

EMB-6908T

ATi RS690T + SB600
Mini-ITX Board

Thermal Image Analysis Report

Report NO : 09E080006

Release Date: Mar. 12 , 2009

2009/03/12

Issue Stamp

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Manager

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Thermal Image Analysis

I . Model Name: EMB-6908T A1.1

**II . Description: ATi RS690T + SB600
Mini-ITX Board**

III . Date: March.12, 2009

IV. Measure Site: AAEON QE Dept.

V. Issued by : Jerry Tsai

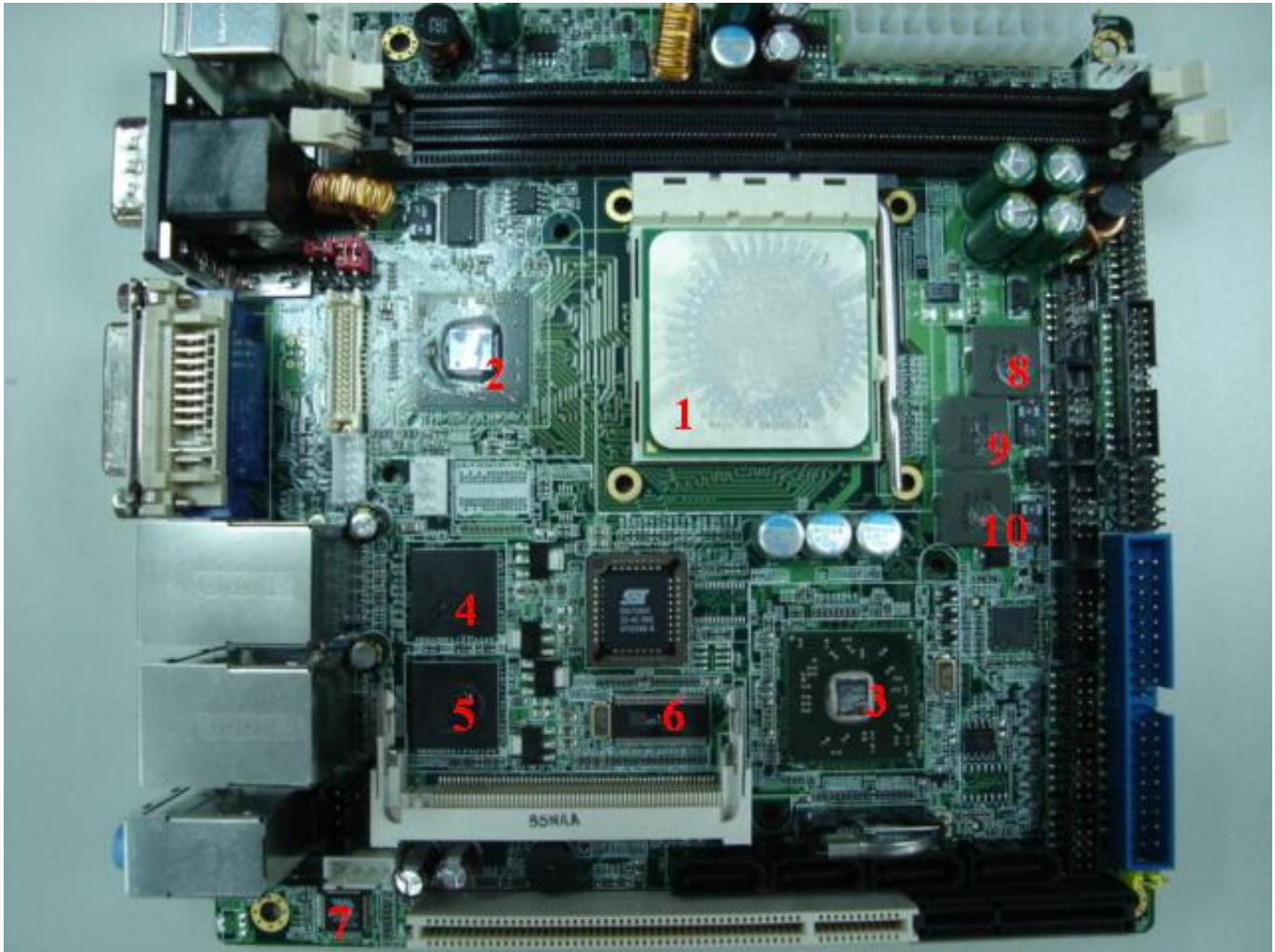
**VI. Equipment:
PR1000(TH-046)**

VII. Simulation Environment:

- Temperature: Component Side-1 :25.0°C , Component Side-2 : 25.0°C
