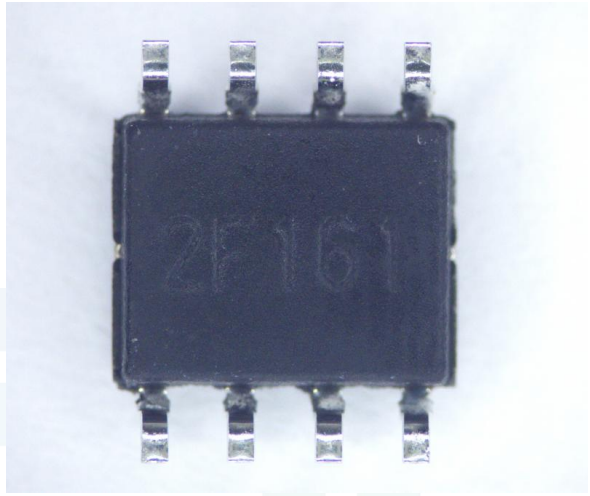
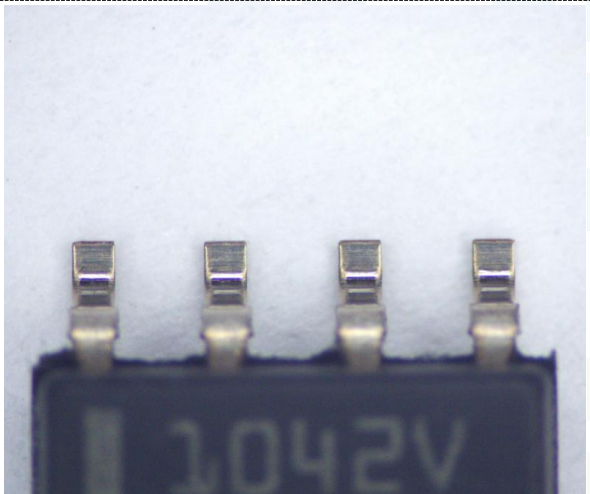
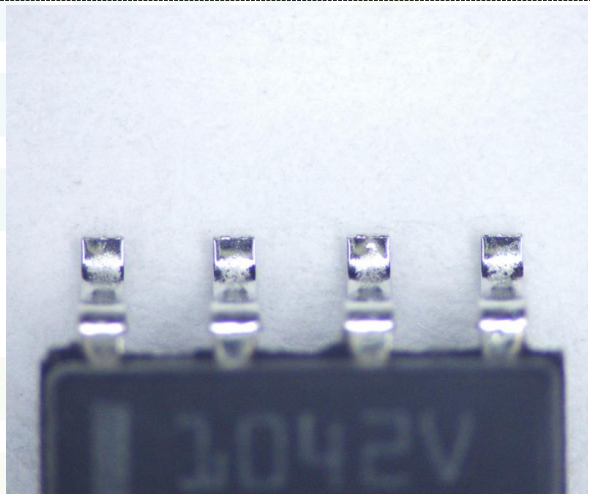
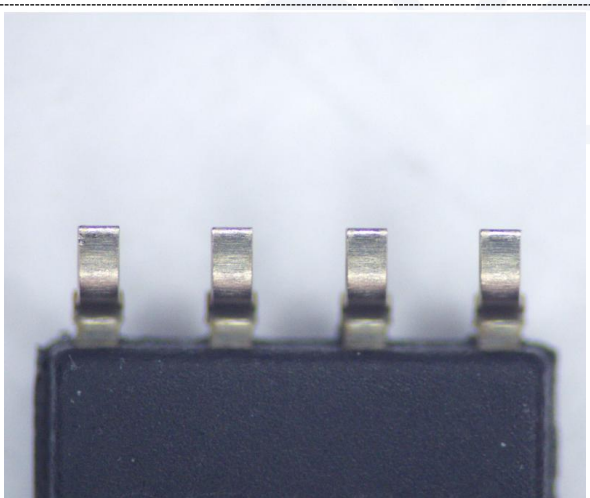
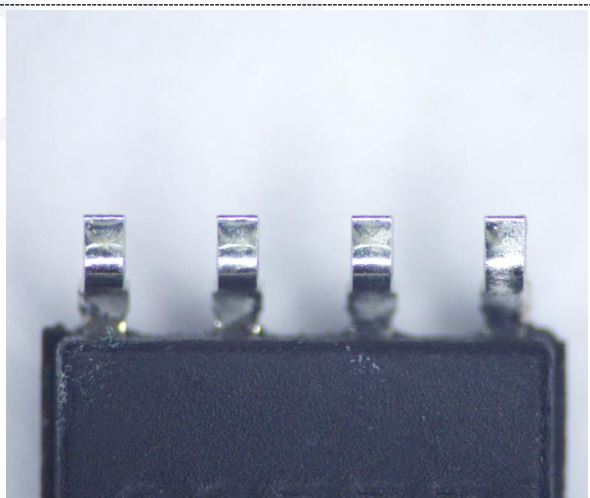
#1-Before bottom view



