PFM-540I

AMD LX-800+CS5536 PC/104 Board

Thermal Image Analysis Report

Report NO: 08E080013

Release Date: Jun 27 2008

2008/06/27	*Wenyuan Yang*	*Eva Yeh*
Issue Stamp	**Manager**	**Test Engineer**

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056

Thermal Image Analysis

Ⅰ. Model Name: PFM-540I B1.0

Ⅱ. Description: AMD LX-800+CS5536 PC/104 Board

Ⅲ. Date: Jun 16 2008

Ⅳ. Measure Site: AAEON QE Dept.

Ⅴ. Issued by : Eva Yeh

Ⅵ.Equipment:

TVS-100 series by NIPPON AVIONICS CO., LTD.

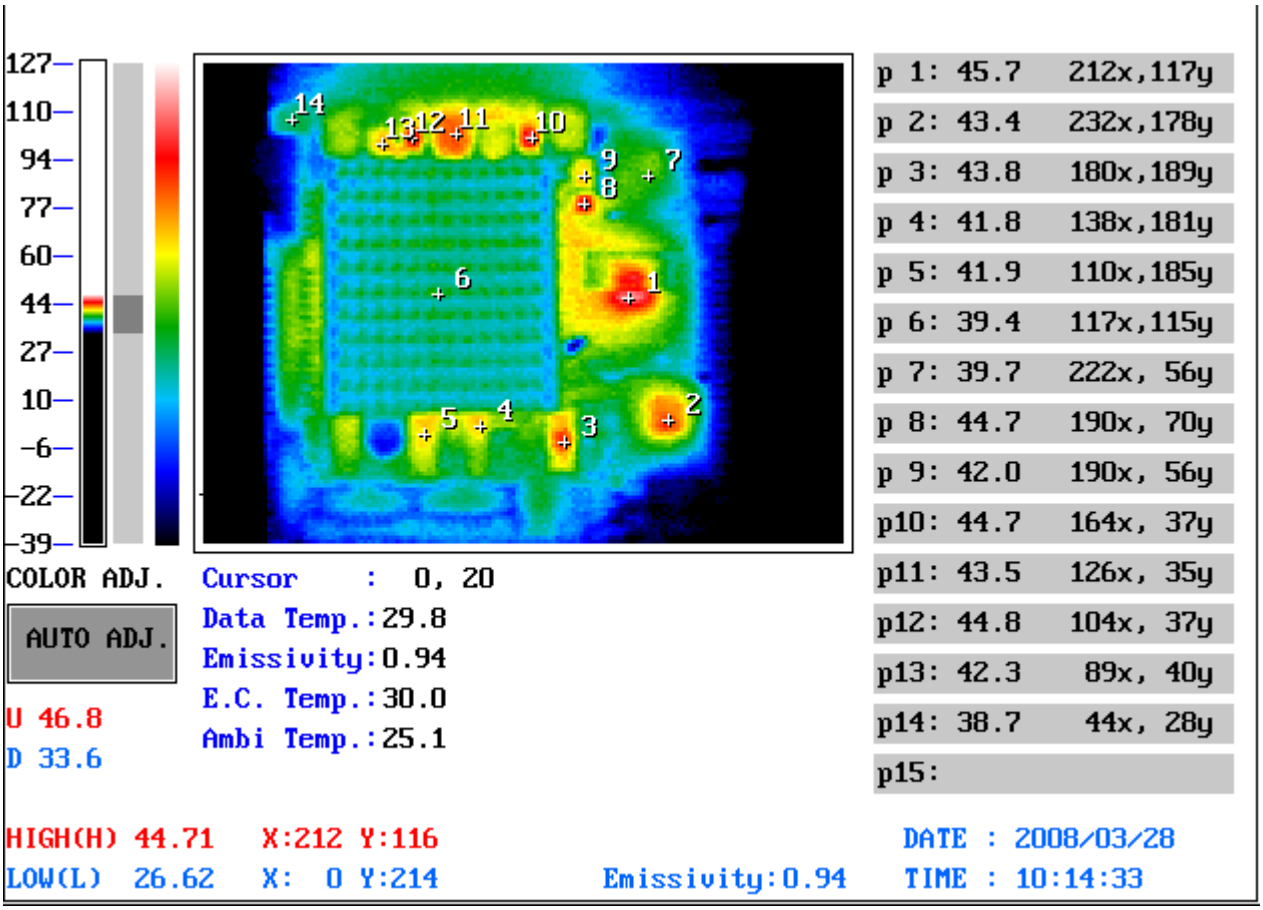
Ⅶ. Simulation Environment:

