HSB-810A A0.2

(Intel Pentium-M 1.6 GHz CPU)

Thermal Image Analysis Report

Report No: 05I080002

Release Date: Jan. 17, 2005

2005-01-17	Wenyuan Yang	Milo Wang
Issue Stamp	Manager	Test Engineer

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Thermal Image Analysis

Ⅰ. **Model Name: HSB-810A (Intel Pentium-M 1.6 GHz CPU) Rev. A0.2**

Ⅱ. **Description: Half Size CPU Board**

Ⅲ. **Date: Jan. 17, 2005**

Ⅳ. **Measure Site: AAEON QE Dept.**

Ⅴ. **Issued by : Milo Wang**

Ⅵ. **Equipment:**

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

Ⅶ. **Simulation Environment:**

- **Temperature: 24 degrees C**
- **CPU: Intel Pentium-M 1.6 GHz**
- **RAM: Infineon HY8250256800CC-6/DDR333/512MB**
- **HDD: MAXTOR FIREDALL3/ATA133/30GB**
- **Application Software: Run HCT 9.5 under Win2000**
- **Take Picture Time: After Power on 2 hours.**

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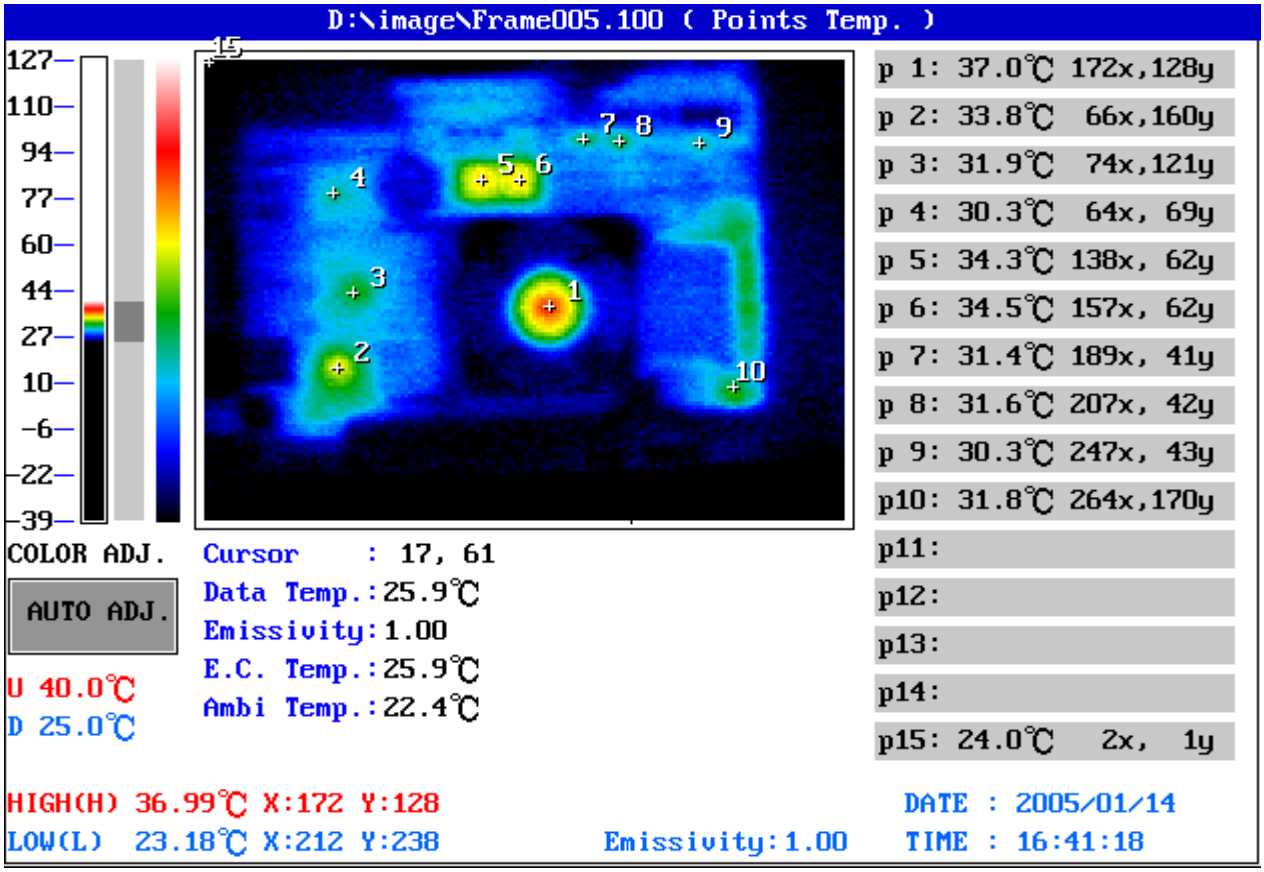
Temperature Profile Test:

Component Side :



