

## ESD TEST REPORT

Human Body Model
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JS-001-2017
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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. :	AOCA24106C	Sample Size :	8pcs
Package Type :	MCSP1.9X1.6	Pin Count :	6
Lot No. :	9C01	Date Code :	-
VDD Domains :	S2 S1	VSS Domains :	S1 S2

### Test Equipment

Tester :	ZAPMASTER MK.2 SE	Serial No. :	0508317
Calibration Date :	Jun 20 <sup>th</sup> 2019	Expiration Date :	Jun 19 <sup>th</sup> 2020

### Environmental Condition

Temperature :	23°C	Humidity :	50% RH
Submit date :	Dec 27 <sup>th</sup> 2019	Complete date :	Dec 27 <sup>th</sup> 2019

Stress Summary
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Channel_1 G1 TO S1			
Sample No.	Stress Type	Voltage Level	Spot Test Results* (Within 10µA @ 8V between G1 and S2/S1)
1#	HBM	+3.5kV	FAILED
2#	HBM	±3.4kV	PASS
3#	HBM	±3.4kV	PASS
4#	HBM	±3.4kV	PASS

Channel_1 G1 TO S2			
Sample No.	Stress Type	Voltage Level	Spot Test Results* (Within 10µA @ 8V between G1 and S2/S1)
5#	HBM	+3.8kV	FAILED
6#	HBM	±3.7kV	PASS
7#	HBM	±3.7kV	PASS
8#	HBM	±3.7kV	PASS

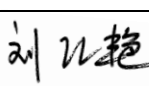
Channel_2 G2 TO S2			
Sample No.	Stress Type	Voltage Level	Spot Test Results* (Within 10µA @ 8V between G2 and S1/S2)
1#	HBM	-3.5kV	FAILED
2#	HBM	±3.4kV	PASS
3#	HBM	±3.4kV	PASS
4#	HBM	±3.4kV	PASS

Channel_2 G2 TO S1			
Sample No.	Stress Type	Voltage Level	Spot Test Results* (Within 10µA @ 8V between G2 and S1/S2)
5#	HBM	+3.7kV	FAILED
6#	HBM	±3.6kV	PASS
7#	HBM	±3.6kV	PASS
8#	HBM	±3.6kV	PASS

Test Result*
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Model	Pin Combinations	ESD Sensitivity Pass*: <u>3.4kV</u>	V Class
HBM	Channel 1 – G1 vs. S1	±3.4kV	2 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
	Channel 1 – G1 vs. S2	±3.7kV	
	Channel 2 – G2 vs. S2	±3.4kV	
	Channel 2 – G2 vs. S1	±3.6kV	

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

Test Engineer: Wenping Yan	Date: Dec 27 <sup>th</sup> 2019
Approved by Technical Director: 	Date: Dec 27 <sup>th</sup> 2019



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### 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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