AAEON Technology INC.
ISO-9001/ISO-14001 Certified
Industrial Automation PCs

SBC-860GV A1.0
Thermal Image Analysis Report

Release Date: Mar.23, 2003

2003-03-23	Wayne Chen	Rex Chang
Issue Stamp	**A.V.P.**	**Test Engineer**

Thermal Image Analysis

Ⅰ. Model Name: SBC-860GV Rev.A1.0 (BIOS:0.4)

Ⅱ. Description: Full-size CPU Card

Ⅲ. Date: MAR. 19, 2003

Ⅳ. Measure Site: AAEON DV Dept.

Ⅴ. Issued by : Rex Chang

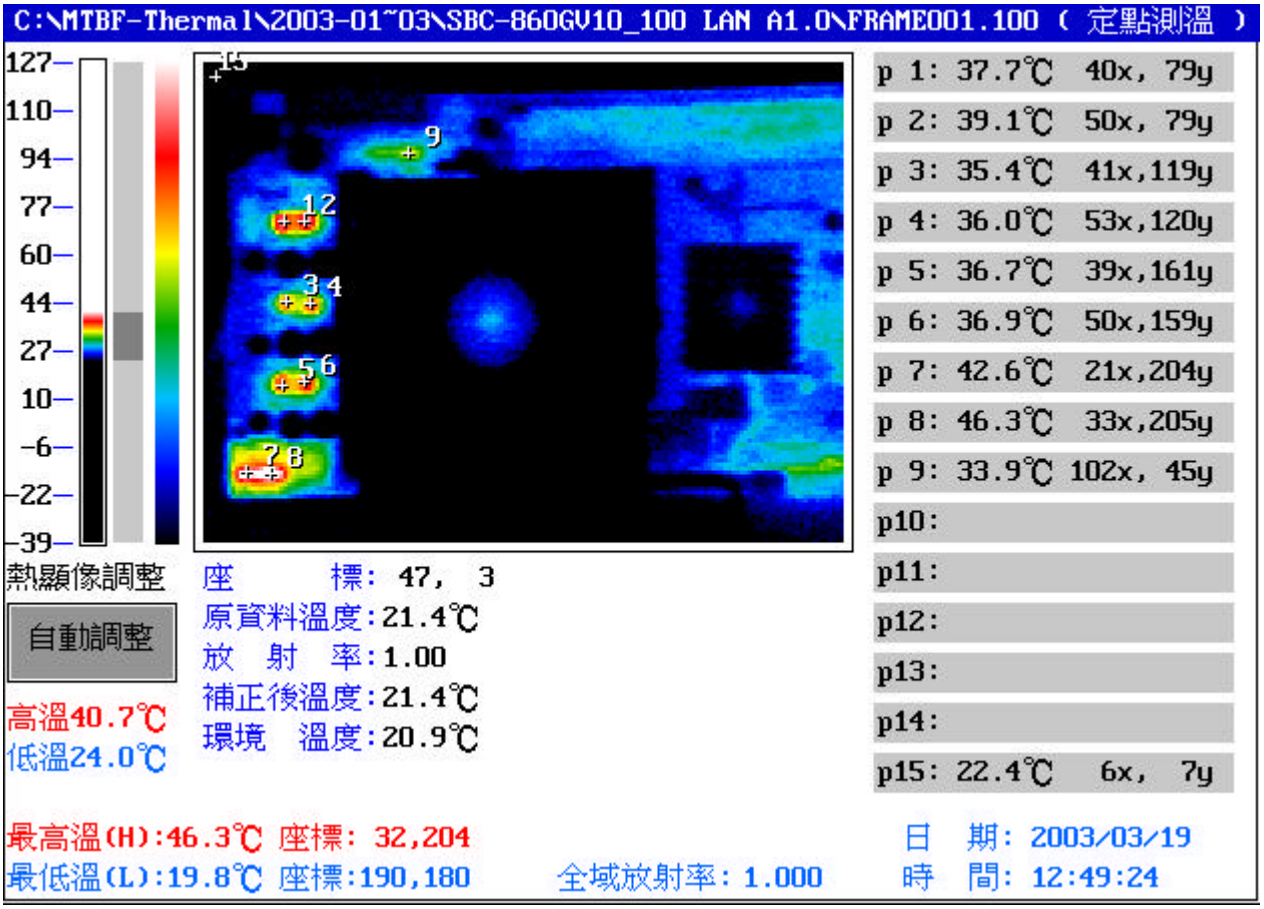
Ⅵ.Equipment: TVS-100 series by NIPPON AVIONICS CO., LTD.

