



APC-8122 (PCM-8500 A1.0)

Environment Test Report

Report NO: 04P020028

Issued by: Rex-Chang / 12/24/2004
Test Engineer Date

Reviewed by: Wenyuan Yang / 12/24/2004
Manager Date

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Test Configuration:

Num	Item	Spec
1.	Industrial Workstations:	APC-8122
	1.LCD	12" TFT LCD.12".TOSHIBA.LTD121C30S 800*600.18 Bits TTL
	2.Power	SPS.ATX.100-240V.250W.AC with PFC.UMEC UPF250-AA
	3. Inverter	Inverter.Double.12V.3.8mA.CHI SAM.CDA-084A
2.	CPU Board:	PCM-8500 Rev: A1.0
	1. Bios Ver.	APC-8152 & 8172 Bios Ver.1.0 (04/26/2004)
	2.CPU	Pentium 4 / 3.06GHz
	3.Memory	Hynix HY5DU56822BT-J003 512MB(DDR 333)
	4.HDD	Fujitsu MHT2040AT 40GB
	5.DVD-ROM	TEAC DW-224E-BM3

CPU Cooler :

ARKUA 866S-7G (for Socket 478)



Speed: 4500 ±10% RPM

APC-8122 (PCM-8500 A1.0) Panel PC

Test Date: 12-17~19-2004

Test Product: APC-8122 (PCM-8500 A1.0).

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

Test Standard:

Reference IEC 68-2-61 Testing procedures
Test Z/ABD: Climatic Sequence Test

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4H+-100
Date of Calibration: 05/24/04
Serial Number: 1241

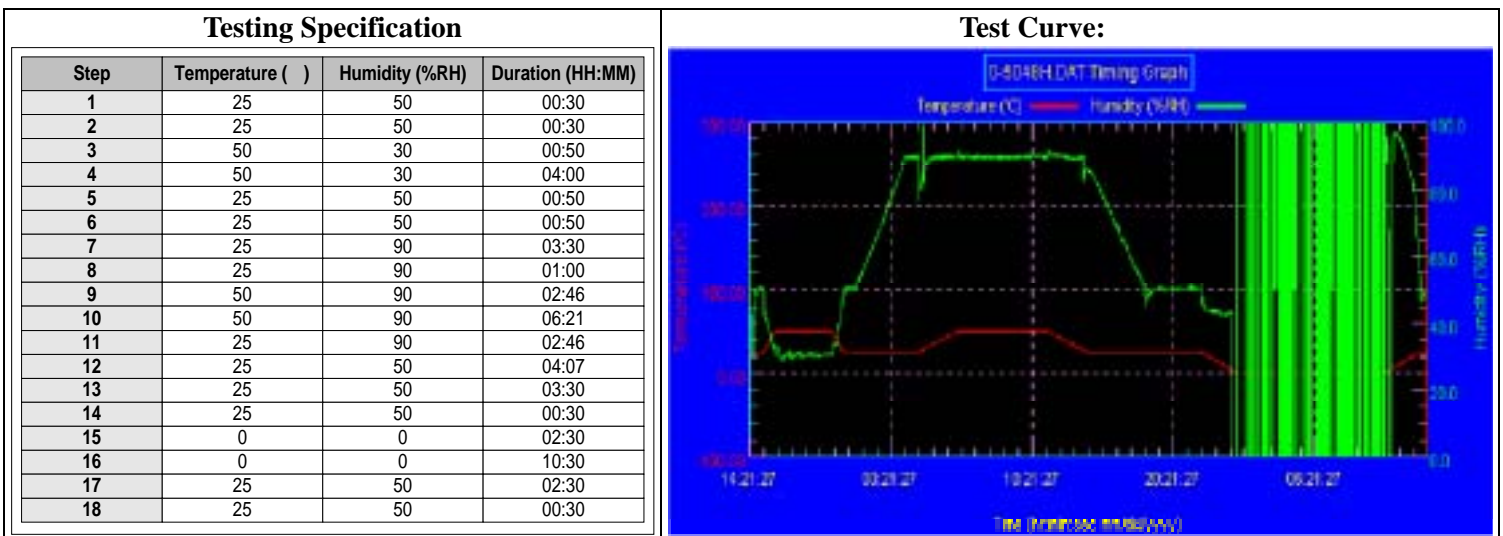
Temperature Measurement:

20 Channel Thermal Recorder:
YOKOGAWA Inc,
Model: DA100-13-1D
Date of Calibration: 12/25/03
Serial Number: 12A323190

Test O.S. / Software:

Windows 2000 / Run six Microsoft media player simultaneously.

