THE QUALITY CONTROL COMPANY

PRODUCT ANALYSIS REPORT

Report:	[redacted]
Date:	13-Nov-2026
Lot Qty:	3197
Part Number:	TCAN1051HDR
Manufacturer:	Texas Instruments
Client:	iBuyXS LLC
Client P/O:	[redacted]
Work Order:	[redacted]

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO/IEC 17025
TESTING LABORATORY

WHITE HORSE LABORATORIES
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Unit A 10/F, Wofoo Building 204-210 Texaco Road
SAR Hong Kong , China , 999077
+852 2614 - 5998

Order Information

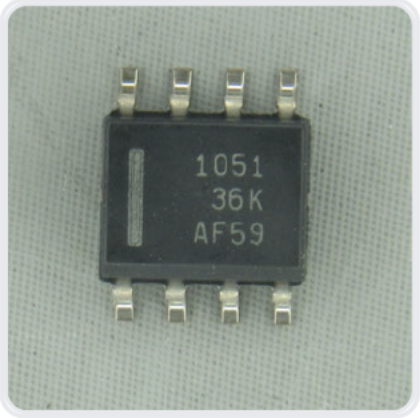
Work Order:	[redacted]	**Protocol:**	Custom
Part Number:	TCAN1051HDR	**Risk History:**	Low Risk (ERAI)
Manufacturer:	Texas Instruments	**Device Type:**	IC - Interface
Package Type:	8SOIC	**MSL:**	1
Description:	Fault Protected CAN Transceiver with CAN FD		
Datasheet:	https://www.ti.com/general/docs/suppproductinfo.tsp?distId=10&gotoUrl=https%3A%2F%2Fwww.ti.com%2Flit%2Fgpn%2Ftcan1051h		

Result

Conclusion: Acceptable

Approved By: Leonida Tabor

Job Title: Product Analysis Engineer



Processes Performed

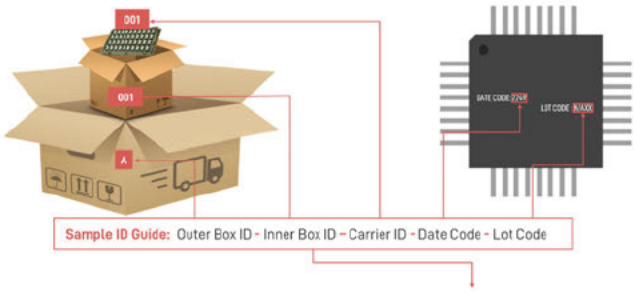
✓	Documentation & Packaging	3197	●	Dye & Pry	
✓	General Inspection	13	●	Heated Chemical Test	
✓	External Visual Inspection	13	●	Cross Section	
●	Sole Marking Permanency Test		●	Sorting	
●	XRF		●	Baking	
●	HPC Memory Module FT				
●	2D Radiological (X-Ray) Inspection				
●	Scanning Acoustic Microscopy				
✓	Dip and Look Test (ST)	1			

Legend: ✓ Acceptable ● Not Acceptable ● Not Conducted

Analysis

Actual package marking of inspected samples is consistent with the manufacturer's part marking requirement. The exterior configuration and measured dimensions were in accordance with the datasheet specification. The samples showed no evidence of remarking, rework, or prior use. Terminal contamination and exposed copper is low risk since solderability test passed with more than 95% solder coverage on the terminals and exhibiting good wetting properties.

Documentation & Packaging



Outer Box	Inner Box	Carrier	Date Code	Lot Code	COO	QTY	Samples Taken	Sample ID	Dimensions (CM)	Weight (KG)
1	N/A	1	2323	3455129ML3	Malaysia	3197	13	1	122*103*80	114

Sample Table

Test Item	Sample ID	QTY
External Visual Inspection	1	13
Dip and Look Test (ST)	1	1

Documentation & Packaging Inspection

Plan A

Reviewer:	RR0397	**Process Location:**	Hong Kong
Technician:	JL0233	**Date Conducted:**	3-Nov-2026
Standard & Method:	AS6081 Level A1 Method 4.2.6.4.1 and Level A2 Method 4.2.6.4.2.1		

Equipment

Equipment	Serial No	Current Cal	Next Cal	Job
Camera	WHL-HK0129	N/A	N/A	GIS
IPAD	WHL-HKG00212	N/A	N/A	DPI

Analysis

Product arrived in reel with appropriate ESD protective packaging. Received material was seen with damage carrier tape and uneven sealing.