Ⅶ. Simulation Environment:

- **Temperature: 22.4degrees C**
- **CPU: Intel Pentium4 2.4GHz**
- **RAM: SAMSUNG K4H280838B-TCB0 DDR266 256MB**
- **HDD : Maxtor 54610H6 46.1GB**
- **Application Software: Win98SE (VCD Play)**
- **Take Picture Time: Power on 30 minutes after**

Temperature Profile Test:

Component Side - 1:

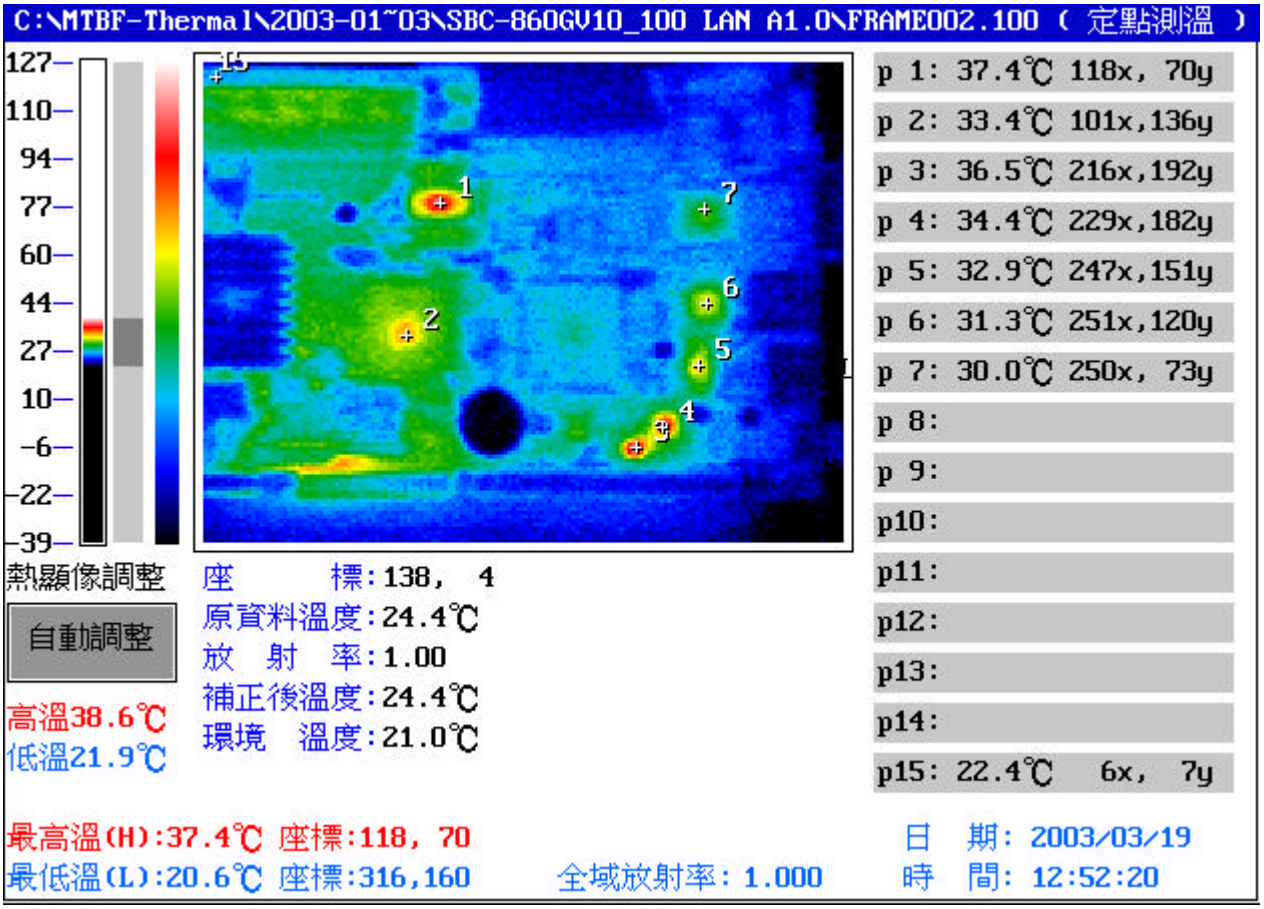


Point	Position	Describe	Ts	Tm	Note
1	EC6	EC.820uF.4V.20%.(10*12.5mm).8mOhm DIP.NIPPON CHEMI- CON.4PS820MJ12		37.7 ℃	
2	EC7	EC.820uF.4V.20%.(10*12.5mm).8mOhm DIP.NIPPON CHEMI- CON.4PS820MJ12		39.1 ℃	
3	EC9	EC.820uF.4V.20%.(10*12.5mm).8mOhm DIP.NIPPON CHEMI- CON.4PS820MJ12		35.4 ℃	
4	EC10	EC.820uF.4V.20%.(10*12.5mm).8mOhm DIP.NIPPON CHEMI- CON.4PS820MJ12		36.0 ℃	
5	EC15	EC.820uF.4V.20%.(10*12.5mm).8mOhm DIP.NIPPON CHEMI- CON.4PS820MJ12		36.7 ℃	
6	EC16	EC.820uF.4V.20%.(10*12.5mm).8mOhm DIP.NIPPON CHEMI- CON.4PS820MJ12		36.9 ℃	