- **Temperature: Component Side-1 : 25.1℃ , Component Side-2 : 25.1℃**
- **CPU : AMD LX-800 500 MHz**
- **RAM : Kingston KVR333X64SC25 DDR333 SODIMM 512MB (NANYA NT5DS64M8BS-5T)**
- **BIOS : PFM-540I BIOS Rev B 0.8 (03/06/2008)**
- **OS : Windows XP Professional English Version V2002 Service Pack 2**
- **CF Card : N/A**
- **HDD : Seagate ST3160815A 160GB**
- **Power : ZECK ZKS-300W AT Power**
- **Application Software: Run Prime95 under Windows XP Professional V2002 Service Pack 2**
- **Take Picture Time: After Power on 2 hours.**

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056

Temperature Profile Test:

Component Side-1:



Point	Position	Describe	Tc (℃)	Tm (25.1℃)	Tm (60℃)	Note
1	U6	(TF)IC.SMD 208PBGA.I/O Companion.Multi-Function South Bridge.AMD.CS5536AD;EE-A061313;14S4553600;TWN	110	45.7	80.6	
2	U7	(TF)IC.SMD PBGA 196P.PCI Ethernet 10/100BaseT.Intel.LU82551ER;EE-A031178;14S4255101;TWN	85	43.4	78.3	
3	U10	(TF)IC.SMD.SSOP28.Clock Generator.ICS.MK1491-09FLN;EE-A051233;14S3149103;TWN	100	43.8	78.7	
4	U8	(TF)IC.SMD.SO8.RS-485 Transceiver.Analog.ADM485ARZ;EE-A071696;14S4048503;TWN	85	41.8	76.7	
5	U11	(TF)IC.SMD.SSOP RS232 Driver ESD 15KV.AD.ADM213EARSZ;EE-A970562;14S4021301;TWN	85	41.9	76.8	
6	U5	(TF)AMD CPU.BGU481.LX-800.500MHz.1.25V. AMD.ALXD800EEXJ2VD C3;EE-A080020;14S4800004;TWN	85	39.4	74.3	
7	U3	(TF)IC.SMD TFBGA.160P.PCI to ISA Bridge Chip.ITE.IT8888G-L;EE-A051091;14S4888801;TWN	70	39.7	74.6	

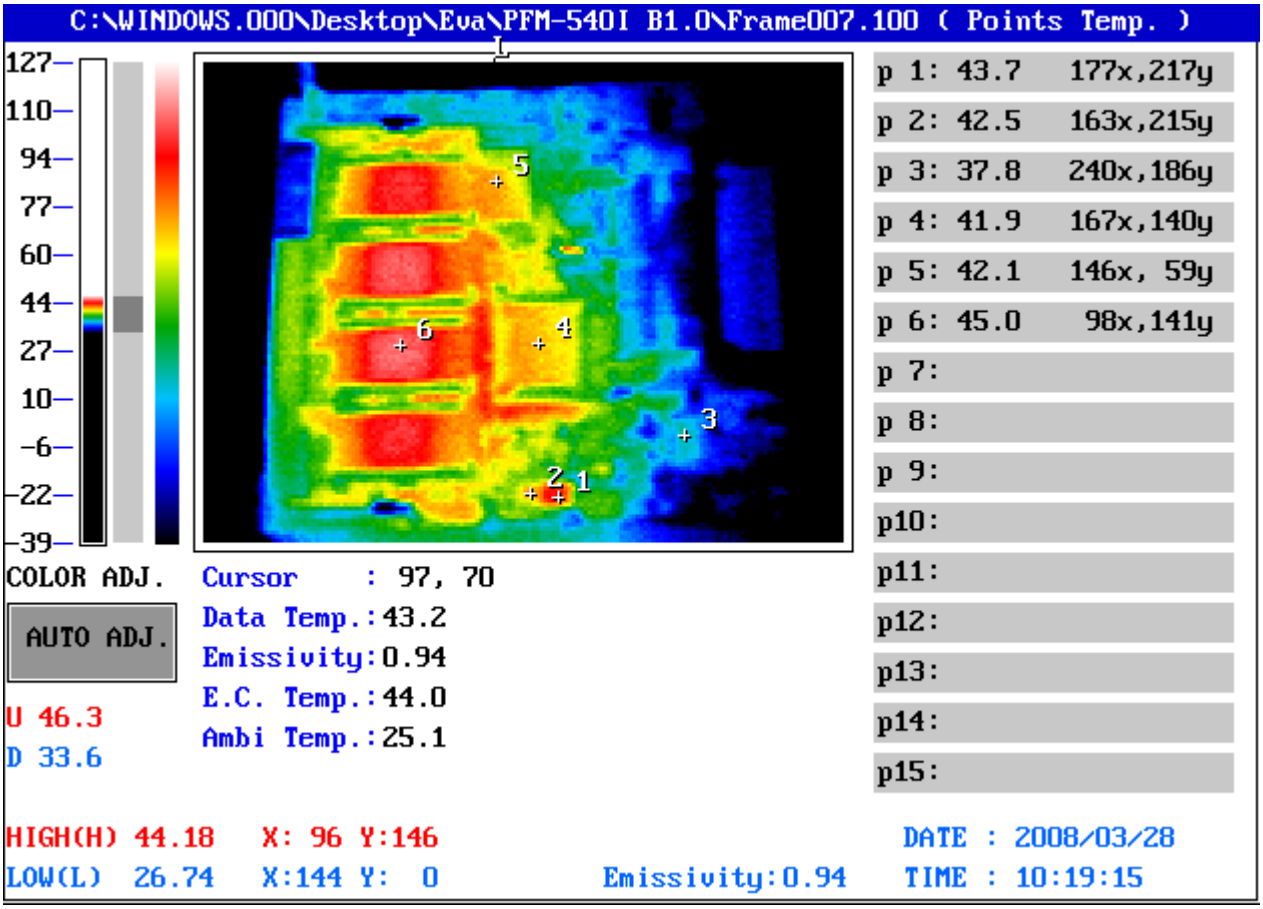
AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056

