PCM-9150

Compact Board. Intel ®Pentium® M processor 2.00GHz(133*15.0)

Thermal Image Analysis Report

Report No:05E080022

Release Date: Aug. 10, 2005

2005/08/10	Wenyuan Yang	YY Lin
Issue Stamp	Manager	Test Engineer

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Thermal Image Analysis

Ⅰ. **Model Name:** PCM-9150 Rev: A0.2-A

Ⅱ. **Description: Intel 915GM/ICH6M Compact Board**

Ⅲ. **Date: Aug.10, 2005**

Ⅳ. **Measure Site: AAEON QE Dept.**

Ⅴ. **Issued by: YY Lin**

Ⅵ.**Equipment:**

1. TVS-100 series by NIPPON AVIONICS CO., LTD.

Ⅶ. **Simulation Environment:**

- **Temperature:**

  Component Side – 1:27.1 degrees C

  Component Side – 2:28.5 degrees C

- **System Configuration :**

  BIOS ver: 0.b (06/23/2005)

  CPU: Intel ®Pentium® M processor 2.00GHz(133*15.0)

  Memory: Elpida DDR2-533 512MB(E5108AB-5C-E)(SD2-200502)

  HDD: Maxtor 6Y080L0 YAR41BW0 (ID-200413)

- **Application Software: Windows 2000 run HCT9.5**
- **Take Picture Time: Power on 2 hours after**

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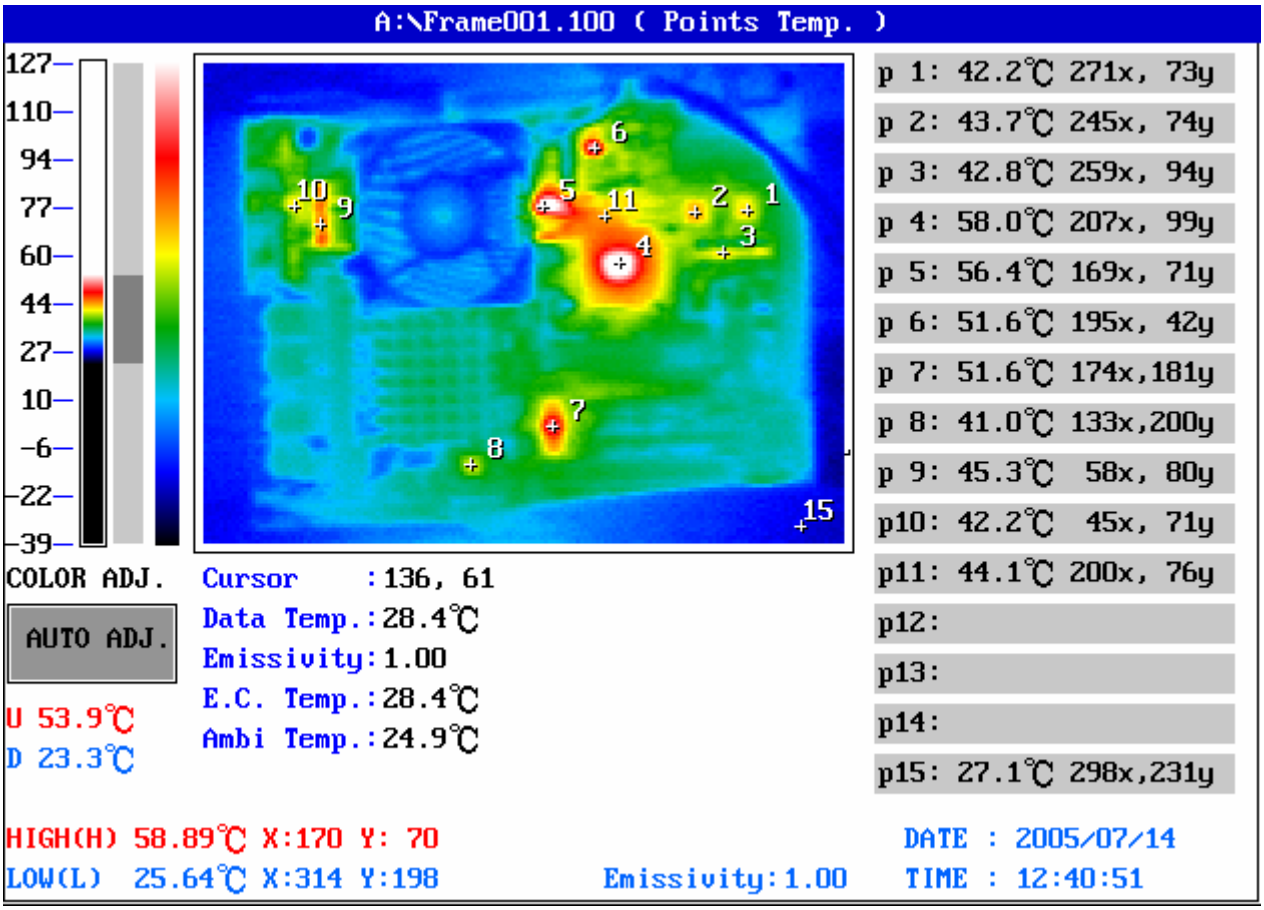
Temperature Profile Test:

