



Industrial Computing Platform Partner

PFM-550S

Temperature cycle Test Report

Report NO: 06E020004

Issued by: **Ryan Cheng** / **01/12/2006**
Test Engineer Date

Reviewed by: **Wenyuan Yang** / **01/12/2006**
Manager Date

Temperature cycle test

Test Date: 01-09~12-2005

Test Product: PFM-550S (AT Power) Rev: A1.0

Test Site: AAEON QA Internal Lab.

Performed By: Ryan Cheng

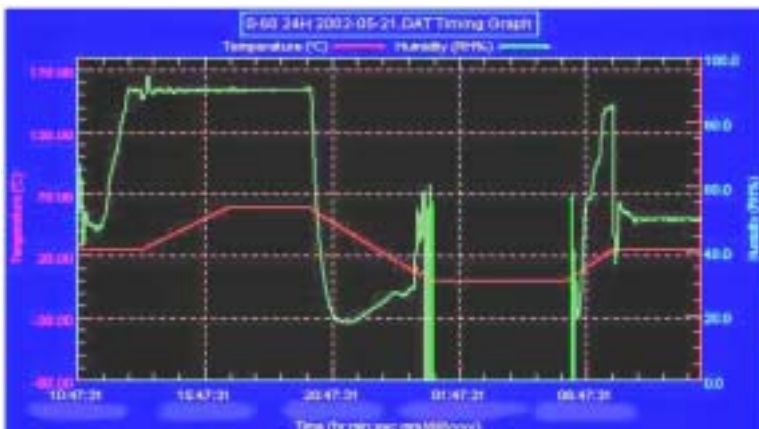
Test Standard: Reference IEC 68-2-30 Testing procedures
 Test DB: Damp Heat Test
 Reference IEC 68-2-61 Testing procedures
 Test Z/ABD: Climatic Sequence Test

Test Equipment:
 Programmable Temperature & Humidity Chamber
 K.SON. INS. TECH. CORP.
 Model: THS-A4C-100
 Date of Calibration: 05/23/05
 Serial Number: 3188

**Temperature & Humidity Power On/Off Test:
 Testing Specification:**

| Step | Temperature () | Humidity (%RH) | Duration (HH:MM) |
|------|-----------------|----------------|------------------|
| 1 | 25 | 50 | 00:30 |
| 2 | 25 | 50 | 00:30 |
| 3 | 25 | 90 | 01:00 |
| 4 | 25 | 90 | 00:30 |
| 5 | 60 | 90 | 03:30 |
| 6 | 60 | 90 | 03:00 |
| 7 | 0 | 0 | 04:50 |
| 8 | 0 | 0 | 05:23 |
| 9 | 25 | 50 | 01:47 |
| 10 | 25 | 50 | 03:00 |

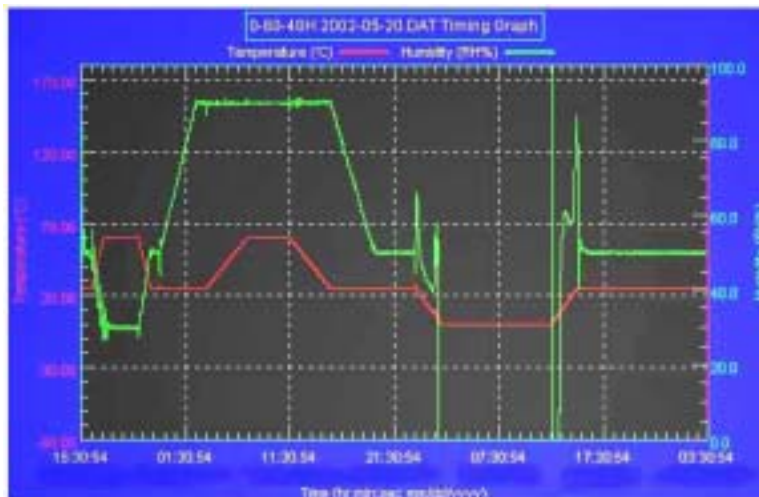
Test Curve:



**Temperature & Humidity Cycle Test:
 Testing Specification**

| Step | Temperature () | Humidity (%RH) | Duration (HH:MM) |
|------|-----------------|----------------|------------------|
| 1 | 25 | 50 | 00:30 |
| 2 | 25 | 50 | 00:30 |
| 3 | 60 | 30 | 01:10 |
| 4 | 60 | 30 | 03:20 |
| 5 | 25 | 50 | 01:10 |
| 6 | 25 | 50 | 00:50 |
| 7 | 25 | 90 | 03:30 |
| 8 | 25 | 90 | 01:00 |
| 9 | 60 | 90 | 03:53 |
| 10 | 60 | 90 | 04:07 |
| 11 | 25 | 90 | 03:53 |
| 12 | 25 | 50 | 04:07 |
| 13 | 25 | 50 | 03:30 |
| 14 | 25 | 50 | 00:30 |
| 15 | 0 | 0 | 02:30 |
| 16 | 0 | 0 | 10:30 |
| 17 | 25 | 50 | 02:30 |
| 18 | 25 | 50 | 00:30 |

Test Curve:



Temperature cycle test

Sample Configuration & Quantity Under Test:

1. CPU: On Board VIA Mark CPU – 533MHz (BIOS: 0.3)
2. SDRAM: Transcend 128MB PC-133 SDRAM (SO-DIMM)
3. Chipset: VIA VT82C686B
4. VGA: VIA VT8606 (Share memory up to 32)
5. LAN: Realtek RTL8100BL
6. CFD: SanDisk 32MB
7. HDD: Seagate ST320413A 20GB
8. Test Software: Windows XP / Run PassMark Burn In Test Pro 4.0
9. AT Power Supply: Enhance ENT-1815 150W
10. Heat Sink:



Test Result:

1. **Temperature & Humidity Power On/Off Test:**
No problem was found during the Temperature & Humidity Power On/Off Test.
2. **Temperature & Humidity Cycle Test:**
No problem was found during the Temperature & Humidity Cycle Test.

Test Date: 01-09~07~08-2005

Test Product: PFM-550S (AT Power) Rev: A1.0

Test Site: AAEON QA Internal Lab.

Performed By: Ryan Cheng

Test Standard: Reference IEC 68-2-2 Testing procedures
Test Bd: Dry Heat Test (Operation)

Test Equipment:

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

Model: THS-A4C-100

Date of Calibration: 05/23/05

Serial Number: 3188

Temperature Measurement:

DER EE 2 Channel Digital Thermometer

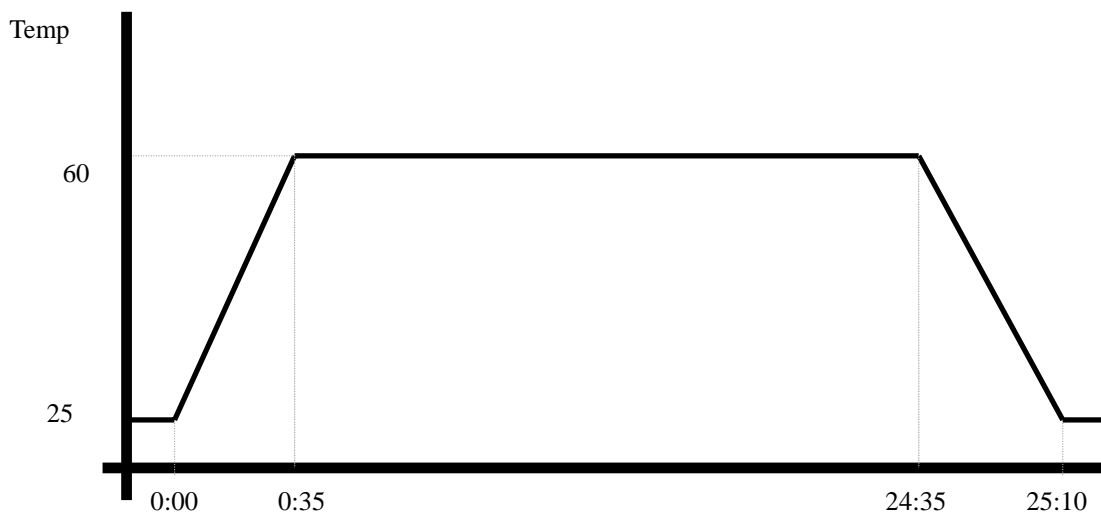
Model: DE-3004 TYPE K

Date of Calibration: 09/15/05

Serial Number: E0005039

Testing Item:

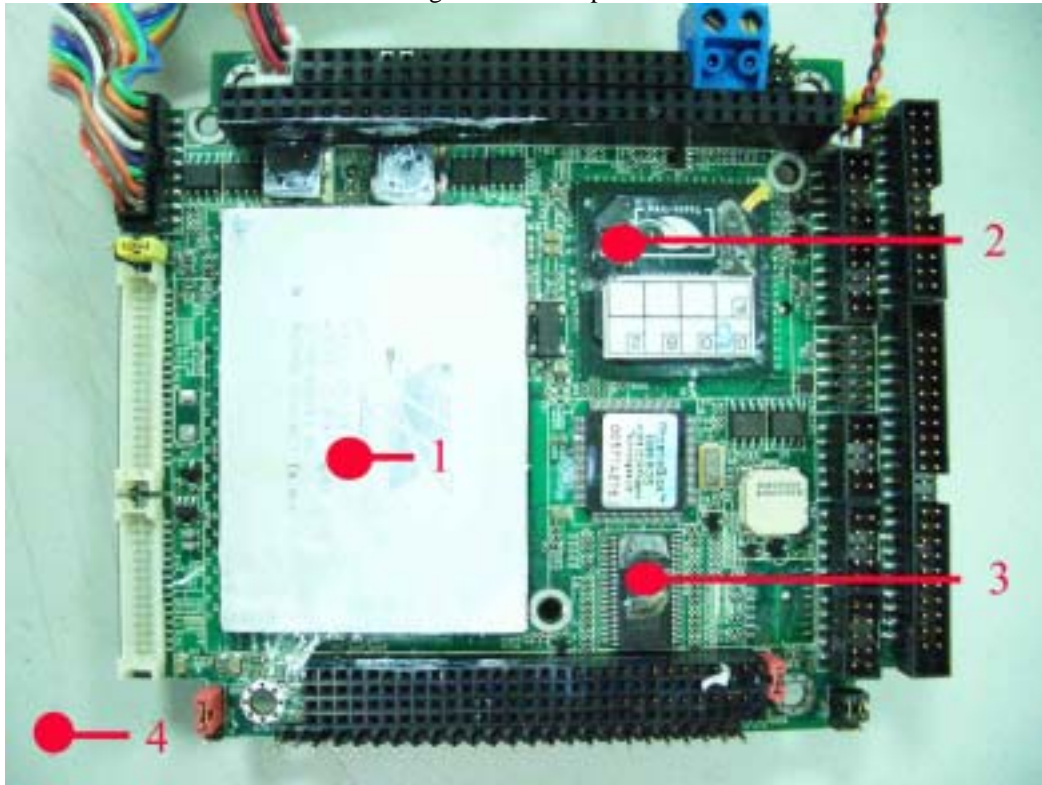
1. Test Temperature: 60
2. Test Times: 24Hrs
3. Test Software: Windows XP / Run PassMark Burn In Test Pro 4.0
4. Test Environment Curve:



High temperature operation test

Temperature Recorder:

Measuring Thermal Couple Position:



Thermal profile data:

PFM-550S A1.0

| Point | Temp. | Room Temp. | Chamber 25 | Chamber 60 | Spec. |
|----------------------|-------|------------|------------|------------|-------|
| 1. Mark CPU – 533MHz | | 69 / 68 | 45 / 43 | 82 / 80 | 100 |
| 2. South bridge | | 68 / 67 | 45 / 43 | 81 / 79 | 85 |
| 3. CLK Generator | | 76 / 75 | 53 / 51 | 89 / 87 | 115 |
| 4. Air Temp. | | 26 / 25 | 27 / 25 | 62 / 60 | N/A |

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

Sample Configuration & Quantity Under Test:

Quantity: 1 (PFM-550S)

Test Result:

No problem was found during the high temperature operation test.