7	U22	IC.SMD.SOIC 8Pin MOSFET Drivers.INTERSIL.HIP6601B		42.6 ℃	
8	U23	IC.SMD SOIC 14Pin.Dual Channel MOSFET Drivers.INTERSIL.HIP6602B		46.3 ℃	
9	U3	IC.SMD.SOIC 14P.TI.SN7406		33.9 ℃	
10					
11					
12					
13					
14					
15				22.4 ℃	

1. Operation Temperature (℃):
   Ts = Defined by component specification ; Tm = Measured by DV

Temperature Profile Test:

Component Side - 2:



Point	Position	Describe	Ts	Tm	Note
1	U6	IC.SMD.SSOP 56Pin Clock Generator.ICS.ICS950201		37.4 ℃	
2	U14	IC.SMD.Chipset ICH4.INTEL.FW82801DB SL66K		33.4 ℃	
3	Q4	REG.DIP(CASE29).Voltage Regulators.MOTOROLA.MOMC78L05ACPRP		36.5 ℃	
4	U20	IC.SMD.AC'97 Audio Codec.AVANCE LOGIC.ALC201		34.4 ℃	
5	U16	IC.SMD.SSOP48 Chipset.INTEL.DA82562ET		32.9 ℃	
6	U12	IC.SMD.Chipset.10/100BaseT LAVON.Intel.GD82551QM		31.1 ℃	
7	U9	IC.SMD.IT8712F 128P Super I/O.ITE.IT8712F		30.0 ℃	
8					
9					
10					
11					
12					
13					
14					
15		The Room Temperature		22.4 ℃	

