

# <u>宜特科技股份有限公司</u>



# **Integrated Service Technology Inc.**

TEL: (02) 2656-2289 TRA No: 9401548-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 l	: 6F, No.56, Ln.258 Jui Kuang Rd., Nei Hu District, Taipei, Taiwan		
Product	: SCN6400G			
Testing Item	: ESD-HBM	Package/Pin Count: QFP-80		
Application Date	: 06/17/2005	<b>Date Finished</b> : 06/20/2005		
Test Method	: MIL-STD-883E Method 3015.7			
Failure Criteria	: FOR V CHANGE AT 1μA ±30%			
Test Voltage	: 3000V~4000V(±), Step: 1000	$V(\pm)$		

	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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# Integrated Service Technology Inc. No.: T1091

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Email: esd@isti.com.tw

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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: 3
PIN	SAMPLE	PASSED VOLTS	NOTE:
COMBINATION	SIZE	PASSED VOLIS	NOTE:
GND (+)	3	+4000V	FOR MIL-STD
GND (-)	3	-4000V	CLASS1: 0V-1999V
VDD(+)	3	+4000V	CLASS2: 2000V-3999V
VDD (-)	3	-4000V	CLASS3: 4000V-TO ABOVE
VDD- GND (+)	3	+4000V	
VDD- GND (-)	3	-4000V	

I/P: 28-31,33,36,38 GND:27,34

NC :26,35,37,39

VDD:32 O/P: 1-24,41-80 I/O: 25,40

		GND (+)	(UNIT:V)
Test FAIL Pin 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
10	PASS	PASS	PASS
11	PASS	PASS	PASS
12	PASS	PASS	PASS
13	PASS	PASS	PASS
14	PASS	PASS	PASS
15	PASS	PASS	PASS
16	PASS	PASS	PASS
17	PASS	PASS	PASS
18	PASS	PASS	PASS
19	PASS	PASS	PASS
20	PASS	PASS	PASS
21	PASS	PASS	PASS
22	PASS	PASS	PASS
23	PASS	PASS	PASS
24	PASS	PASS	PASS
25	PASS	PASS	PASS
28	PASS	PASS	PASS
29	PASS	PASS	PASS
30	PASS	PASS	PASS
31	PASS	PASS	PASS
33	PASS	PASS	PASS
36	PASS	PASS	PASS
38	PASS	PASS	PASS

		GND (+)	(UNIT:V)
Test FAIL Pin VOLTAGE	#1	#2	#3
40	PASS	PASS	PASS
41	PASS	PASS	PASS
42	PASS	PASS	PASS
43	PASS	PASS	PASS
44	PASS	PASS	PASS
45	PASS	PASS	PASS
46	PASS	PASS	PASS
47	PASS	PASS	PASS
48	PASS	PASS	PASS
49	PASS	PASS	PASS
50	PASS	PASS	PASS
51	PASS	PASS	PASS
52	PASS	PASS	PASS
53	PASS	PASS	PASS
54	PASS	PASS	PASS
55	PASS	PASS	PASS
56	PASS	PASS	PASS
57	PASS	PASS	PASS
58	PASS	PASS	PASS
59	PASS	PASS	PASS
60	PASS	PASS	PASS
61	PASS	PASS	PASS
62	PASS	PASS	PASS
63	PASS	PASS	PASS
64	PASS	PASS	PASS
65	PASS	PASS	PASS
66	PASS	PASS	PASS
67	PASS	PASS	PASS
68	PASS	PASS	PASS
69	PASS	PASS	PASS
70	PASS	PASS	PASS
71	PASS	PASS	PASS
72	PASS	PASS	PASS
73	PASS	PASS	PASS

	(UNIT:V)		
Test FAIL Pin VOLTAGE	#1	#2	#3
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

		GND (-)	(UNIT:V)
Test FAIL Pin 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
10	PASS	PASS	PASS
11	PASS	PASS	PASS
12	PASS	PASS	PASS
13	PASS	PASS	PASS
14	PASS	PASS	PASS
15	PASS	PASS	PASS
16	PASS	PASS	PASS
17	PASS	PASS	PASS
18	PASS	PASS	PASS
19	PASS	PASS	PASS
20	PASS	PASS	PASS
21	PASS	PASS	PASS
22	PASS	PASS	PASS
23	PASS	PASS	PASS
24	PASS	PASS	PASS
25	PASS	PASS	PASS
28	PASS	PASS	PASS
29	PASS	PASS	PASS
30	PASS	PASS	PASS
31	PASS	PASS	PASS
33	PASS	PASS	PASS
36	PASS	PASS	PASS
38	PASS	PASS	PASS

		GND (-)	
Test FAIL Pin VOLTAGE	#1	#2	#3
40	PASS	PASS	PASS
41	PASS	PASS	PASS
42	PASS	PASS	PASS
43	PASS	PASS	PASS
44	PASS	PASS	PASS
45	PASS	PASS	PASS
46	PASS	PASS	PASS
47	PASS	PASS	PASS
48	PASS	PASS	PASS
49	PASS	PASS	PASS
50	PASS	PASS	PASS
51	PASS	PASS	PASS
52	PASS	PASS	PASS
53	PASS	PASS	PASS
54	PASS	PASS	PASS
55	PASS	PASS	PASS
56	PASS	PASS	PASS
57	PASS	PASS	PASS
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64	PASS	PASS	PASS
65	PASS	PASS	PASS
66	PASS	PASS	PASS
67	PASS	PASS	PASS
68	PASS	PASS	PASS
69	PASS	PASS	PASS
70	PASS	PASS	PASS
71	PASS	PASS	PASS
72	PASS	PASS	PASS
73	PASS	PASS	PASS

	(UNIT:V)		
Test FAIL Pin VOLTAGE	#1	#2	#3
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

		VDD (+)	(UNIT:V)
Test FAIL Pin 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
10	PASS	PASS	PASS
11	PASS	PASS	PASS
12	PASS	PASS	PASS
13	PASS	PASS	PASS
14	PASS	PASS	PASS
15	PASS	PASS	PASS
16	PASS	PASS	PASS
17	PASS	PASS	PASS
18	PASS	PASS	PASS
19	PASS	PASS	PASS
20	PASS	PASS	PASS
21	PASS	PASS	PASS
22	PASS	PASS	PASS
23	PASS	PASS	PASS
24	PASS	PASS	PASS
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28	PASS	PASS	PASS
29	PASS	PASS	PASS
30	PASS	PASS	PASS
31	PASS	PASS	PASS
33	PASS	PASS	PASS
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38	PASS	PASS	PASS

		VDD (+)	(UNIT:V)
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51	PASS	PASS	PASS
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69	PASS	PASS	PASS
70	PASS	PASS	PASS
71	PASS	PASS	PASS
72	PASS	PASS	PASS
73	PASS	PASS	PASS

	V	'DD (+)	(UNIT:V)
Test FAIL Pin VOLTAGE	#1	#2	#3
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

	VDD (-)		(UNIT:V)	
Test FAIL Pin VOLTAGE	#1	#2	#3	
1	PASS	PASS	PASS	
2	PASS	PASS	PASS	
3	PASS	PASS	PASS	
4	PASS	PASS	PASS	
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14	PASS	PASS	PASS	
15	PASS	PASS	PASS	
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17	PASS	PASS	PASS	
18	PASS	PASS	PASS	
19	PASS	PASS	PASS	
20	PASS	PASS	PASS	
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22	PASS	PASS	PASS	
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	VDD (-)		(UNIT:V)	
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71	PASS	PASS	PASS	
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73	PASS	PASS	PASS	

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

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

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