

EMB-9458T

Intel 945GM(Calistoga) + ICH7M HD Mini ITX Board

Thermal Image Analysis Report

Report NO: 07E080013

Release Date: Dec 24, 2007

2007/12/24

Issue Stamp

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Manager

Eva Yeh

Test Engineer

Thermal Image Analysis

I . Model Name: EMB-9458T A1.0

II . Description: Intel 945GM(Calistoga) + ICH7M HD Mini ITX Board

III . Date: Dec 24, 2007

IV . Measure Site: AAEON QE Dept.

V . Issued by : Eva Yeh

VI. Equipment:

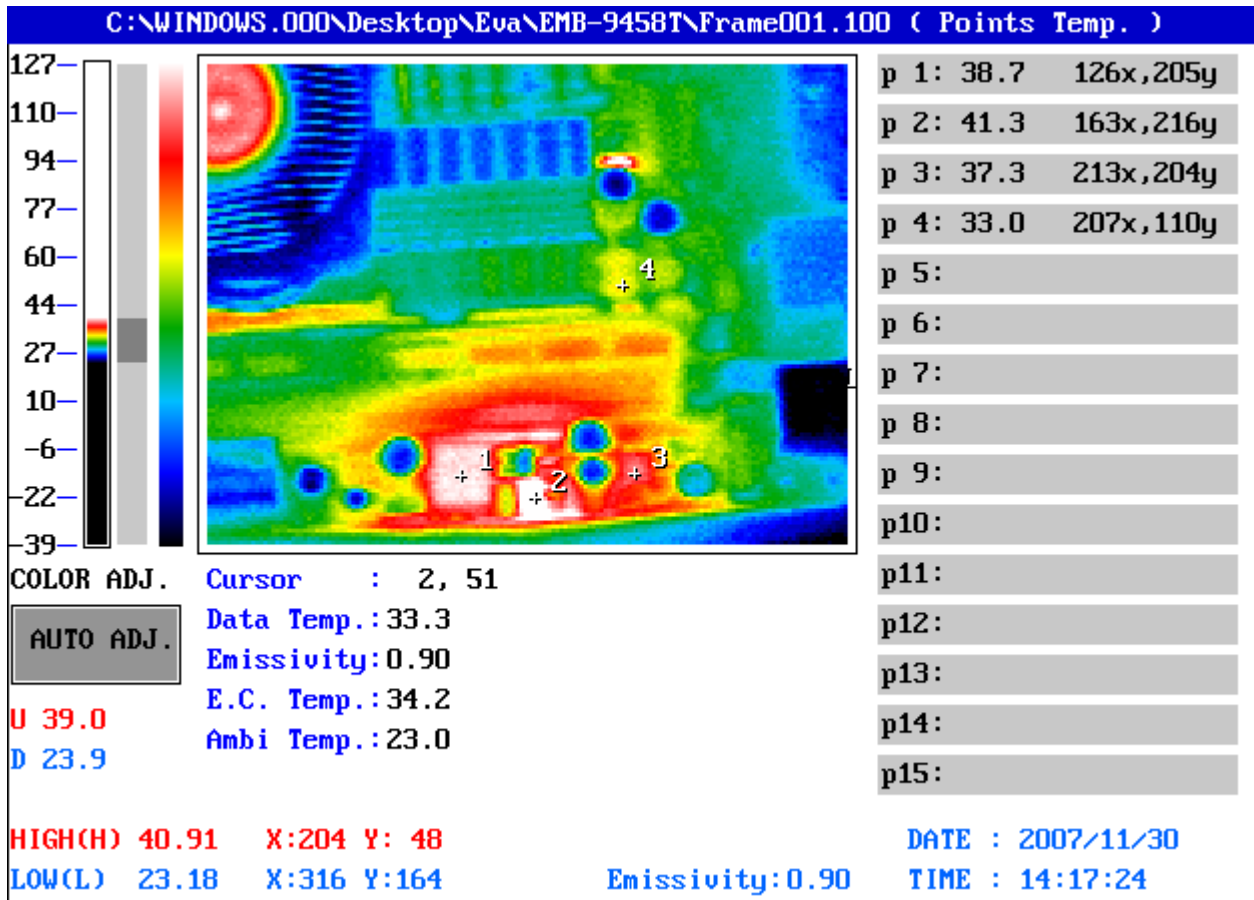
TVS-100 series by NIPPON AVIONICS CO., LTD.