1. Operation Temperature (℃):
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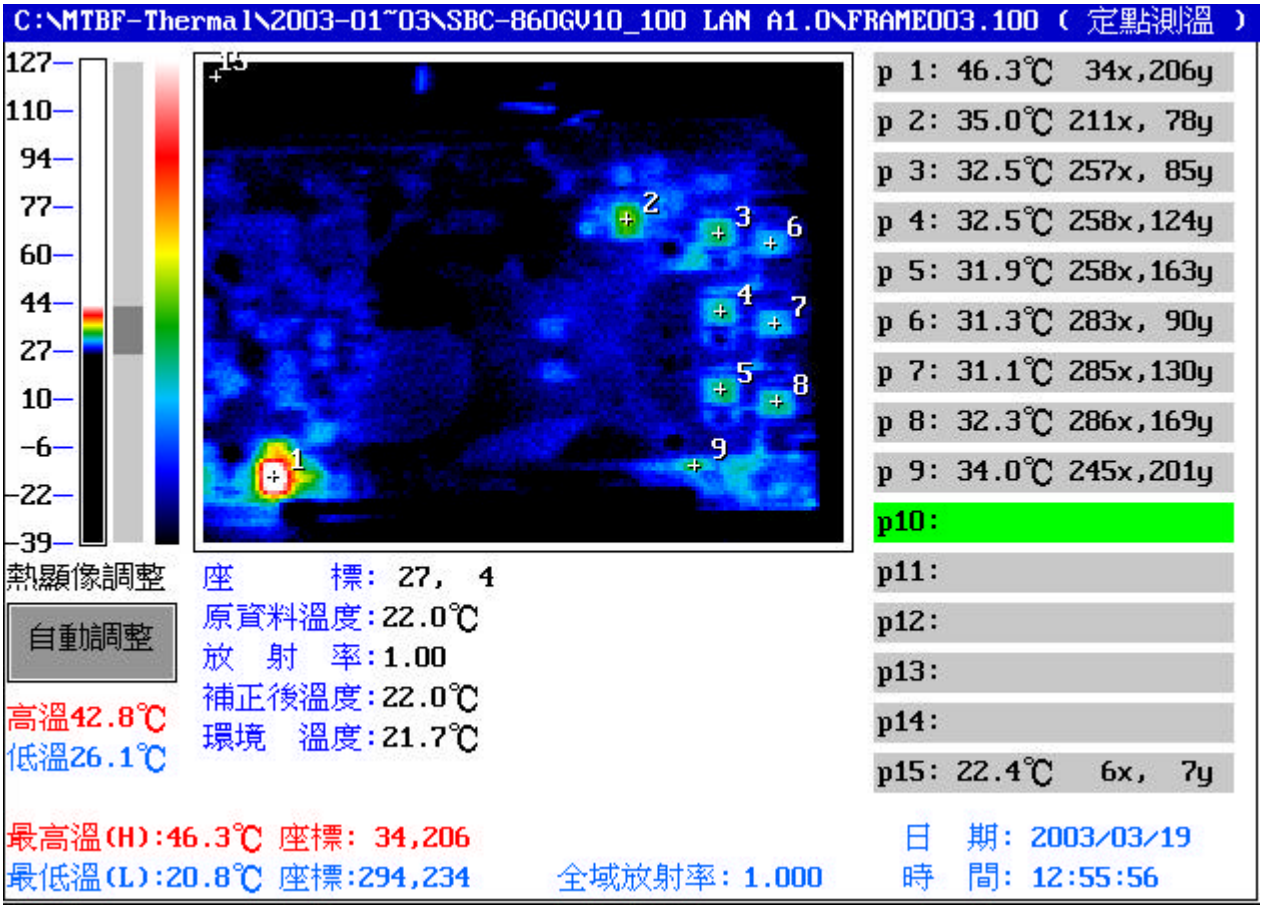
Temperature Profile Test:

Solder Side -1:



Point	Position	Describe	Ts	Tm	Note
1	Q32	REG.SMD.8A Linear Regulator TO-263.AMS.AMS1083CM		46.3 ℃	
2	Q10	REG.SMD TO-263.Fixed 2.5V 7A LinearRegulator.SEMTECH.EZ1580CM-2.5V		35.0 ℃	
3	Q12	PWR.SMD.TO-263 N-Channel Power MOSFET.CET.CEB71A3		32.5 ℃	
4	Q21	PWR.SMD.TO-263 N-Channel Power MOSFET.CET.CEB71A3		32.5 ℃	
5	Q31	PWR.SMD.TO-263 N-Channel Power MOSFET.CET.CEB71A3		31.9 ℃	
6	Q15	PWR.SMD TO-263.N-Channel MOSFET Rdson13.5mΩ.CET.CEB6030L		31.3 ℃	
7	Q26	PWR.SMD TO-263.N-Channel MOSFET Rdson13.5mΩ.CET.CEB6030L		31.1 ℃	
8	Q30	PWR.SMD TO-263.N-Channel MOSFET Rdson13.5mΩ.CET.CEB6030L		32.3 ℃	
9	Q35	PNP.SMD.2N3906 3P (TO-236AB).MOTOROL.MMBT3906LT1 SOT-23		34.0 ℃	
10					
11					
12					
13					
14					
15		The Room Temperature		22.4 ℃	

