PFM-532I

Thermal Image Analysis Report

Report No:05E080024

Release Date: 09 /13 / 2005

2005-09-13	Wenyuan Yang	Andrew Ku
Issue Stamp	**Manager**	**Test Engineer**

Thermal Image Analysis

Ⅰ. Model Name: PFM-532I-A0.1

Ⅱ. Description: PC/104 Board

Ⅲ. Date: 09 / 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:**

  Component Side – 1: 21.5degrees C
  Component Side – 2: 21.5 degrees C

- **System Configuration :**

  BIOS ver :A0.4
  CPU: STPC-DX2 133MHz
  Memory: HYNIX /HY57V63220DTP-6 /32MB
  HDD: MAXTOR 80GB

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

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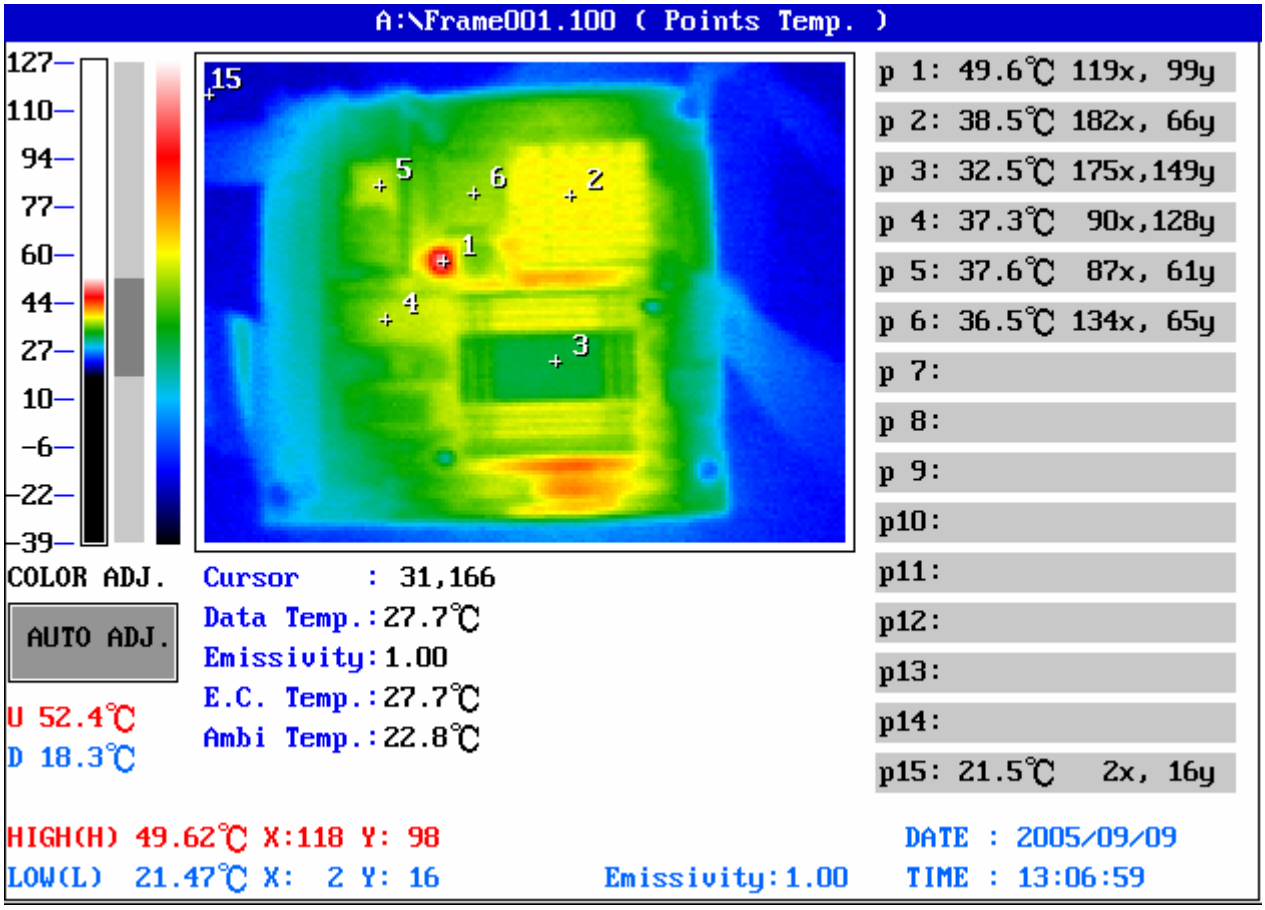
Thermal Image Analysis

Temperature Profile Test:

Component Side – 1:



Point	Position	Describe	Tc	Tm (25℃)	Tm (60℃)	Note
1	U4	(TF)IC.SMD SOP 8P.Clock Output Buffer.ICS.ICS9112G-16LF-T	-30℃~100℃	49.6℃	84.6℃	
2	U5	(TF)IC.SMDBGA256Pin.DisplayControllerW/4M RAM.SMI.SM712GF4BA	-10℃~120℃	38.5℃	73.5℃	
3	U2	CPU.PBGA388P.100MHz.X86CoreSystem-On-Chip.STPC ELITE.STPCE1HEBCE	-0℃~85℃	32.5℃	67.5℃	
4	U3	TSOPII 86P.SDRAM 2M*32.PC-166.HYNIX.HY57V643220DTP-6	-10℃~120℃	37.3℃	72.3℃	
5	U8	GAL.Lattice.16V8D.CS:35CBh.MB-668/MB-662.DOC Decoder	-10℃~120℃	37.6℃	72.6℃	
6	U6	(TF)IC.PLCC.32P 2M bit Flash Memory.SST.ST39SF020A-70-4C-NH	-30℃~100℃	36.5	71.5℃	
7						
8						
9						
10			-			
11						
12						
13						
14						
15		Ambient Temperature		21.5℃		

