GENE-5312

Thermal Image Analysis Report

Report No:05E080030

Release Date: 09 /15 / 2005

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

Thermal Image Analysis

Ⅰ. Model Name: GENE-5312 A0.2

Ⅱ. Description: SubCompact Board

Ⅲ. Date: 09 / 15 / 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: 24.5degrees C
  Component Side – 2: 24.5 degrees C

- **System Configuration :**

  BIOS ver :A0.2
  CPU: AMD Geode ™GX 400MHz
  Memory: HYNIX / HY5DU121622A / DDR333 /512MB
  HDD: MAXTOR 80GB

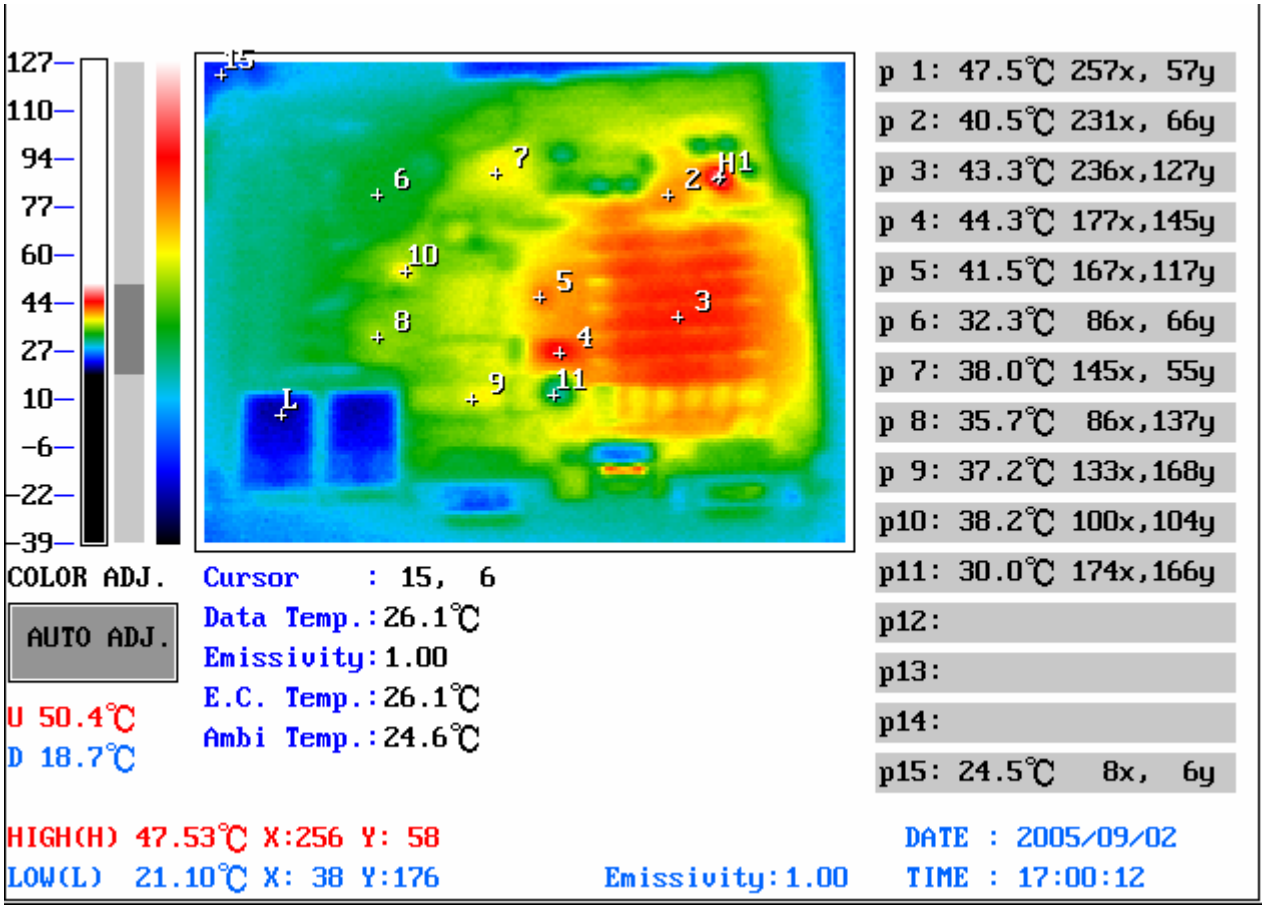
- **Application Software: Windows 2000 run HCT9.5**
- **Take Picture Time: Power on 2 hours after**

