COM-945GSE

Intel 945GSE + ICH7-M COM Express Board

Thermal Image Analysis Report

Report NO: 09E080015

2009/7/10	Wenyuan Yang	Anderson Lin
Issue Stamp	**Manager**	**Test Engineer**

Thermal Image Analysis

Ⅰ. Model Name: COM-945GSE Rev:A1.0

Ⅱ. Description: Intel 945GSE + ICH7-M COM Express Board

Ⅲ. Date: 2008/11/20

Ⅳ. Measure Site: AAEON QE Dept.

Ⅴ. Issued by : Anderson Lin

Ⅵ.Equipment:
PR1000(TH-046)

Ⅶ. Simulation Environment:

- **Temperature: Component Side-1 : 25.2℃ , Component Side-2 : 25.5℃**
- **CPU : Intel ATOM N270 1.6GHz**
- **RAM : A-DATA DDR2 SO-DIMM 667 1G**
- **BIOS : COM-945GSE BIOS Rev 1.0 (11/05/2008)**
- **CF Card : N/A**
- **HDD : Seagate IDE H.D 80G- ST380215A**
- **Application Software: Run Prime95 under Windows XP Professional Service Pack 3**
- **Take Picture Time: After Power on 2 hours.**

Temperature Profile Test:

Component Side-1:

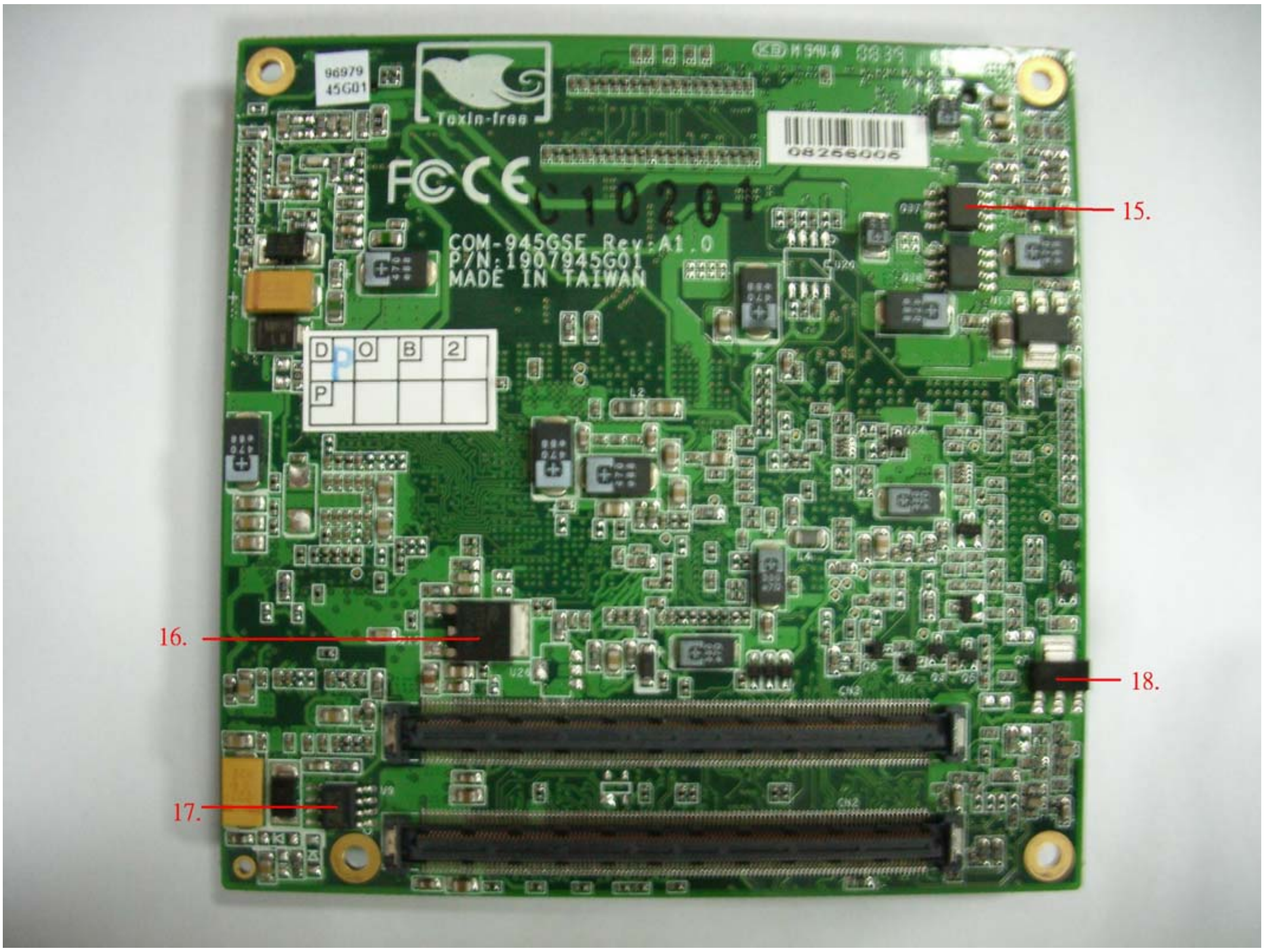
Red line: Frontside

Pink line: Backside

Point	Position	Describe	Tc (℃)	Tm (25.2 ℃)	Tm (60℃)	Note
1	U1(CPU)	Intel CPU.Diamondville.N270.1.6GHz/FSB 533MHz	90	40.6	75.4	
2	U3(NB)	(TF)IC.SMD.Intel 945GSE Express Chipset.Intel.QG82945GSE SLB2R	105	36.3	71.1	
3	U4(SB)	(TF)IC.SMD.Chipset ICH7M.Intel.NH82801GBM SL8YB	----	36.7	71.5	
4	Memory	Transcend DDR2 SO-DIMM 667 2G	----	44.8	79.6	
5	U15	(TF)IC.SMD.SSOP 28P.WatchDog.Fintek.F75111RG	115	38.5	73.3	
6	U24	(TF)IC.SMD.QFN 28P.Power Controller.for Dual Channel DDR.Intersil.ISL6537CRZ	100	46.7	81.5	
7	U6	(TF)IC.SMD.QFN 64P.PCI-E GigaBit Ethernet Chipset.Intel.WG82574L SLBA8	109	34.9	69.7	
8	U22	(TF)IC.SMD SO.14Pin.PHILIPS.74LVC07AD-T	125	39.7	74.5	
9	U10	(TF)IC.SMD.TSSOP 64P.CLOCK GENERATOR.IDT.9LPRS501PGLF	100	56.1	90.9	
10	L10	(TF)COIL.1.5uH.Irms=9A.Isat=18A.20%.SMD(7.3x6.8x3.0).2pin.RDC=15m Ohm.GOTREND.GSTC063P-1R5MN	125	39.1	73.9	
11	U7	(TF)IC.SMD.SOIC.8P.8K SPI Bus Serial EEPROM.ATMEL.AT25080AN-10SU-2.7	125	33.5	68.3	
12	Q9	(TF)PWR.SMD SO-8.P-Channel MOSFET.ANPEC.APM4463KC-TRL	125	41.5	76.3	
13	Q39	(TF)PWR.SMD.SOP8.Dual N MOSFET.30V.9.1A/6.8A.CET.CEM3138	125	46.7	81.5	
14	U25	(TF)IC.SMD.QFN 48P.IMVP6 Two Phase PWM.Intersil.ISL6262ACRZ-T	130	41.3	76.1	

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 (℃)	Tm (25.5 ℃)	Tm (60℃)	Note
15	Q37	(TF)PWR.SMD.SOP8.Dual N MOSFET.30V.9.1A/6.8A.CET.CEM3138	125	57.9	92.7	
16	Q15	(TF)REG.SMD.TO-252 5A Linear Regulator.ATC.AP1084DL-ADJ	125	43.2	78	
17	U9	(TF)IC.SMD.SOP-8.Switching Bulk.Regulator.withbuilt in Mosfet.FEELING.FP6102DR-LF	115	48.1	82.9	
18	Q7	(TF)PNP.SMD SOT-223.1Amp.ON.BCP69T1G	125	38.3	73.1	

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