Receiving	✔	Result is acceptable
DPI	✔	Result is acceptable
GIS	✔	Result is acceptable



Reel

[redacted]

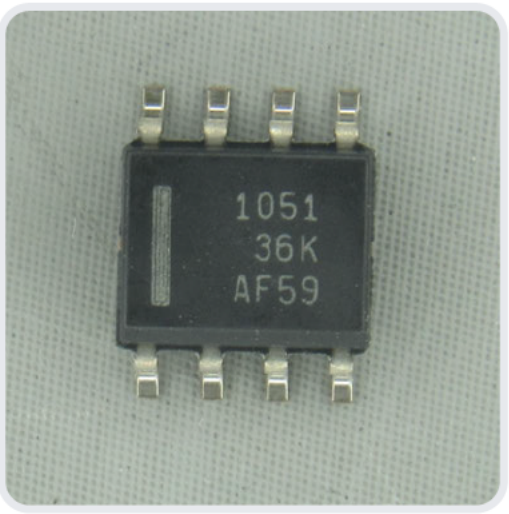


Reel Label

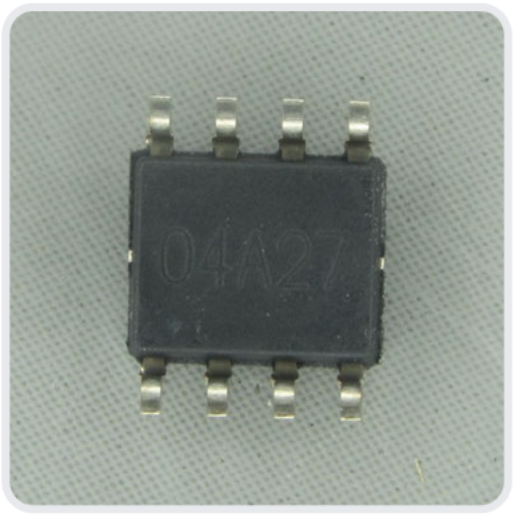
[redacted]



Parts Aligned In Tape



Top View



Bottom View


Damage Carrier Tape

End of Section

External Visual Inspection

Reviewer:	RR0397	**Process Location:**	Hong Kong
Technician:	MS0631	**Date Conducted:**	5-Nov-2026
Standard & Method:	AS6081 4.2.6.4.2.2		

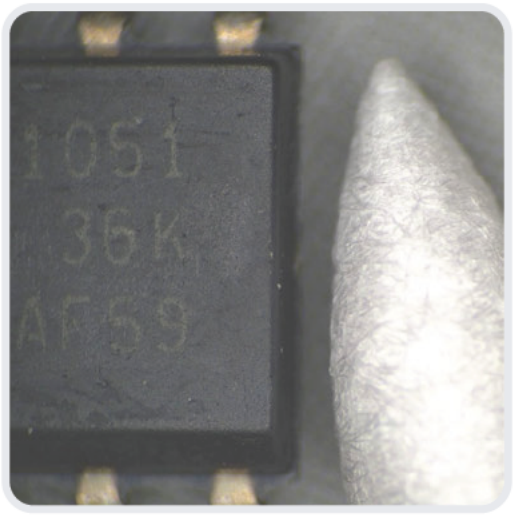
Equipment

Equipment	Serial No	Current Cal	Next Cal
Camera	WHL-HK0138	N/A	N/A
Caliper	WHL-HK0002	2-Nov-2026	2-Dec-2026
Scale	WHL-HK0134	2-Nov-2026	2-Dec-2026
Microscope with HD Camera	WHL-HK0058	N/A	N/A

