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

GENE-4310

Thermal Image Analysis Report

Release Date: JUNE.29, 2000

Issue Stamp	QA Manager	QE Manager	Test Engineer

Thermal Image Analysis

Ⅰ. **Model Name:** **GENE-4310**

Ⅱ. **Description:** **NS Geode GXLV SubCompact Board with LCD, LVDS, Ethernet, & Audio**

Ⅲ. **Date:** **JUNE. 29, 2000**

Ⅳ. Measure **Site:** **AAEON QE Dept.**

Ⅴ. **Issied by :** **Fenglin Dong**

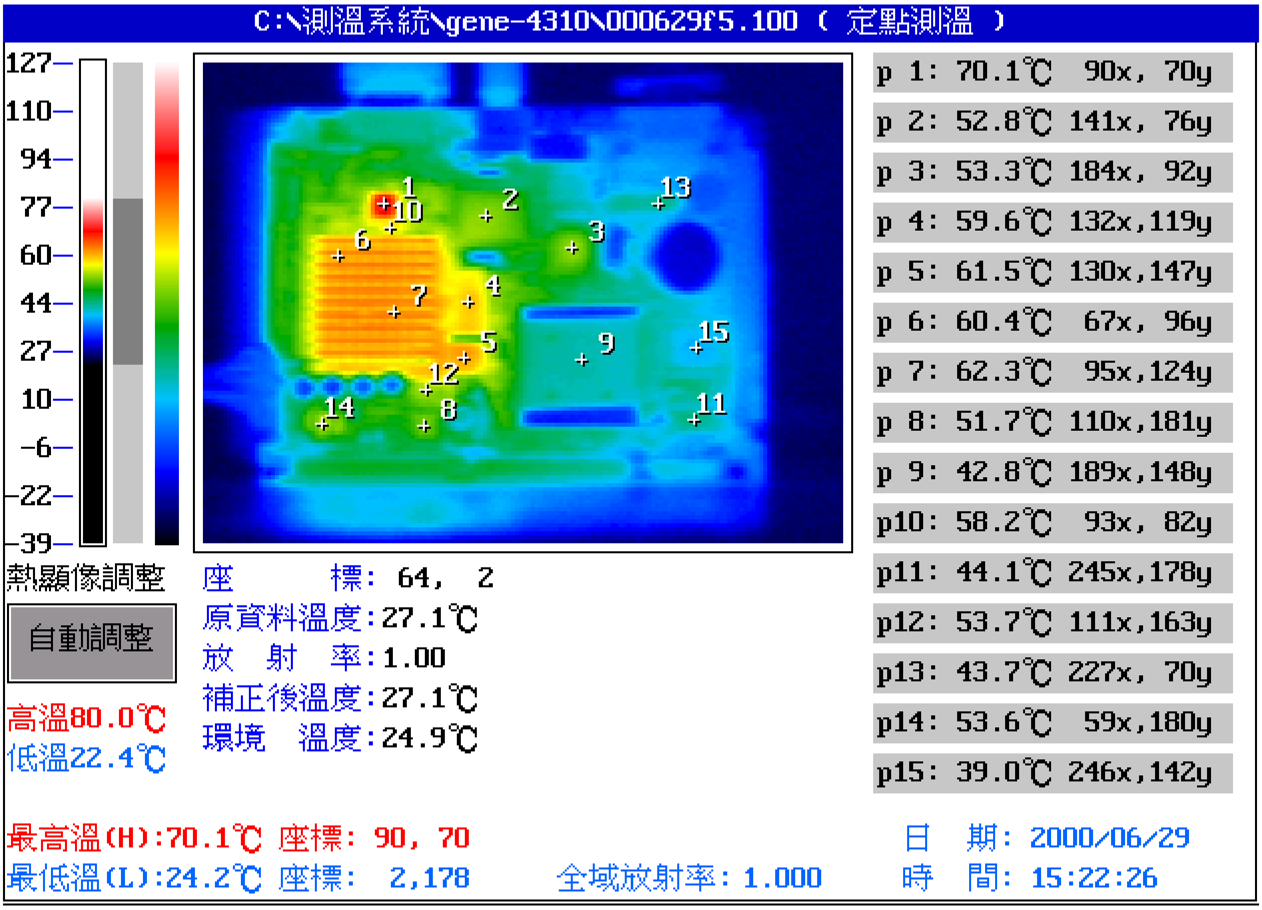
Ⅵ.**Equipment:** **TVS-100 series by NIPPON AVIONICS CO., LTD.**

