



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

# **PCM-5335 Rev.B1.0**

## **Thermal Image Analysis Report**

**Release Date:Dec.24, 2002**

2002-12-26

**Issue Stamp**

Wayne Chen

**DV Manager**

Rex Chang

**Test Engineer**

# Thermal Image Analysis

---

. **Model Name:** PCM-5335 Rev.B1.0 (BIOS:1.0)

. **Description:** Embedded Low power NS Geode GX1-300 MHz PC/104 CPU Modules

. **Date:** Dec. 24, 2002

. **Measure Site:** AAEON DV Dept.

. **Issued by :** Rex Chang

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

. **Simulation Environment:**

Temperature: 25.4 degrees C

CPU: Embedded Low power NS Geode GX1-300 MHz processor ( BGA)

RAM: 32MB SDRAM NANYA NT56V6620C0T-75

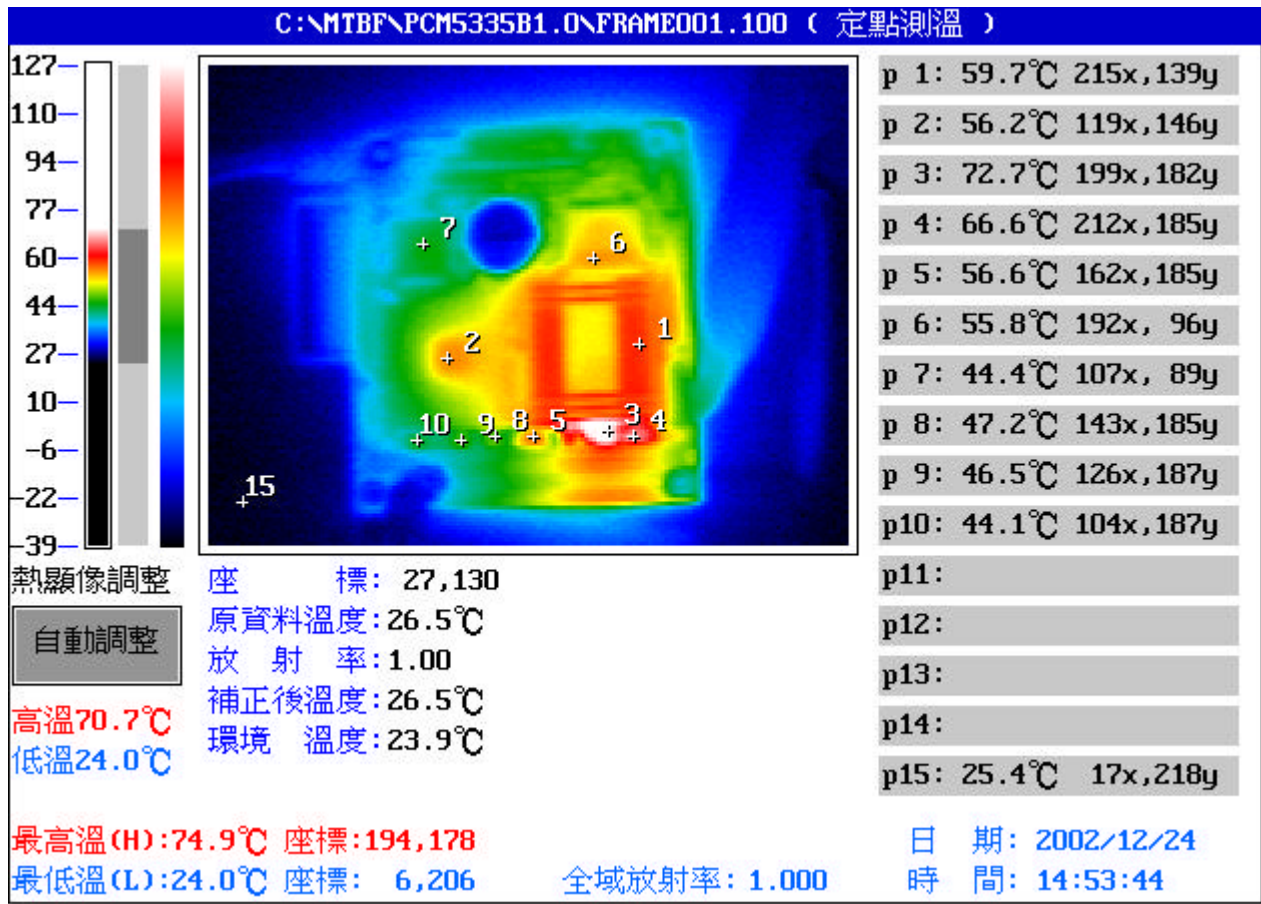
Hardware: Sun Disk 64MB CF Card

Application Software: QAPLus 5.5

Take Picture Time: Power on 30 minutes after

# Temperature Profile Test:

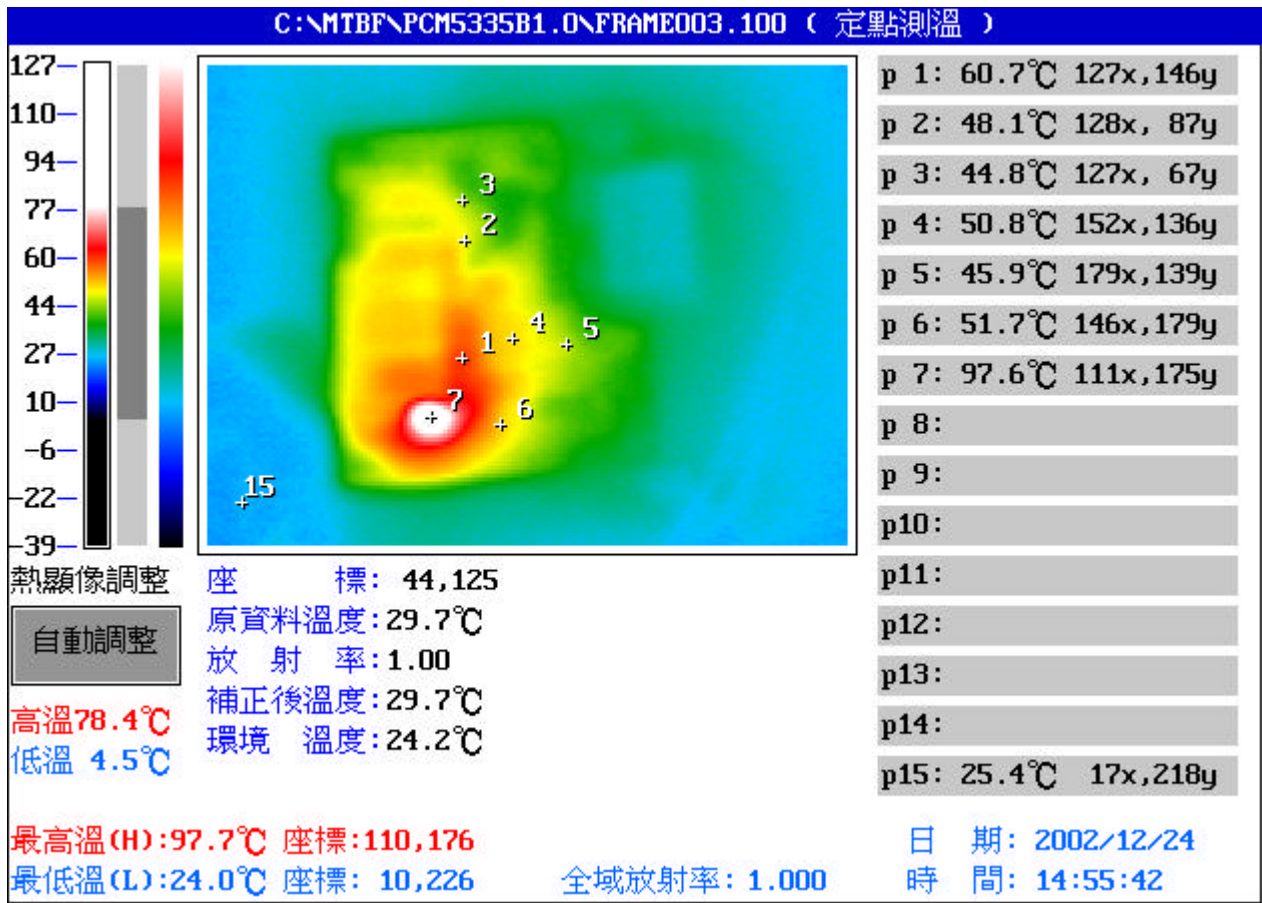
Component Side:



Point	Position	Describe	Ts	Tm	Note
1	U2	NS CPU.BGA GX1-300B 2.0V 85C		59.7	
2	U3	IC.SMD 352PBGA.I/O Companion.Multi-Function South		56.2	
3	L1	INDUCTOR.3.3uH 3A.20%.SMD 2Pin.SMTDR54-3R3M		72.7	