Temperature & Humidity Cycle Test:



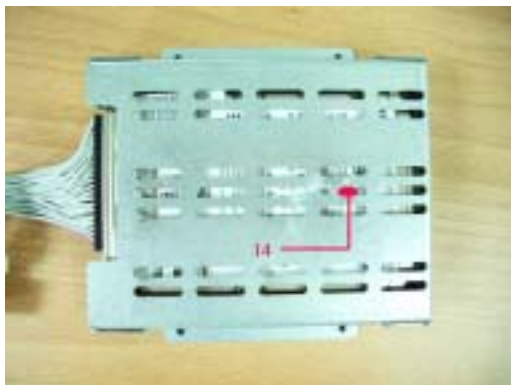
Sample Configuration & Quantity Under Test:

Using one APC-8122 (PCM-8500 A1.0) Panel PC.

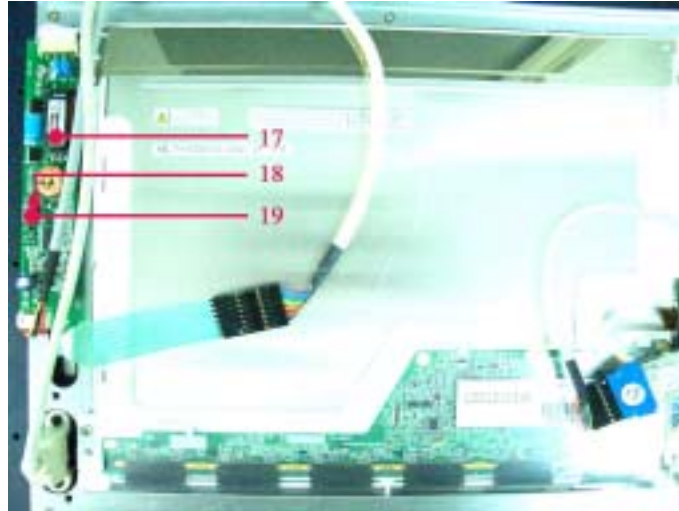
APC-8122 (PCM-8500 A1.0) Panel PC

Temperature Recorder:

Measuring Accelerometer Position:



APC-8122 (PCM-8500 A1.0) Panel PC



Thermal profile data:

APC-8122 Industrial Workstations

Point	Temp. Stage		
	50	25	0
1. PCM-8500 - U29 (Dual Channel MOSFET Drivers.INTERSil.HIP6602B)	88.1	69.8	41.5
2. PCM-8500 - U31 (Power Controller.Intersil.HIP6501ACB)	83.5	65.1	37.3
3. PCM-8500 - U2 (RG82845GV-SL6PU)	67.3	45.1	21.5
4. PCM-8500 - Q17 (REG.SMD.8A Linear Regulator TO-263.AMS.AMS1083CM)	91.2	69.7	45.4
5. PCM-8500 - Q14 (PWR.SMD.TO-252.N-Channel Power 25V 60A)	107.8	93.0	56.4
6. PCM-8500 - Q13 (PWR.SMD.TO-252.N-Channel Power 30V 55A)	107.4	92.4	56.1
7. PCM-8500 - Q18 (NPN.SMD CASE 369A-13.Power Transistor 80V 8A.ON.MJD44H11D)	82.8	63.1	36.0
8. PCM-8500 - U39 (TI.SN7406)	83.5	62.9	37.6
9. PCM-8500 - C467 (220uF.2V.20%.D(7.3*4.3*2.7mm).10mOhm Japan Carlit.2SW220M)	85.2	64.2	38.9
10. PCM-8500 - Q16 (PWR.SMD.TO-252.N-Channel Power 25V 60A MOSFET.APEC.AP70T03H)	108.7	94.0	55.2
11. PCM-8500 - Pentium 4 / 3.06 GHz CPU	79.2	59.8	32.9
12. PCM-8500 - L86 (CEP125U-0R8)	91.1	75.6	43.8
13. DVD-ROM Surface	56.7	33.2	8.8
14. HDD	71.1	50.0	25.6
15. Control Box Inside Air Temperature (1)	68.0	45.4	21.1
16. Control Box Inside Air Temperature (2)	64.3	42.6	17.6
17. Inverter - T1	83.9	65.7	45.4
18. Inverter - D1	79.0	61.1	40.5
19. Inverter - Q3	78.1	60.2	38.9
20. Chamber Air Temperature	50.8	26.0	0.8

Note: The description in red states which temperature is over the specification of the device.