VII. Simulation Environment:

- **Temperature: Component Side-1 : 23.0°C , Component Side-2 : 23.8°C , Component Side-3 : 24.2°C , Component Side-4 : 23.7°C**
- **CPU : Intel(R) Core(TM) Duo CPU T2500 2.0GHz**
- **RAM : Transcend DDR2-800 1GB (0634SP V59C1512804QBF25)**
- **BIOS : EMB-9458T BIOS Rev.1.0 (11/21/2007)**
- **CF Card : N/A**
- **HDD : Maxtor 6Y080L0 YAR41BW0 80GB**
- **Application Software: Run Prime95 under Windows XP Professional V2002 Service Pack 2**
- **Take Picture Time: After Power on 2 hours.**

Temperature Profile Test:

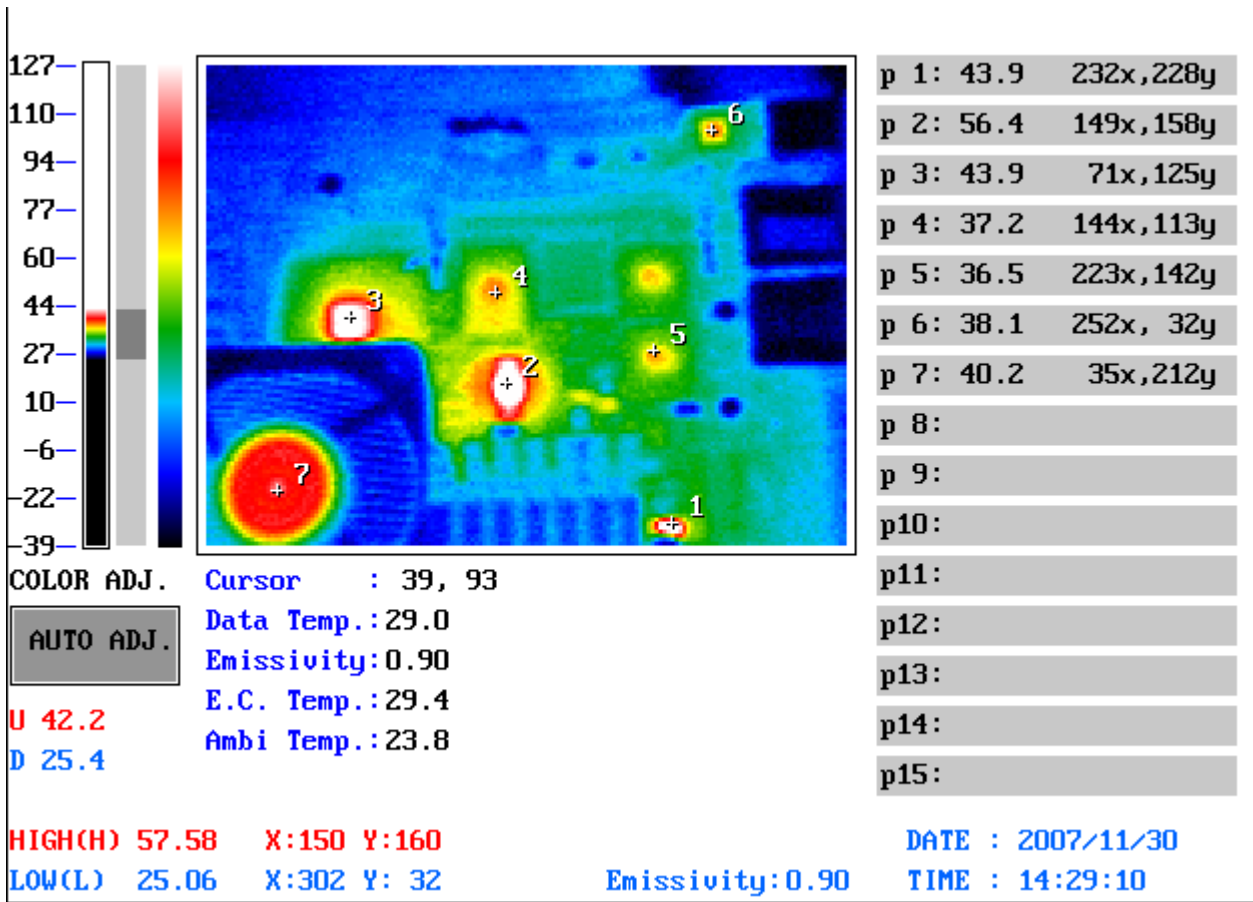
Component Side-1:



Point	Position	Describe	Tc (°C)	Tm (23°C)	Tm (60°C)	Note
1	L17	(TF)COIL.1.5uH.20%.DCR=3.4mOhm.Idc=23A.13.8*12.8mm.SMD. GOTREND.GSTC135P-1R5MF;EE-A060441;1211101569;TWN	155	38.7	75.7	
2	Q13	(TF)PWR.SMD.TO-252.N-Channel Power 25V 60A MOSFET.APEC.AP70T03GH;EE-A031083;1315700310;TWN	150	41.3	78.3	
3	U7	(TF)IC.SMD.QFN 28P.Power Controller.for Dual Channel DDR.Intersil.ISL6537CRZ;EE-A050796;14S4653700;TWN	100	37.3	74.3	
4	C85	(TF)POSCAP.[68,100,150,220,330,470,680,1000]uF.[2.5,4.0,6.3,10.0]V.2 0%.[9,12,15,18,25,35]mohm.SMD.SANYO.TPE series;EE-A060324;11896*****;TWN	105	33.0	70	

1. Tm (Measured operation temperature) must be less than Tc (Specified case temperature) +5 degree C
 2. Any Tm value showed in red words which meaning the value is over the Tc+ 5 degree C of this device specification

Component Side-2:



Point	Position	Describe	Tc (°C)	Tm (23.8 °C)	Tm (60°C)	Note
1	Q7	(TF)PWR.SMD.S08.N-Channel.30V.12A.ANPEC.APM4410KC-TRL; EE-A060270;1315441014;TWN	125	43.9	80.1	
2	U12	(TF)IC.SMD.TSSOP 56P.CLOCK GENERATOR.ICS. ICS954226AGLF;EE-A060018;14S3422600;TWN	115	56.4	92.6	
3	U15	(TF)IC.SMD.Chipset ICH7M. Intel.NH82801GBM SL8YB;EE-A060320;14S428010D;TWN	99	43.9	80.1	
4	U13	(TF)IC.SMD.QFP128P Super I/O. ITE.IT8712F/KX-L;EE-A061481;14S4871204;TWN	100	37.2	73.4	
5	U6	(TF)IC.SMD.BGA 196P.GigaBit Ethernet Chipset. Intel.PC82573L;EE-A061536;14S4825730;TWN	100	36.5	72.7	
6	U3	(TF)IC.SMD LQFP 48Pin.6 Channel AC'97 Audio Codec. REALTEK.ALC655-LF;EE-A040125;14S3065500;TWN	100	38.1	74.3	
7	CPU	Intel(R) Core(TM) Duo CPU T2500 2.0GHz	100	40.2	76.4	

3. Tm (Measured operation temperature) must be less than Tc (Specified case temperature) +5 degree C
 4. Any Tm value showed in red words which meaning the value is over the Tc+ 5 degree C of this device specification

