XTX-945

Intel 945GM(E) + ICH7-M XTX Board

Thermal Image Analysis Report

Report NO: 08E080004

Release Date: March 03, 2008

2008/03/03	*Wenyuan Yang*	*Jojo Lin*
Issue Stamp	**Manager**	**Test Engineer**

Thermal Image Analysis

Ⅰ. Model Name: XTX-945 A0.3 (Carrier Board: ECB-910M A0.3)

Ⅱ. Description: Intel 945GM(E) + ICH7-M XTX Board

Ⅲ. Date: March 03, 2008

Ⅳ. Measure Site: AAEON QE Dept.

Ⅴ. Issued by : Jojo Lin

Ⅵ.Equipment:

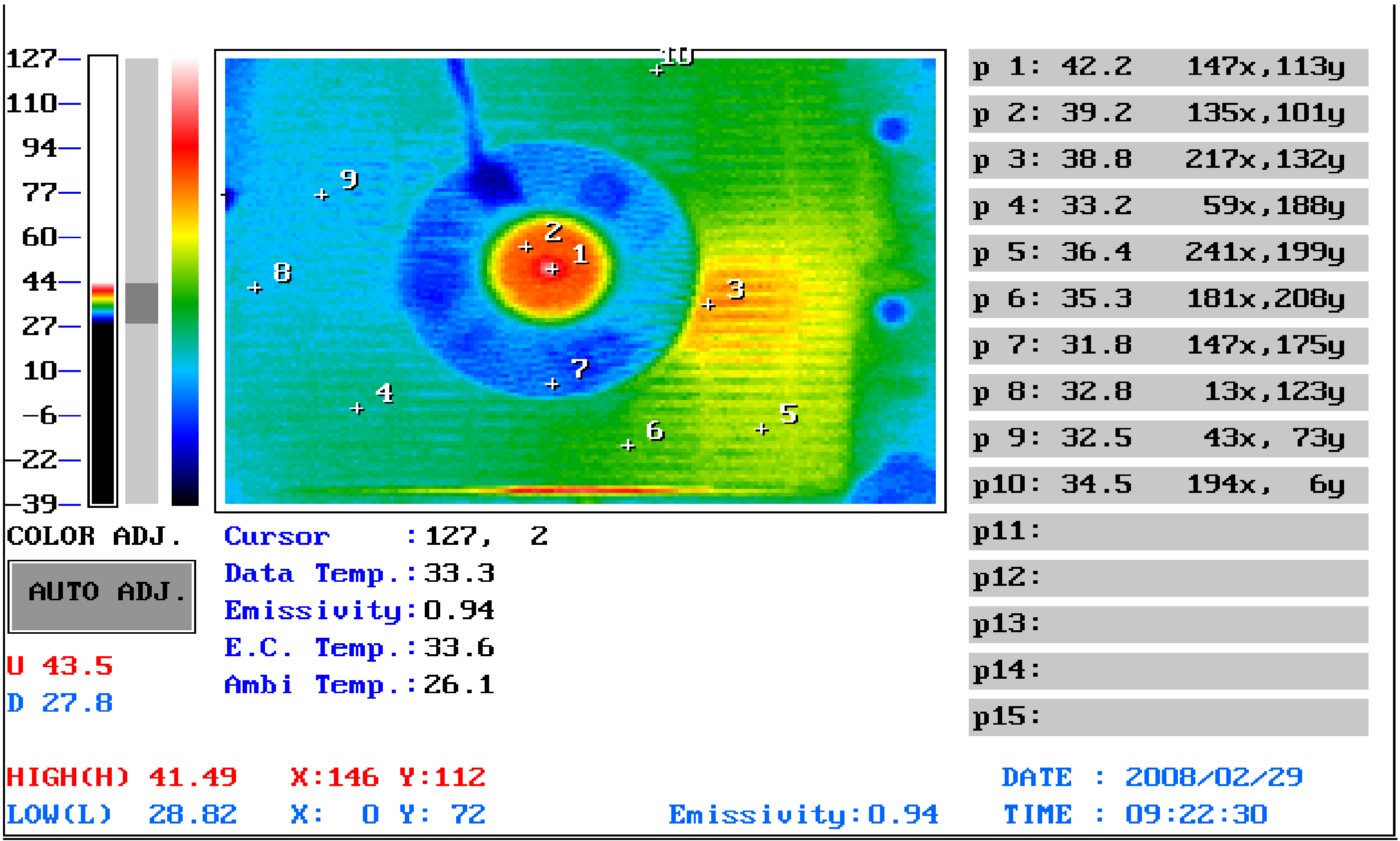
TVS-100 series by NIPPON AVIONICS CO., LTD.

