

ESD (MACHINE 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		MAR 30, 2020
Manager	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.

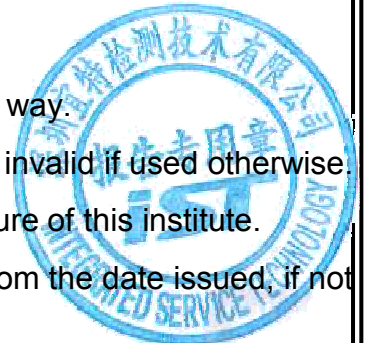




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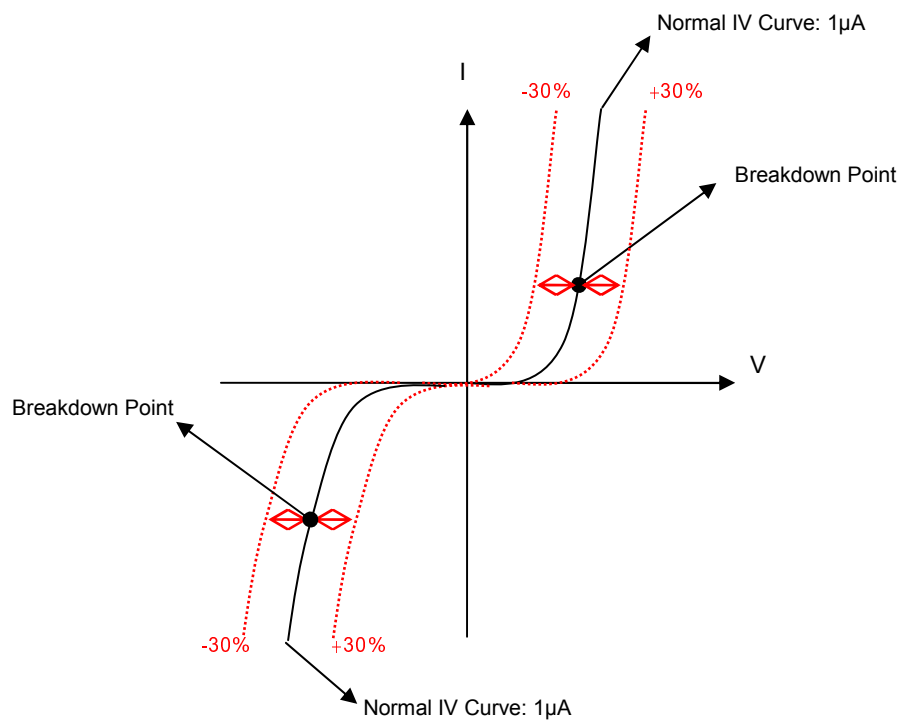
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1. GENERAL INFORMATION

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-A115
TEST VOLTAGE	: 200V~1200V(±), Step :200V
SAMPLE QUANTITY	: 12 EA
FAILURE CRITERIA (Reference Only)	: ±30% voltage shift at ±1μA before/after zapping
JESD22-A115 ZAP	: 3 times, 1Sec

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



2. ESD (MACHINE 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-A115

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 : MM	ESD Sensitivity Passed : <u>±600V</u>		JEDEC Classification Class : <u> C </u>
Test condition	Sample Quantity	Passed Volts	Class A : < 200V. Class B : ≥ 200V , < 400V Class C : ≥ 400V
All other pin to GND(+)	3	+600V	
All other pin to GND(-)	3	-800V	
All other pin to VDD(+)	3	+800V	
All other pin to VDD(-)	3	-800V	

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	#13	#14	#15	Test Pin	FAIL VOLTAGE	#13	#14	#15	
1	I/O	1200	1000	1200	6	I/O	1200	1000	1000	
2	VDD	PASS	PASS	PASS	7	I/O	1200	1000	1200	
3	I/O	1200	1200	1000	8	I/O	1000	1200	1000	
5	I/O	800	1200	800						

All other pin to GND(-)										(UNIT:V)
Test Pin	FAIL VOLTAGE	#16	#17	#18	Test Pin	FAIL VOLTAGE	#16	#17	#18	
1	I/O	-1000	-1000	-1000	6	I/O	-1000	-1000	-1000	
2	VDD	PASS	PASS	PASS	7	I/O	-1000	-1000	-1000	
3	I/O	-1000	-1200	-1200	8	I/O	-1000	-1000	-1000	
5	I/O	-1000	-1000	-1000						

All other pin to VDD(+)										(UNIT:V)
Test Pin	FAIL VOLTAGE	#19	#20	#21	Test Pin	FAIL VOLTAGE	#19	#20	#21	
1	I/O	1200	1200	1200	6	I/O	1200	1200	1200	
3	I/O	1000	1000	1000	7	I/O	1000	1000	1000	
4	GND	PASS	PASS	PASS	8	I/O	1200	1200	1200	
5	I/O	1200	1200	1200						

All other pin to VDD(-)										(UNIT:V)
Test Pin	FAIL VOLTAGE	#22	#23	#24	Test Pin	FAIL VOLTAGE	#22	#23	#24	
1	I/O	-1000	-1000	-1000	6	I/O	-1000	-1000	-1000	
3	I/O	-1000	-1000	-1000	7	I/O	-1000	-1000	-1000	
4	GND	-1200	-1200	PASS	8	I/O	-1000	-1000	-1000	
5	I/O	-1000	-1000	-1000						

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