FSB-865G

Thermal Image Analysis Report

Report No: 04I080001

Release Date: Dec. 30, 2004

2004-12-30	Wenyuan Yang	Andrew KU
Issue Stamp	**Manager**	**Test Engineer**

Thermal Image Analysis

Ⅰ. **Model Name:** **FSB-865G**

Ⅱ. **Description:** Full-size PICMG CPU Card. Socket 478 Pentium 4 Processor CPU Card. with VGA / two Ethernet. / LVDS/Mini PCI /Audio/CFD/7USBs/Mini PCI/ATX

Ⅲ. **Date:** **Dec. 30, 2004**

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: 21.4 degrees C**
  Component Side – 2: 20.7 degrees C
  Component Side – 3: 21.3 degrees C
  Component Side – 4: 21.3 degrees C
- **System Configuration : FSB-865G A1.0 (BIOS ver : 1.0)**
  CPU: Intel Pentium 4 / 3.06GHz / FSB 533MHz
  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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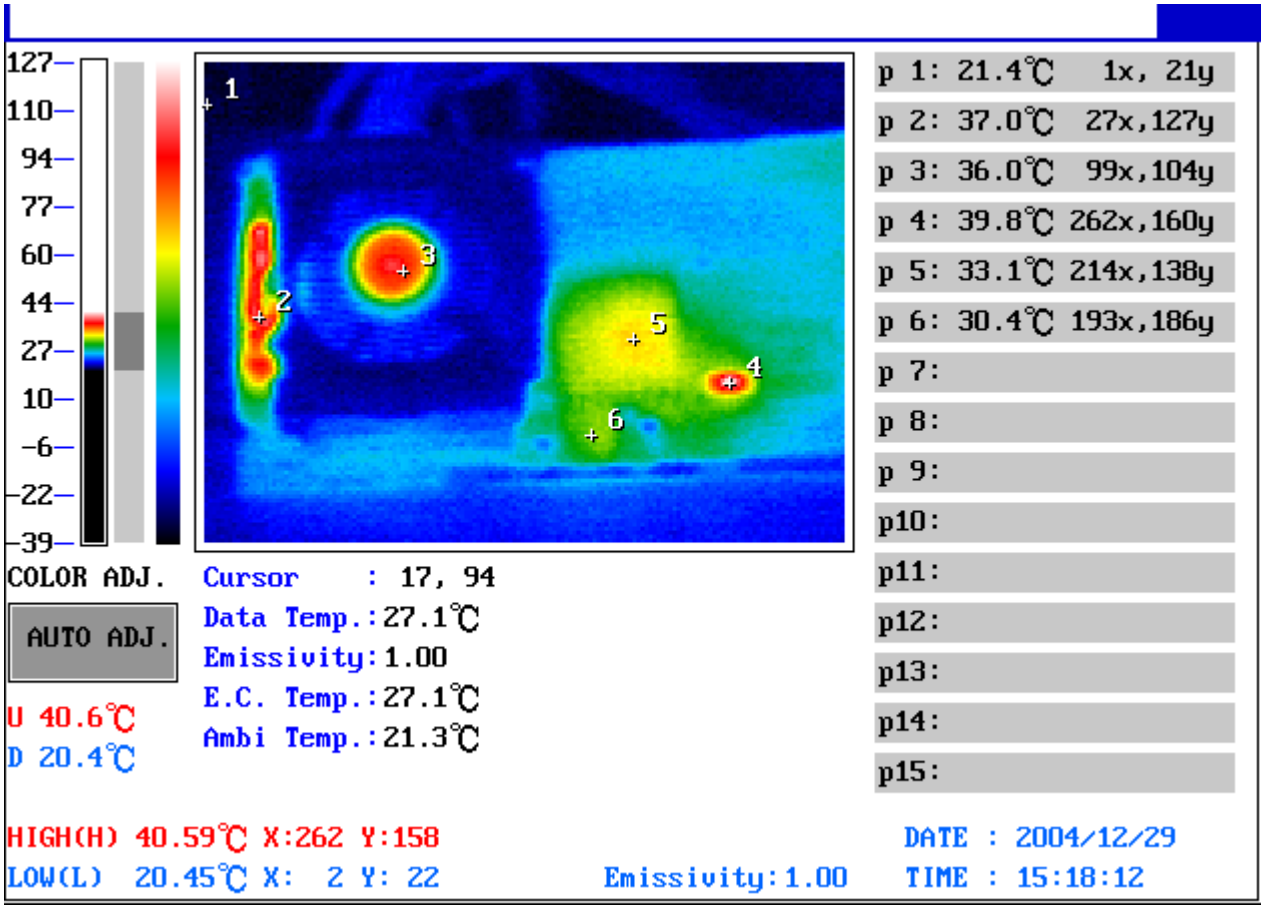
Thermal Image Analysis

