

# COM-915

## Thermal Image Analysis Report

Report NO : 09E080007

Release Date: Mar. 19 , 2009

2009/03/19

Issue Stamp

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## Thermal Image Analysis

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**I . Model Name: COM-915 A2.0**

**II . Description: Intel 915GME + ICH6-M  
COM Express Board**

**III . Date: March.19, 2009**

**IV. Measure Site: AAEON QE Dept.**

**V. Issued by : Jerry Tsai**

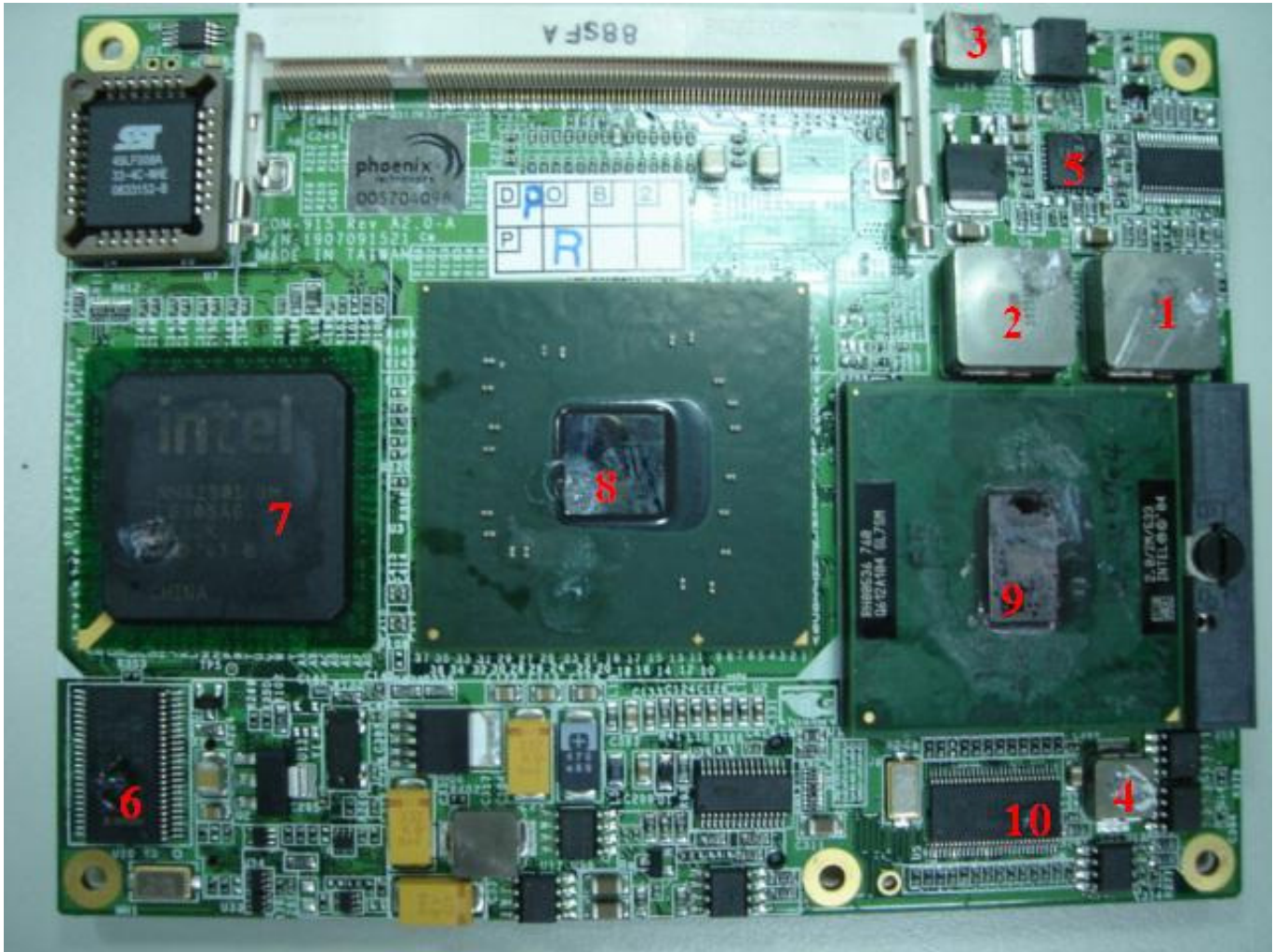
**VI.Equipment:  
PR1000(TH-046)**

**VII. Simulation Environment:**

- Temperature: Component Side-1 :25.0°C , Component Side-2 : 25.0°C
- CPU : Pentium M Dothan 2.0GHz / 2M / 533 / RH80536 / 760 / Q612A104 / SL7SM
- RAM : Transcend DDR2 667 SODIMM 2GB TS256MSQ64V6U (SAMSUNG K4T1G084QQ)
- BIOS : COM-915 A2.0 BIOS 1.0(02/18/2009)
- CF Card : N/A
- HDD : WD800BB / 80GB / 7200 / 8M / 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	L27	(TF)COIL.1.0uH.SMD.12.9*12.9*5mm.DCR=2.1m ohm.Idc=29Amp.VISHAY.HLP5050EZER1R0M01	125	38.1	73.1	
2	L26	(TF)COIL.1.0uH.SMD.12.9*12.9*5mm.DCR=2.1m ohm.Idc=29Amp.VISHAY.HLP5050EZER1R0M01	125	37.1	72.1	
3	L25	(TF)COIL.1.0uH.SMD.6.5*6.5*3mm.DCR=9m ohm.Idc=11Amp.VISHAY.IHLP-2525CZER1R0M01	125	47.6	82.6	

4	L21	(TF)INDUCTOR.3.3uH.20%.SMD DCR=12mohm Isat=27A.VISHAY.IHLP2525CZRZ3R3M01	125	65.9	100.9