Analysis

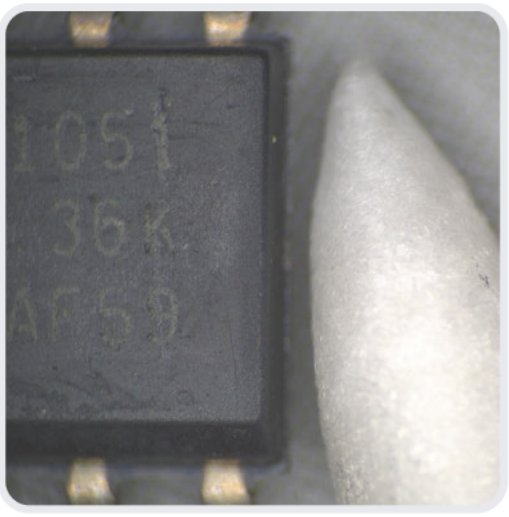
Sample is not remarked due to passing chemical solution and scrape tests. Samples are not re-plated due to presence of exposed base metal and stress marks. Samples do not exhibit any indication of rework or prior use. The samples have the same exterior configuration as shown on the Package Outline Drawing (POD). The contamination/expose copper on the pins is considered minor, as the parts passed the solderability test. Minor observations are not considered problematic.

Marking Inspection	✓	Result is acceptable	
Acceptable QTY : 13		Not Acceptable QTY : 0	
Package Body Inspection	✓	Result is acceptable	
Acceptable QTY : 13		Not Acceptable QTY : 0	
Terminal Inspection	✓	Result is acceptable	
Acceptable QTY : 13		Not Acceptable QTY : 0	
Exterior Configuration and Coplanarity	✓	Result is acceptable	
Acceptable QTY : 13		Not Acceptable QTY : 0	
Dimensions and Weights	✓	Result is acceptable	
Acceptable QTY : 3		Not Acceptable QTY : 0	
MPT/Resurfacing Test	✓	Result is acceptable	
Acceptable QTY : 1		Not Acceptable QTY : 0	



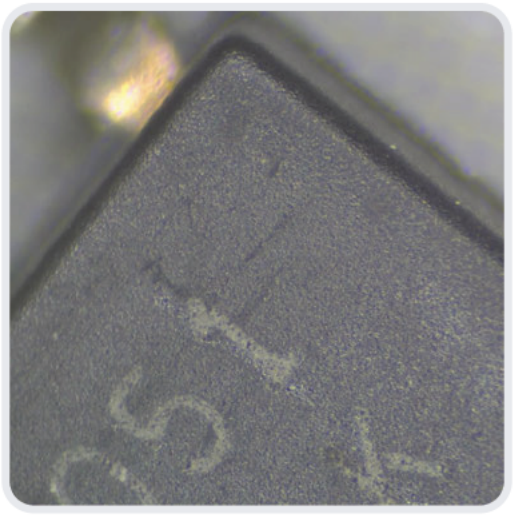
Top Side Before Acetone Test

1



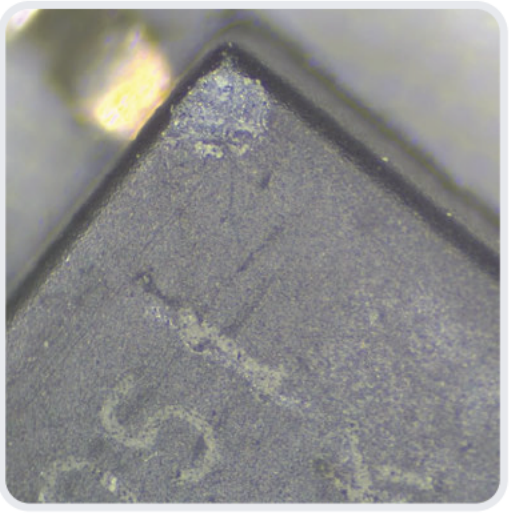
Top Side After Acetone Test (Pass)