Temperature Profile Test:

Component Side – 1:



Point	Position	Describe	Ts	Tm	Note
1		The Room Temperature		21.4℃	
2	C32	KO-CAP.330uF.6.3V.SMD.KEMET.T520D337M006AS		37.0℃	
3		CPU COOLER		36.0℃	
4	U28	IC.SMD.SSOP 48Pin Clock Generator.ICS.ICS952607		32.1℃	
5	U22	IC.SMD.FC-BGA932.GMCH.INTEL.82865GV SL77X		33.1℃	
6	L57	COIL.3.3uH 6.4A.20%.SMD.永馳.YC0804-3R3		30.4℃	
7					
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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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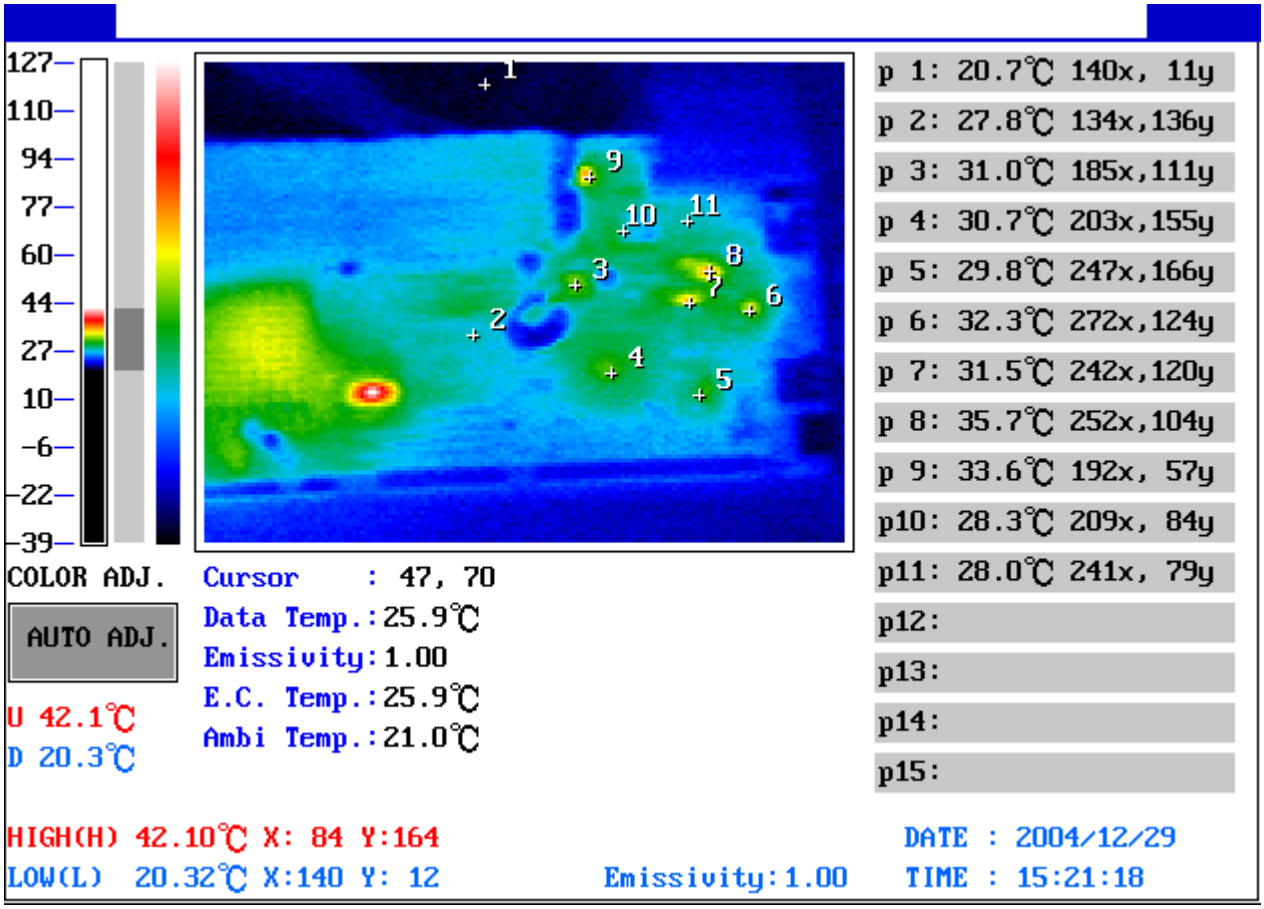
Thermal Image Analysis

