GENE-6350

Thermal Image Analysis Report

Report No:05E080025

Release Date: 09 /27/ 2005

2005-09-27	Wenyuan Yang	Liping Hsieh
Issue Stamp	**Manager**	**Test Engineer**

Thermal Image Analysis

Ⅰ. Model Name: GENE-6350 A1.1

Ⅱ. Description:

Intel ULV Celeron Subcompact Board With LCD / Ethernet / Audio / CFD /Mini PCI / 4COMs / 4USBs / DVI

Ⅲ. Date: 09 / 27 / 2005

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 – 1:26.3 degrees C
  Component Side – 2:26.6 degrees C

- **System Configuration :**

  BIOS ver :A0.5
  CPU: INTEL LV CELERON 650MHz
  Memory: TRANSCEND /V58C2256804SCT6/256MB
  HDD: MAXTOR 80GB

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

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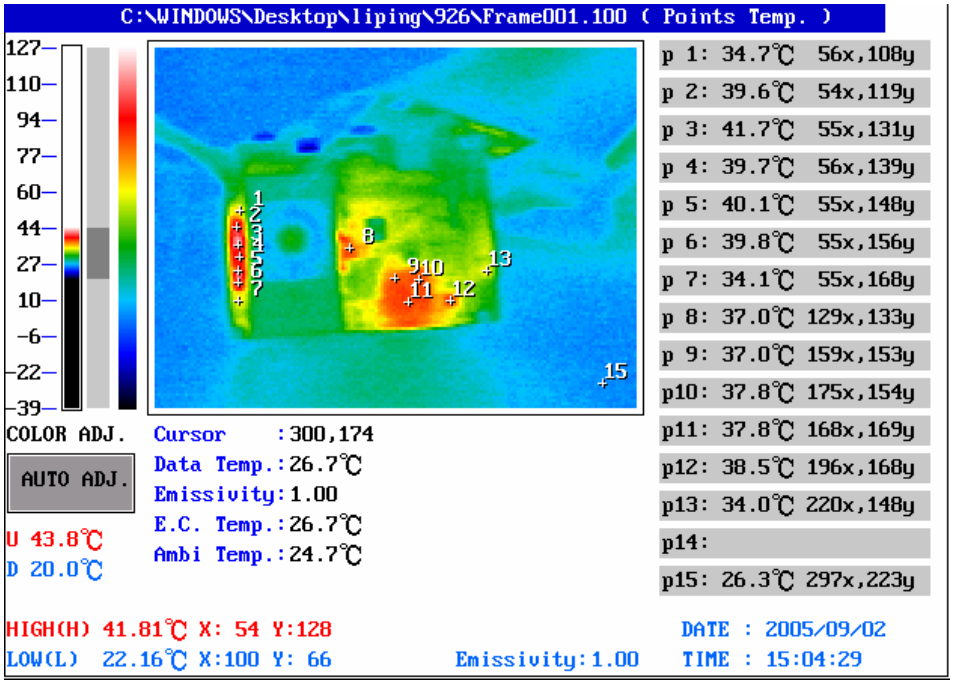
Thermal Image Analysis

Temperature Profile Test:

Component Side – 1:



Point	Position	Describe	Tc	Tm (25℃)	Tm (60℃)	Note
1	C117	TDK/C1210-SERIES/YORKIE/MCC22uF+80/-20% 1210;EE-A000193;1129722090;TWN	-30℃~85℃	34.7℃	69.7℃	
2	U8	IC.SMD.SO-8P.Dual Operational Amplifiers.NS.LMV358M	150℃	39.6℃	74.6℃	
3	C304	KO-CAP.330uF.6.3V.20%.D(7.3*4.3*2.8mm).45mOhm SMD.KEMET.T520D337M006AS	105℃	41.7℃	76.7℃	
4	U4	APEC/AP4880M/PWR.SMD.SO-8N-Channel25V13A MOSFET.APEC.AP4880M;EE-A031081;1315488010;TWN	-55℃~150℃	39.7℃	74.7℃	
5	U5	APEC/AP4880M/PWR.SMD. SO-8N-Channel25V13A MOSFET.APEC.AP4880M;EE-A031081;1315488010;TWN	-55℃~150℃	40.1℃	75.1℃	
6	L5	(TF)INDUCTORS.1.6uH 11A.30%. SMD.2pin.GOTREND.GSCDK106P-1R6N; EE-A031086;1211101660;TWN	-40℃~85℃	39.8℃	74.8℃	
7	C17	Japan Carlit/SANMOS/SW Series/PC-CON. (100~220)uF.(2,2.5,4,6.3)V.20%.D(7.3*4.3*2.7mm).10mOhm SMD. Japan Carlit.SW Series;EE-A030626;	-55℃~105℃	34.1℃	69.1℃	
8	U9	IC.SMD.SSOP 48P.FTG for VIA Pro-266 DDR. CYPRESS.W311.ITX-266;EE-A040206;14S3031100;TWN	-30℃~100℃	37.0℃	72℃	
9	U10	IC.SMD.LQFP 100P.PCI Ethernet CHIP.RELTEK.RTL8100BL	-30℃~100℃	37.0℃	72℃	
10	U11	Winbond/W83781D/WINBOND STATUS MONITORING ICW83781D48PIN LQFP/87.09.22;EE-A980268;14S4378100;TWN	--40℃~120℃	37.8℃	72.8℃	
11	U2	VIA/VT8235/IC.SMD.BGA 487P. SouthBridgeChipset.VIA.VT8235;EE-A040476;14S4823500;TWN	0℃~85℃	37.8℃	72.8℃	
12	U1	IC.SMD LQFP 48Pin.6 Channel AC'97 Audio Codec.REALTEK.ALC650	0℃~85℃	38.5℃	73.5℃	
13	L6	(TF)INDUCTORS.3.3uH 6.5A.20%.SMD 2pin.AG.SMTDR105N-3R3M;EE-A030329;1211103362;TWN	-25℃~85℃	34.0℃	69℃	
14						
15		Ambient Temperature		26.3℃		