1



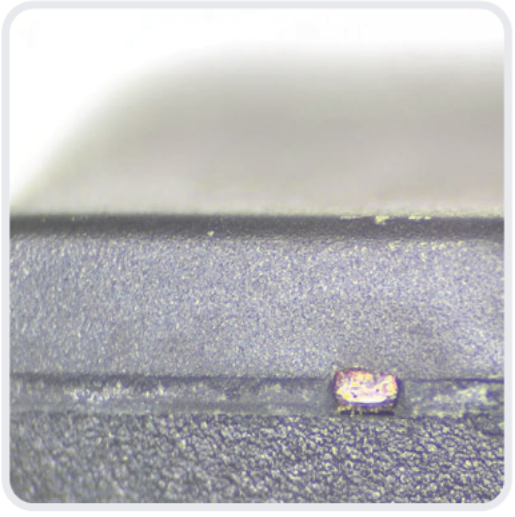
Top Side Before Mechanical Scrape Test

1



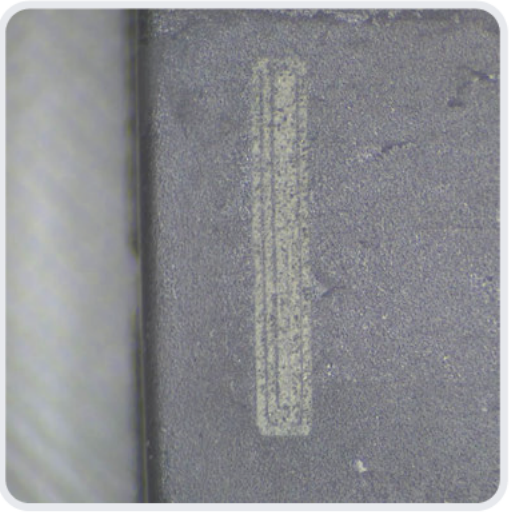
Top Side After Mechanical Scrape Test (Pass)

1



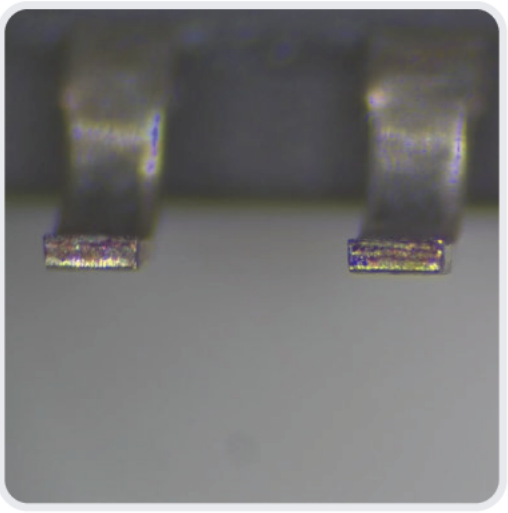
No Coating

1



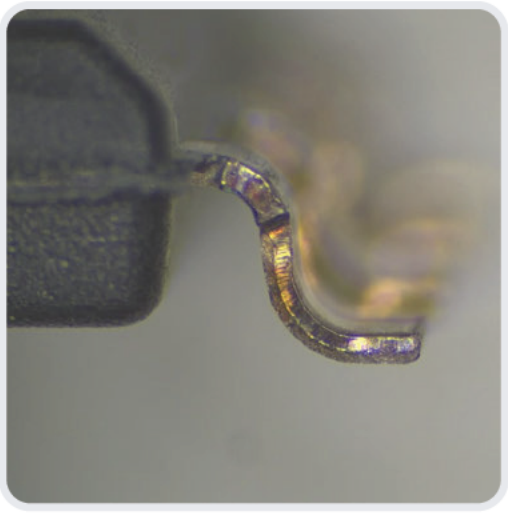
Pin 1 Indicator (Device Top)