5	U19	(TF)IC.SMD.QFN 28P.Power Controller.for Dual Channel DDR.Intersil.ISL6537CRZ	100	58.4	93.4
6	U10	(TF)IC.SMD.SSOP48 Chipset.INTEL.EP82562ET	135	47.5	82.5
7	U3	(TF)IC.SMD.Chipset ICH6M.Intel.NH82801FBM SL89K B2	125	37.8	72.8
8	U2	(TF)IC.SMD.Chipset Alviso 915GME.Intel.QG82915GME SLA9K	125	33.2	68.2
9	CPU	Pentium M Dothan 2.0GHz / 2M / 533 / RH80536 / 760 / Q612A104 / SL7SM	95	48.6	83.6
10	U5	(TF)IC.SMD.TSSOP 56P.CLOCK GENERATOR.ICS.ICS954206AGLFT	100	54.8	89.8
11	DDR	Transcend DDR2 667 SODIMM 2GB TS256MSQ64V6U (SAMSUNG K4T1G084QQ)	95	56.9	91.9
12	DDR	Transcend DDR2 667 SODIMM 2GB TS256MSQ64V6U (SAMSUNG K4T1G084QQ)	95	52.4	87.4

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

**Temperature Profile Test:  
Component Side-2:**



Point	Position	Describe	Tc (°C)	Tm (25°C)	Tm (60°C)	Note
1	Q6	(TF)PWR.SMD.TO252.N-Channel Power 30V 45A MOSFET.APEC.AP60T03GH	150	58.5	93.5	
2	Q5	(TF)PWR.SMD.TO-252.N-Channel Power 25V 60A MOSFET.APEC.AP70T03GH	150	44.3	79.3	
3	Q7	(TF)PWR.SMD.TO-252.N-Channel Power 25V 60A MOSFET.APEC.AP70T03GH	150	62.3	97.3	

4	C346	(TF)SP CAP.220uF.2V.-35~+10%.D(7.3*4.3*1.9mm).9mOhm SMD.Panasonic.EEFSX0D221EY	105	55.3	90.3	
5	C243	(TF)SP CAP.220uF.2V.-35~+10%.D(7.3*4.3*1.9mm).9mOhm SMD.Panasonic.EEFSX0D221EY	105	60.3	95.3	

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