Ⅶ. Simulation Environment:

- **Temperature: Component Side-1: 26.1℃**
  Solder Side-1: N/A
- **CPU : Intel Core 2 Duo 2.16 GHz / FSB:667MHz / L2: 4MB T7400 LF80537GF0484M (Merom)**
- **RAM : Kingston DDR2-533 SODIMM SDRAM 512MB (0604VJ V59C1512164QAF37)**
- **BIOS : XTX-945 BIOS Rev 1.0 (12/18/2007)**
- **CF Card : N/A**
- **HDD: Maxtor 2F040L0710634 3.5” IDE HDD**
- **DVD-ROM: BenQ DVD-ROM 1650V**
- **Application Software: Run Prime 95 under Windows XP Professional Service Pack 2**
  Version 2002
- **Take Picture Time: After Power on 2 hours.**

Temperature Profile Test:

Component Side-1:



COLOR ADJ.

AUTO ADJ.

U 43.5
D 27.8

Cursor :127, 2
Data Temp.:33.3
Emissivity:0.94
E.C. Temp.:33.6
Ambi Temp.:26.1

p 1:	42.2	147x,113y
p 2:	39.2	135x,101y
p 3:	38.8	217x,132y
p 4:	33.2	59x,188y
p 5:	36.4	241x,199y
p 6:	35.3	181x,208y
p 7:	31.8	147x,175y
p 8:	32.8	13x,123y
p 9:	32.5	43x, 73y
p10:	34.5	194x, 6y
p11:		
p12:		
p13:		
p14:		
p15:		

HIGH(H) 41.49 X:146 Y:112
LOW(L) 28.82 X: 0 Y: 72
Emissivity:0.94
DATE : 2008/02/29
TIME : 09:22:30

Point	Position	Describe	Tc (℃)	Tm (26.1℃)	Tm (60℃)	Note
1		Center of the fan on heatsink		**42.2**	**76.1**	
2	U3	(TF)IC.SMD.Chipset Intel 945GM Express.Intel.QG82945GM SL8Z2;EE-A060321;14S4294501;TWN	**0 ~ 105**	**39.2**	**73.1**	
3	CPU	Intel CPU.Core 2 Duo 2.16 GHz. Merom T7400.LF80537GF0484M FSB: 667MHz / L2 Cache：4MB	**100**	**38.8**	**72.7**	
4	U4	(TF)IC.SMD.Chipset ICH7M.Intel.NH82801GBM SL8YB;EE-A060320;14S428010D;TWN	**100**	**33.2**	**67.1**	
5	U19	(TF)IC.SMD.QFP128P Super I/O.ITE.IT8712F/KX-L;EE-A061481;14S4871204;TWN	**-30 ~ 100**	**36.4**	**70.3**	
6	U2	(TF)IC.SMD.TSSOP 56P.CLOCK GENERATOR.ICS.ICS954226AGLF;EE-A060018;14S3422600;TWN	**115**	**35.3**	**69.2**	
7	L21	(TF)COIL.1.5uH.Irms=9A.Isat=18A.20%.SMD(7.3x6.8x3.0).2pin.RDC=15m Ohm.GOTREND.GSTC063P-1R5MN;EE-A061612;121110156A;TWN	**-85 ~ 155**	**31.8**	**65.7**	
8	L48	(TF)COIL.2.2uH.(30mohm,3.5A).20%.5.8*5.2mm.SMD.GOTREND.GSDR53P-2R2M;EE-A061578;1211102268;TWN	**-70 ~ 115**	**32.8**	**66.7**	
9	U58	(TF)IC.SMD.TSOP.32P.8M bit Flash Memory.SST.SST49LF008A-33-4C-WHE;EE-A080004;14S6200802;TWN	**-30 ~ 115**	**32.5**	**66.4**	
10	L53	(TF)COIL.1uH.+/-20%.SMD.7.3*6.8*3.0mm.DCR=9mohm.Irms=11Amp. GOTREND.GSTC063P-1R0MN;EE-A061520;1211000180;TWN	**-85 ~ 155**	**34.5**	**68.4**	

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