

EPIC-5536

AMD Geode LX + CS5536

EPIC Board

Thermal Image Analysis Report

Report NO: 08E080012

Release Date: June. 9, 2008

2008/06/13

Issue Stamp

Wenyuan Yang

Manager

Tina Wang

Test Engineer

Thermal Image Analysis

I . Model Name: EPIC-5536 A1.0

**II . Description: AMD Geode LX + CS5536
EPIC Board**

III . Date: June.06, 2008

IV. Measure Site: AAEON QE Dept.

V. Issued by : Tina Wang

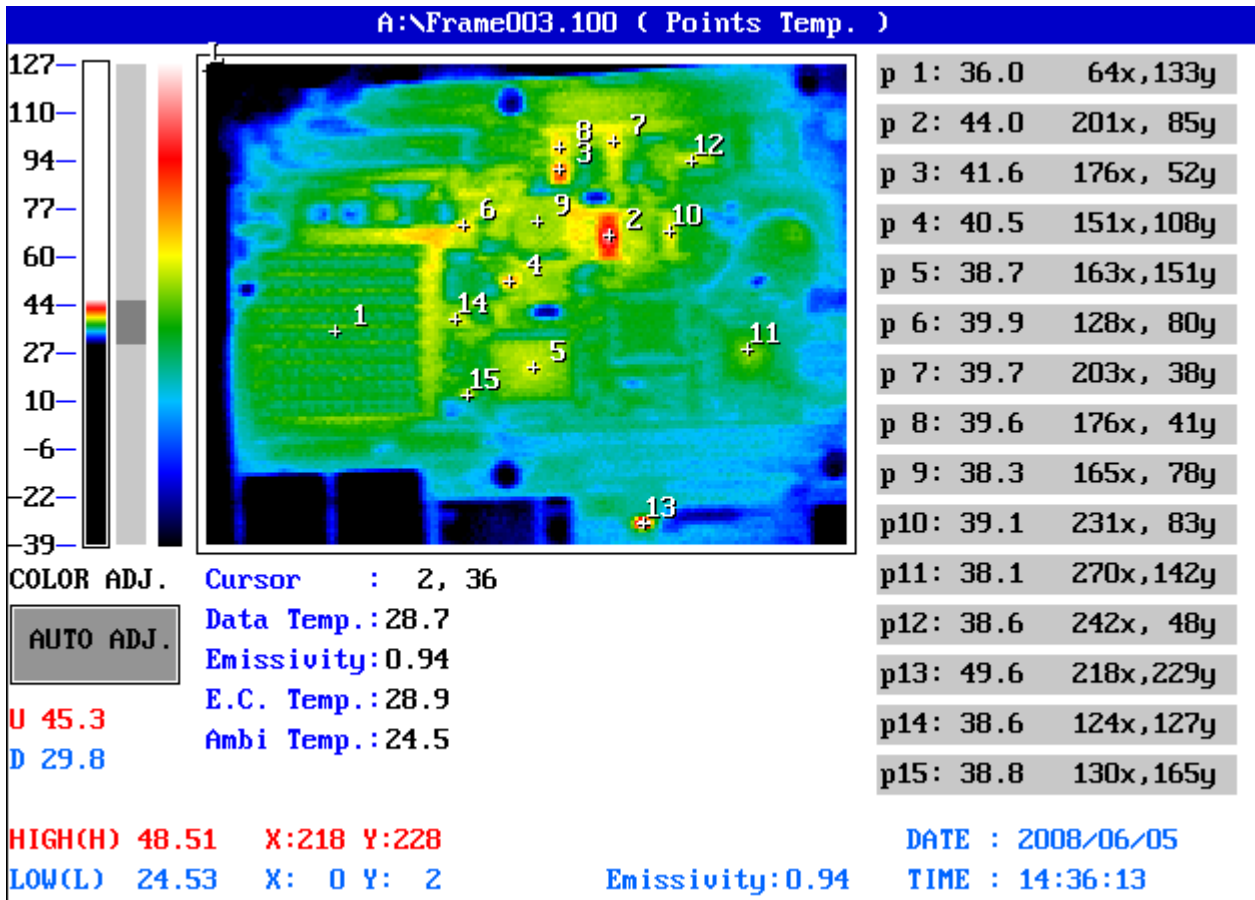
**VI. Equipment:
TVS-100 series by NIPPON AVIONICS CO., LTD.**

VII. Simulation Environment:

- Temperature: Component Side-1 : 24.5°C , Component Side-2 : 26.1°C
- CPU : Geode-LX 500MHz
- RAM : Transcend DDR 333 SODIMM 512MB
- BIOS : EPIC-5536 BIOS Rev 1.0(03/17/2008)
- CF Card : N/A
- HDD : Westrern Digital WD800JB-00JJC0 80GB 3.5" IDE HDD
- Application Software: Run Media Player to Play Film
- Take Picture Time: After Power on 2 hours.