Ⅶ. **Simulation Environment:**

- **Temperature: 24.9 degrees C**
- **CPU: P 233 (On Board)**
- **Memory: Compact Flush**
- **RAM: 32 MB (NEC D4564163G5-A10-9JF)**
- **Application Software: QAPLUS/FE V5.2**
- **Take Picture Time: Power on 30 minutes after**

Ⅷ. Prediction Result:

1. Component Side:



C:\測溫系統\gene-4310\000629f5.100 (定點測溫)

熱顯像調整

高溫80.0℃
低溫22.4℃

座　標: 64, 2
原資料溫度:27.1℃
放　射　率:1.00
補正後溫度:27.1℃
環境　溫度:24.9℃

p 1:	70.1℃	90x, 70y
p 2:	52.8℃	141x, 76y
p 3:	53.3℃	184x, 92y
p 4:	59.6℃	132x,119y
p 5:	61.5℃	130x,147y
p 6:	60.4℃	67x, 96y
p 7:	62.3℃	95x,124y
p 8:	51.7℃	110x,181y
p 9:	42.8℃	189x,148y
p10:	58.2℃	93x, 82y
p11:	44.1℃	245x,178y
p12:	53.7℃	111x,163y
p13:	43.7℃	227x, 70y
p14:	53.6℃	59x,180y
p15:	39.0℃	246x,142y

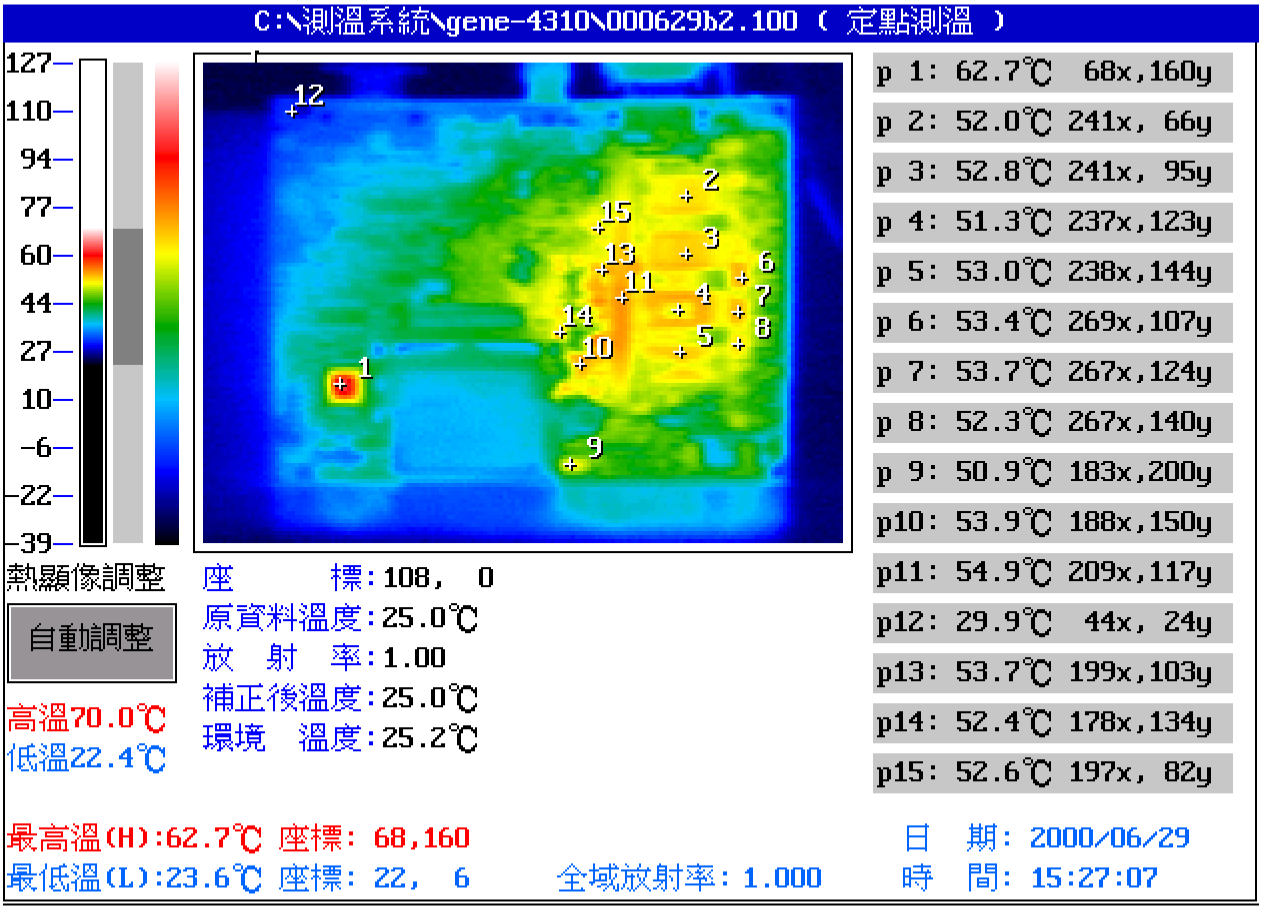
最高溫(H):70.1℃ 座標: 90, 70
最低溫(L):24.2℃ 座標: 2,178
全域放射率:1.000

