

GLOBAL ETS

NEXT GENERATION COMPONENT TESTING & AUTHENTICATION

Laboratory Analysis Report

Report Number: 2000-XXXXXX
Date: 202X-XX-XX
Customer:
Customer Address:
Customer PO Number:
Customer Internal P/N:
Manufacturer: MARVELL SEMICONDUCTOR
Manufacturer Part Number: 88E6321-A0-NAZ2I000
Quantity: 1,520
Date Code: 2223
Lot Code: PVG925.11JW
Part Description: ETHERNET SWITCH 7-PORT



Global ETS USA

1-727-807-7991

**2631 Success Dr
Odessa, FL. 33556
USA**

www.gets-usa.com



Analysis Report - 2000-XXXXXX

Customer Name:		Purchase Order:	
Part Number:	88E6321-A0-NAZ2I000	Customer P/N:	
Manufacturer:	MARVELL SEMICONDUCTOR	Devices Received:	1,520
Date Code:	2223	Lot Code:	PVG925.11JW

Summary Of Inspection Results

Test-Process Operation	Quantity Inspected	Pass	Fail	N/A	Comments / Observations	Inspector
1.0.0 Incoming - Documentation and Packaging Inspection (AS6171/2A) (Non-Destructive)						
Incoming Packaging Conditions	1520	1520	0		1,520 Devices were received in acceptable condition.	N/A
2.0.0 X-Ray - Standard 2D (AS6081 (4.2.6.4.4), (AS6171/5) (Non-Destructive)						
X-Ray Analysis	10	10	0		10 devices were X-rayed. Construction and size are the same. No anomalies were found.	N/A
3.0.0 Electrical - Curve Trace Testing, at ambient temp. (MIL-STD-883) (Non-Destructive)						
Electrical Test	10	10	0		Tested 10 via pin correlation at 25C using Curve Tracer method. Passed: 10. Power's applied to DUT to check for current surge at 25C.	N/A
4.0.0 Delid/Decapsulation - Thermomechanical (AS6171/4) (Destructive)						
Physical (INTERNAL)	1	1	0		Internal inspection was performed on 1 device. Device revealed Marvell logo with 2013 copyright. Die marking E6320 was also found. Die marking correlates with devices family marking.	N/A

(End Of Summary. Continue Reviewing Test Report On Next Page.)

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Date Code:	2223	Lot Code:	PVG925.11JW

1.0.0 Incoming - Documentation and Packaging Inspection (AS6171/2A) (Non-Destructive)

Results Summary

1,520 Devices were received in acceptable condition.

	Criteria	Acceptable	Suspect	Not Acceptable	Not Available	Comments / Observations
1.1.0	Incoming Packaging Conditions (Non-Destructive)					
1.1.1	ESD Protection	X				YES
1.1.2	Quantity Match Document	X				YES
1.1.3	Box Damaged	X				No sign of water damage
1.1.4	Type of Package	X				Trays
1.1.5	Invalid or Missing Identification Indicator on the Part Packaging	X				Acceptable
1.1.6	Invalid Part Packaging Labels	X				Yes, part packaging labels match what is expected but some information has been redacted on the label prior to arriving at GETS.
1.1.7	Invalid Part Packaging	X				Acceptable
1.1.8	Missing or Non-Functional Packaging	X				Acceptable
1.1.9	Missing/Forged Paperwork	X				Acceptable
1.1.10	Multiple Date Codes Identified in Documentation	X				No, one date code identified.
1.1.11	Multiple Date Codes within a Lot	X				No, one date code identified.
1.1.12	Part Orientation within Part Packaging	X				Acceptable
1.1.13	Missing or Non-Functional Condition Indicator	X				No, one date code identified.
1.1.14	Missing or Non-Functional Part Protector	X				Acceptable
1.1.15	Invalid Identification Indicator on the Part Package	X				Manufacturer label available.
1.1.16	Multiple Identification Indicator within an Expected Homogenous Lot	X				No, one date code identified.
1.1.17	Correct MSL Packaging	X				Moisture Sensitivity Level (MSL) 3 (168 Hours).

Images For Incoming - Documentation and Packaging Inspection.



