GENE-1270

Thermal Image Analysis Report

Report No:06E080016

Release Date: 2006/06/15

2006-06-15	Wenyuan Yang	Liping Hsieh
Issue Stamp	**Manager**	**Test Engineer**

Thermal Image Analysis

Ⅰ. Model Name:GENE-1270 Rev：B0.2

Ⅱ. Description: Intel PXA270 SubCompact Board

Ⅲ. Date: 06 / 15 / 2006

Ⅳ. Measure Site: AAEON QE Dept.

Ⅴ. Issued by: Liping Hsieh

Ⅵ.Equipment:

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

Ⅶ. Simulation Environment:

- **Temperature:**

  Component Side – 1:27.3 degrees C
  Component Side – 2:27.1 degrees C

- **System Configuration :**

  BIOS Rev: N/A
  CPU: Intel Xscale PXA270 Processor 520MHz
  Memory: Infineon. HYB25L256160AC-7.5 / SDRAM PC133 / 64MB (onboard)
  HDD: N/A

- **Application Software: Play .WMA file for 2 hours**
- **Take Picture Time: After power on 2 hours**

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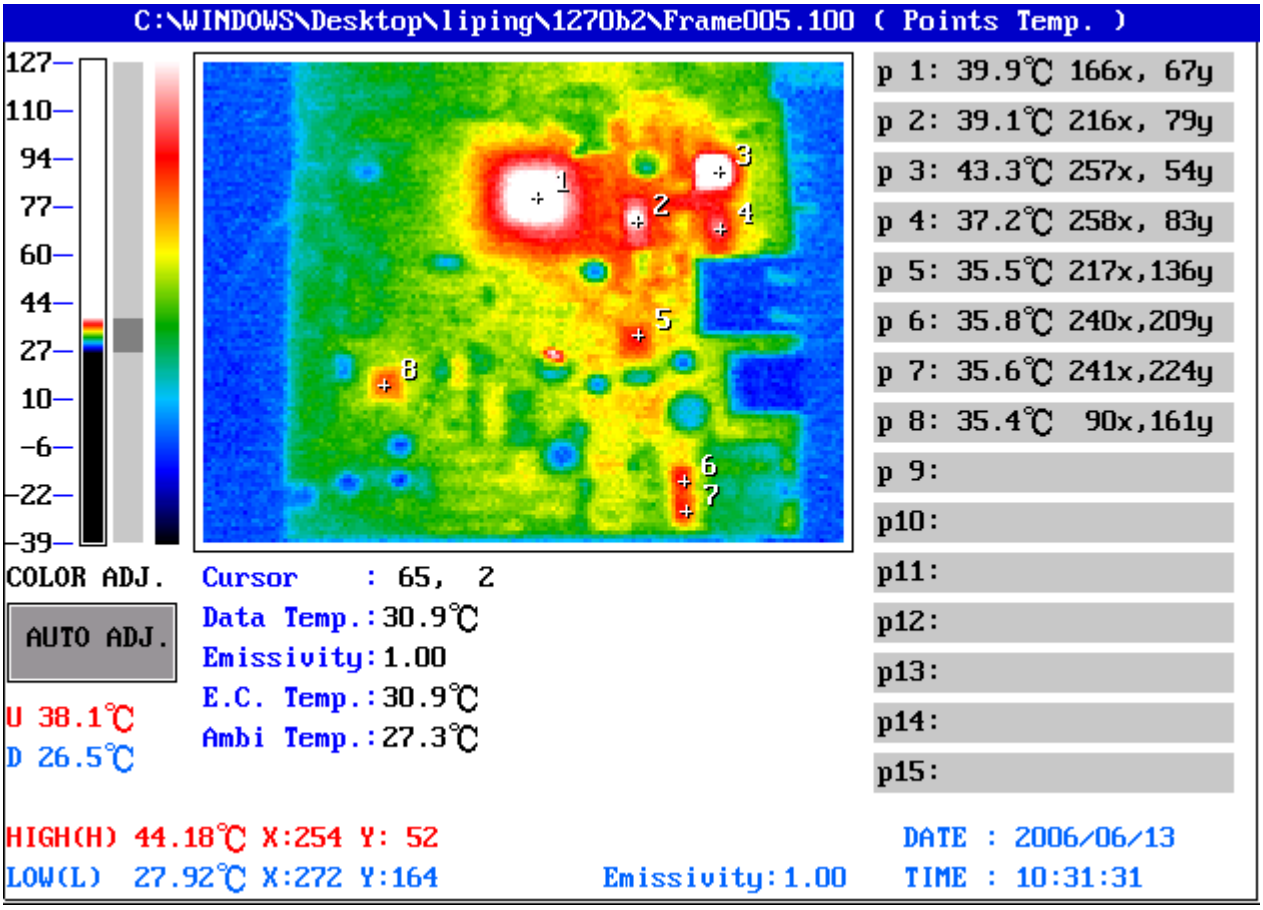
Thermal Image Analysis

Temperature Profile Test:

Component Side – 1:



Point	Position	Describe	Tc	Tm (25℃)	Tm (60℃)	Note
1	U20	PBGA 360Pin.Intel PXA 270 RISC Processor.520MHz.Intel.NHPXA270C1E520	85℃	39.9℃	74.9℃	
2	U28	SSOP 28P.USB1.1 4PORT HUB.ALCOR.AU9254	85℃	39.1℃	74.1℃	
3	U30	LQFP 48Pin.8 bit Video D/A Converter.ANALOG DEVICE.ADV7125KST140	85℃	43.3℃	78.3℃	
4	U31	SSOP RS232 Driver ESD 15KV.AD.ADM213EARSZ;EE-A970562	85℃	37.2℃	72.2℃	
5	U27	LQFP 48P.Non PCI Ethernet CHIP.DAVICOM.DM9000AEP	85℃	35.5℃	70.5℃	
6	Q10	SO-8.P-Channel E-Mode MOSFET.ANPEC.APM9435KC-TRL	125℃	35.8℃	70.8℃	
7	Q9	SO-8.P-Channel E-Mode MOSFET.ANPEC.APM9435KC-TRL	125℃	35.6℃	70.6℃	
8	U7	LQFP 48Pin.Audio Code.with Touch Screen Controller.PHILIPS.UCB1400	95℃	35.4℃	70.4℃	
9						
10		Ambient Temperature		27.3℃		

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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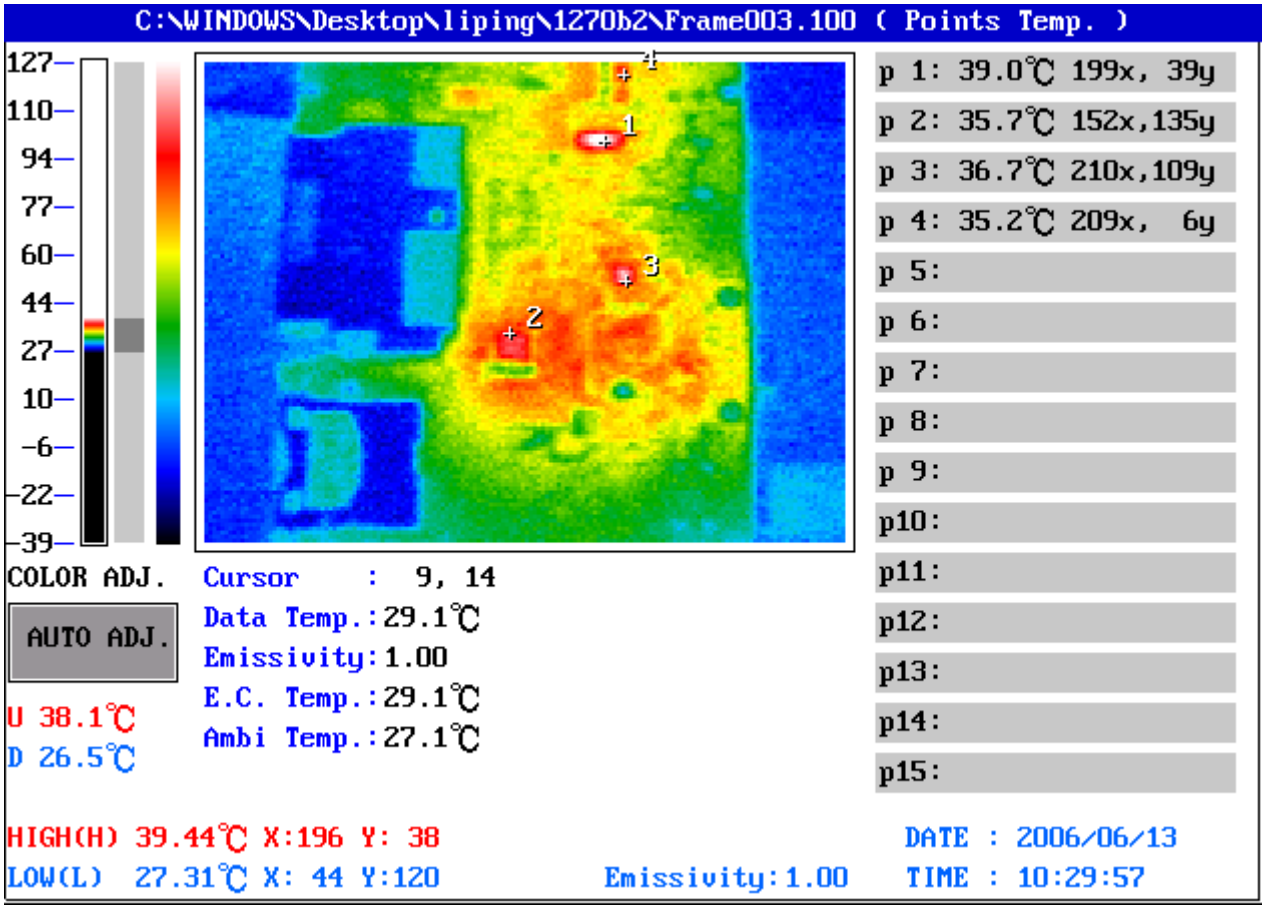
Component Side –2:



Point	Position	Describe	Tc	Tm (25℃)	Tm (60℃)	Note
1	U46	16Pin PWM IC.FEELING.FP5452DR-LF	95℃	39℃	74℃	
2	CE12	15mohm.3100mA.SMD.SANYO.2R5TPE220MF	105℃	35.7℃	70.7℃	
3	U47	24Pin Regulator.LINEAR.LTC3445EUF#PBF	125℃	36.7℃	71.7℃	
4	D9	Schottky.VDC=40V.3A.SMD.DO-214AC.Barrier Rectifiers.Willas.SK34A	125℃	35.2℃	70.2℃	
5						
6						
7						
8						
15		Ambient Temperature		27.1℃		

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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