PCM-8150

CPU: Intel / Celeron 600MHz

Thermal Image Analysis Report

Report No: 05E080001

Release Date: Jan. 07, 2005

2005-01-07	Wenyuan Yang	Andrew KU
Issue Stamp	**Manager**	**Test Engineer**

Thermal Image Analysis

Ⅰ. Model Name: PCM-8150

Ⅱ. Description: **Intel Pentium-M /Celeron-M LCD , DVI , TV, DDR , LAN, Audio , 4com , USB2.0 , CF , M-PCI ,**PCMCIA

Ⅲ. Date: Jan , 7 , 2005

Ⅳ. Measure Site: AAEON QE Dept.

Ⅴ. Issued by: Andrew Ku

Ⅵ.Equipment:

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

Ⅶ. Simulation Environment:

- Temperature: Component Side – 1: 21.9 degrees C
  Component Side – 2: 21.4 degrees C
- System Configuration : PCM-8150 A0.2(BIOS ver : 1.0)
  CPU: Intel / Celeron 600MHz
  Memory: KINGMAX KDL684J44A-60 (DDR-333) / 256MB
  HDD: Seagate ST31276A
- Application Software: Windows 2000 run HCT9.5
- Take Picture Time: Power on 2 hours after

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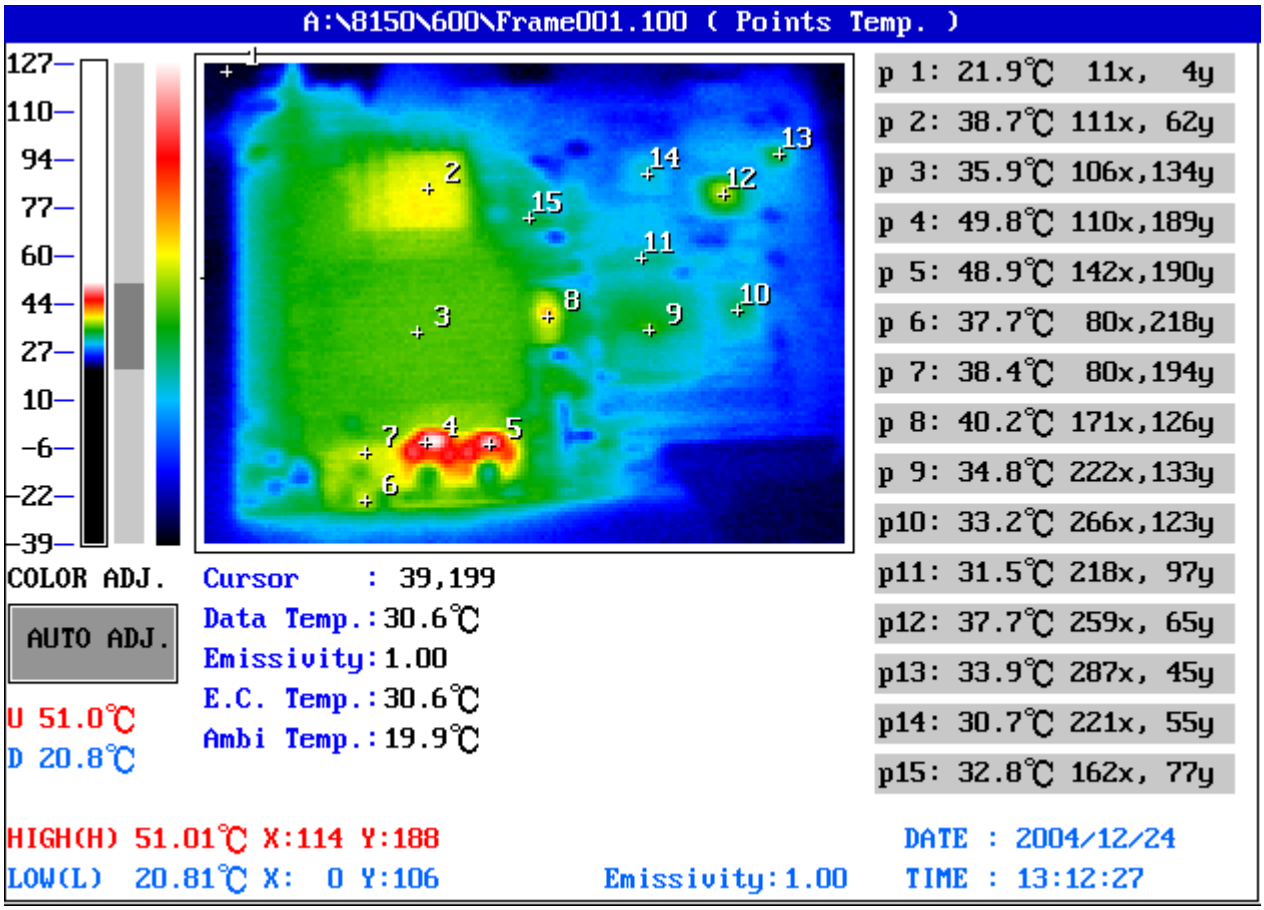
Thermal Image Analysis