Figure 1. INCOMING 1



Figure 2. INCOMING 2



Figure 3. INCOMING 3

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Figure 4. INCOMING 4

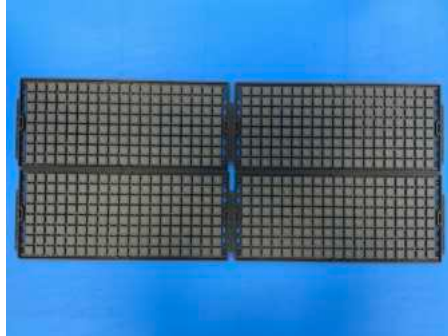


Figure 5. INCOMING 5



Figure 6. INCOMING 6

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2.0.0 X-Ray - Standard 2D (AS6081 (4.2.6.4.4), (AS6171/5) (Non-Destructive)

Results Summary

10 devices were X-rayed. Construction and size are the same. No anomalies were found.

	Criteria	Acceptable	Suspect	Not Acceptable	Not Available	Comments / Observations
2.1.0	X-Ray Analysis (Non-Destructive)					
2.1.1	Inconsistent Die Construction	X				
Equipment Used		X-RAY SYSTEM				Asset Tag: 154 Calibration Due Date: 2025-01-02 Cert: C10077
2.1.2	Wire Bond Layout/Quality	X				
2.1.3	Inconsistent Lead Frame	X				
2.1.4	Missing Bond Wires	X				

Images For X-Ray - Standard 2D.

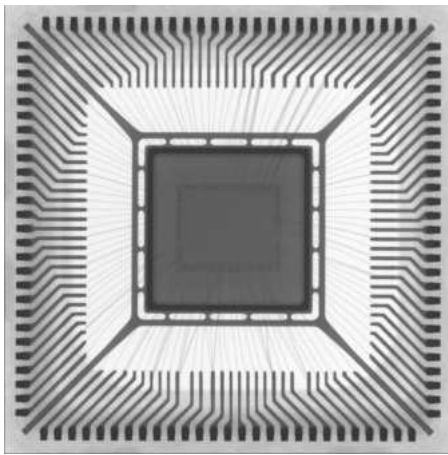


Figure 7. X-RAY-2223-PVG925.11JW-01

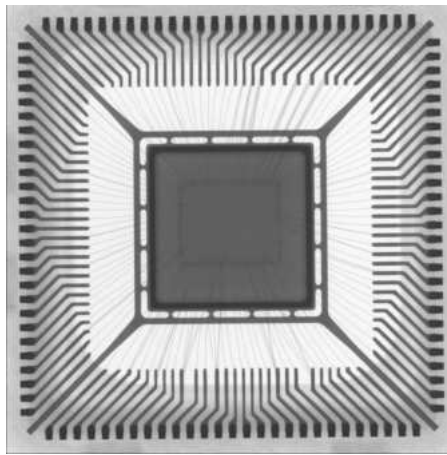


Figure 8. X-RAY-2223-PVG925.11JW-02

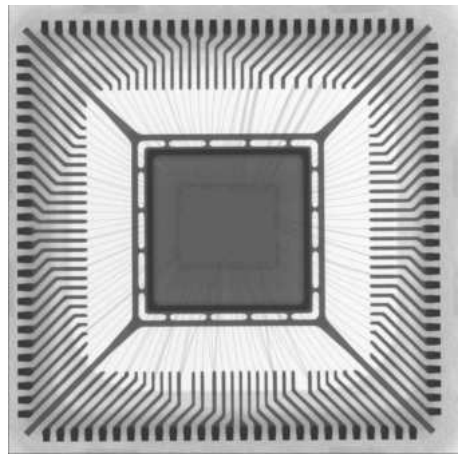


Figure 9. X-RAY-2223-PVG925.11JW-03

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Devices Received:

1,520

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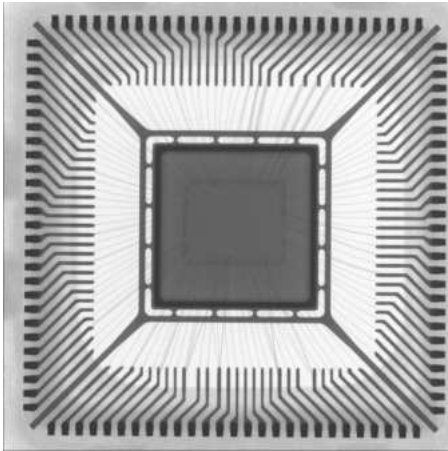


