



宜特科技股份有限公司



Integrated Service Technology Inc.

No.:T1091

TEL : (02) 2656-2289

TRA No: 9401546-E

FAX : (02) 2656-2285

Date : 06/20/2005

Email: esd@isti.com.tw

Test Site Address: 1F,No. 9, Alley 2, Lane 35, Jihu Rd., NeiHu District, Taipei City, Taiwan, R.O.C.

可靠度測試報告

RELIABILITY TEST REPORT

Applicant/Department: Anant Electronics Corporation	
Address	: 6F , No.56 , Ln.258 Jui Kuang Rd. , Nei Hu District , Taipei , Taiwan
Product	: SDN0080G
Testing Item	: ESD-HBM Package/Pin Count: QFP-100
Application Date	: 06/17/2005 Date Finished : 06/20/2005
Test Method	: MIL-STD-883E Method 3015.7
Failure Criteria	: FOR V CHANGE AT 1 μ A \pm 30%
Test Voltage	: 3000V~4000V(\pm) , Step : 500V(\pm)

Testing Item

Random ESD-HBM Test.....P2

Remark:

This report refers only to the specimen submitted to testing, and be invalid as separately used.

Testing Engineer: Nelly Hsueh	
Report Review: Kosa Liu	Laboratory Head: Frank Wu



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ESD-HBM Testing Report

Test Equipment:

KEYTEK ZAPMASTER

Environmental Condition of Laboratory:

Temperature: 25°C±5°C

Humidity: 55%±10% RH

Test Condition:

GND (+)

GND (-)

VDD(+)

VDD (-)

VDD- GND (+)

VDD- GND (-)

Test Result:

MODEL: HBM	ESD SENSITIVITY PASS : ±4000V		V CLASS: <u>3</u>
PIN COMBINATION	SAMPLE SIZE	PASSED VOLTS	NOTE:
GND (+)	5	+4000V	FOR MIL-STD CLASS1: 0V-1999V CLASS2: 2000V-3999V CLASS3: 4000V-TO ABOVE
GND (-)	3	-4000V	
VDD(+)	3	+4000V	
VDD (-)	3	-4000V	
VDD- GND (+)	3	+4000V	
VDD- GND (-)	3	-4000V	

ALL:1-84,86-87,89,91,95-100
GND:85,88

VDD:90

		GND (+)					(UNIT:V)
Test Pin	FAIL VOLTAGE	#1	#2	#3	#4	#5	
1		PASS	PASS	PASS	PASS	PASS	
2		PASS	PASS	PASS	PASS	PASS	
3		PASS	PASS	PASS	PASS	PASS	
4		PASS	PASS	PASS	PASS	PASS	
5		PASS	PASS	PASS	PASS	PASS	
6		PASS	PASS	PASS	PASS	PASS	
7		PASS	PASS	PASS	PASS	PASS	
8		PASS	PASS	PASS	PASS	PASS	
9		PASS	PASS	PASS	PASS	PASS	
10		PASS	PASS	PASS	PASS	PASS	
11		PASS	PASS	PASS	PASS	PASS	
12		PASS	PASS	PASS	PASS	PASS	
13		PASS	PASS	PASS	PASS	PASS	
14		PASS	PASS	PASS	PASS	PASS	
15		PASS	PASS	PASS	PASS	PASS	
16		PASS	PASS	PASS	PASS	PASS	
17		PASS	PASS	PASS	PASS	PASS	
18		PASS	PASS	PASS	PASS	PASS	
19		PASS	PASS	PASS	PASS	PASS	
20		PASS	PASS	PASS	PASS	PASS	
21		PASS	PASS	PASS	PASS	PASS	
22		PASS	PASS	PASS	PASS	PASS	
23		PASS	PASS	PASS	PASS	PASS	
24		PASS	PASS	PASS	PASS	PASS	
25		PASS	PASS	PASS	PASS	PASS	
26		PASS	PASS	PASS	PASS	PASS	
27		PASS	PASS	PASS	PASS	PASS	
28		PASS	PASS	PASS	PASS	PASS	
29		PASS	PASS	PASS	PASS	PASS	
30		PASS	PASS	PASS	PASS	PASS	
31		PASS	PASS	PASS	PASS	PASS	
32		PASS	PASS	PASS	PASS	PASS	

		GND (+)					(UNIT:V)
Test Pin	FAIL VOLTAGE	#1	#2	#3	#4	#5	
33		PASS	PASS	PASS	PASS	PASS	
34		PASS	PASS	PASS	PASS	PASS	
35		PASS	PASS	PASS	PASS	PASS	
36		PASS	PASS	PASS	PASS	PASS	
37		PASS	PASS	PASS	PASS	PASS	
38		PASS	PASS	PASS	PASS	PASS	
39		PASS	PASS	PASS	PASS	PASS	
40		PASS	PASS	PASS	PASS	PASS	
41		PASS	PASS	PASS	PASS	PASS	
42		PASS	PASS	PASS	PASS	PASS	
43		PASS	PASS	PASS	PASS	PASS	
44		PASS	PASS	PASS	PASS	PASS	
45		PASS	PASS	PASS	PASS	PASS	
46		PASS	PASS	PASS	PASS	PASS	
47		PASS	PASS	PASS	PASS	PASS	
48		PASS	PASS	PASS	PASS	PASS	
49		PASS	PASS	PASS	PASS	PASS	
50		PASS	PASS	PASS	PASS	PASS	
51		PASS	PASS	PASS	PASS	PASS	
52		PASS	PASS	PASS	PASS	PASS	
53		PASS	PASS	PASS	PASS	PASS	
54		PASS	PASS	PASS	PASS	PASS	
55		PASS	PASS	PASS	PASS	PASS	
56		PASS	PASS	PASS	PASS	PASS	
57		PASS	PASS	PASS	PASS	PASS	
58		PASS	PASS	PASS	PASS	PASS	
59		PASS	PASS	PASS	PASS	PASS	
60		PASS	PASS	PASS	PASS	PASS	
61		PASS	PASS	PASS	PASS	PASS	
62		PASS	PASS	PASS	PASS	PASS	
63		PASS	PASS	PASS	PASS	PASS	

