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ESD (HUMAN BODY MODE) TEST REPORT

Company ：深圳国芯人工智能有限公司

Model Name ：STC8G1K08A

Date Received ：MAR 24, 2020

Date Tested ：MAR 28, 2020

TESTING LABORATORY IS ACCREDITED BY:

IECQ Certificate of Approval No.: IECQ-L DEKRA 16.0002 For Independent Test Laboratory According to ISO/IEC 17025

ISO 9001 certificate is approved by TUV CERT certification body of TUV NORD Cert GmbH

WE HEREBY CERTIFY THAT:

The test(s) shown in the attachment were conducted according to the indicating procedures. We assume full responsibility for the accuracy and completeness of these tests and vouch for the qualifications of all personnel performing them.

	Name	Signature	Date
Test Engineer	Changwan Xing	邢昌万	MAR 30, 2020
Manager	Suku Tsai	Suku Tsai	MAR 30, 2020

NOTE：

1. This report will be invalid if reproduced in part or altered in any way.
2. This report refers only to the specimen(s) submitted to test, and is invalid if used otherwise.
3. This report is ONLY valid with the examination seal and signature of this institute.
4. The tested specimen(s) will only be preserved for thirty days from the date issued, if not collected by the applicant.

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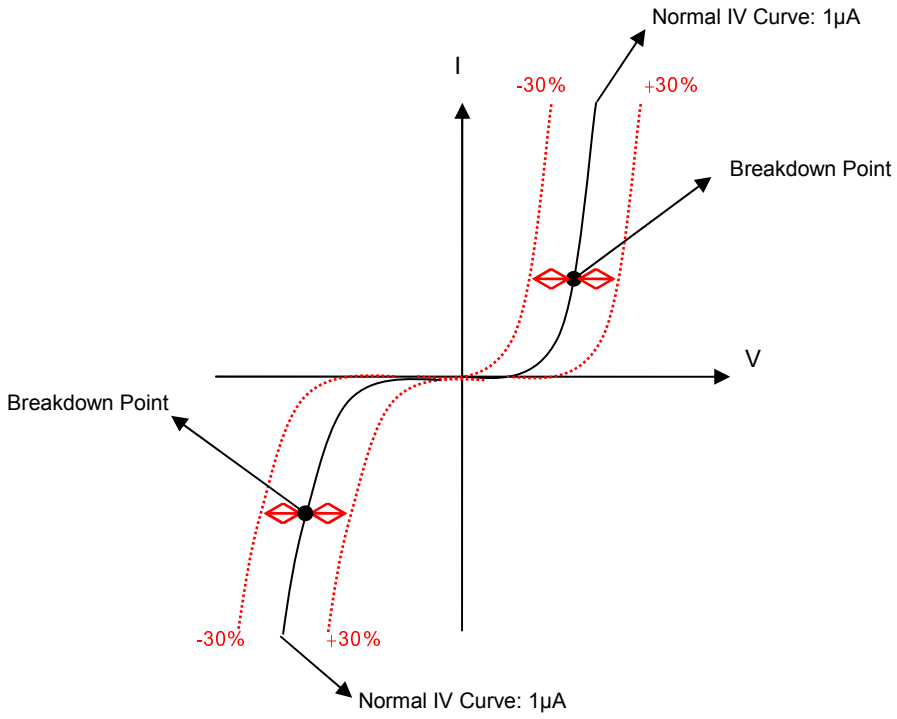
1. GENERAL INFORMATION

1.1 DESCRIPTION OF UNIT

MANUFACTURER	：深圳国芯人工智能有限公司
DEVICE NAME	：STC8G1K08A
PACKAGED / PIN COUNT	：DIP-8
REFERENCE DOCUMENT	：JEDEC EIA/JESD22-A114
TEST VOLTAGE	：2000V~8000V(±), Step:2000V
SAMPLE QUANTITY	：12 EA
FAILURE CRITERIA (Reference Only)	：±30% voltage shift at ±1μA before/after zapping
JESD22-A114 ZAP	：3 times, 1Sec

※ Failure Judgment: IV curve shift over 1μA±30% at breakdown point.



2. ESD (HUMAN BODY MODE) TEST

2.1 TEST EQUIPMENT

Test Equipment	Equipment Number	Calibration Date
KEYTEK ZAPMASTER	ESD#02	Jul,16, 2019

2.2 LABORATORY AMBIENCE CONDITION

Temperature：23±5°C
Relative humidity：55%±10% (RH)

2.3 REFERENCE DOCUMENT

The test is based on JEDEC EIA/JESD22-A114

2.4 TEST CONDITION

All other pin to GND(+)
All other pin to GND(-)
All other pin to VDD(+)
All other pin to VDD(-)

2.5 SUMMARY OF TEST

Test Model : HBM	**ESD Sensitivity Passed : ±8000V**		**JEDEC Classification Class : 3B**
Test condition	Sample Quantity	Passed Volts	Class 0 : ＜ 250V. Class 1A : ≧250V , ＜499V Class 1B : ≧ 500V , ＜999V Class 1C : ≧1000V , ＜1999V Class 2 : ≧2000V , ＜3999V Class 3A : ≧4000V , ＜7999V Class 3B : ≧8000V
All other pin to GND(+)	3	+8000V	
All other pin to GND(-)	3	-8000V	
All other pin to VDD(+)	3	+8000V	
All other pin to VDD(-)	3	-8000V	

I/O :1,3,5,6,7,8
GND:4
VDD :2

2.6 CONTENTS OF TEST

All other pin to GND(+) (UNIT:V)

Test Pin	FAIL VOLTAGE	#1	#2	#3	Test Pin	FAIL VOLTAGE	#1	#2	#3
1	I/O	PASS	PASS	PASS	6	I/O	PASS	PASS	PASS
2	VDD	PASS	PASS	PASS	7	I/O	PASS	PASS	PASS
3	I/O	PASS	PASS	PASS	8	I/O	PASS	PASS	PASS
5	I/O	PASS	PASS	PASS					

All other pin to GND(-) (UNIT:V)

Test Pin	FAIL VOLTAGE	#4	#5	#6	Test Pin	FAIL VOLTAGE	#4	#5	#6
1	I/O	PASS	PASS	PASS	6	I/O	PASS	PASS	PASS
2	VDD	PASS	PASS	PASS	7	I/O	PASS	PASS	PASS
3	I/O	PASS	PASS	PASS	8	I/O	PASS	PASS	PASS
5	I/O	PASS	PASS	PASS					

All other pin to VDD(+) (UNIT:V)

Test Pin	FAIL VOLTAGE	#7	#8	#9	Test Pin	FAIL VOLTAGE	#7	#8	#9
1	I/O	PASS	PASS	PASS	6	I/O	PASS	PASS	PASS
3	I/O	PASS	PASS	PASS	7	I/O	PASS	PASS	PASS
4	GND	PASS	PASS	PASS	8	I/O	PASS	PASS	PASS
5	I/O	PASS	PASS	PASS					

All other pin to VDD(-) (UNIT:V)

Test Pin	FAIL VOLTAGE	#10	#11	#12	Test Pin	FAIL VOLTAGE	#10	#11	#12
1	I/O	PASS	PASS	PASS	6	I/O	PASS	PASS	PASS
3	I/O	PASS	PASS	PASS	7	I/O	PASS	PASS	PASS
4	GND	PASS	PASS	PASS	8	I/O	PASS	PASS	PASS
5	I/O	PASS	PASS	PASS					

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