Component Side – 1:



Point	Position	Describe	T c	Tm (25℃)	Tm (60℃)	Note
1	U9	IC.SMD QFN 64P.PCI-E GigaBit Ethernet Chipset.Marvell.88E8053-A2-NNC	-30℃~100℃	42.2℃	75.1℃	
2	U8	IC.SMD QFN 64P.PCI-E GigaBit Ethernet Chipset.Marvell.88E8053-A2-NNC	-30℃~100℃	43.7℃	76.6℃	
3	Q8	PNP.SMD SOT-223.1Amp.ON.BCP69T1G	-40℃~125℃	42.8℃	75.7℃	
4	U14	Intel 82801fb ICH6 I/O Controller hubs	-0℃~95℃	58.0℃	90.9℃	
5	Q4	REG.SMD.TO-252.5P.3A.0.45V LOW DROPOUT REGULATOR.ANPEC.APL1582UC-TRL	-25℃~125℃	56.4℃	89.3℃	
6	U1	IC.SMD SOP.8Pin Switching PWM Controller.IR.IRU3037CSPbF	-25℃~100℃	51.6℃	84.5℃	
7	U24	TF IC.SMD.SSOP 56P.CLOCK GENERATOR.ICS.ICS954206BFLFT	-30℃~100℃	51.6℃	84.5℃	
8	U26	IC.SMD LQFP.48P.DVI Transmitter.CHRONTEL.CH7307C-DEF	-45℃~125℃	41.0℃	73.9℃	
9	U10	PWR.SMD SO8.N-Channel POWER MOSFET.FAIRCHILD.FDS6680S_NL	-30℃~125℃	45.3℃	78.2℃	
10	U5	IC.SMD.QFN 28P.Power Controller.for Dual Channel DDR.Intersil.ISL6537CRZ	-30℃~100℃	42.2℃	75.1℃	
11	L5	INDUCTOR.3.3uH.20%.SMD DCR=12mohm Isat=27A.VISHAY.IHLP2525CZRZ3R3M01	-55℃~125℃	44.1℃	77℃	
15		Ambient Temperature		27.1℃		

1. Operation Temperature (℃):
T c (Case temp.) = Ta (Ambient Temp.)+/-30℃ = T j (Junction Temp.)-/+25℃

Note: The description in red states which temperature is over the specification of the device.

