



1. <i>Test item list</i> -----	2
2. <i>Temperature variation operation test</i> -----	3
3. <i>Cold start and hot start test</i> -----	4

## Test Product: PER-C20L + GENE-8310

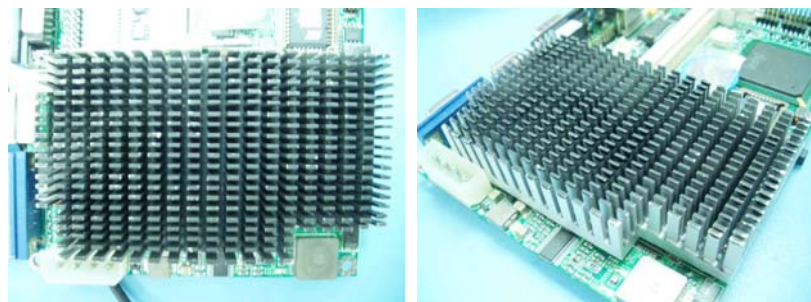
### Sample Configuration & Quantity Under Test:

**Test Sample: PER-C20L A1.0**

1. LAN Chipset: Intel 82551ER \* 2

**Test System: GENE-8310 A1.1**

1. CPU: Intel(R) Celeron M 600MHz
2. Memory: ATP 512MB(DDR2-533) / SAMSUNG K4H510838C-UCB3
3. Chipset: Intel 852GM / Intel ICH4
4. VGA: North Bridge Intel 852GM
5. HDD: Western Digital WD800BB-00JHA0 80GB
6. Test Software: Using Windows XP running Microsoft media player simultaneously from server 1 and server 2.
7. ATX Power Supply: FSP ATX300GU
8. Heat Sink:



**Server 1:**

SBC-659 with Intel GD82559ER Ethernet + Genuine GE-ES1005BCN 5 Port switch Hub

**Server 2:**

SBC-658 with Realtek RTL8139B Ethernet + Genuine GE-ES1005BCN 5 Port switch Hub

**Test Date:** 01-07~08-2007

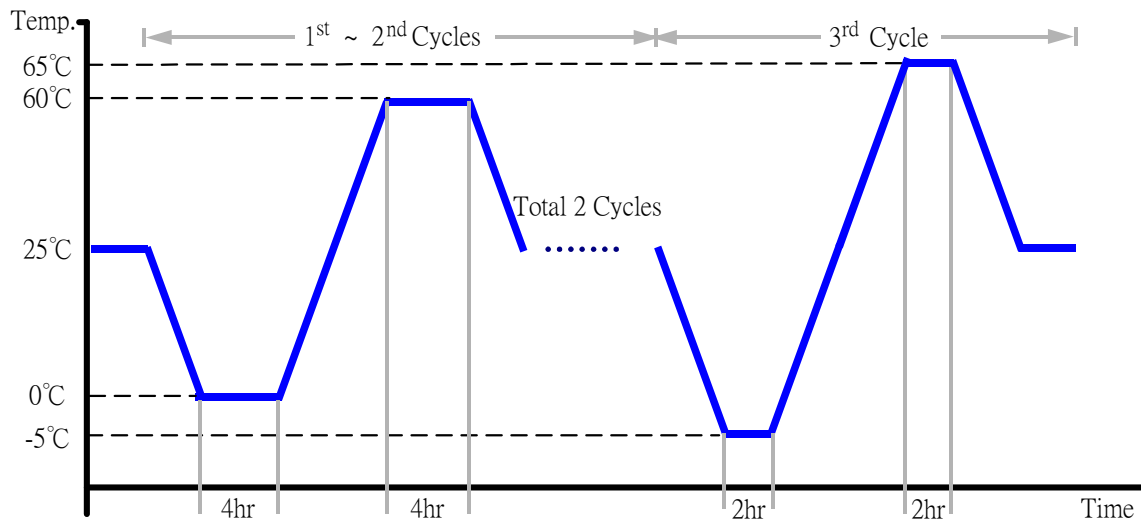
**Test Site:** AAEON QA Internal Lab.