1



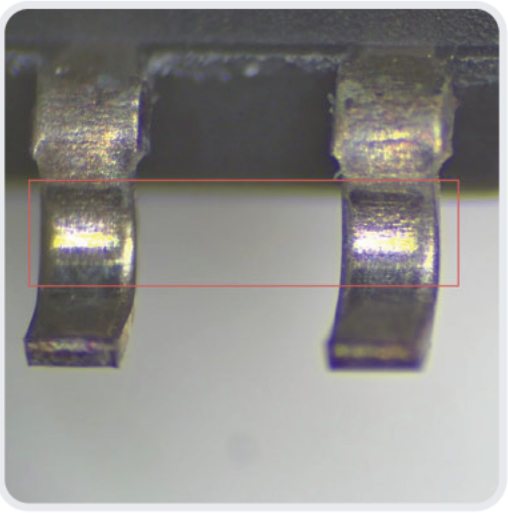
Exposed Base Metal From Trimming

1



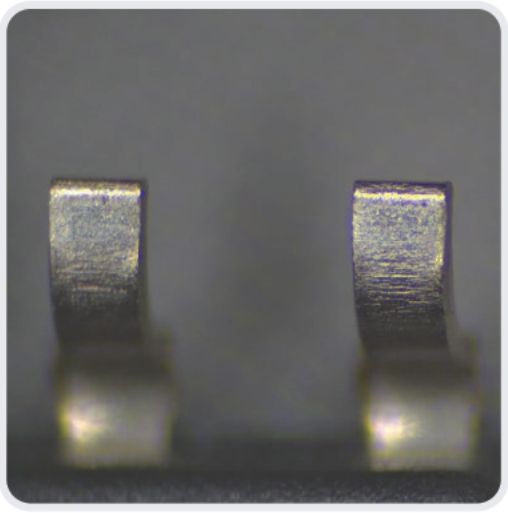
Exposed Base Metal From Trimming

1



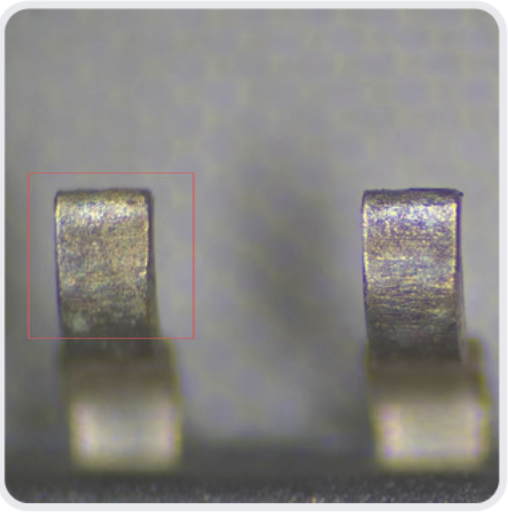
Stress Marks From Forming

1



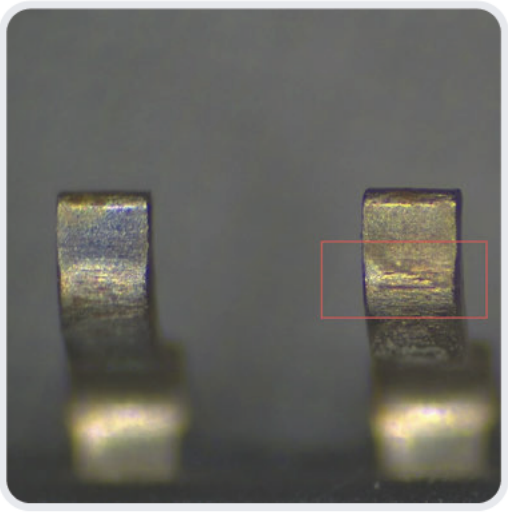
Terminal

1



Contamination, 8pcs

1



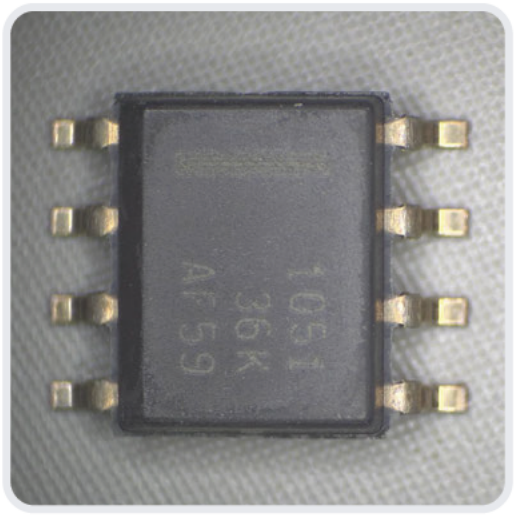
Exposed metal,1pc

1



Coplanarity Test, 13pcs (Pass)

