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

SBC-658
Thermal Image Analysis Report

Release Date: JUNE.29, 2000

Issue Stamp	QA Manager	QE Manager	Test Engineer

Thermal Image Analysis

Ⅰ. **Model Name: SBC-658**

Ⅱ. **Description: FC/Socket 370 Half-size CPU Card with LCD, Ethernet, & SSD**

Ⅲ. **Date: JUNE. 29, 2000**

Ⅳ. Measure **Site: AAEON QE Dept.**

Ⅴ. **Issued by : Fenglin Dong**

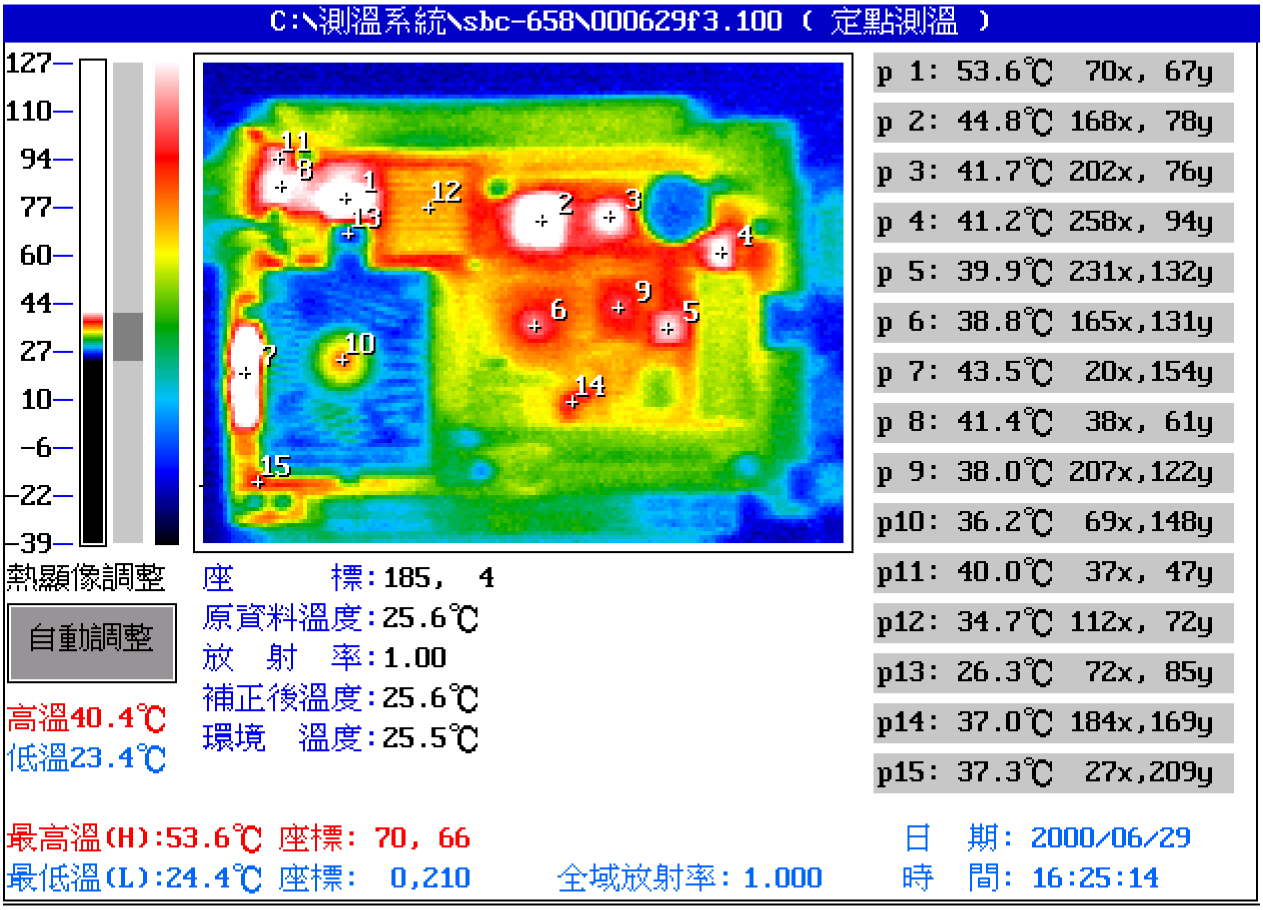
Ⅵ.**Equipment: TVS-100 series by NIPPON AVIONICS CO., LTD.**