Temperature Profile Test:

Component Side – 1:



Point	Position	Describe	Ts	Tm	Note
1		The Room Temperature		21.9℃	
2	U4	IC.SMD.BGA732.Chipset.NB82852GM.Intel.RG82852GM-SL6ZK		38.7℃	
3	U19	INTEL CPU.Celeron-M.ULV 600MHz.Zero Cache.mFCBGA479		35.9℃	
4	L24	Coil.1uH.+/-20%.DCR=0.004Ohm.Idc=25A.DIP.AG.TC5052-1R0M-UL		49.8℃	
5	L25	Coil.1uH.+/-20%.DCR=0.004Ohm.Idc=25A.DIP.AG.TC5052-1R0M-UL		48.9℃	
6	Q26	PWR.SMD.SO-8.N-Channel.30V.10A.13.5mΩ.MOSFET.APEC.AP4410M		37.7℃	
7	U21	IC.SMD.SO8.Step-Down DC/DC Controller.Anpec.APW7057		38.4℃	
8	U16	IC.SMD.SSOP 56Pin Clock Generator.ICS.ICS950201		40.2℃	
9	U18	IC.SMD.Chipset ICH4.INTEL.FW82801DB SL6DM		34.8℃	
10	U17	IC.SMD.IT8712F 128P Super I/O.ITE.IT8712F/GX		33.2℃	
11	U12	IC.SMD SO.14Pin.PHILIPS.74LVC06AD		31.5℃	
12	U3	IC.SMD PBGA 196P.PCI Ethernet 10/100BaseT.Intel.GD82551ER		37.7℃	
13	U1	IC.SMD LQFP 48Pin.6 Channel AC'97 Audio Codec.REALTEK.ALC655		33.9℃	
14	U2	IC.SMD PBGA 209Pin.PC CARD Controller.TI.PCI1420GHK		30.7℃	
15	U5	TSSOP-28.Dual Power Supply Controller.SEMTECH.SC1485ITSTR		32.8℃	