		GND (+)					(UNIT:V)
Test Pin	FAIL VOLTAGE	#1	#2	#3	#4	#5	
64		PASS	PASS	PASS	PASS	PASS	
65		PASS	PASS	PASS	PASS	PASS	
66		PASS	PASS	PASS	PASS	PASS	
67		PASS	PASS	PASS	PASS	PASS	
68		PASS	PASS	PASS	PASS	PASS	
69		PASS	PASS	PASS	PASS	PASS	
70		PASS	PASS	PASS	PASS	PASS	
71		PASS	PASS	PASS	PASS	PASS	
72		PASS	PASS	PASS	PASS	PASS	
73		PASS	PASS	PASS	PASS	PASS	
74		PASS	PASS	PASS	PASS	PASS	
75		PASS	PASS	PASS	PASS	PASS	
76		PASS	PASS	PASS	PASS	PASS	
77		PASS	PASS	PASS	PASS	PASS	
78		PASS	PASS	PASS	PASS	PASS	
79		PASS	PASS	PASS	PASS	PASS	
80		PASS	PASS	PASS	PASS	PASS	
81		PASS	PASS	PASS	PASS	PASS	
82		PASS	PASS	PASS	PASS	PASS	
83		PASS	PASS	PASS	PASS	PASS	
84		PASS	PASS	PASS	PASS	PASS	
86		PASS	PASS	PASS	PASS	PASS	
87		PASS	PASS	PASS	PASS	PASS	
89		PASS	PASS	PASS	PASS	PASS	
91		PASS	PASS	PASS	PASS	PASS	
95		PASS	PASS	PASS	PASS	PASS	
96		PASS	PASS	PASS	PASS	PASS	
97		PASS	PASS	PASS	PASS	PASS	
98		PASS	PASS	PASS	PASS	PASS	
99		PASS	PASS	PASS	PASS	PASS	
100		PASS	PASS	PASS	PASS	PASS	

		GND (-)		
		(UNIT:V)		
Test Pin	FAIL VOLTAGE	#1	#2	#3
1		PASS	PASS	PASS
2		PASS	PASS	PASS
3		PASS	PASS	PASS
4		PASS	PASS	PASS
5		PASS	PASS	PASS
6		PASS	PASS	PASS
7		PASS	PASS	PASS
8		PASS	PASS	PASS
9		PASS	PASS	PASS
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27		PASS	PASS	PASS
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31		PASS	PASS	PASS
32		PASS	PASS	PASS

		GND (-)		
		(UNIT:V)		
Test Pin	FAIL VOLTAGE	#1	#2	#3
33		PASS	PASS	PASS
34		PASS	PASS	PASS
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37		PASS	PASS	PASS
38		PASS	PASS	PASS
39		PASS	PASS	PASS
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58		PASS	PASS	PASS
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		GND (-)		
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91		PASS	PASS	PASS
95		PASS	PASS	PASS
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		VDD (+)		
		(UNIT:V)		
Test Pin	FAIL VOLTAGE	#1	#2	#3
1		PASS	PASS	PASS
2		PASS	PASS	PASS
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4		PASS	PASS	PASS
5		PASS	PASS	PASS
6		PASS	PASS	PASS
7		PASS	PASS	PASS
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		(UNIT:V)		
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		(UNIT:V)		
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30		PASS	PASS	PASS
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32		PASS	PASS	PASS

		VDD (-)		
		(UNIT:V)		
Test Pin	FAIL VOLTAGE	#1	#2	#3
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60		PASS	PASS	PASS
61		PASS	PASS	PASS
62		PASS	PASS	PASS
63		PASS	PASS	PASS

		VDD (-)		
		(UNIT:V)		
Test Pin	FAIL VOLTAGE	#1	#2	#3
64		PASS	PASS	PASS
65		PASS	PASS	PASS
66		PASS	PASS	PASS
67		PASS	PASS	PASS
68		PASS	PASS	PASS
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71		PASS	PASS	PASS
72		PASS	PASS	PASS
73		PASS	PASS	PASS
74		PASS	PASS	PASS
75		PASS	PASS	PASS
76		PASS	PASS	PASS
77		PASS	PASS	PASS
78		PASS	PASS	PASS
79		PASS	PASS	PASS
80		PASS	PASS	PASS
81		PASS	PASS	PASS
82		PASS	PASS	PASS
83		PASS	PASS	PASS
84		PASS	PASS	PASS
86		PASS	PASS	PASS
87		PASS	PASS	PASS
89		PASS	PASS	PASS
91		PASS	PASS	PASS
95		PASS	PASS	PASS
96		PASS	PASS	PASS
97		PASS	PASS	PASS
98		PASS	PASS	PASS
99		PASS	PASS	PASS
100		PASS	PASS	PASS

VDD-GND(+)				(UNIT: V)
Test Pin	FAIL VOLTAGE	#1	#2	#3
90		PASS	PASS	PASS

VDD-GND (-)				(UNIT: V)
Test Pin	FAIL VOLTAGE	#1	#2	#3
90		PASS	PASS	PASS