1



Part as Shown on POD Device Top

1



Part as Shown on POD Device Side

1



Part as Shown on POD Device Side

1

PACKAGING INFORMATION

Orderable part number	Status (1)	Material type (2)	Package | Pins	Package qty | Carrier	RoHS (3)	Lead finish/ Ball material (4)	MSL rating/ Peak reflow (5)	Op temp (°C)	Part marking (6)
TCAN1051HD	Obsolete	Production	SOIC (D) | 8	-	-	Call TI	Call TI	-55 to 125	1051
TCAN1051HDR	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051
TCAN1051HDR.A	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051
TCAN1051HDR.B	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051
TCAN1051HGD	Obsolete	Production	SOIC (D) | 8	-	-	Call TI	Call TI	-55 to 125	1051
TCAN1051HGDR	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051
TCAN1051HGDR.A	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051
TCAN1051HGDR.B	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051
TCAN1051HGDRG4	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051
TCAN1051HGDRG4.A	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051
TCAN1051HGDRG4.B	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051
TCAN1051HGVD	Obsolete	Production	SOIC (D) | 8	-	-	Call TI	Call TI	-55 to 125	1051V
TCAN1051HGVDR	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051V
TCAN1051HGVDR.A	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051V
TCAN1051HGVDR.B	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051V
TCAN1051HVD	Obsolete	Production	SOIC (D) | 8	-	-	Call TI	Call TI	-55 to 125	1051V
TCAN1051HVDR	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051V
TCAN1051HVDR.A	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051V
TCAN1051HVDR.B	Active	Production	SOIC (D) | 8	2500 | LARGE T&R	Yes	NIPDAU	Level-1-260C-UNLIM	-55 to 125	1051V

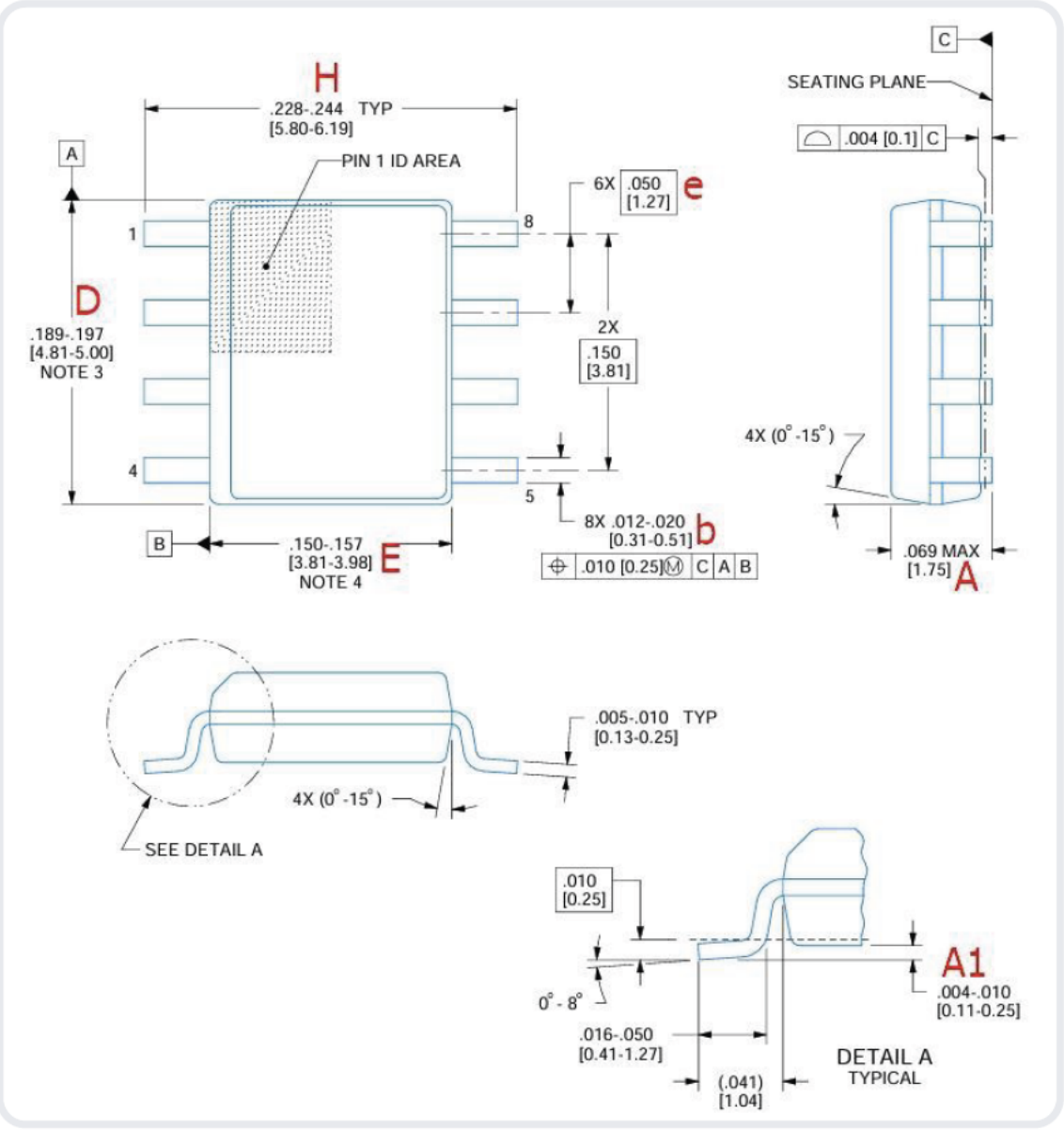
(1) **Status:** For more details on status, see our product life cycle.