Temperature Profile Test:

Component Side-1:

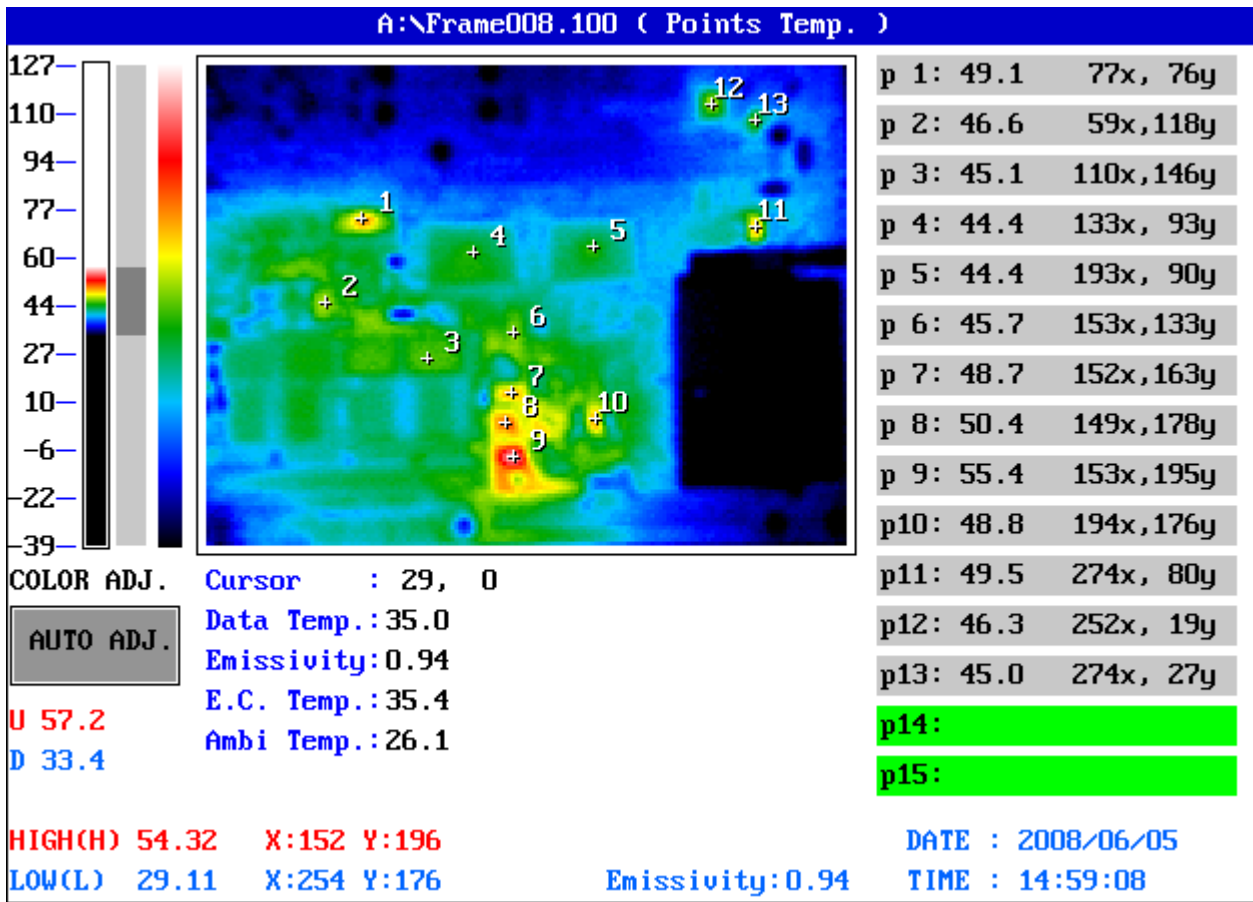


Point	Position	Describe	Tc (°C)	Tm (24.5°C)	Tm (60°C)	Note
1	U12	(TF)AMD CPU.BGU481.LX-800.500MHz.1.25V. AMD.ALXD800EEXJ2VD C3;EE-A080020;14S4800004;TWN	85	36	71.5	
2	U28	(TF)IC.SMD.SSOP28.Clock Generator.ICS.MK1491-09FLN	100	44	79.9	
3	U14	(TF)PWR.SMD SO8.N-Channel MOSFET 30V 15A.FAIRCHILD.FDS8896	125	41.6	77.1	
4	U20	(TF)IC.SMD MLPD-10.PWM BUCK CONTROLLER.IR.IR3624MTRPBF	125	40.5	76	