8	**U4**	(TF)IC.SMD MLPD-10.PWM BUCK CONTROLLER. IR.IR3624MTRPBF;EE-A061341;14S2362400;TWN	**125**	**44.7**	**79.6**	
9	**Q2**	(TF)Dual N-Channel.SO-8.SMD.Vds=30V.Ids=6A.Rds=21/27mohm.Vgs=10/4.5V.ANPEC.APM7313KC-TRL;EE-A060563;1315731310;TWN	**125**	**42.0**	**76.9**	
10	**U2**	(TF)IC.SMD MLPD-10.PWM BUCK CONTROLLER.IR.IR3624MTRPBF;EE-A061341;14S2362400;TWN	**125**	**44.7**	**79.6**	
11	**L3**	(TF)COIL.1.5uH.Irms=9A.Isat=18A.20%.SMD(7.3x6.8x3.0).2pin.RDC=15m Ohm.GOTREND.GSTC063P-1R5MN; EE-A061612;121110156A;TWN	**125**	**43.5**	**78.4**	
12	**U1**	(TF)IC.SMD MLPD-10.PWM BUCK CONTROLLER.IR.IR3624MTRPBF;EE-A061341;14S2362400;TWN	**125**	**44.8**	**79.7**	
13	**Q1**	(TF)Dual N-Channel.SO-8.SMD.Vds=30V.Ids=6A.Rds=21/27mohm.Vgs=10/4.5V.ANPEC.APM7313KC-TRL;EE-A060563;1315731310;TWN	**125**	**42.3**	**77.2**	
14	**TC1**	(TF)SP CAP.[8.2μF～470μF].[2V～8V].20%.SMD.Panasonic.EEF/ECG 系列(耐溫 260℃);EE-A060158;118*****8*;TWN	**105**	**38.7**	**73.6**	

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

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056

Component Side-2:



Point	Position	Describe	Tc (℃)	Tm (25.1 ℃)	Tm (60℃)	Note
1	TC3	(TF)SP CAP.[8.2μF～470μF].[2V～8V].20%.SMD.Panasonic.EEF/ECG 系列(耐溫 260℃);EE-A060158;118*****8*;TWN	105	43.7	78.6	
2	Q7	(TF)Dual N-Channel.SO-8.SMD.Vds=30V.Ids=6A.Rds=21/27mohm.Vgs=10/4.5V.ANPEC.APM7313KC-TRL;EE-A060563;1315731310;TWN	125	42.5	77.4	
3	U16	(TF)IC.SO8 SMD.Voltage Detecting.System Resetting IC.MITSUBISHI.M51957A;EE-A060753;14S4195710;TWN	85	37.8	72.7	
4	N/A	(TF)IC.SMD.PLCC 32P.8M Bit Flash Memory.SST.49LF008A-33-4C-NHE;EE-A070587;14S6200800;TWN	85	41.9	76.8	
5	U28	(TF)IC.SMD.VTQF-128Pin.Super I/O.SMSC.SCH3114-NU;EE-A080482;14S4311401;TWN	100	42.1	77	
6	Memory	Kingston KVR333X64SC25 DDR333 SODIMM 512MB (NANYA NT5DS64M8BS-5T)	N/A	45.0	79.9	

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056

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

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1056