CENE-9155

Intel Embedded Pentium M/Celeron M Processors SubCompact Board

Thermal Image Analysis Report

Report NO: 09E080008

Release Date: 04/07/2009

2009/04/07	*Wenyuan Yang*	*Danny Chen*
Issue Stamp	**Manager**	**Test Engineer**

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Thermal Image Analysis

Ⅰ. Model Name: GENE-9155

Ⅱ. Description: Intel Embedded Pentium M/Celeron M Processors SubCompact Board

Ⅲ. Date: 2009/04/07

Ⅳ. Measure Site: AAEON QE Dept.

Ⅴ. Issued by : Danny Chen

Ⅵ.Equipment: PR1000(TH-046)

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Ⅶ. Simulation Environment:

- •Temperature: Component Side-1 : 25.1℃, Component Side-2 : 25.1℃
- •CPU : Intel ® Pentium M processor 2.00GHz
- •RAM : Transcend DDR2 667 SODIMM 1GB
- •BIOS : GENE-9155 BIOS Rev 1.0 (11/12/2008)
- •CF Card : N/A
- •HDD : Western Digital WD800BB 80GB
- •Application Software: Run Prime95 under Windows XP Professional V2002 Service Pack 3
- •Take Picture Time: After Power on 2 hours.

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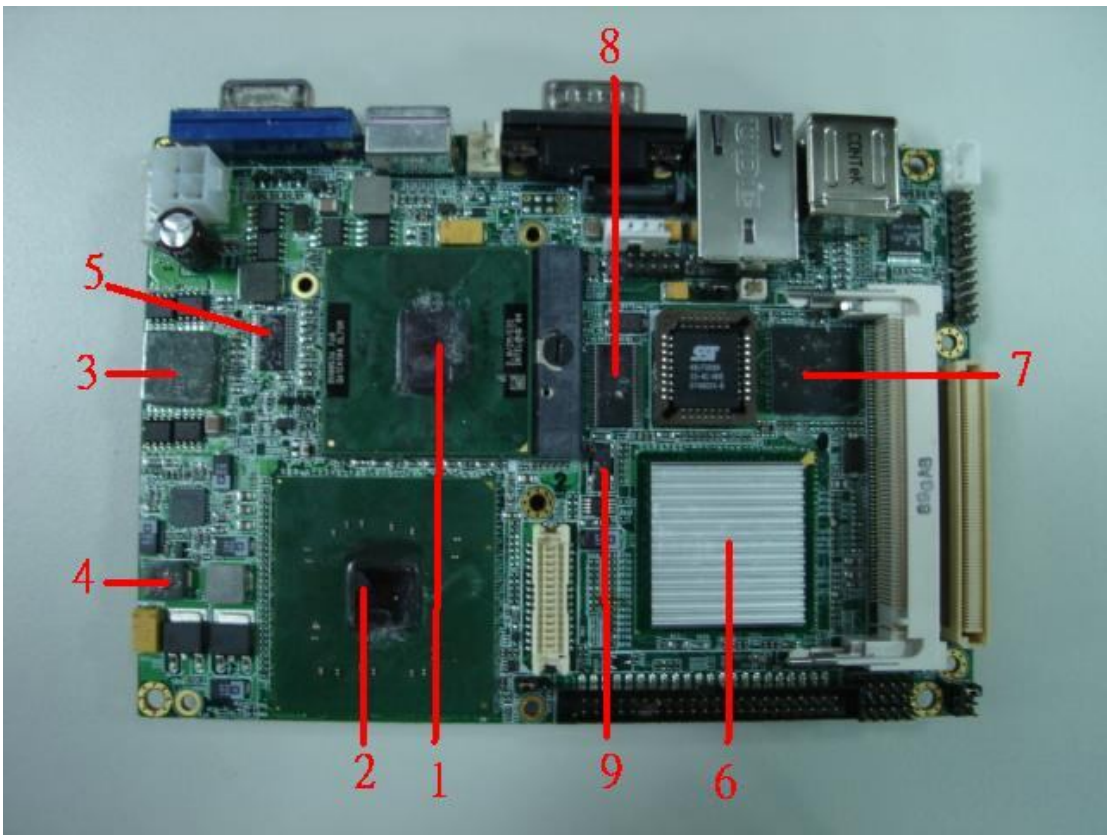
Temperature Profile Test:

Component Side-1:



Point	Position	Describe	Tc (℃)	Tm (25.1℃)	Tm (60℃)	Note
1	U1	Intel ® Pentium M processor 2.00GHz	100	37.2	72.1	
2	U3	(TF)IC.SMD.Chipset Alviso 915GME.Intel.QG82915GME SLA9K;EE-A080507;14S4291503;TWN	105	35	69.9	
3	L55	(TF)COIL.0.68uH.+/-20%.SMD.13.8*12.8*3.5mm.DCR=2.5m Ohm.Idc=28A.GOTREND.GSTC133P-R68MF;EE-A060595;1211106802;TWN	125	34.8	69.7	
4	L53	(TF)COIL.2.2uH.SMD.7.3*6.8*3.0mm.+/-20%.DCR=18mohm.Irms=8 Amp.GOTREND.GSTC063P-2R2MN;EE-A081766;121110226C;TWN	125	58.4	93.3	