Figure 10. X-RAY-2223-PVG925.11JW-04

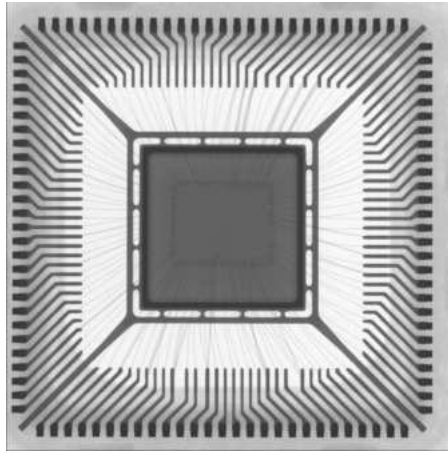


Figure 11. X-RAY-2223-PVG925.11JW-05

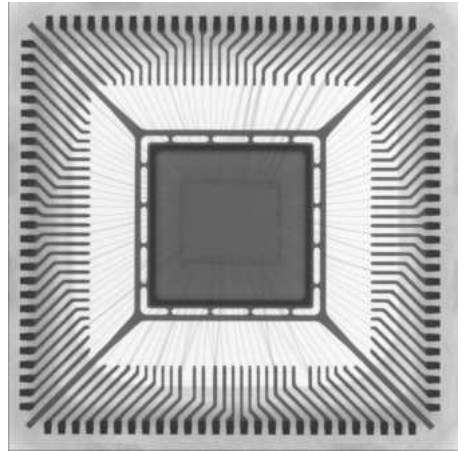


Figure 12. X-RAY-2223-PVG925.11JW-06

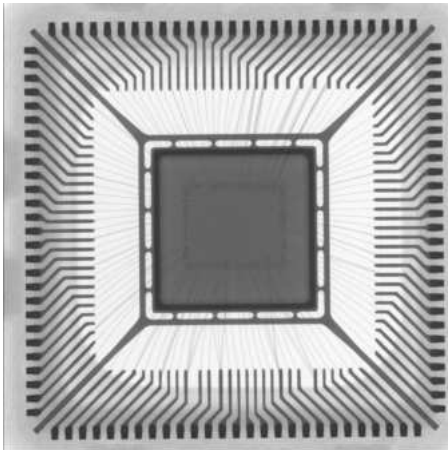


Figure 13. X-RAY-2223-PVG925.11JW-07

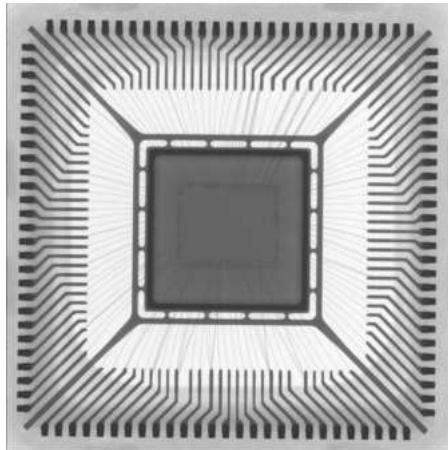


Figure 14. X-RAY-2223-PVG925.11JW-08

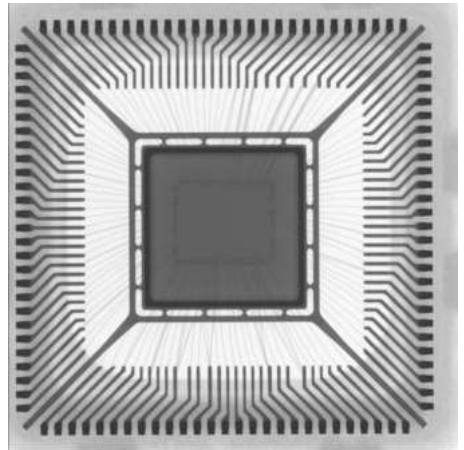


Figure 15. X-RAY-2223-PVG925.11JW-09

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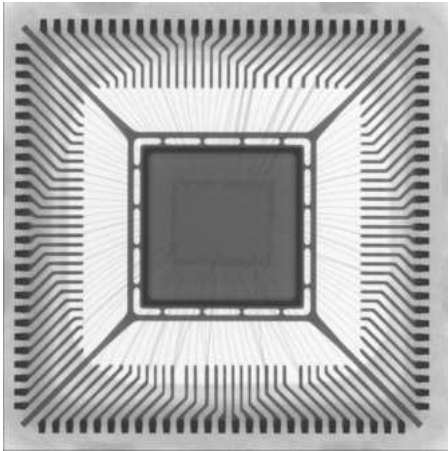