(2) **Material type:** When designated, preproduction parts are prototypes/experimental devices, and are not yet approved or released for full production. Testing and final process, including without limitation quality assurance, reliability performance testing, and/or process qualification, may not yet be complete, and this item is subject to further changes or possible discontinuation. If available for ordering, purchases will be subject to an additional waiver at checkout, and are intended for early internal evaluation purposes only. These items are sold without warranties of any kind.

(3) **RoHS values:** Yes, No, RoHS Exempt. See the TI RoHS Statement for additional information and value definition.

Ordering Information

Package Outline Drawing (POD)



Dimensions Data Measured Device Key

Device #	1	2	3
Sample ID	1	1	1

Dimensions Data Log

Label	UOM	Tolerance	Device # 1	Device # 2	Device # 3
D	mm	REF= — , Min=4.8100 , Max=5.0000	4.8400	4.8300	4.8300
H	mm	REF= — , Min=5.8000 , Max=6.1900	6.0900	6.0900	6.1000
E	mm	REF= — , Min=3.8100 , Max=3.9800	3.8100	3.8200	3.8300
A	mm	REF= — , Min= — , Max=1.7500	1.6200	1.6200	1.6200
A-A1	mm	REF= — , Min= — , Max=1.6400	1.4600	1.4500	1.4500
b	mm	REF= — , Min=0.3100 , Max=0.5100	0.4000	0.4000	0.4000
e	mm	1.2700	1.2600	1.2700	1.2700
g	g	—	0.0800	0.0800	0.0800

Dimensions Data Log Photo



Label : D

1



Label : H

1



Label : E

1



Label : A

1

Dimensions Data Log Photo



Label : A-A1

1



Label : b

1



Label : e

1



Label : g

1

End of Section

Dip and Look Test (ST)

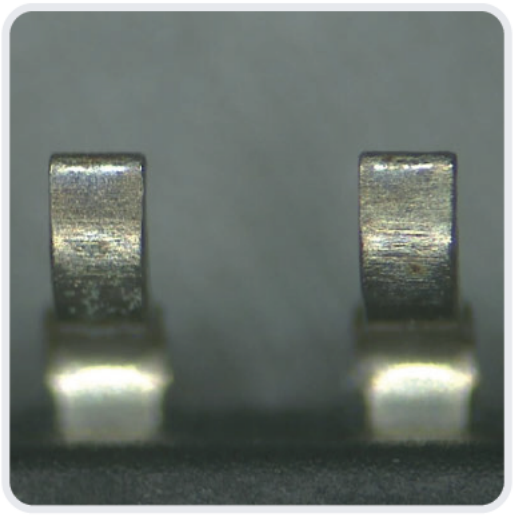
Reviewer:	RR0397	**Process Location:**	Hong Kong
Technician:	LH0261	**Date Conducted:**	12-Nov-2026
Standard & Method:	J-STD-002E Method 4.2.1, 4.2.2, 4.2.6, 4.2.7		