**Test Standard:** Reference IEC 68-2-14 Testing procedures  
Test N: Change of temperature Test

**Test Equipment:**  
Programmable Temperature & Humidity Chamber  
K.SON. INS. TECH. CORP.  
Model: THS-A4C-100  
Date of Calibration: 06/19/07  
Serial Number: 3188

### Temperature & Humidity Cycle Test:

1. Test Low Temperature: 0°C (1~2 cycles)  
-5°C (3<sup>rd</sup> cycle)
2. Test High Temperature: 60°C (1~3 cycles)  
65°C (3<sup>rd</sup> cycle)
3. Test dwell time: 4Hrs (1~2 cycles)  
2Hrs (3<sup>rd</sup> cycle)
4. Temperature slope: 2°C/min
5. Test cycle: 3 cycles
6. Test Environment Curve:



### Test Result:

No problem was found during the temperature variation operation test.

# Cold start and hot start test

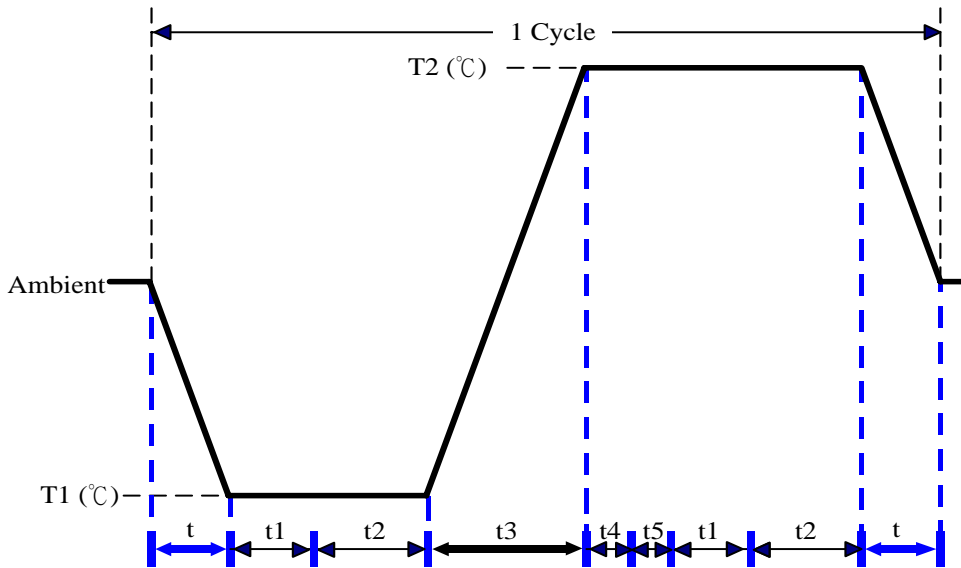
**Test Date:** 01-08-2008

**Test Site:** AAEON QA Internal Lab.

**Test Standard:** Reference IEC 68-2-14 Testing procedures  
Test N: Change of temperature Test

**Test Equipment:**  
Programmable Temperature & Humidity Chamber  
K.SON. INS. TECH. CORP.  
Model: THS-A4C-100  
Date of Calibration: 06/19/07  
Serial Number: 3188

**Test Condition:**



Parameters	Description
T1	-5°C
T2	65°C
t1	1 hrs
t2	2 hrs
t4, t5	30 min
t, t3	2°C/min
n (Cycle)	1

t,t3 = temprature slope  
t, t1: Power Off  
t2: Power on/off test 10 times (on 2 min / off 5min)  
t3,t4: Run PassMark Burn In Test  
t5: Win XP Software restart test 2 times  
Test Software: Windows XP

**Test Result:**

- a. No problem was found during the cold start test.
- b. No problem was found during the hot start test.