HSB-835P

Thermal Image Analysis Report

Report No: 05I080004

Release Date: Jan. 13, 2005

2005-01-13	Wenyuan Yang	Andrew KU
Issue Stamp	**Manager**	**Test Engineer**

Thermal Image Analysis

Ⅰ. Model Name: HSB-835P

Ⅱ. Description: **Intel Pentium 4 PICMG / PCI Half-Size SBC**

Ⅲ. Date: Jan. 13, 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: 25.4 degrees C**
- **System Configuration : HSB-835P A0.2(BIOS ver : 1.0)**
  CPU: Intel / Pentium 4 CPU 3.20GHz(200*16.0)
  Memory: SAMSUNG /K4H560438E-GCCC / DDR400 /1GB
  HDD: Seagate ST31276A
- **Application Software: Windows 2000 run HCT9.5**
- **Take Picture Time: Power on 2 hours after**

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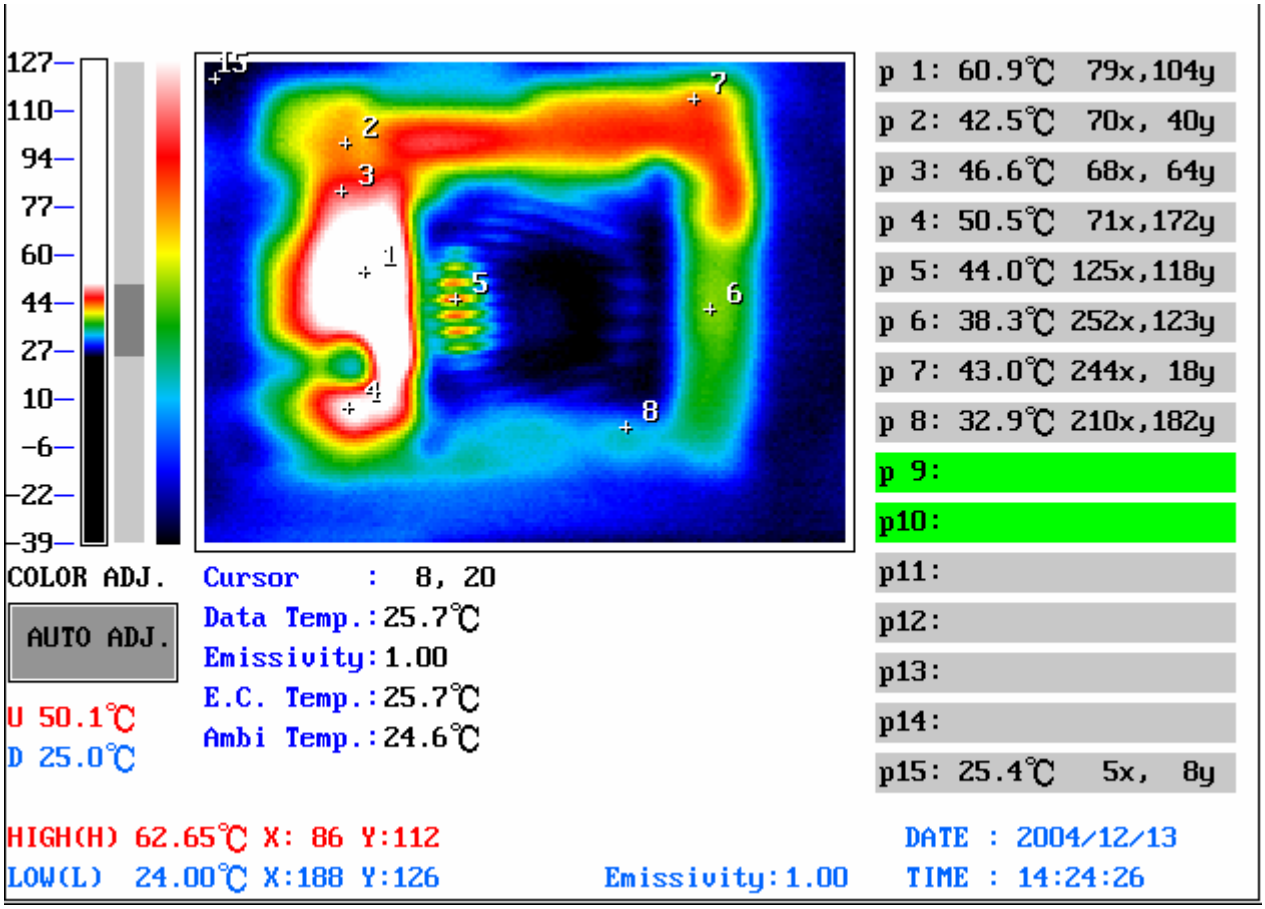
Thermal Image Analysis

Temperature Profile Test:

Component Side – 1:



Point	Position	Describe	Tc	Tm (25℃)	Tm (60℃)	Note
1	U11	IC.SMD.Chipset ICH5.INTEL.FW82801EB SL73Z	-55~105℃	60.9℃	95.5	
2	U5	IC.SMD.PLCC 32Pin FWH(4MB).SST.49LF004A	-55~105℃	42.5℃	77.1	
3	U8	IC.SMD.SOP.TI.7407	-55~105℃	46.6℃	81.2	
4	U17	IC.SMD.SOIC 8P.Ultra Low Dropout Regulator.IR.IRU1150CS	-35~120℃	50.5℃	85.1	
5	L11	COIL.1.0uH.SMD.12.9*12.9*5mm.DCR=2.1mohm.Idc=29Amp.VISHAY	-25~95℃	44.0℃	78.6	
6	U13	IC.SMD.FC-BGA932.GMCH.INTEL.82865GV SL77X	-50~110℃	38.3℃	72.9	
7	BZ1	Buzzer.SMD.5V.80mA.90dB.KINGSTATE.KSS-J4D26	0~100℃	43.0℃	77.6	
8	U16	IC.SMD.SSOP 48Pin Clock Generator.ICS.ICS952607	-35~120℃	32.9℃	67.5	
9						
10						
11						
12						
13						
14						
15		Ambient Temperature		25.4℃		

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

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

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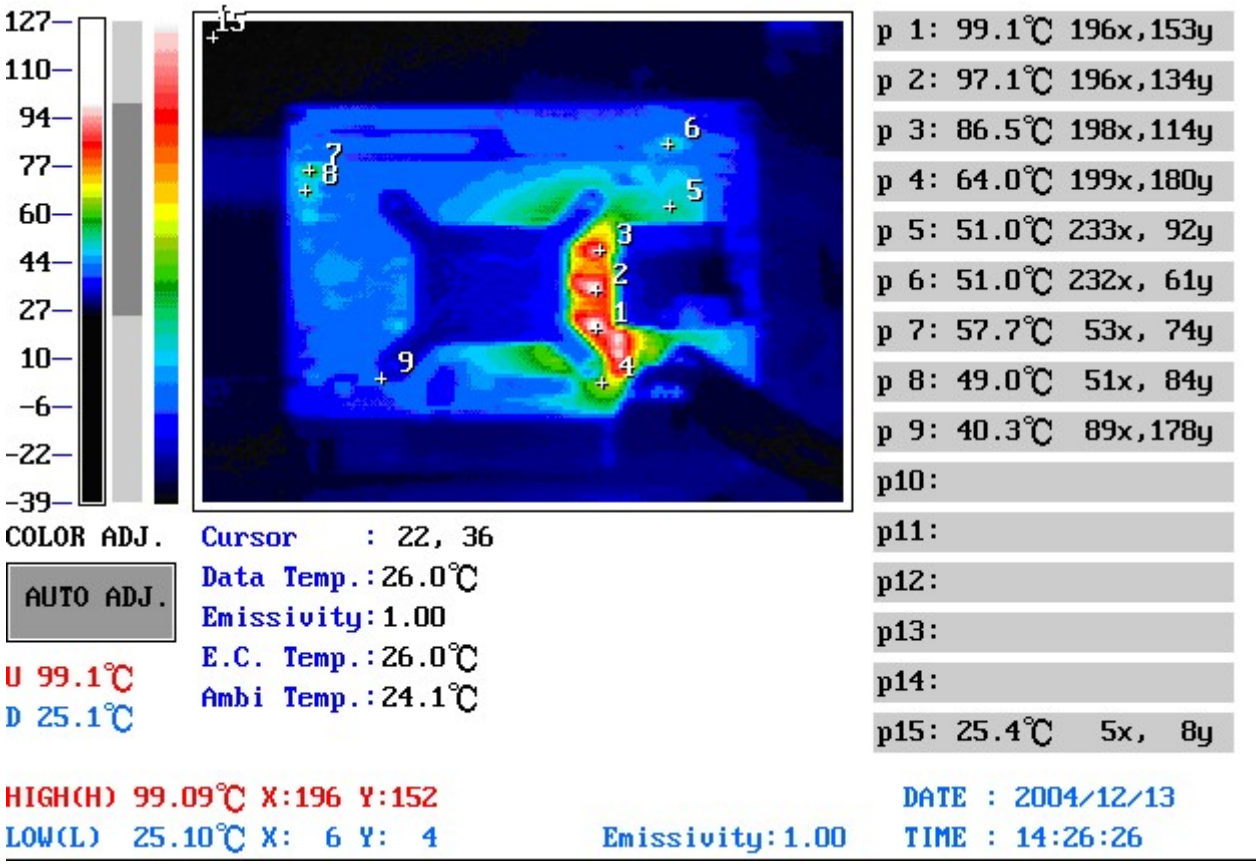
Component Side –2:



Point	Position	Describe	Tc	Tm (25℃)	Tm (60℃)	Note
1	Q16	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.	-30~150℃	99.1℃	133.7	
2	Q14	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.	-30~150℃	97.1℃	131.7	
3	Q12	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.	-30~150℃	86.5℃	74.1	
4	U31	IC.SMD.SOIC 28Pin PWM Controller.Intersil.ISL6556BCB	-35~120℃	64.0℃	98.6	
5	U24	IC.SMD.PQFP 128Pin LPC SuperI/O.Winbond.W83627HF-AW A version	-25~120℃	51.0℃	85.6	
6	U19	IC.SMD.28Pin QSOP Parallel Term.CMD.Super 1284-04Q	-35~120℃	51.0℃	85.6	
7	Q23	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD414	-25~150℃	57.7℃	83.6	
8	Q22	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD412	-25~150℃	49.0℃	73.4	
9	C122	SMD.Panasonic.EEFSX0D221YR	-10~135℃	40.3℃	74.9	
10						
11						
12						
13						
14						
15		Ambient Temperature		25.4℃		

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

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

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