Sample Configuration & Quantity Under Test:

Quantity: 1 (APC-8122 Panel PC)

Test Result:

The system structure doesn't deformation; Function is OK during system test.

APC-8122 (PCM-8500 A1.0) Panel PC

Test Date: 12-15~17-2004

Test Product: APC-8122 (PCM-8500 A1.0).

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

Test Standard: Reference IEC 68-2-2 Testing procedures
Test Bb: Dry Heat Test (Non-operation)

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.

Model: THS-D4L+-100

Date of Calibration: 10/01/04

Serial Number: 2582

Testing Item:

1. Test Temperature: 60
2. Test Times: 48Hrs
3. Test Software: Windows media Player (Video test soft-MPEG form HDD)
4. Test Environment Curve:



Sample Configuration & Quantity Under Test:

Quantity: 1 (APC-8122 Panel PC)

Test Result:

The system structure doesn't have any deformation; All functions are OK after high temperature storage test.

APC-8122 (PCM-8500 A1.0) Panel PC

Test Date: 12-10~13-2004

Test Product: APC-8122 (PCM-8500 A1.0)..

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

Test Standard: Reference IEC 68-2-1
Testing procedures Test Ab: Cold Test (Non-operation)

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4H+-100
Date of Calibration: 10/01/04
Serial Number: 2582

Testing Item:

1. Test Temperature: -20
2. Test Times: 48Hrs
3. Test Software: Windows media Player (Video test soft-MPEG form HDD)
4. Test Environment Curve:



Sample Configuration & Quantity Under Test:

Quantity: 1 (APC-8122 Panel PC)

Test Result:

The system structure doesn't have any deformation; All functions are OK after low temperature storage test.

APC-8122 (PCM-8500 A1.0) Panel PC

Test Date: 12-20~22-2004

Test Product: APC-8122 (PCM-8500 A1.0).

Test Site: AAEON QA Internal Lab.

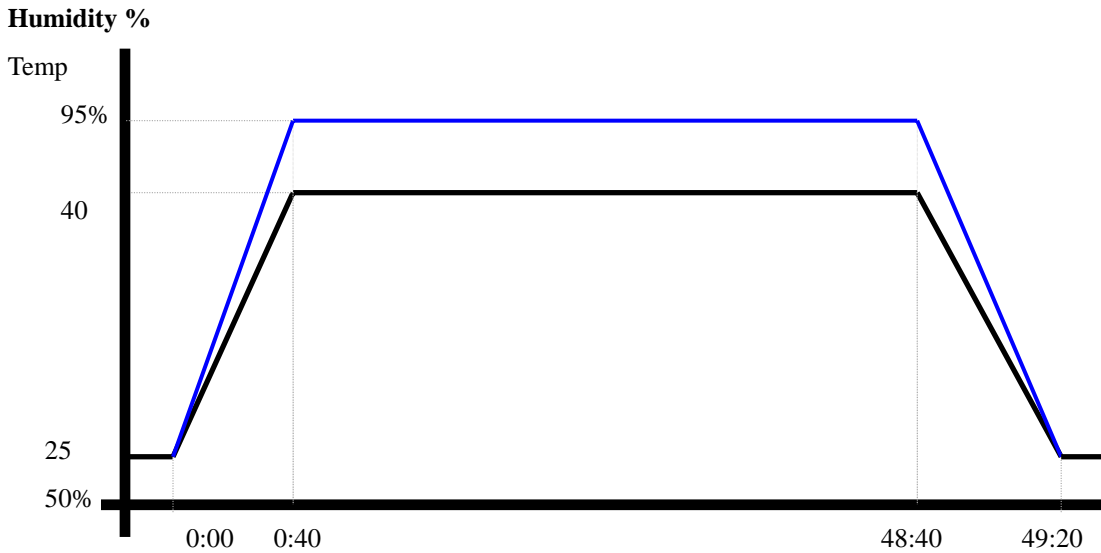
Performed By: Rex Chang

Test Standard: Reference IEC 68-2-3 Testing procedures
Test Ca: Damp heat, steady state (Non-operation)

Test Equipment:
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4H+-100
Date of Calibration: 10/01/04
Serial Number: 2582

Testing Item:

1. Test Temperature: 40
2. Test Humidity: 95%RH
3. Test Times: 48Hrs
4. Test Software: Windows media Player (Video test soft-MPEG form HDD)
5. Test Environment Curve:



Sample Configuration & Quantity Under Test:

Quantity: 1 (APC-8122 Panel PC)

Test Result:

The system structure doesn't have any deformation; All functions are OK after humidity test.