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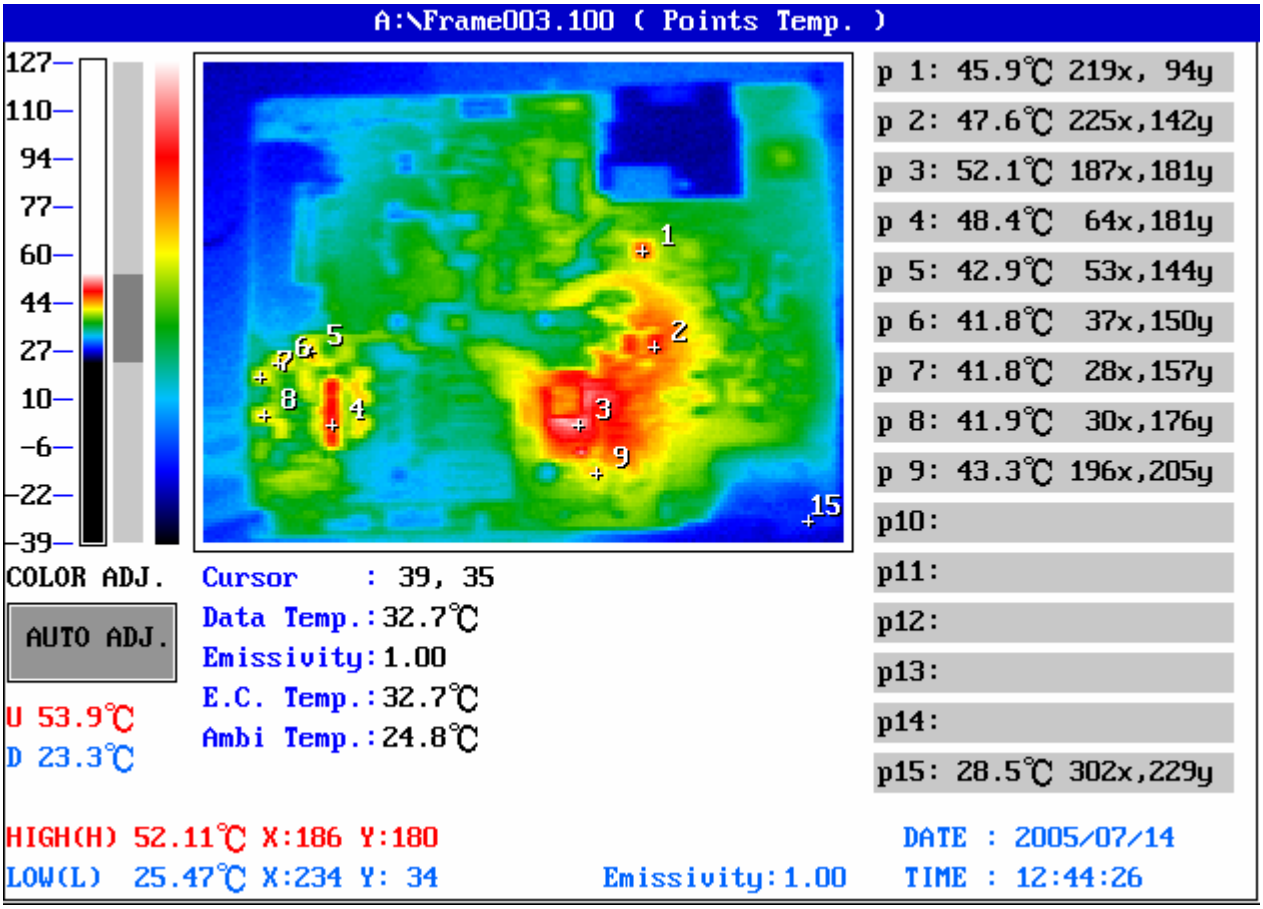
Component Side –2:



Point	Position	Describe	T c	Tm (25℃)	Tm (60℃)	Note
1	U41	IC.SMD.LQFP48P.USB2.0 to CF Controller.Genesys Logic.GL813	-30℃~130℃	45.9℃	78.8℃	
2	C412	SP CAP.220uF.2V.-35~+10%.D(7.3*4.3*1.9mm).9mOhm SMD.Panasonic.EEFSX0D221YR	-40℃~105℃	47.6℃	80.5℃	
3	Q18	PNP.SMD SOT-23.3P.ON.MMBT3906LT1G	-30℃~125℃	52.1℃	85℃	
4	U37	PWR.SMD SO8.N-Channel MOSFET 30V 15A.FAIRCHILD.FDS7760A	-30℃~125℃	48.4℃	81.3℃	
5	Q27	PWR.SMD.TO-252.N-Channel Power 25V 60A MOSFET.APEC.AP70T03H	-30℃~150℃	42.9℃	75.8℃	
6	Q26	PWR.SMD.TO-252.N-Channel Power 25V 60A MOSFET.APEC.AP70T03H	-30℃~150℃	41.8℃	74.7℃	
7	Q25	PWR.SMD.TO-252.N-Channel Power 25V 60A MOSFET.APEC.AP70T03H	-30℃~150℃	41.8℃	74.7℃	
8	Q33	NPN.SMD.SOT-23.ON.MMBT3904LT1G	-30℃~125℃	41.9℃	74.8℃	
9	D11	D Schottky.SMD SOT-23.PHILIPS.BAT54C	-40℃~100℃	43.3℃	76.2℃	
15		Ambient Temperature		28.5℃		

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