Figure 16. X-RAY-2223-PVG925.11JW-10



Figure 17. X-RAY ORIENTATION

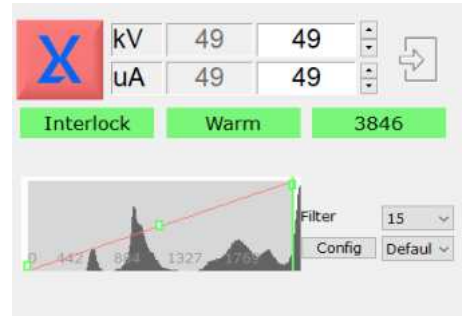


Figure 18. X-RAY SETTINGS

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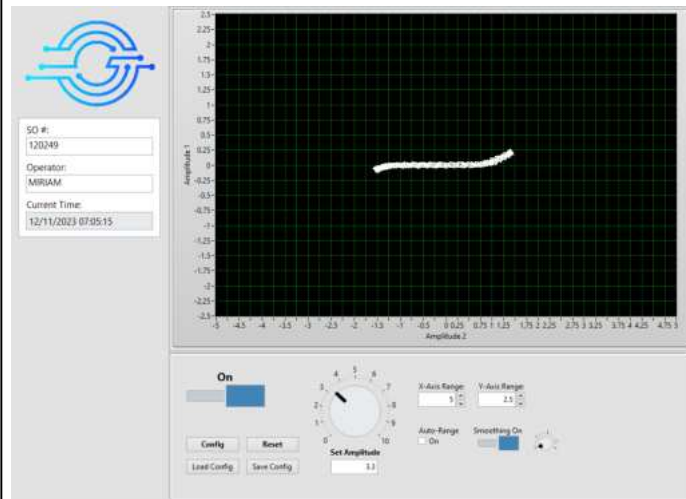


Figure 21. 3 VDDO_VSS

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4.0.0 Delid/Decapsulation - Thermomechanical (AS6171/4) (Destructive)

Results Summary

Internal inspection was performed on 1 device. Device revealed Marvell logo with 2013 copyright. Die marking E6320 was also found. Die marking correlates with devices family marking.

	Criteria	Acceptable	Suspect	Not Acceptable	Not Available	Comments / Observations
4.1.0	Physical (INTERNAL) (Destructive)					
4.1.1	Die Topography	X				
Equipment Used		DECAP OVEN Asset Tag: 243 Calibration Due Date: 2024-09-15 Cert: A5219795				
4.1.2	Die Marking Verification	X				

Images For Delid/Decapsulation - Thermomechanical.

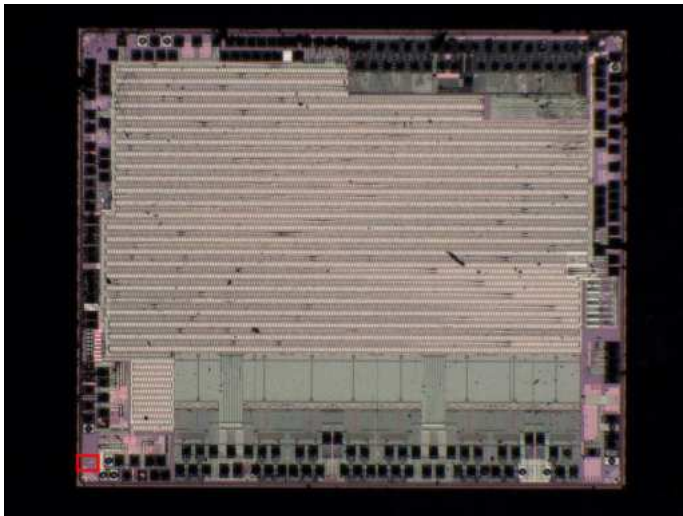


Figure 22. DIE TOPOGRAPHY

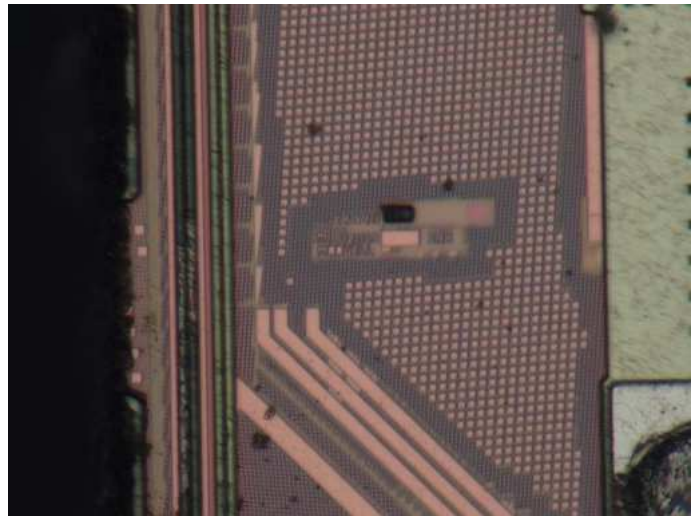


Figure 23. DIE MARKING

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