1. Operation Temperature (℃):
   Ts = Defined by component specification ; Tm = Measured by QE

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

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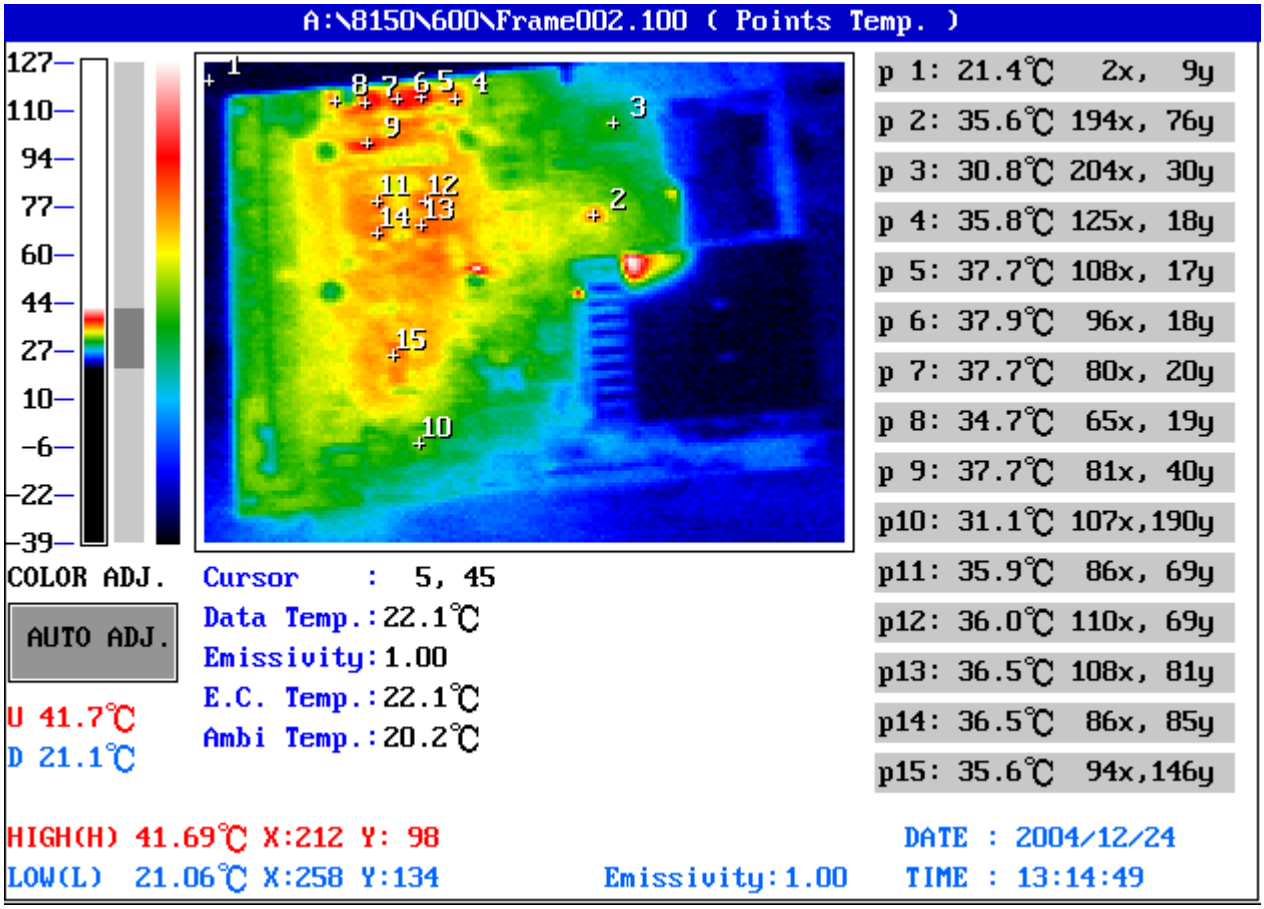
Thermal Image Analysis

Component Side –2:



Point	Position	Describe	Ts	Tm	Note
1		The Room Temperature		21.4℃	
2	Q41	REG.SMD.TO-252 5A Linear Regulator.ATC.AP1084D-ADJ		35.6℃	
3	U38	IC.SMD.IT8712F 128P Super I/O.ITE.IT8712F/GX		30.8℃	
4	Q59	PWR.SMD.TO-252.N-Channel Power30V55AMOSFET.APEC.AP60N03H		35.8℃	
5	Q61	PWR.SMD.TO-252.N-Channel Power25V 60A MOSFET.APEC.AP70T03H		37.7℃	
6	Q60	PWR.SMD.TO-252.N-Channel Power30V 55A MOSFET.APEC.AP60N03H		37.9℃	
7	Q62	PWR.SMD.TO-252.N-Channel Power25V 60A MOSFET.APEC.AP70T03H		37.7℃	
8	Q63	PWR.SMD.SO-8.N-Channel.30V.10A.13.5mΩ.MOSFET.APEC.AP4410M		34.7℃	
9	U37	IC.SMDTSSOP-38IMVP4.DualPhase PWM Controller.SEMTECH.SC1476		37.7℃	
10	U25	IC.SMD LQFP.64P DVI/TV ENCODER.CHRONTEL.CH7009A		31.1℃	
11	C640	Panasonic.EEFSX0D221YR		35.9℃	
12	C639	Panasonic.EEFSX0D221YR		36.0℃	
13	C657	MCC.10uF.10V.+80/-20%.0805.SMD		36.5℃	
14	C568	Panasonic.EEFSX0D221YR		36.5℃	
15	C415	Panasonic.ECGUD0J151R		35.6℃	

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