Ⅶ. **Simulation Environment:**

- **Temperature: 25.5 degrees C**
- **CPU: PIII 700**
- **RAM: 128 MB (NEC D4564841G5-A80-9JF)**
- **Hardware: DiskOnChip**
- **Application Software: QAplusfe V5.2**
- **Take Picture Time: Power on 30 minutes after**

Ⅷ. Prediction Result:

1. Component Side:



C:\測溫系統\sbc-658\000629f3.100 (定點測溫)

p 1: 53.6℃ 70x, 67y
p 2: 44.8℃ 168x, 78y
p 3: 41.7℃ 202x, 76y
p 4: 41.2℃ 258x, 94y
p 5: 39.9℃ 231x,132y
p 6: 38.8℃ 165x,131y
p 7: 43.5℃ 20x,154y
p 8: 41.4℃ 38x, 61y
p 9: 38.0℃ 207x,122y
p10: 36.2℃ 69x,148y
p11: 40.0℃ 37x, 47y
p12: 34.7℃ 112x, 72y
p13: 26.3℃ 72x, 85y
p14: 37.0℃ 184x,169y
p15: 37.3℃ 27x,209y

熱顯像調整

高溫40.4℃
低溫23.4℃

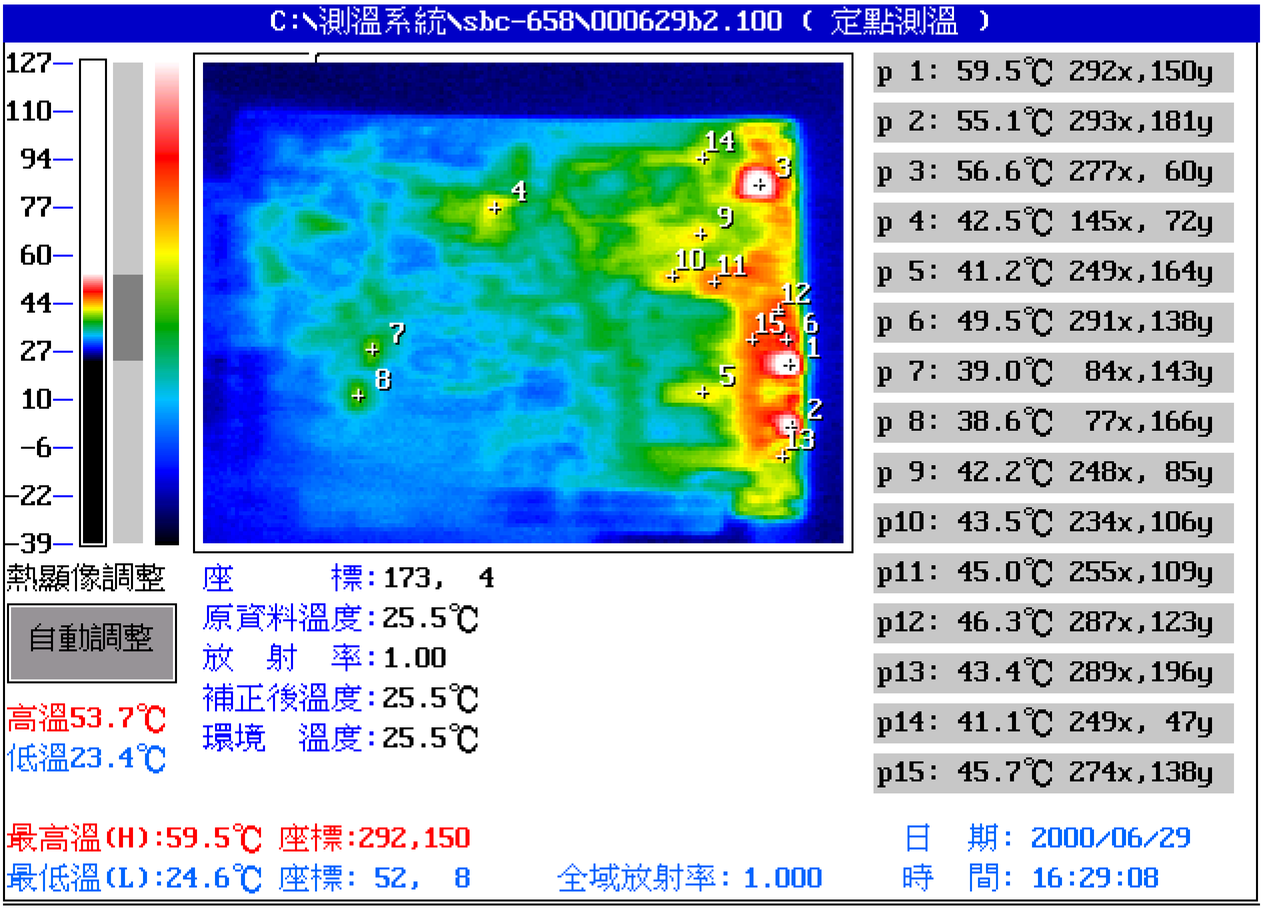
座 標:185, 4
原資料溫度:25.6℃
放 射 率:1.00
補正後溫度:25.6℃
環境 溫度:25.5℃