APC-8122 (PCM-8500 A1.0) Panel PC

Test Date: 12-14-2004

Test Product: APC-8122 (PCM-8500 A1.0).

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

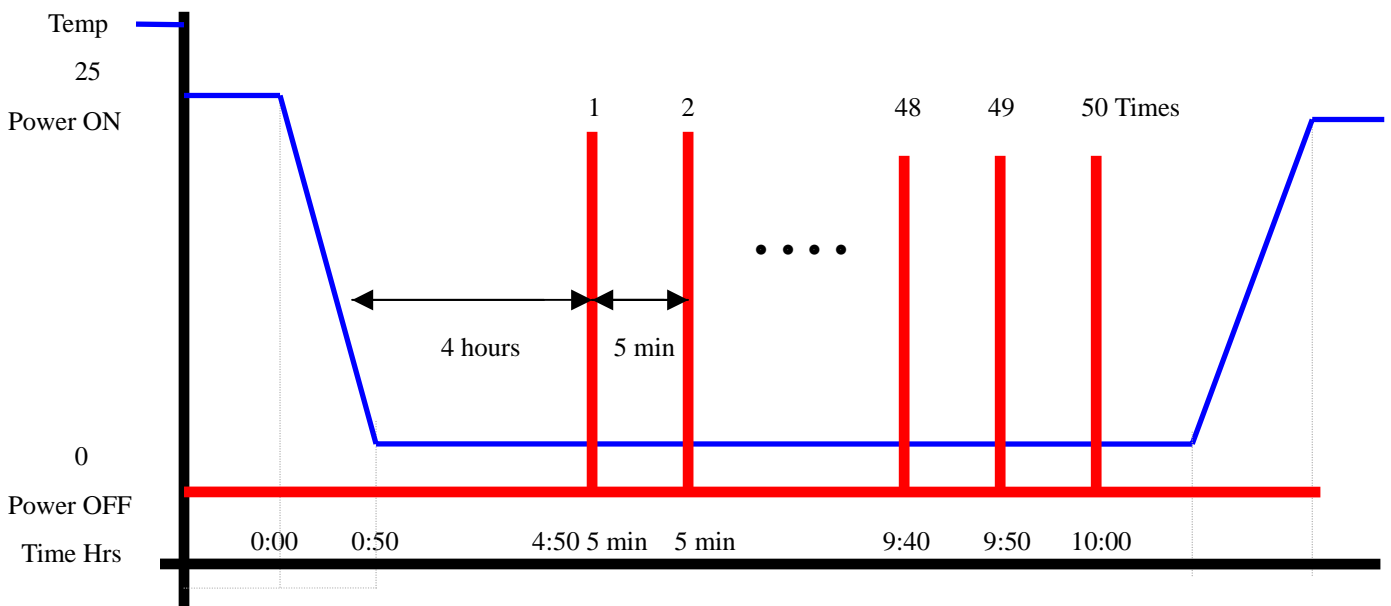
Test Standard: Reference IEC 68-2-1 Testing procedures
Test Ab: Cold Test

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4H+-100
Date of Calibration: 10/01/04
Serial Number: 2582

Test Condition:

1. Test Temperature: 0
2. Test Times: 5 Hours or 50 times of ON/OFF
 - (1) Power off for 4 hours before 1'st power on. Then once complete boot, power off immediately.
 - (2) After 5 min later power on again and wait until booting is completed.
 - (3) Repeat (2) for around 4:50
 - (4) Power off then wait for 5 min before final power on operation.
3. Number of test: 50 times
4. Test Software: Windows 2000
5. Test Environment Curve:



APC-8122 (PCM-8500 A1.0) Panel PC

Sample Configuration & Quantity Under Test:

Quantity: 1 (APC-8122 Panel PC)

Test Result:

Passed.