#1-After bottom view



#1-Before leads view-1 	#1-After leads view-1 
#1-Before leads view-2 	#1-After leads view-2 
#2-Before top view 	#2-After top view 

#2-Before bottom view 	#2-After bottom view 
#2-Before leads view-1 	#2-After leads view-1 
#2-Before leads view-2 	#2-After leads view-2 

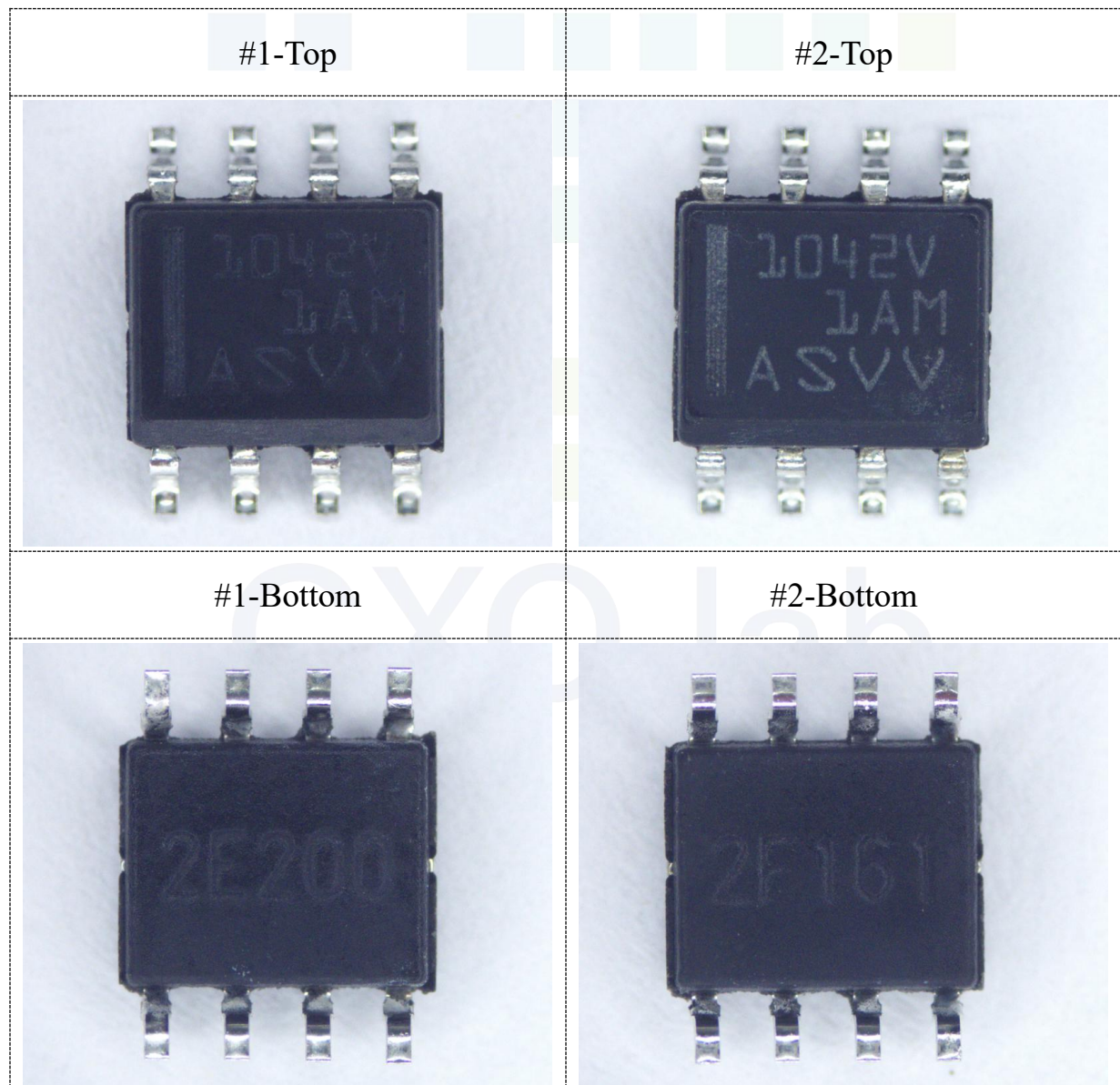
5. Internal visual inspection:

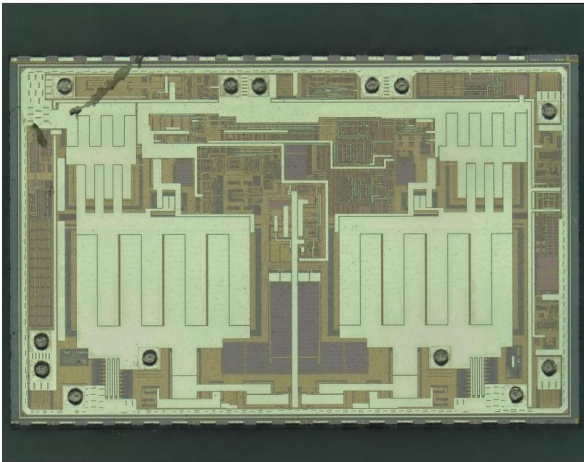
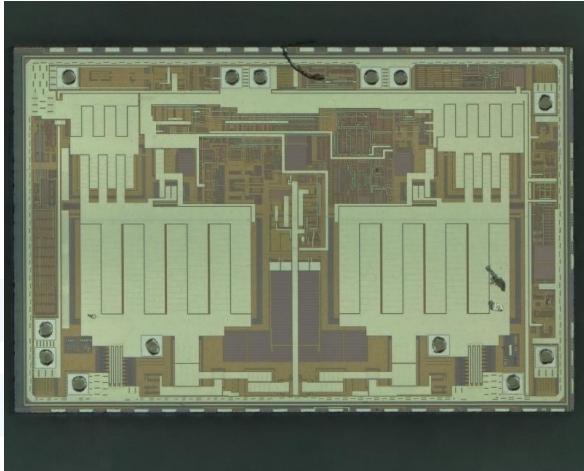
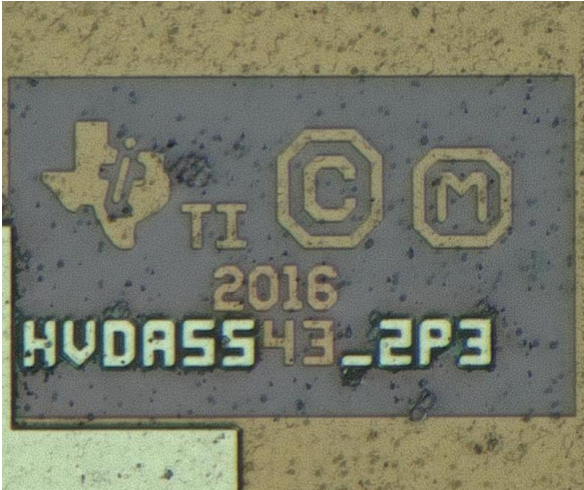
Applicable standard: [AS6081A-2023](#)

Ambient temperature: 24.2 °C Relative humidity: 57.5 % RH

Internal visual inspection was verified on 2 PCS samples(#1-#2). The 2 PCS samples have the same structure. Manufacturer TI marking with 2016 copyright year and die marking HVDA5543_2P3 were found on the die surface.

Devices confirmed to be the TI device.



#1-Die topography	#2-Die topography
	
#1-Die logo with marking and copyright	#2-Die logo with marking and copyright
	

-End of Report-

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Disclaimer

1. The test report is invalid without the stamp of “company report seal” and “cross-page seal”.
2. The copy of the test report is invalid without the stamp of “company report seal” and “cross-page seal”.
3. The test report is invalid without the signatures of operator, supervisor and manager.
4. A modified or partial copy of the test report is invalid.
5. When there is disagreement with the test report, please submit the issue to us within 15 days from the date of receipt. Overdue information will not be accepted.
6. The test report is only reflective of the test results of testing samples, not of the quality of batch products.
7. The * indicates subcontract test data.
8. The report is stamped with the CMA mark, indicating that the test items are within the scope of qualification recognition; No CMA mark is stamped, indicating that some/all of the test items are not within the scope of CMA qualification, and the results are for internal use by the customer only.



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