1. Operation Temperature (℃):
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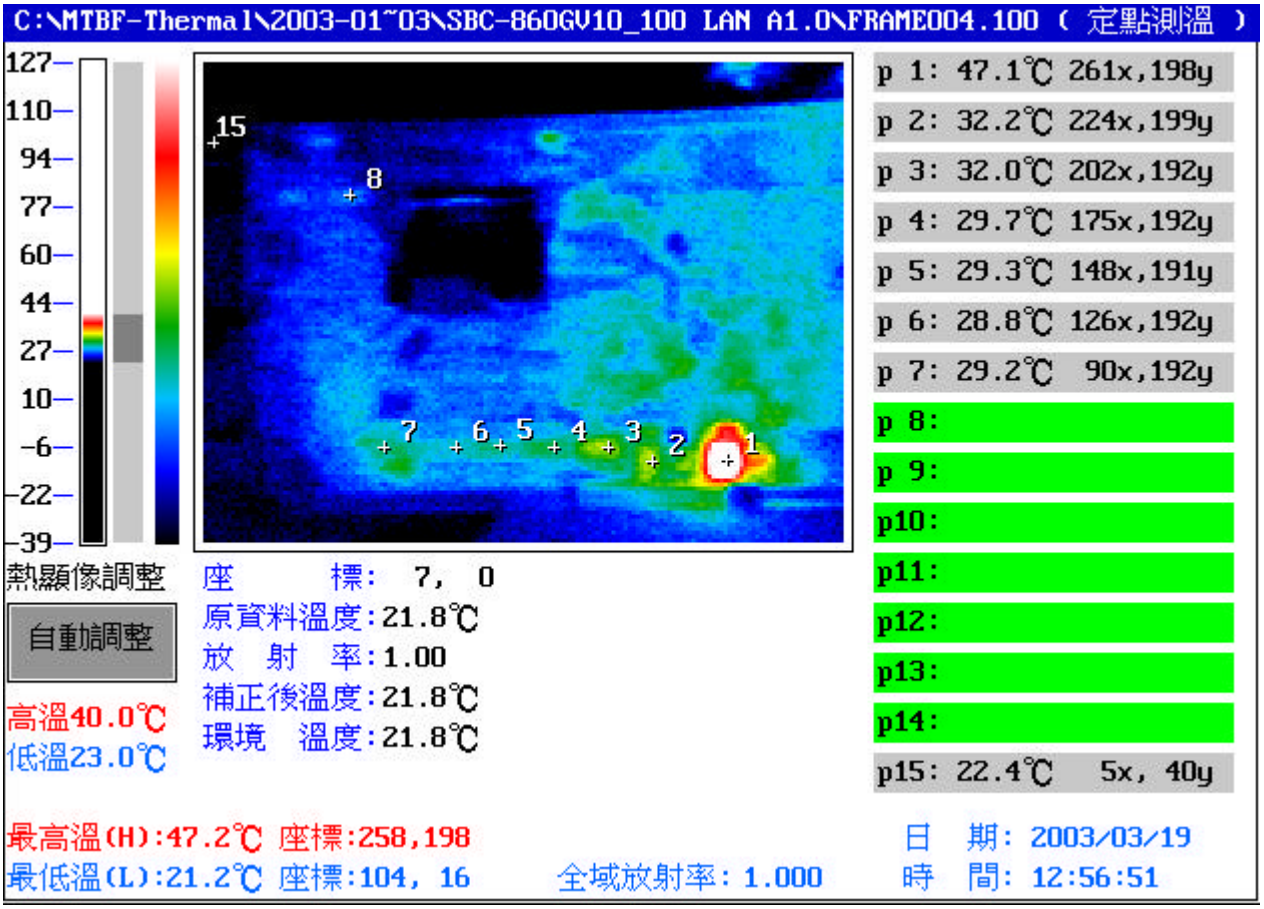
Temperature Profile Test:

Solder Side -2:



Point	Position	Describe	Ts	Tm	Note
1	Q32	REG.SMD.8A Linear Regulator TO-263.AMS.AMS1083CM		47.1 ℃	
2	Q33	REG.SMD.8A Linear Regulator TO-263.AMS.AMS1083CM		32.2 ℃	
3	U39	IC.SMD.SSOP Dual 245.TI.SN74ABT162245DL		32.0 ℃	
4	U40	IC.SMD.SSOP Dual 245.TI.SN74ABT162245DL		29.7 ℃	
5	U41	IC.SMD.SSOP Dual 245.TI.SN74ABT162245DL		29.3 ℃	
6	U42	IC.SMD.SSOP Dual 245.TI.SN74ABT162245DL		28.8 ℃	
7	U38	IC.SMD.Dual 250mw Audio AMP.NS.LM4880M		29.2 ℃	
8					
9					
10					
11					
12					
13					
14					
15		The Room Temperature		℃	

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