- CPU : AMD Athlon 64 x2 3400+
- RAM : Kingston 1GB DDR2 800MHz
- BIOS : EMB-6908T BIOS 1.0(12/24/2008)
- CF Card : N/A
- HDD : WD WD400 40GB 3.5" IDE HDD
- Application Software: Run Prime95 under Windows XP Professional V2002 Service Pack 3
- Take Picture Time: After Power on 2 hours.

Temperature Profile Test:

Component Side-1:



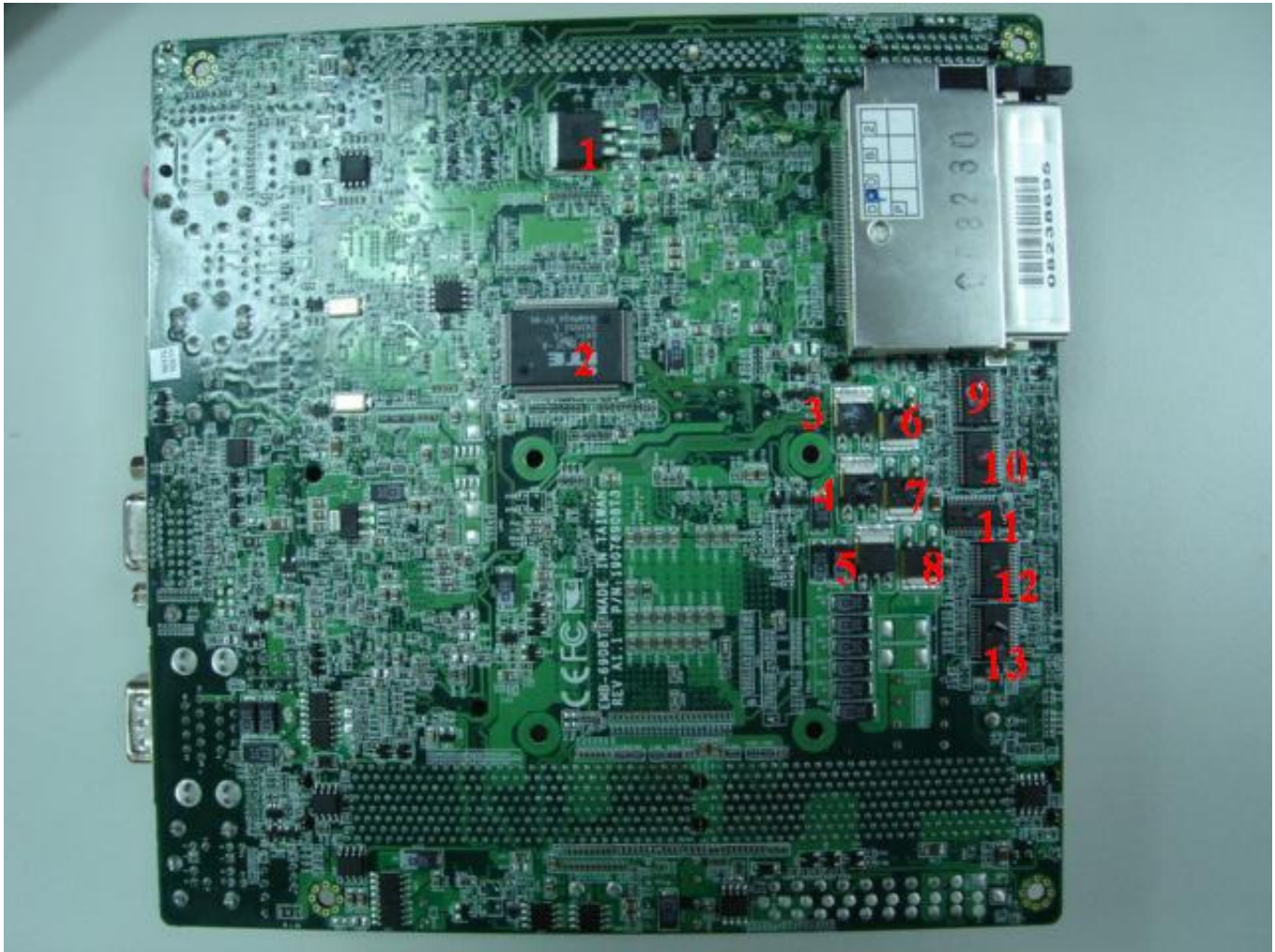
Point	Position	Describe	Tc (°C)	Tm (25.°C)	Tm (60°C)	Note
1		AMD Athlon 64 x2 3400+	95	47.0	82	
2	U7	(TF)IC.SMD.FCBGA-465.Chipset M690E.AMD.100-CG1408	95	43.6	78.6	
3	U17	(TF)IC.SMD.FCBGA-549.Chipset SB600.AMD.218S6ECLA21FG	95	41.6	76.6	