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5	U46	(TF)IC.SMD.TSSOP 38P.IMVP4 Single Phase PWM.Intersil.ISL6218CVZ;EE-A041734;14S4621800;TWN	115	50	84.9	
6	U5	(TF)IC.SMD.Chipset ICH6M.Intel.NH82801FBM SL89K B2;EE-A051169;14S428010B;TWN	95	44.2	79.1	
7	U13	(TF)IC.SMD.BGA 196P.GigaBit Ethernet Chipset.Intel.PC82573L;EE-A061536;14S4825730;TWN	125	37	71.9	
8	U8	(TF)IC.SMD.TSSOP 56P.CLOCK GENERATOR.ICS.ICS954206AGLFT;EE-A060039;14S3420600;TWN	115	49.3	84.2	
9	Y1	(TF)X'TAL.32.768KHz.SMD.4P.12.5pf/20ppm.32721.EPSON.MC306; EE-A980439;1231332721;TWN	125	35	69.9	

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

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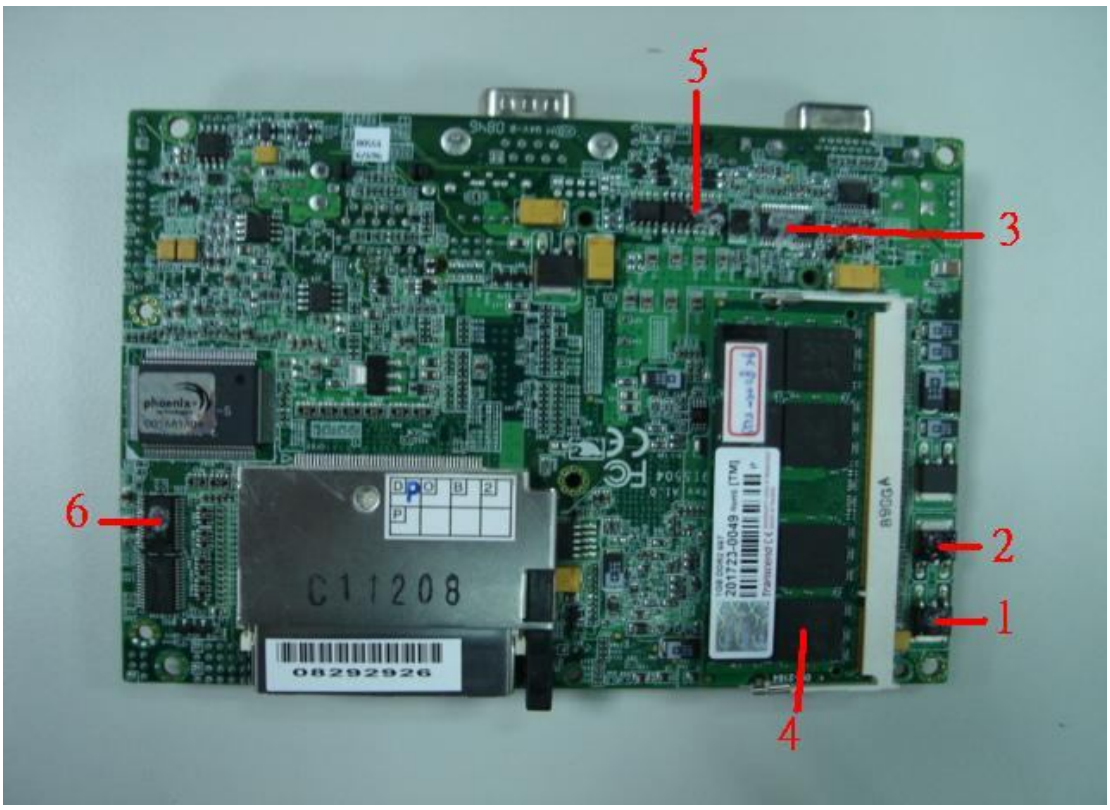
Component Side-2



Point	Position	Describe	Tc (℃)	Tm (25.1℃)	Tm (60℃)	Note
1	Q23	(TF)PWR.SMD.TO-252.N-Channel Power 25V 60A MOSFET.APEC.AP70T03GH;EE-A031083;1315700310;TWN	150	62.8	97.7	
2	Q22	(TF)PWR.SMD.TO-252.N-Channel Power 30V 55A MOSFET.APEC.AP60N03GH;EE-A031082;1315600311;TWN	125	51.4	86.3	
3	U35	(TF)IC.SMD.TSSOP.28Pin.Two Phase.Switching PWM Controller.NS.LM2642MTC;EE-A071223;14S2264200;TWN	100	43.1	78	
4	RAM	Transcend DDR2 667 SODIMM 1GB TS128MSQ64V6J	------	51	85.9	
5	U51	(TF)PWR.SMD.SO8.N-Channel.30V.12A.ANPEC.APM4410KC-TRL; EE-A060270;1315441014;TWN	125	36.6	71.5	
6	U21	(TF)IC.SMD.SSOP RS232 Driver ESD 15KV.AD.ADM213EARSZ;EE-A970562;14S4021301;TWN	115	33	67.9	

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

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