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

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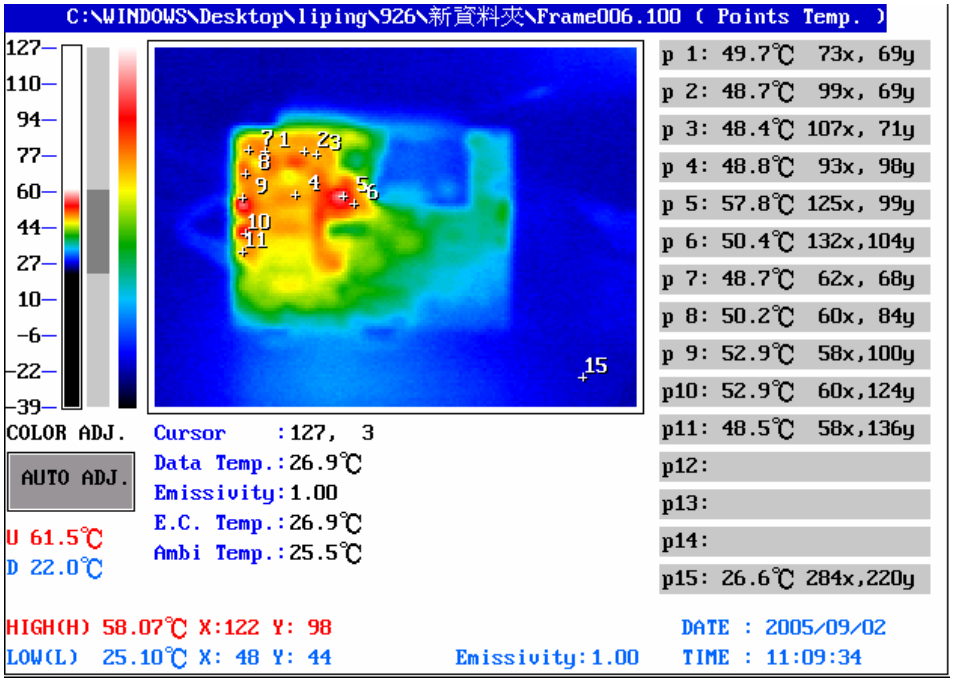
Note: The description in red states which temperature is over the specification of the device.

Component Side –2:



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Point	Position	Describe	Tc	Tm (25℃)	Tm (60℃)	Note
1	C241	(TF)SPCAP.(8.2~150)uF.(2,2.5,4,6.3,8,12.5,16)V.20%.D.SMD.Panasonic.EEFCD Series;EE-A020599;118*6***8*;TWN	-40℃~105℃	49.7℃	84.7℃	
2	C242	Japan Carlit/SANMOS/SW Series/PC-CON.(100~220)uF.(2,2.5,4,6.3)V.20%.D(7.3*4.3*2.7mm).10mOhm SMD.Japan Carlit.SW Series;EE-A030626;11896***8*;TWN	-55℃~105℃	48.7℃	83.7℃	
3	C243	Japan Carlit/SANMOS/SW Series/PC-CON.(100~220)uF.(2,2.5,4,6.3)V.20%.D(7.3*4.3*2.7mm).10mOhm SMD.Japan Carlit.SW Series;EE-A030626;11896***8*;TWN	-55℃~105℃	48.4℃	83.4℃	
4	U23	CYPRESS/W256/IC.SMD.SSOP28P.12Output Buffer.CYPRESS.W256;EE-A040436;14S4025600;TWN	-30℃~100℃	48.8℃	83.8℃	
5	U20	IC.SMD.SO-8P.DualOperational Amplifiers.NS.LMV358M;EE-A030570;14S1035800;TWN	125℃	57.8℃	92.8℃	
6	Q16	APEC/AP9916H/PWR.SMD.TO-252.N-Channel Power MOSFET.APEC.AP9916H;EE-A040445;1315991610;TWN	-25℃~125℃	50.4℃	85.4℃	
7	C155	JapanCarlit/SANMOS/SW Series/PC-CON.(100~220)uF.(2,2.5,4,6.3)V.20%.D(7.3*4.3*2.7mm).10mOhm SMD.Japan Carlit.SW Series;EE-A030626;11896***8*;TWN	-55℃~105℃	48.7℃	83.7℃	
8	U19	(TF)IC.SMD SOP.8Pin Switching PWM Controller.Intersil.ISL6520ACBZ;EE-A020421;14S2652000;TWN	-15℃~100℃	50.2℃	85.2℃	
9	Q13	APEC/AP9916H/PWR.SMD.TO-252.N-Channel Power MOSFET.APEC.AP9916H;EE-A040445;1315991610;TWN	-30℃~125℃	52.9℃	87.9℃	
10	Q14	APEC/AP9916H/PWR.SMD.TO-252.N-Channel Power MOSFET.APEC.AP9916H;EE-A040445;1315991610;TWN	-30℃~125℃	52.9℃	87.9℃	
11	C66	KO-CAP.330uF.6.3V.20%.D(7.3*4.3*2.8mm).45mOhm SMD.KEMET.T520D337M006AS	105℃	48.5℃	83.5℃	
12						
13						
14						
15		**Ambient Temperature**		26.6℃		

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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