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ADVANTECH CO., LTD.

QA Test Report

IPC-610 with PCA-6184VE

(Thermal Profile Test)

Report No : 02H012A0

Report Date : July 24, 2002

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Issue Stamp	**Manager of QA Department**	**Approval**	**Test Engineer**

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IPC-610 # Thermal Profile Test **Report No.02H012A0**

QA Lab Reliability test

Test Date : July 23, 2002 ~ July 24, 2002
Test Site : Advantech QA Environment Lab
Performed By : Jeff Yang

Test Standard : Reference IEC68-2-2 Testing procedures
Test Bb : Dry Heat Test

Test Condition :

1. Test Temperature : 25℃/40℃/45℃/50℃/55℃
2. Test Times : Each temperature 4 Hrs
3. Test Software : Running soft-MPEG file in Win2000

Test Equipment : Programmable Temperature & Humidity Chamber
K.SON. INS. Tech. Corp..
Model : THS-DL4 +-150
Date of Calibration : 05/20/2002

DATA LOGGER
OMEGA CO. LTD.
Model : OM-5100
S/N : 9412-0404
Date of Calibration : 09/19/2001

Sample Configuration & Quantity Under Test :

Using one IPC-610 chassis with the following installed:

1. SBC: PVA-6184VE Rev. A1
2. Backplane: PCA-6114P7-C Rev: A1 01
3. CPU: Pentuim IV 2.0GHz
4. RAM: Samsung 184P DDR-RAM 512MB
5. CD-ROM : ASUS CD-S340 34x CD-ROM
6. HDD: Seagate ST34310A 4.0G
7. Power supply: Skynet ADT-925C 260W
8. BIOS: PCA-6184 V1.11 06/19/2002

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Performance Criteria :

Electronic function check:

1. All system functions must be checked with appropriate testing programs and should pass the inspection.
2. Running Win2000 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 Data :

NUM	Parts List	25℃	40℃	45℃	50℃	55℃
1	Pentium IV 2.0GHz CPU	32.4	45.6	50.3	55.1	60.0
2	Intel 82845 heatsink temperature (U18)	28.4	42.4	47.1	51.9	56.7
3	ATI Rage 128 PRO heatsink (U19)	34.7	47.6	52.5	57.3	62.2
4	Intel FW82801BA	37.5	49.2	53.9	58.7	63.7
5	IT8888F PQFP160 chipset (U22)	43.2	54.2	58.9	63.7	68.7
6	Power supply case temperature	38.2	50.4	55.2	60.0	65.0
7	Chassis rear side air temperature (right side---near power supply)	43.6	54.7	59.4	64.2	69.2
8	Chassis rear side air temperature (left side)	28.2	42.2	47.1	51.3	56.2

Test Result :

1. There is no damage in electronic and mechanical functions.
2. Degradation has not been found.
3. Performance is maintained with no incurable physical damage or degradation.
4. Test result meets system thermal specification 55 degree and Intel Pentuim IV 2.0GHz CPU specification. (Thermal Spec: 68 degree)

Conclusion :

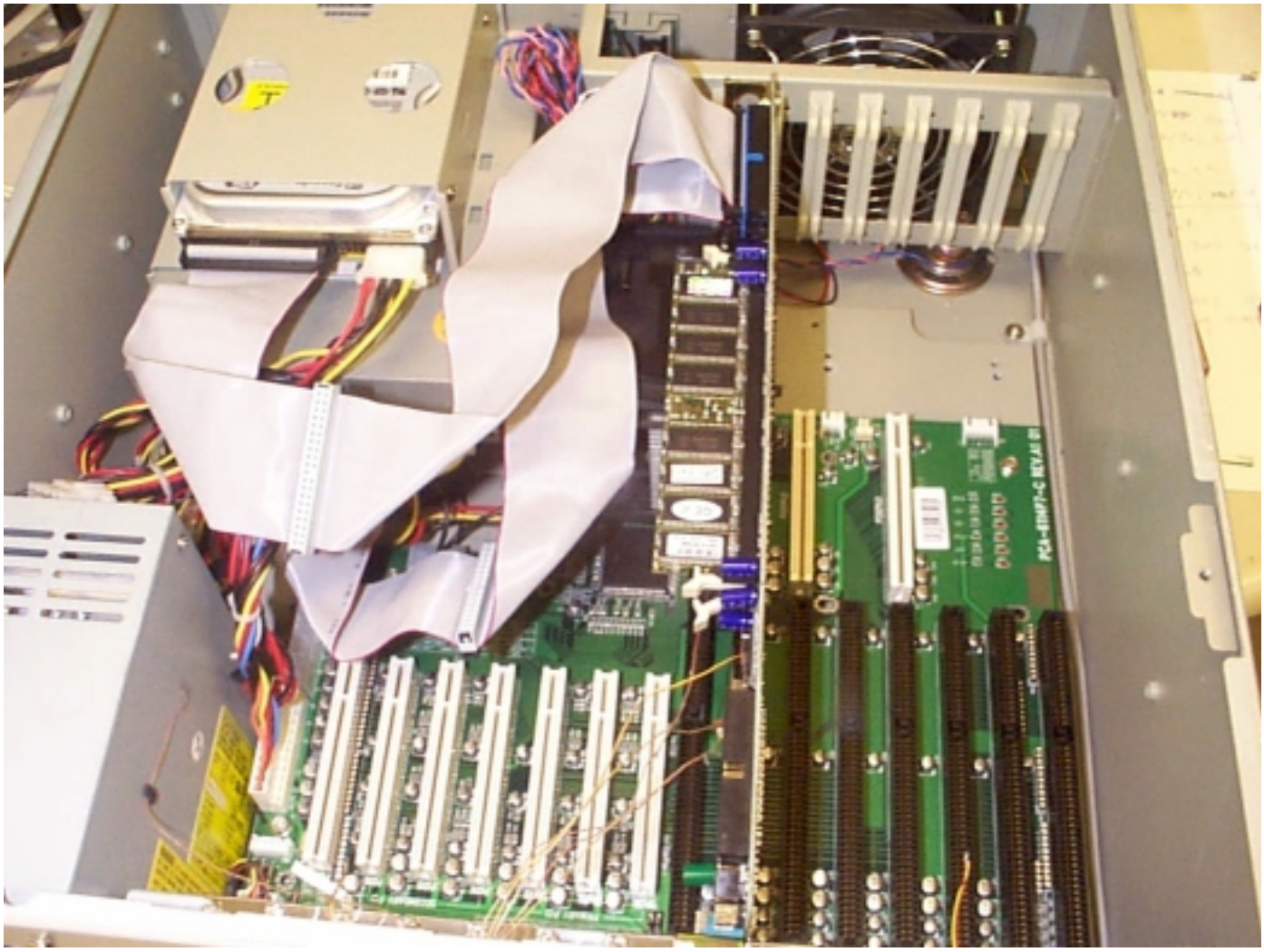
Passed.

The IPC-610 chassis with PCA-6184VE meets thermal profile test.

Photo I:

IPC-610 with PCA-6184VE thermal profile test

Photo II:



IPC-610 with PCA-6184VE structure photo