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056
http://www.aaeon.com.tw

Thermal Image Analysis

Temperature Profile Test:

Component Side – 1:



Point	Position	Describe	Tc	Tm (25℃)	Tm (60℃)	Note
1	U2	(TF)IC.SMD SO8.3A Linear Regulator.Anpec.APL5331KC-TRL	-25℃~100℃	47.5℃	82.5℃	
2	TC1	(TF) SMD.KEMET.T520V157M006ASE045		40.5℃	75.5℃	
3	U12	(TF) AMD CPU BGU396.GX2.400MHZ.1.5V.AGXD533EEXF0BD		43.3℃	78.3℃	
4	U13	(TF)IC.SMD.SSOP28.Clock Generator.ICS.MK1491-09FLN	-30℃~100℃	44.3℃	79.3℃	
5	U7	(TF)IC.SMD SOP 8P.Clock Output Buffer.ICS.ICS9112G-16LF-T	-30℃~100℃	41.5℃	76.5℃	
6	U3	(TF)IC.SMD208PBGA.I/OCompanion.Multi-FunctionSouth Bridge.AMD.CS5535-UDCF		32.3℃	67.3℃	
7	U1	IC.SMD.QFP128P Super I/O.ITE.IT8712F/HX	0℃~70℃	38.0℃	73℃	
8	U34	(TF)IC.SMD TFBGA.160P.PCI to ISA Bridge Chip.ITE.IT8888G-L	0℃~70℃	35.7℃	70.7℃	
9	U15	IC.SMD.SSOP RS232 Driver ESD 15KV.AD.ADM213EARS		37.2℃	72.2℃	
10	U6	(TF)IC.SMDSO-8.1.5A.LowDropout Regulator.Adj(1.2~4.8V).SEMTECH.SC1565IS-TRT	-10℃~115℃-	38.2℃	73.2℃	
11	L3	(TF)COIL.4.7uH 2.5A.+-20%.SMD.SMTDR54N-4R7M.震元.430-02210		30.0℃	65.0℃	
12						
13						
14						
15		Ambient Temperature		24.5℃		