Point	Position	Describe	Ts	Tm	Note
1	CPU1	Intel Pentium-M 1.6 GHZ		37.0℃	
2	U9	IC.SMD BGA 196P.GigaBit Ethernet Chipset.INTEL.RC82541GI		33.8℃	
	U6	IC.SMD.Chipset ICH4.INTEL.FW82801DB SL6DM		31.9℃	
4	U4	IC.SMD.QFP128P Super I/O.ITE.IT8712F/HX		30.3℃	
5	L9	COIL.1.0uH.SMD.12.8*12.8*6.5mm.DCR=3mohm Idc=25Amp.		34.3℃	
6	L10	COIL.1.0uH.SMD.12.8*12.8*6.5mm.DCR=3mohm Idc=25Amp		34.5℃	
7	U1	IC.SMD TSSOP-38 IMVP4.Dual Phase PWM Controller.SEMTECH.SC1476		31.4℃	
8	U34	IC.SMD SOP.8Pin Switching PWM Controller.IR.IRU3037CS		31.6℃	
9	L5	COIL.3.3uH 6.4A.20%.SMD.永馳.YC0804-3R3		30.3℃	
10	Q3	REG.SMD.TO-252 5A Linear Regulator.ATC.AP1084D-ADJ		31.8℃	
11					
12					
13					
14					
15		The Room Temperature		24.0℃	

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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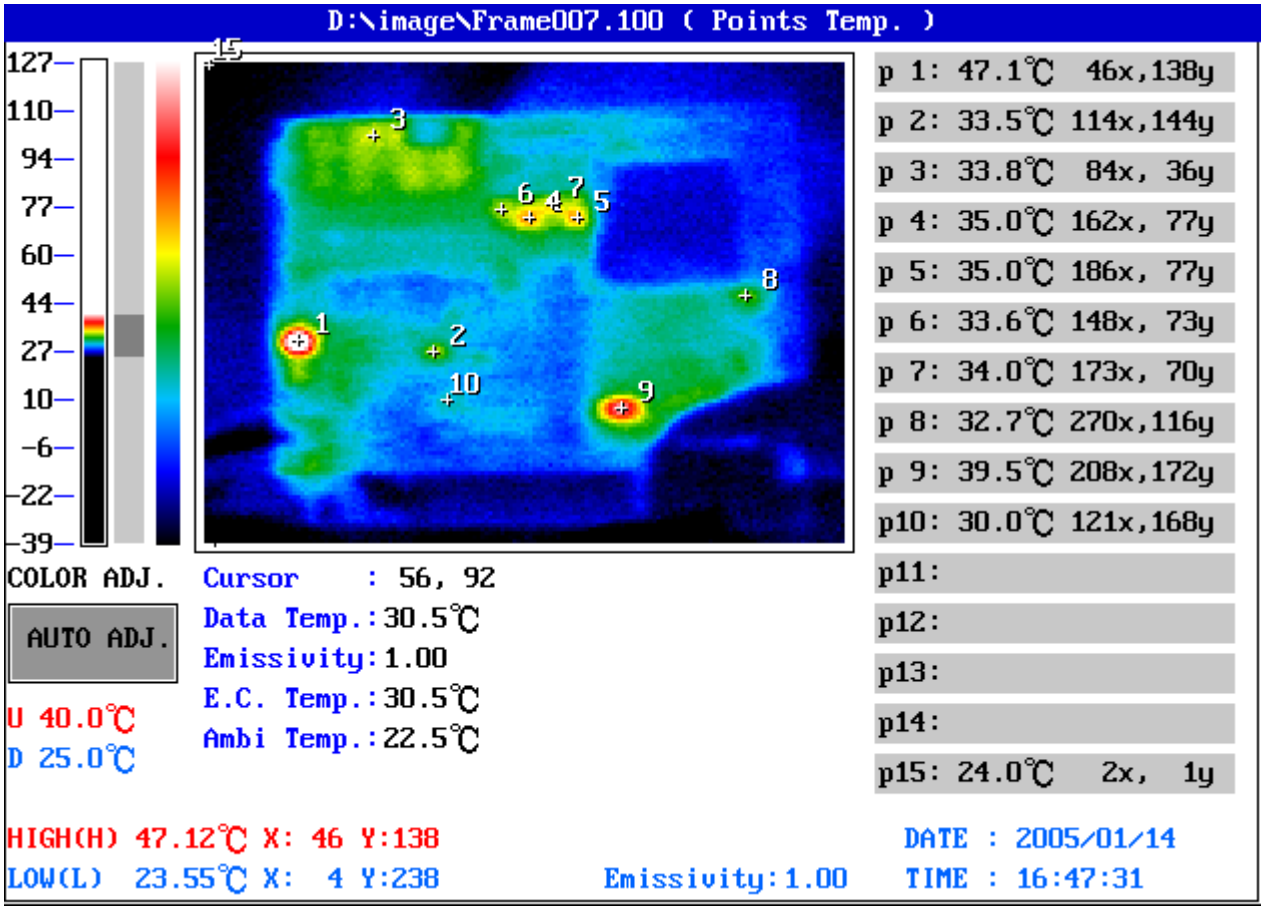
Temperature Profile Test:

Solder Side :



Point	Position	Describe	Ts	Tm	Note
1	U33	PWR.SMD SO-8.DUAL N-Channel 30(D-S) MOSFET.VISHAY.SI4920DY		47.1℃	
2	U28	IC.SMD MSOP-10.Dual Linear FET Controller.SEMTECH.SC338IMSTR		33.5℃	
3	DIMM1	Infineon HY8250256800CC-6/DDR333/512MB		33.8℃	
4	Q12	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD414		35.0℃	
5	Q11	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD414		35.0℃	
6	Q9	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD412		33.6℃	
7	Q8	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD412		34.0℃	
8	U25	IC.SMD.SOP.TI.7407		32.7℃	
9	U30	IC.SMD.SSOP 48Pin Clock Generator.ICS.ICS952607		39.5℃	
10	U31	Dual P-Channel 4.5V(SO-8).TEMIC.SI9953DY-T1.MOSFET		30.0℃	
11					
12					
13					
14					
15		The Room Temperature		24.0℃	

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