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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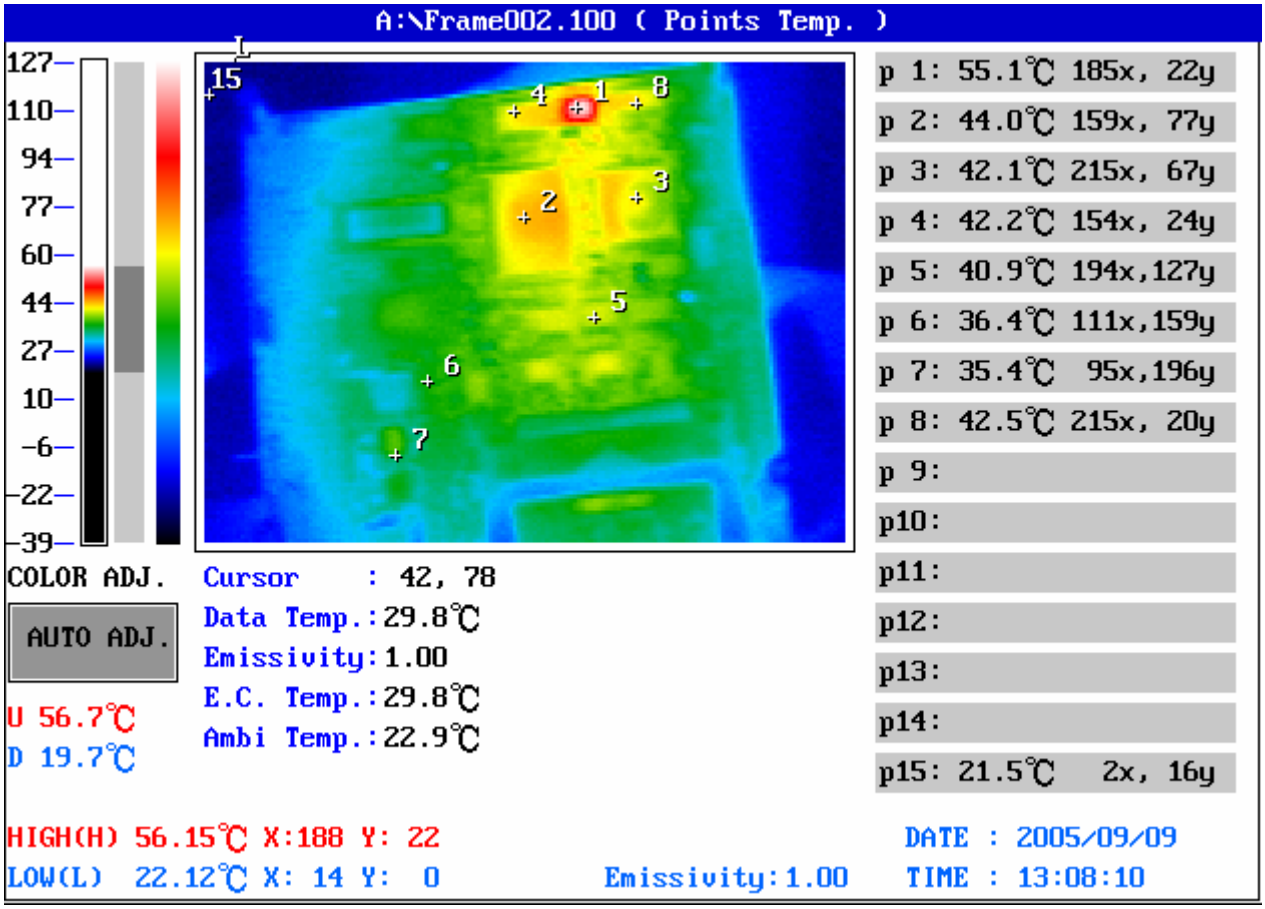
Component Side –2:



Point	Position	Describe	Tc	Tm (25℃)	Tm (60℃)	Note
1	U31	(TF)IC.SMD.SOIC 8P.Ultra Low Dropout Regulator.IR.IRU1150CSPbF	-25℃~125℃	55.1℃	90.1℃	
2	U25	IC.SMD.128P QFP Super I/O.Winbond.W83977F-A	-30℃~100℃	44.0℃	79.0℃	
3	U26	IC.SMD.LQFP 100P.PCI Ethernet CHIP.RELTEK.RTL8100BL	-25℃~100℃	42.1℃	77.1℃	
4	C175	(TF)MLCC.1uF.X5R.6.3V.10%.0402.SMD	-25℃~125℃	42.2℃	77.2℃	
5	U21	IC.SMD.TSSOP 16P.PHILIPS.74HCT138	-10℃~120℃	40.9℃	75.9℃	
6	L1	INDUCTOR.3.3uH.20%.SMDDCR=12mohm Isat=27A.VISHAY.IHLP2525CZRZ3R3M01	-25℃~125℃	36.4℃	71.4℃	
7	U14	Dual N-Channel.SMD SO-8.2.5V MOSFET.APEC.AP9926M	-25℃~125℃	35.4℃	70.4℃	
8	C182	(TF)MCC.10uF.10V.+80/-20%.0805.SMD	-25℃~125℃	42.5℃	77.5℃	
9						
10						
11						
12						
13						
14						
15		Ambient Temperature		21.5℃		

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

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