

QA Test Report

PCA-6751A

(Thermal Shock Test)

Report No : 02T023A0

Report Date : July 10, 2002

Issue Stamp

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Approval

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www.advantech.com

QA Lab Reliability test

Test Date : July 9, 2002
Test Site : Advantech QA Environment Lab
Performed By : Charles Chang

Purpose: Customer's individual request

Test Standard : Reference IEC68-2-14 Testing procedures
 Test Nb : Change of temperature test

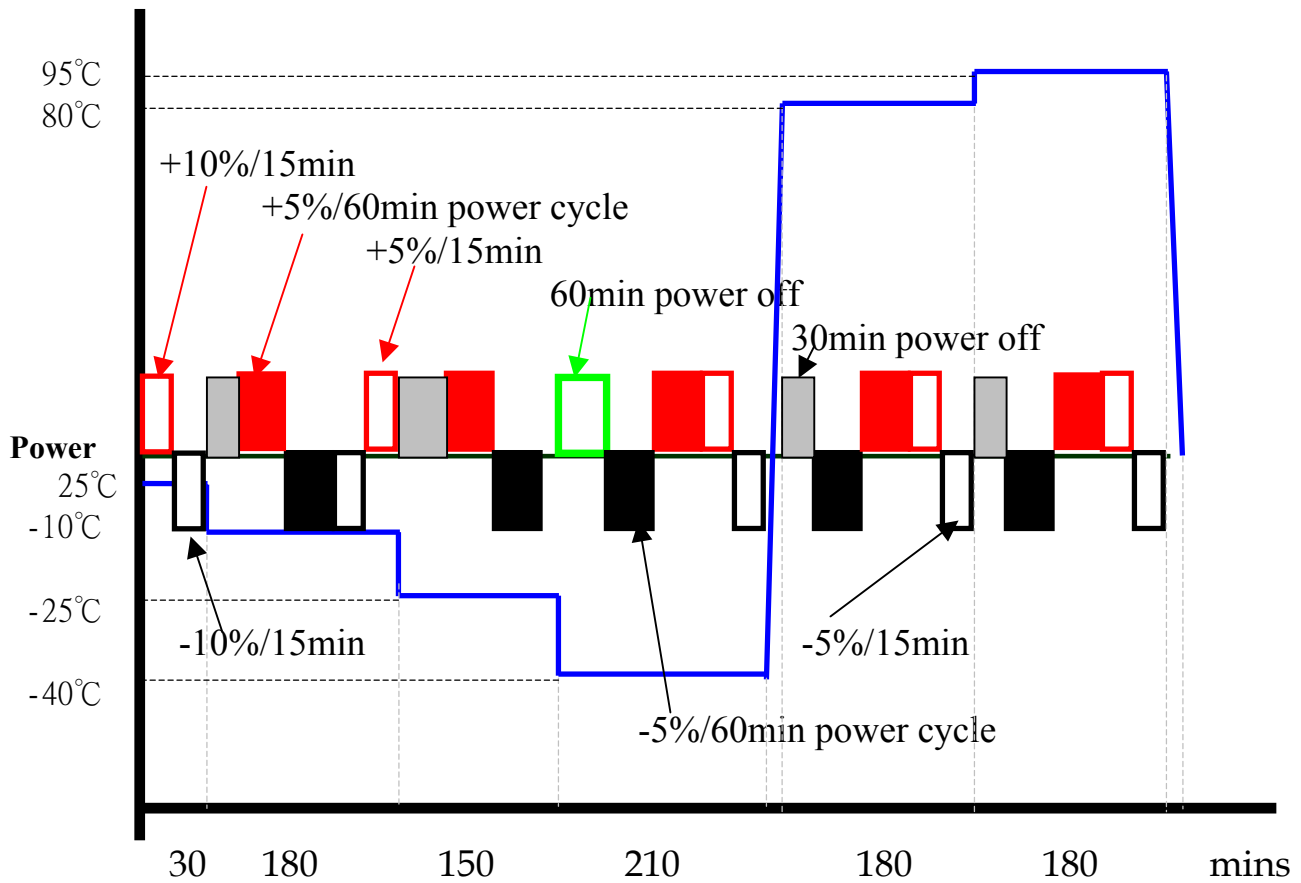
Test Condition :

1. Test Temperature : 25°C/-10°C/-25°C/-40°C/80°C/95°C
2. Temperature change rate : 10°C/min
3. Power Cycle : ON 4mins, OFF 2mins total 10times for each cycle
(power on running Kpower & MPEG program)
4. Power Regulation : 5V+/- 5%(+/- 10% 25°C only)
5. Test Step list

Step	Temp°C	Voltage	Time(min)	Step	Temp°C	Voltage	Time(min)
1	25	+10%	15	2	25	-10%	15
3	-10	Off	30	4	-10	+5%	Cycle
5	-10	-5%	Cycle	6	-10	+5%	15
7	-10	+5%	15	8	-25	Off	30
9	-25	+5%	Cycle	10	-25	-5%	15
11	-40	Off	60	12	-40	-5%	Cycle
13	-40	+5%	Cycle	14	-40	+5%	15
15	-40	-5%	15	16	80	Off	30
17	80	+5%	Cycle	18	90	+5%	Cycle
19	80	+5%	15	20	80	-5%	15
21	95	Off	30	22	95	-5%	Cycle
23	95	+5%	Cycle	24	95	+5%	15
25	95	-5%	15				

6. Test Software : Running soft-MPEG file in Win98
Kpower program for CPU test
7. Test Environment Curve :

QA Lab Reliability test



Test Equipment : Programmable Temperature & Humidity Chamber

K.SON. INS. Tech. Corp..

Model : THS-DL4 +-150

Date of Calibration : 05/20/2002

Programmable Linear Power Supply

AMERICAN RELIANCE INC

LPS-305

QA Lab Reliability test

Sample Configuration & Quantity Under Test :

Using one PCA-6751A CPU board with the following options installed:

1. M/B : PCA-6751A B1 01-1
2. CPU : Tillamook-MMX 166MHz
3. RAM : KINGMAX PC133 256MB
4. Core Logic : FW82439TX
FW82371EB
5. Clock : 48S87-04H
6. VGA : Chips B69000B4
7. LAN : GD82559
8. I/O : W83977EF
9. HDD : Seagate ST310211A 10G
10. Power supply : APP4500 450W

Performance Criteria :

Electronic function check:

1. All system functions must be checked with appropriate testing programs and should pass the inspection.
2. Running Win98 for OS, the system should not have degradation in its performance.

Mechanical function check:

1. The cover and connectors should work properly without any interference.
2. All screws should be tightened up appropriately.

Test Result :

1. System function is normal and no any damage or degradation.
2. Performance is maintained with no incurable physical damage or degradation.
3. There is no damage in mechanical functions degradation has not been found.

Conclusion :

Passed.

The PCA-6751A CPU board meets thermal shock test.