

ESD TEST REPORT

Human Body Model

JS-001-2017

ANSI/ESDA/JEDEC Standard, Method JS-001-2017 is an ESD test using Human Body Model where "R = 1500 ohm", "C = 100pf", one positive and one negative pulses applied to the devices per customer's specification with a minimum of 0.1 second cool down between pulses.

Customer : Chongqing Alpha and Omega Semiconductor Limited

Address: No. 288 Yuefu Road, Beibei District, Chongqing, P.R. China

Device Information

Part No. :	AONR21311C	Sample Size :	11pcs
Package Type :	DFN3x3-8L-EP	Pin Count :	8
Lot No. :	AZS0925.01(NL0S11)	Date Code :	-
VDD Domains :	D	VSS Domains :	S

Test Equipment

Tester :	ZAPMASTER MK.2 SE	Serial No. :	0508317
Calibration Date :	Jan 15 th 2020	Expiration Date :	Jan 14 th 2021

Environmental Condition

Temperature :	23°C	Humidity :	50% RH
Submit date :	Jul 24 th 2020	Complete date :	Jul 24 th 2020

Curve Trace Criteria

Pin Combinations		Force Voltage	Limit current
D	Vs. S & G	-30V ~ +30V	50μA

Curve Trace Results Within 10% range.

Stress Summary

G TO S			
Sample No.	Stress Type	Voltage Level	Spot Test Results* (Within -10 μ A @ -20V between G and D/S)
1#	HBM	-1.5kV	Failed
2#	HBM	\pm 1.4kV	PASS
3#	HBM	\pm 1.4kV	PASS
4#	HBM	\pm 1.4kV	PASS


G TO D			
Sample No.	Stress Type	Voltage Level	Spot Test Results* (Within -10 μ A @ -20V between G and D/S)
5#	HBM	+1.6kV	Failed
6#	HBM	\pm 1.5kV	PASS
7#	HBM	\pm 1.5kV	PASS
8#	HBM	\pm 1.5kV	PASS

D TO S			
Sample No.	Stress Type	Voltage Level	Spot Test Results* (Within -10 μ A @ -20V between G and D/S)
9#	HBM	\pm 8kV	PASS
10#	HBM	\pm 8kV	PASS
11#	HBM	\pm 8kV	PASS

Test Result*

Model	Pin Combinations	ESD Sensitivity Pass*: 1.4kV	V Class
HBM	G vs. S	±1.4kV	1C JS-001-2017 Class 0Z: <50V Class 0A: 50V~124V Class 0B: 125V~249V Class 1A: 250V~499V Class 1B: 500V~999V Class 1C: 1000V~1999V Class 2: 2000V~3999V Class 3A: 4000V~7999V Class 3B: ≥8000V
	G vs. D	±1.5kV	
	D vs. S	±8kV	

*Note: Results will be updated based on customer final electrical test results.

Test Engineer: Fei Teng	Date: Jul 24 th 2020
Approved by FA Manager: 	Date: Jul 24 th 2020



Recommendations

EAG Shanghai certifies that above tests have been performed in accordance to the requirements stated above and per the customer purchase order and applicable documents.

EAG Shanghai recommends electrical testing as a validation of reported results. Curve Trace criteria was utilized to specify a pass or fail. Industry standards require the device to be tested functionally at post stress and should continue to meet all electrical parameters as per the data sheet.

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