4	U5	(TF)IC.SMD.BGA 196P.GigaBit Ethernet Chipset.Intel.PC82573L	100	35.6	70.6
5	U4	(TF)IC.SMD.BGA 196P.GigaBit Ethernet Chipset.Intel.PC82573L	100	34.9	69.9
6	U14	(TF)IC.SMD.TSSOP 64P.CLOCK GENERATOR.ICS.ICS951462AGLF	115	47.2	82.2
7	U2	(TF)IC.SMD.LQFP 48P.7.1Channel HD Audio Codec.VIA.VT1708B	85	41.3	76.3
8	L8	(TF)COIL.0.68uH.+/-20%.SMD.13.8*12.8*3.5mm.DCR=2.5m Ohm.Idc=28A.GOTREND.GSTC133P-R68MF	125	33.2	68.2
9	L7	(TF)COIL.0.68uH.+/-20%.SMD.13.8*12.8*3.5mm.DCR=2.5m Ohm.Idc=28A.GOTREND.GSTC133P-R68MF	125	34.2	69.2
10	L6	(TF)COIL.0.68uH.+/-20%.SMD.13.8*12.8*3.5mm.DCR=2.5m Ohm.Idc=28A.GOTREND.GSTC133P-R68MF	125	33.8	68.8

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

Temperature Profile Test:

Component Side-2:



Point	Position	Describe	Tc (°C)	Tm (25°C)	Tm (60°C)	Note
1	U35	(TF)REG.SMD.TO-263 5A Linear Regulator.ATC.AP-1084KLA	125	35.5	70.5	
2	U34	(TF)IC.SMD.QFP128P Super I/O.ITE.IT8712F-A/IX-L	70	37.3	72.3	
3	Q52	(TF)PWR.SMD.TO-252.N-Channel Power 25V 60A MOSFET.APEC.AP70T03GH	150	35.6	70.6	

4	Q51	(TF)PWR.SMD.TO-252.N-Channel Power 25V 60A MOSFET.APEC.AP70T03GH	150	38.1	73.1	
5	Q53	(TF)PWR.SMD.TO-252.N-Channel Power 25V 60A MOSFET.APEC.AP70T03GH	150	39.2	74.2	
6	Q54	(TF)PWR.SMD.TO-252.N-Channel Power 30V 55A MOSFET.APEC.AP60N03GH	125	39.6	74.6	
7	Q55	(TF)PWR.SMD.TO-252.N-Channel Power 30V 55A MOSFET.APEC.AP60N03GH	125	41.6	76.6	
8	Q56	(TF)PWR.SMD.TO-252.N-Channel Power 30V 55A MOSFET.APEC.AP60N03GH	125	36.5	71.5	
9	U41	(TF)IC.SMD SSOP 28P.RS232 Driver ESD 15KV.INTERASIL.HIN213ECAZ	125	35.7	70.7	
10	U42	(TF)IC.SMD SSOP 28P.RS232 Driver ESD 15KV.INTERASIL.HIN213ECAZ	125	35.9	70.9	
11	U40	(TF)IC.SMD.QSOP 28P.IEEE 1284 Termination Network.CMD.PACSZ1284-04QR	85	35.7	70.7	
12	U43	(TF)IC.SMD SSOP 28P.RS232 Driver ESD 15KV.INTERASIL.HIN213ECAZ	125	32.2	67.2	
13	U44	(TF)IC.SMD SSOP 28P.RS232 Driver ESD 15KV.INTERASIL.HIN213ECAZ	125	31.4	66.4	

1.Tm (Measured operation temperature) must be less than Tc (Specified case temperature) +5 degree C

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