日　期: 2000/06/29
時　間: 15:22:26

Point	Position	Describe	Ts	Tm	Note
1	U10	ANDEV, AD1819BJST	70	70.1	※ = -35.1
2	U3	Winbond, W83977F-A	70	52.8	
3	U22	Intel 82559		53.3	
4	U25	ICS, MK1491-06	70	59.6	※ = -24.6
5	Q6	LINFINY, LX8384-00CDDT	70	62.5	※ = -27.5
6	U1	ACE, ACE-CM260-363515	70	60.4	※ = -25.4
7	U1	ACE, ACE-CM260-363515	70	62.3	※ = -27.3
8	U13	W83781D	70	51.7	※ = -16.7
9	U2	N.S, CS5530	70	42.8	※ = -7.8
10	---				
11	U18	Thine TI000320	70	44.1	※ = -9.1
12	CT20	EC, 1000μF, 6.3V, 20% 8*11mm, DIP	70	53.7	※ = -18.7
13	U4	HARRIS, HIN213CA	75	43.7	※ = -8.7
14	---				
15	U21	29EE010	70	39.0	※ = -4

1. Operation Temperature (℃):
   Ts = Defined by component specification ; Tm = Measured by QE
2. ※ = Ts - (Tm + 60 - 25)

2. Solder Side:



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p 1: 62.7℃  68x,160y
p 2: 52.0℃ 241x, 66y
p 3: 52.8℃ 241x, 95y
p 4: 51.3℃ 237x,123y
p 5: 53.0℃ 238x,144y
p 6: 53.4℃ 269x,107y
p 7: 53.7℃ 267x,124y
p 8: 52.3℃ 267x,140y
p 9: 50.9℃ 183x,200y
p10: 53.9℃ 188x,150y
p11: 54.9℃ 209x,117y
p12: 29.9℃  44x, 24y
p13: 53.7℃ 199x,103y
p14: 52.4℃ 178x,134y
p15: 52.6℃ 197x, 82y
```

高溫70.0℃
低溫22.4℃

座　　標:108, 0
原資料溫度:25.0℃
放　射　率:1.00
補正後溫度:25.0℃
環境　溫度:25.2℃

最高溫(H):62.7℃ 座標: 68,160
最低溫(L):23.6℃ 座標: 22, 6
全域放射率: 1.000
日　期: 2000/06/29
時　間: 15:27:07

Point	Position	Describe	Ts	Tm	Note
1	U19	74F373D	70	62.7	※
2	RAM		-	52.0	
3	RAM		-	52.8	
4	RAM		-	51.3	
5	RAM		-	53.0	
6	---				
7	---				
8	---				
9	U6	PHILIPS, N74F14DT	70	50.9	※
10	---				
11	---				
12	---				
13	---				
14	---				
15	---				

1. Operation Temperature (℃):
   Ts = Defined by component specification ; Tm = Measured by QE
2. ※ = Ts - (Tm + 60 - 25)