5	U42	(TF)IC.SMD QFP 128P.PCI Ethernet Chip 10/100BaseT.REALTEK.RTL8100C-LF	100	38.7	74.2
6	U22	(TF)IC.SMD MLPD-10.PWM BUCK CONTROLLER.IR.IR3624MTRPBF	125	39.9	75.4
7	U18	(TF)IC.SMD.SOP 8P.Switching PWM Controller.Richtek.RT9214PS	100	39.7	75.2
8	U13	(TF)IC.SMD.SOP 8P.Switching PWM Controller.Richtek.RT9214PS	100	39.6	75.1
9	L2	(TF)COIL.3.3uH.SMD.13.8*12.8*5.0mm.DCR=7.7m ohm.Irms=15Amp.GOTREND.GSTC135P-3R3MF	100	38.3	73.8
10	U36	(TF)IC.SMD SSOP 28Pin.Extended PCI Arbiter Buffer.ITE.IT8209R	100	39.1	74.6
11	U46	(TF)IC.SMD TFBGA.160P.PCI to ISA Bridge Chip.ITE.IT8888G-L	100	38.1	73.6
12	U40	(TF)IC.SMD SSOP 28Pin.Extended PCI Arbiter Buffer.ITE.IT8209R	100	38.6	74.1
13	U56	(TF)IC.SMD.SSOP8 8PIN.RENESAS.HD74LV2G125A	115	49.6	85.1
14	U41	(TF)IC.SMD.SOIC 8P.2.5V 1K bits.Microchip.93LC46B/SN	85	38.6	74.1
15	Q41	(TF)PNP.SMD.SOT23 Low Frequency Transistor.ROHM.2SB1197K(R)	125	38.8	74.3

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

Component Side-2:



Point	Position	Describe	Tc (°C)	Tm (26.1°C)	Tm (60°C)	Note
1	U62	(TF)IC.SMD.TSSOP56.FlatLink Transmitter.TI.SN75LVDS83	100	49.1	83	
2	C619	(TF)POSCAP.470uF.2.5V.20%.D2(7.3*4.3*1.8).9mohm.3900mA.SMD.SANYO.2R5TPE470M9	105	46.6	80.5	
3	RAM	Transcend DDR333 SODIMM 512MB(SODDDR-021)	N/A	45.1	79	
4	U44	(TF)IC.SMD QFP 128P.PCI Ethernet Chip 10/100BaseT.REALTEK.RTL8100C-LF	100	44.4	78.3	
5	U47	(TF)IC.SMD.QFP128P Super I/O.ITE.IT8712F/KX-L	100	44.4	78.3	
6	U35	(TF)IC.SMD.SOP 16Pin PCI Arbiter.ITE.IT8208M	100	45.7	79.6	
7	U72	(TF)PWR.SMD SO-8.P-Channel MOSFET.Vgs=-4.5V/-10V.Ids=-13A.Rds=13m/9m.Vds=-30V.ANPEC.APM4429KC-TRL	125	48.7	82.6	

8	D35	(TF)D Schottky.30V.0.5A.SMD.SOD-123.ON.MBR0530T1G	100	50.4	84.3	
9	U15	(TF)PWR.SMD SO8.N-Channel MOSFET 30V 15A.FAIRCHILD.FDS8896	125	55.4	89.3	
10	U24	(TF)REG.SMD.SOT-223.1A Dropout Regulator.AMS.AMS1117-3.3	100	48.8	82.7	
11	U21	(TF)REG.SMD.SOT-223.1A Dropout Regulator.AMS.AMS1117-2.5	100	49.5	83.4	
12	U63	(TF)IC.SMD.2 Channel Audio Codec.Realtek.ALC203-LF	100	46.3	80.2	
13	Q32	(TF)REG.SMD.SOT-89.30V.100mA.Three-Terminal Low Regulator.ANPEC.APL78L05DC-TRL	100	45	78.9	

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