Component Side –2:



Point	Position	Describe	Ts	Tm	Note
1		The Room Temperature		20.7℃	
2	U23	IC.SMD PQFP.160P PCI to ISA Bridge Chip.ITE.IT8888F		27.8℃	
3	Q7	REG.SMD.3A Linear Regulator.AMS.AMS1085CM		31.0℃	
4	U27	IC.SMD.Chipset ICH5.INTEL.FW82801EB SL73Z		30.7℃	
5	U29	IC.SMD BGA 196P.GigaBit Ethernet Chipset.INTEL.RC82541GI		29.8℃	
6	U19	IC.SMD.BGA 196P Ethernet Chipset.Intel.82562EZ		32.3℃	
7	U18	IC.SMD.SOP.TI.7407		31.5℃	
8	U16	IC.SMD.SOIC 8P.Ultra Low Dropout Regulator.IR.IRU1150CS		35.7℃	
9	U4	IC.SMD.28Pin QSOP Parallel Term.CMD.Super 1284-04Q		33.6℃	
10	U9	IC.SMD.PQFP 128Pin LPC Super I/O Winbond.W83627HF-AWA		28.3℃	
11	U10	Flash PLCC BIOS.512K.CS:B3AAh.		28.0℃	
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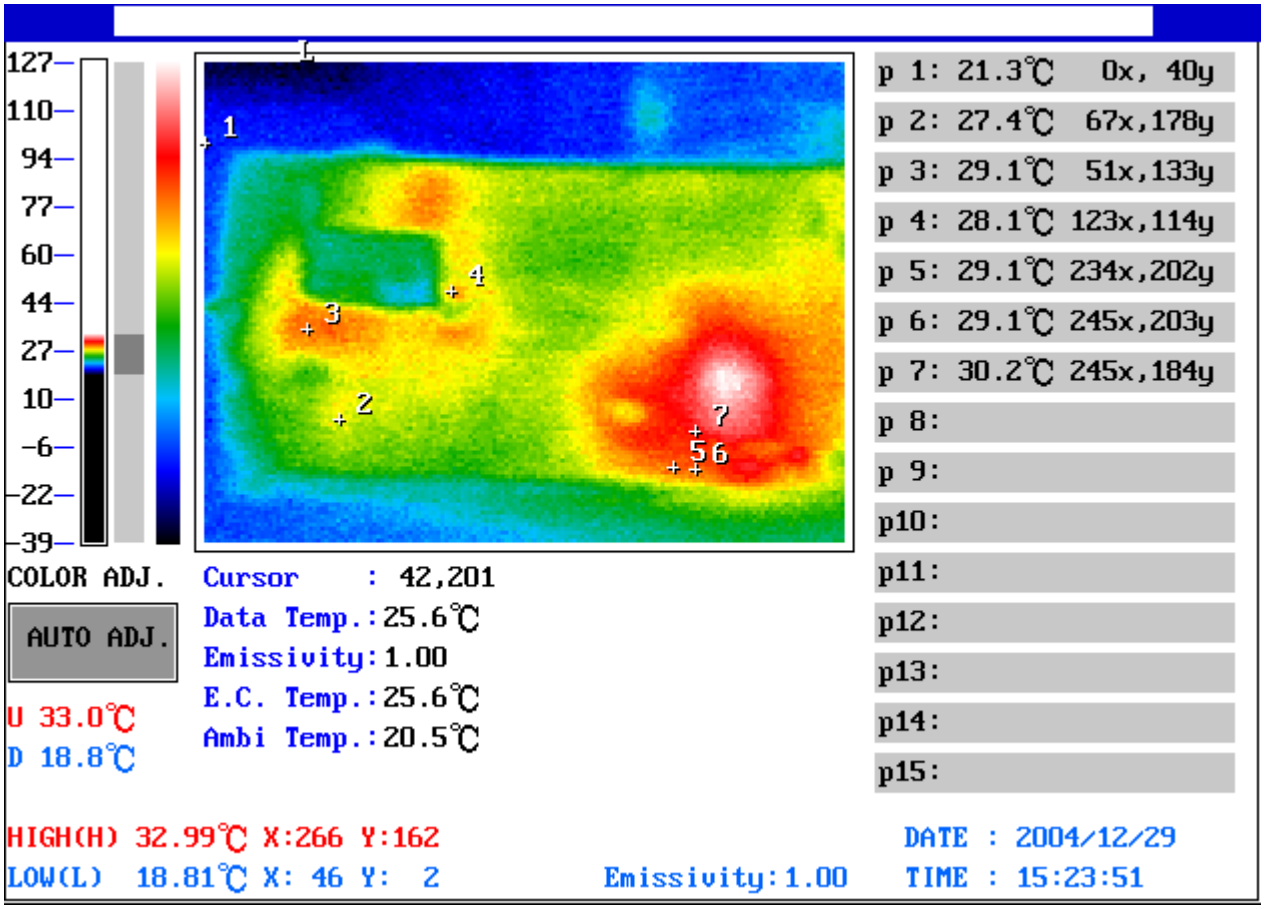
Component Side – 3:



Point	Position	Describe	Ts	Tm	Note
1		The Room Temperature		21.3℃	
2	C157	KO-CAP.330uF.6.3V.SMD.KEMET.T520D337M006AS		27.4℃	
3	C142	SPCAP.47uF.6.3V.SMD.Panasonic.EEFCD0J470R		29.1℃	
4	U11	REG.SMDTO-252-5.2AbusTerminationRegulator.RichTek. RT9173BCL5		28.1℃	
5	Q26	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD414		29.1℃	
6	Q25	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD412		29.1℃	
7	C121	SPCAP.47uF.6.3V.SMD.Panasonic.EEFCD0J470R		30.2℃	
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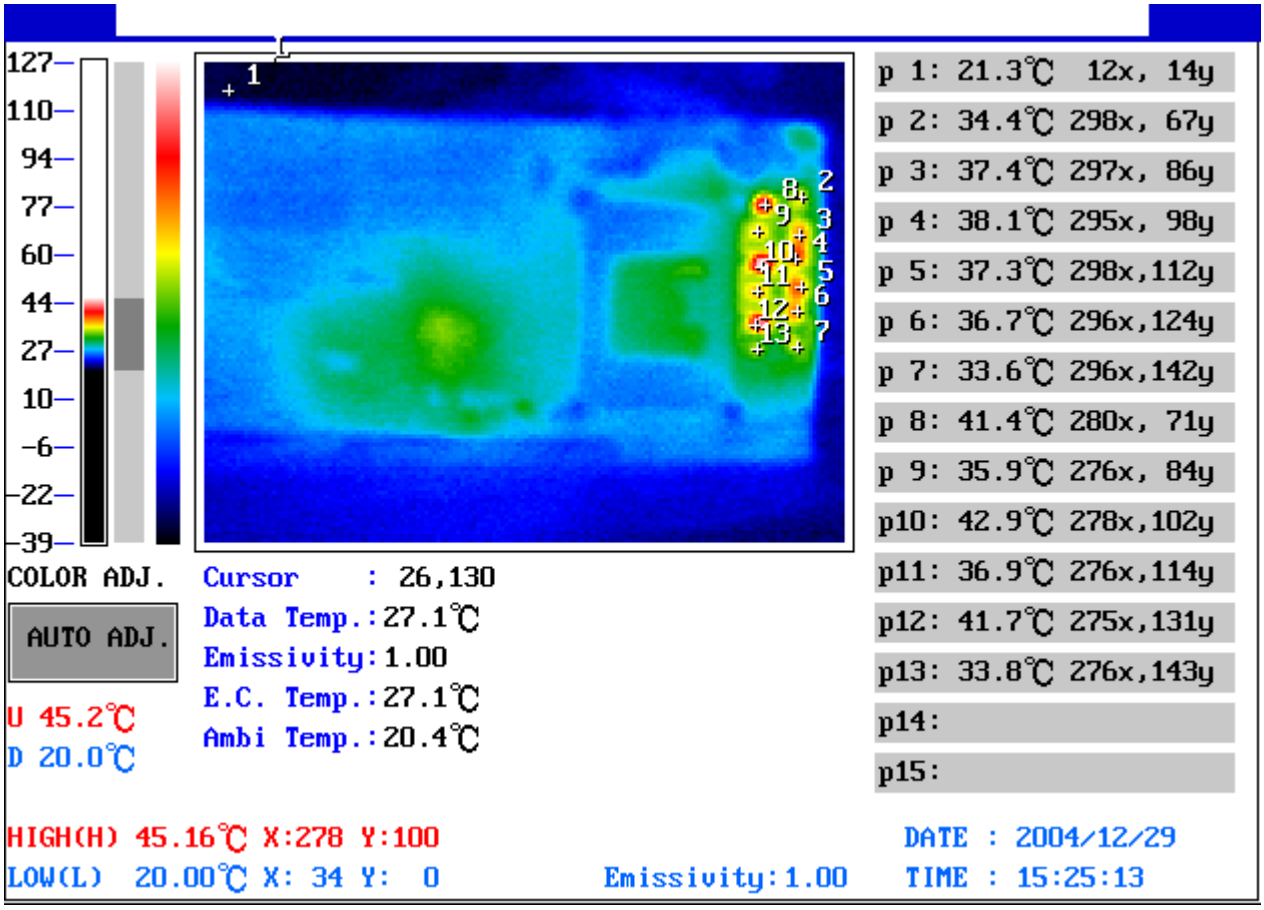
Component Side – 4:



Point	Position	Describe	Ts	Tm	Note
1		The Room Temperature		21.3℃	
2	Q12	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD412		34.4℃	
3	Q13	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD414		37.4℃	
4	Q14	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD412		38.1℃	
5	Q16	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD414		37.3℃	
6	Q17	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD412		36.7℃	
7	Q18	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD414		33.6℃	
8	U40	IC.SMD.SOIC 8Pin MOSFET Drivers.INTERSIL.HIP6601B		41.4℃	
9	Q20	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD414		35.9℃	
10	U41	IC.SMD.SOIC 8Pin MOSFET Drivers.INTERSIL.HIP6601B		42.9℃	
11	Q21	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD414		36.9℃	
12	U45	IC.SMD.SOIC 8Pin MOSFET Drivers.INTERSIL.HIP6601B		41.7℃	
13	Q22	PWR.SMD.TO-252 N-Channel PowerMosfet.AOS.AOD414		33.8℃	
14					
15					

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