Equipment

Equipment	Serial No	Current Cal	Next Cal
Temperature	WHL-HK0152	9-Apr-2026	9-Apr-2027
Solder Pot	WHL-HK0053	N/A	N/A

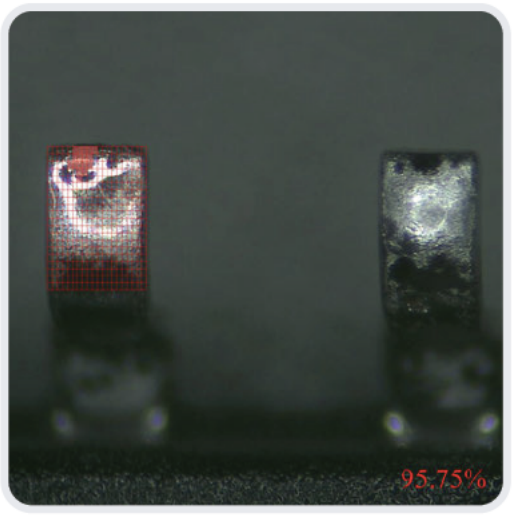
Analysis

The standard states that solder coverage on more than 95% of the terminal pad area meets the requirements for solderability as defined within the JEDEC standard. Product is designated Pb-free by the manufacturer so Pb-free solder was used for testing. The sample was preconditioned before solderability test. Sample passed since the terminal pads area showed more than 95% solder coverage after Pb-free solderability testing.



Before Dipping

1



After Dipping (Pass)

1

End of Section

Report Explanations

1. Result is either Acceptable, Unacceptable, or Suspect Counterfeit based upon the test methods conducted in the requested test plan and the acceptance criteria defined within AS6171A, section 3.7.1.

2. “Risk Factor” is a calculation of the remaining risk of a device being counterfeit or substandard from the results of the processer conducted, and risk associated with not conducting some processes. Green codes are acceptable with minimal risk of counterfeit or being substandard quality. Yellow codes are potential problems that can be verified with additional testing or physical defects that can be removed. Red codes are unacceptable and either high risk of being counterfeit, fail electrical testing, physically unusable condition.

3. Minor observations such as scratches and loose contamination from normal handling, packaging, storage and aging are defined and allowed within the JEDEC manufacturing standards. Images of minor observations are not included in the report but are on file and available upon request.

4. “FAR” in the process summary on Page 2 means “Further Analysis Recommended”. It is not always possible to reach a conclusion on a single process. When we recommend additional tests to verify an observation found in one process, or gaps in the requested test plan, we will identify those areas of risk as “FAR”.

5. Note that definitions are as defined within the AS6081 and AS6171 standard.

6. Measurements of uncertainty are not included in the report. The reported measurements are valid and measurements of uncertainty are available on request.

7. The decision rule for statement(s) of conformity is based on Binary Statement for Simple Acceptance Rule specified in Decision Rules Clause 4.2.1 in ILAC-G8:09/2019

Notes and Disclaimers

1. Product analysis results are applicable for the inspected samples only. White Horse Laboratories is not liable for the value of the product and any liability is limited to the value of the services provided.

2. “Reference samples” are previously tested and/or inspected product which are used for comparison purposes to the devices analyzed for this report. “Known-good samples” are provided by the customer to compare to unverified product. “Golden samples” are acquired by WHL with direct traceability to the original manufacturer.

3. All source and measurement equipment are calibrated and suitable for the processes conducted with calibration certifications available upon request.

4. No part of this publication may be reproduced, altered or distributed publicly in any form or by any means, or stored in database or retrieval system, without the prior written permission of White Horse Laboratories.

5. WHL is obligated by our Nondisclosure and Confidentiality policy and agreements with our customers. Reports will be verified but no additional information will be supplied by WHL without the prior written approval of the party that requested and ordered the analysis.

6. All conducted methods are established, and test plan approved, by the customer.

Revision History

Revision	Date	Update Information	Technician
[redacted]	5-Nov-2026	Documentation & Packaging Inspection Plan A External Visual Inspection	LT0531
[redacted]	12-Nov-2026	Documentation & Packaging Inspection Plan A External Visual Inspection Dip and Look Test (ST)	LT0531