最高溫(H):53.6℃ 座標: 70, 66
最低溫(L):24.4℃ 座標: 0,210
全域放射率: 1.000
日 期: 2000/06/29
時 間: 16:25:14

Point	Position	Describe	Ts	Tm	Note
1	U2	ICS, 9248-39	70	53.6	※
2	U4	INTEL, C&TM6900	75	44.8	※
3	U5	INTEL, 82559ER	75	41.7	※
4	U7	LINEAR, LTC485CS8	70	41.2	※
5	U14			39.9	
6	U13			38.8	
7	U1	HARRIS, HIN213CA	75	43.5	※
8	CN6	鴻呈, AT-PH13-SMT-14-2-G	70	41.4	※
9	U11			38.0	
10	CPU1			36.2	
11	CN6			40.0	
12	U3			34.7	
13	---			---	
14	U21			37.0	
15	---			---	

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

2. Solder Side:



C:\測溫系統\sbc-658\000629b2.100 (定點測溫)

熱顯像調整

高溫53.7℃
低溫23.4℃

座　　標:173,　4
原資料溫度:25.5℃
放　射　率:1.00
補正後溫度:25.5℃
環境　溫度:25.5℃

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p 1: 59.5℃ 292x,150y
p 2: 55.1℃ 293x,181y
p 3: 56.6℃ 277x, 60y
p 4: 42.5℃ 145x, 72y
p 5: 41.2℃ 249x,164y
p 6: 49.5℃ 291x,138y
p 7: 39.0℃  84x,143y
p 8: 38.6℃  77x,166y
p 9: 42.2℃ 248x, 85y
p10: 43.5℃ 234x,106y
p11: 45.0℃ 255x,109y
p12: 46.3℃ 287x,123y
p13: 43.4℃ 289x,196y
p14: 41.1℃ 249x, 47y
p15: 45.7℃ 274x,138y
```

最高溫(H):59.5℃ 座標:292,150
最低溫(L):24.6℃ 座標: 52,　8
全域放射率: 1.000
日　期: 2000/06/29
時　間: 16:29:08

Point	Position	Describe	Ts	Tm	Note
1	Q6	PHILIPS, PHD50N03LT	75	59.5	※ = -19.5
2	Q5	PHILIPS, PHD50N03LT	75	55.1	※ = -15.1
3	Q2	AMS, AMS1083CM	75	56.6	※ = -16.6
4	---			---	
5	C115			41.2	
6	---			---	
7	---			---	
8	---			---	
9	---			---	
10	U27	74F070	70	43.5	※ = -8.5
11	Q3	AMS, AMS1084CM-1.5	70	45.0	※ = -10
12	C108	MCC, 1 μF,10V,+80/-20%, 0603SMD	75	46.3	※ = -6.3
13	---			---	
14	---			---	
15	---			---	

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