



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

PCM-5330 Rev.A0.3

Thermal Image Analysis Report

Release Date: Mar .25, 2003

2002-12-26

Issue Stamp

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Test Engineer

Thermal Image Analysis

. **Model Name:** PCM-5330 Rev.A0.3 (BIOS:1.0)

. **Description:** Embedded Low power STPC-DX2 133MHZ PC/104 CPU Modules

. **Date:** Mar. 24, 2003

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

. **Issued by :** Rex Chang

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

. **Simulation Environment:**

Temperature: 21.2 degrees C

CPU: Embedded Low power STPC-DX2 133MHZ

RAM: Onboard 64MB SDRAM

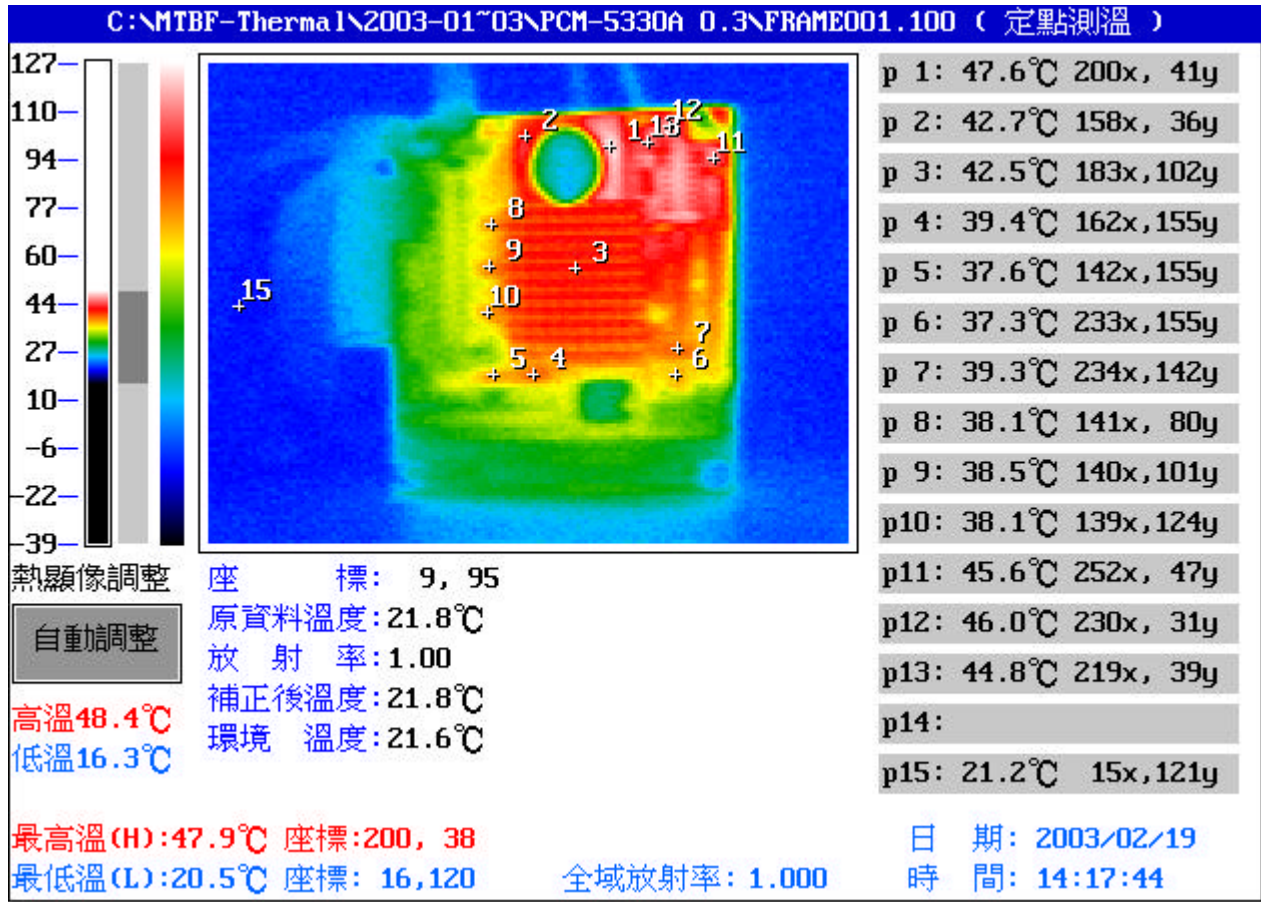
Hardware: Sun Disk 64MB CF Card

Application Software: QAPLUS 5.5

Take Picture Time: Power on 30 minutes after

Temperature Profile Test:

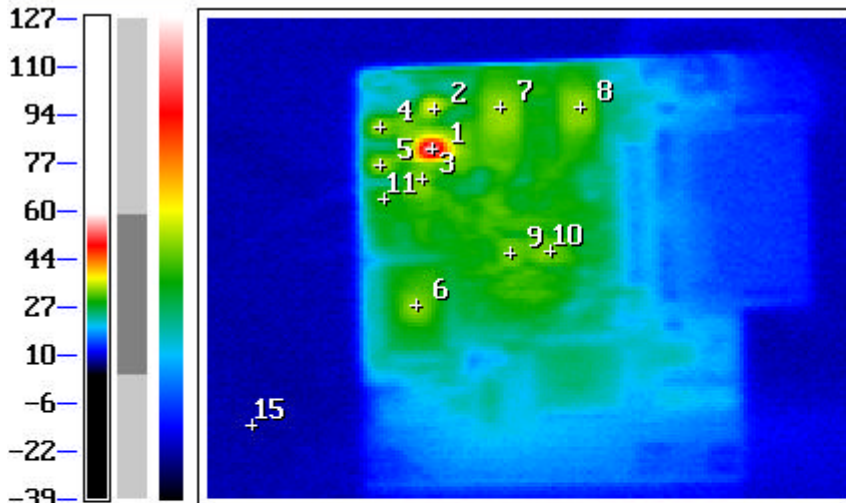
Component Side:



Point	Position	Describe	Ts	Tm	Note
1	U10	IC.SMD.SDRAM.8M*16 PC -133 TSOPII 54P 3.3V.ELPIDA.UPD45128163G5-A75-9JF		47.6	
2	U11	IC.SMD.SDRAM.8M*16 PC -133 TSOPII 54P 3.3V.ELPIDA.UPD45128163G5-A75-9JF		42.7	
3	U1	ST CPU.PBGA 516Pin.CPU/NB/SB All in one/133MHz.STPC - ATLAS.STPCI2HEYC		42.5	
4	U3	IC.SMD.SOP 16Pin.PHILIPS.74F153		39.4	
5	U2	IC.SMD.SOP 16Pin.PHILIPS.74F153		37.6	
6	TRSF1	IC.SMD.10/100 Base Transformers.TAIMAG.HA-002		37.3	
7	U16	IC.SMD.3.3V 1K bits.Microchip.93LC46B/SN		39.3	
8	U4	IC.SMD.TSSOP 14P.PHILIPS.74HCT00		38.1	
9	U5	IC.SMD.TSSOP.Philips.74HCT245		38.5	
10	U7	IC.SMD.TSSOP.Philips.74HC T245		38.1	
11	L1	INDUCTOR.3.3uH 3A.20%.SMD 2Pin.震元.SMTDR54-3R3M		45.6	
12	D1	D Schottky.SMD.1N5817.MICROSEM.SS12		46.0	
13	D2	D Schottky.SMD.1N5817.MICROSEM.SS12		44.8	
14					
15		The Room Temperature		21.2	

I. Operation Temperature ():

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



p 1:	67.0°C	112x, 65y
p 2:	48.5°C	113x, 45y
p 3:	44.6°C	107x, 80y
p 4:	46.0°C	86x, 54y
p 5:	45.7°C	86x, 73y
p 6:	45.4°C	104x, 143y
p 7:	45.9°C	146x, 44y
p 8:	45.4°C	186x, 44y
p 9:	44.4°C	151x, 117y
p10:	44.7°C	171x, 116y
p11:	42.1°C	88x, 90y
p12:		
p13:		
p14:		
p15:	21.2°C	22x, 203y

熱顯像調整 座 標: 0, 71
 自動調整 原資料溫度: 22.1°C
 放射率: 1.00
 補正後溫度: 22.1°C
 環境溫度: 22.0°C

高溫 59.5°C
 低溫 15.9°C

最高溫(H): 67.0°C 座標: 112, 64
 最低溫(L): 20.4°C 座標: 28, 164

日期: 2003/02/19
 時間: 14:18:41
 全域放射率: 1.000

Point	Position	Describe	Ts	Tm	Note
1	U33	IC.SMD.SOIC 8P.Ultra Low Dropout Regulator.IR.IRU1150CS		67.0	
2	U34	IC.SMD SOP.8Pin Switching PWM Controller.IR.IRU3037CS		48.5	
3	TC17	SP CAP.150uF.6.3V.20%.D(7.3*4.3*4.2mm).15Ohm SMD.Panasonic.EEFUE0J151R		44.6	
4	U32	PWR.SMD SO-8.N-Channel 20V 6A MOSFET.CET.CEM9926		46.0	
5	U31	PWR.SMD SO-8.N-Channel 20V 6A MOSFET.CET.CEM9926		45.7	
6	U15	IC.SMD PQFP.128Pin PCI Ethernet Chipset.ADMtek.AN983B		45.4	
7	U13	IC.SMD SDRAM.8M*16 PC -133 TSOPII 54P 3.3V.ELPIDA.UPD45128163G5-A75-9JF		45.9	
8	U12	IC.SMD SDRAM.8M*16 PC -133 TSOPII 54P 3.3V.ELPIDA.UPD45128163G5-A75-9JF		45.4	
9	TC1	SP CAP.180uF.4V.20%.D(7.3*4.3*4.2).15OHM SMD.Panasonic.EEFUE0G181R		44.4	
10	TC2	SP CAP.180uF.4V.20%.D(7.3*4.3*4.2).15OHM SMD.Panasonic.EEFUE0G181R		44.7	
11	U35	IC.SMD SO-8.Supervisory Circuits.ANALOG.ADM706AR		42.1	
12					
13					
14					
15		The Room Temperature		21.2	

1. Operation Temperature ():

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