4	TC1	POSCAP CAP.330uF.6.3V.20%.D4(7.3*4.3*3.8mm).40mOhm		66.6	
5	TC3	POSCAP CAP.330uF.6.3V.20%.D4(7.3*4.3*3.8mm).40mOhm		56.6	
6	U4	IC.SMD.128P QFP Super I/O.Winbond.W83977F-A		55.8	
7	U6	IC.SMD.LQFP 100P PCI Ethernet Chip.RELTEK.RTL8139DL		44.4	
8	L2	INDUCTOR.3.3uH 3A.20%.SMD 2Pin.SMTDR54-3R3M		47.2	
9	Q1	PWR.SMD SO-8.N-Channel 20V 6A MOSFET.CET.CEM9926		46.5	
10	U1	IC.SMD SOP.8Pin Switching PWM Controller.IR.IRU3037CS		44.1	
11					
12					
13					
14					
15		The Room Temperature		25.4	

1. Operation Temperature ( ):

Ts = Defined by component specification ; Tm = Measured by DV



Point	Position	Describe	Ts	Tm	Note
1	U12	IC.SMD TSSOP20.PHILIPS.74HCT373PW		66.7	
2	U19	IC.SMD.213 SSOP RS232 Driver.HARRIS.HIN213CA		48.1	
3	U24	IC.SMD.213 SSOP RS232 Driver.HARRIS.HIN213CA		44.8	
4	U16	IC.PLCC.32P Flash Memory.Winbond.W29C020CP-90		50.8	
5	U13	IC.SMD TSSOP20.PHILIPS.74HCT373PW		45.9	
6	U9	IC.SMD SOP.8Pin Switching PWM		51.7	
7	Q3	PWR.SMD SO-8.N-Channel 20V 6A MOSFET.CET.CEM9926		97.6	
8					
9					
10					
11					
12					
13					
14					
15		The Room Temperature		25.4	

1. Operation Temperature ( ):

Ts = Defined by component specification ; Tm = Measured by DV