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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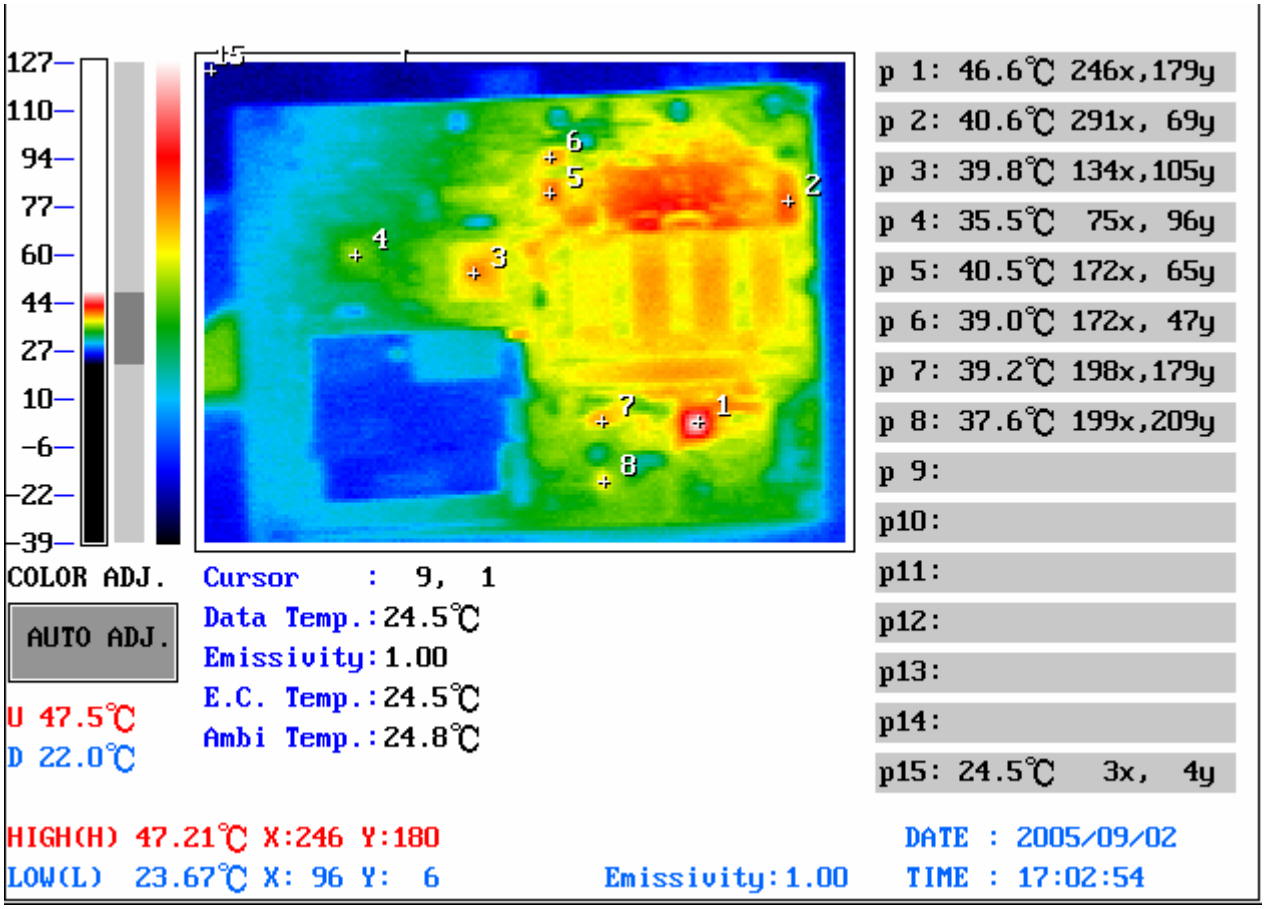
Component Side –2:



Point	Position	Describe	Tc	Tm (25℃)	Tm (60℃)	Note
1	U24	(TF)IC.SMD.2 Channel Audio Codec.Realtek.ALC203-LF	-30℃~100℃	46.6℃	81.6℃	
2	U37	IC.SMD.TSSOP56.FlatLink Transmitter.TI.SN75LVDS83		40.6℃	75.6℃	
3	U33	IC.SMD.LQFP 100P.PCI Ethernet CHIP.RELTEK.RTL8100BL	0℃~70℃	39.8℃	74.8℃	
4	U10	IC.SMD.LQFP 100P.PCI Ethernet CHIP.RELTEK.RTL8100BL	0℃~70℃	35.5℃	70.5℃	
5	U39	(TF)IC.SMD TSSOP14.Synchronous Buck Regulator.NS.LM2727		40.5℃	75.5℃	
6	U44	(TF)PWR.SMD.SOP8.Dual N MOSFET.30V.9.1A/6.8A.CET.CEM3138		39.0℃	74.0℃	
7	U27	Dual N-Channel.SMD SO-8.2.5V MOSFET.APEC.AP9926M	-25℃~125℃	39.2℃	74.2℃	
8	U22	(TF)IC.SMD SOP.8Pin Switching PWM Controller.IR.IRU3037CSPbF	0℃~125℃	37.6℃	72.6℃	
9						
10						
11						
12						
13						
14						
15		Ambient Temperature		24.5℃		

1. Operation Temperature (℃):
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