

PFM-541IWT

AMD LX + CS5536

PC/104 Board

Thermal Image Analysis Report

Report NO : 08E080019

Release Date: Aug. 4 , 2008

2008/08/04

Issue Stamp

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Manager

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Thermal Image Analysis

I . Model Name: PFM-541IWT A0.1

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

III . Date: Aug.4, 2008

IV . Measure Site: AAEON QE Dept.

V . Issued by : Jerry Tsai

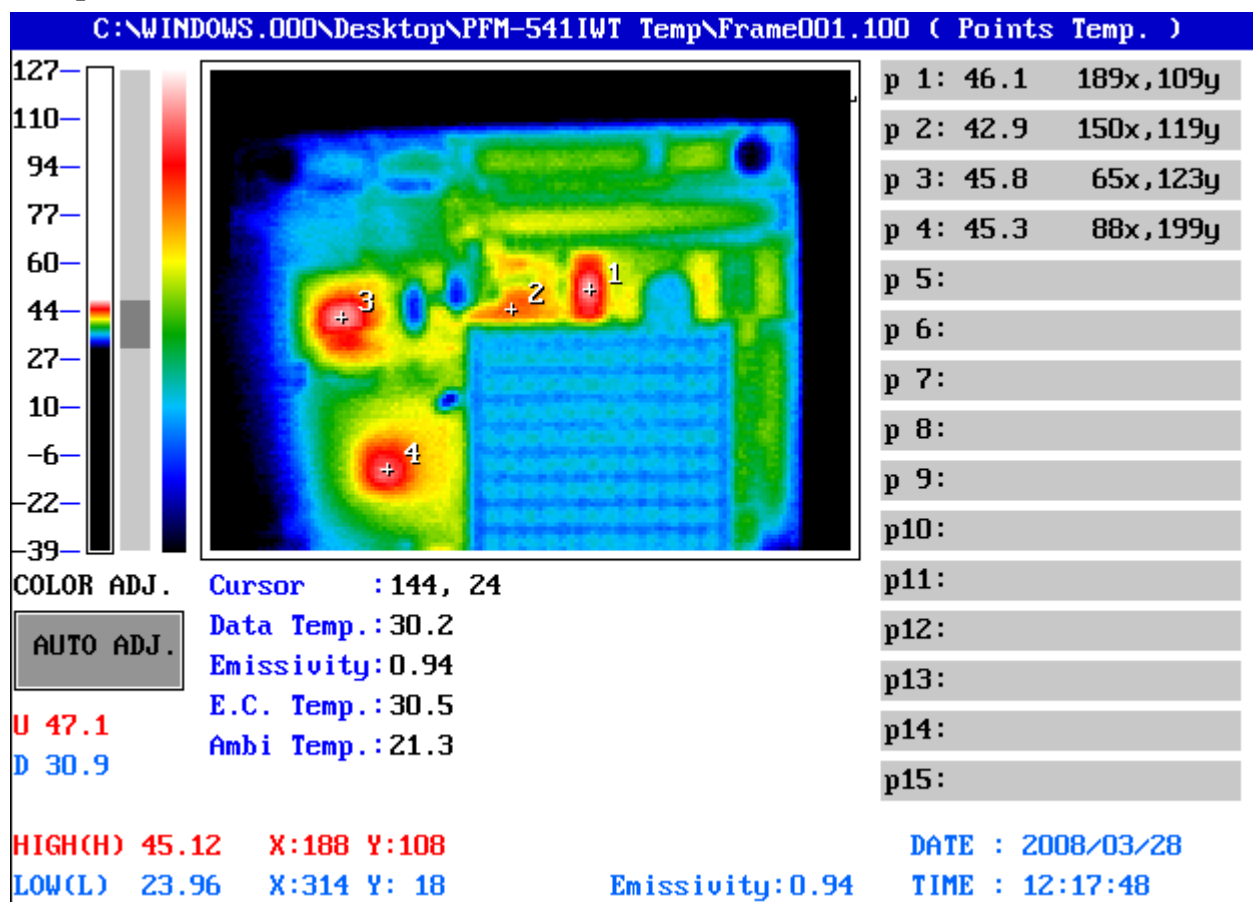
VI.Equipment:
TVS-100 series by NIPPON AVIONICS CO., LTD.

VII. Simulation Environment:

- Temperature: Component Side-1 : 21.3℃ , Component Side-2 : 23.3℃
Component Side-3 : 24.4℃
- CPU : Geode LX 500MHz
- RAM : on Board DDR400 256MB
- BIOS : PFM-541IWT BIOS Rev 0.41 (03/17/2008)
- CF Card : N/A
- HDD : SEAGATE ST340016A 40G 40GB 3.5" IDE HDD
- Application Software: Run Prime95 under Windows XP Professional V2002 Service Pack 2
- Take Picture Time: After Power on 2 hours.

Temperature Profile Test:

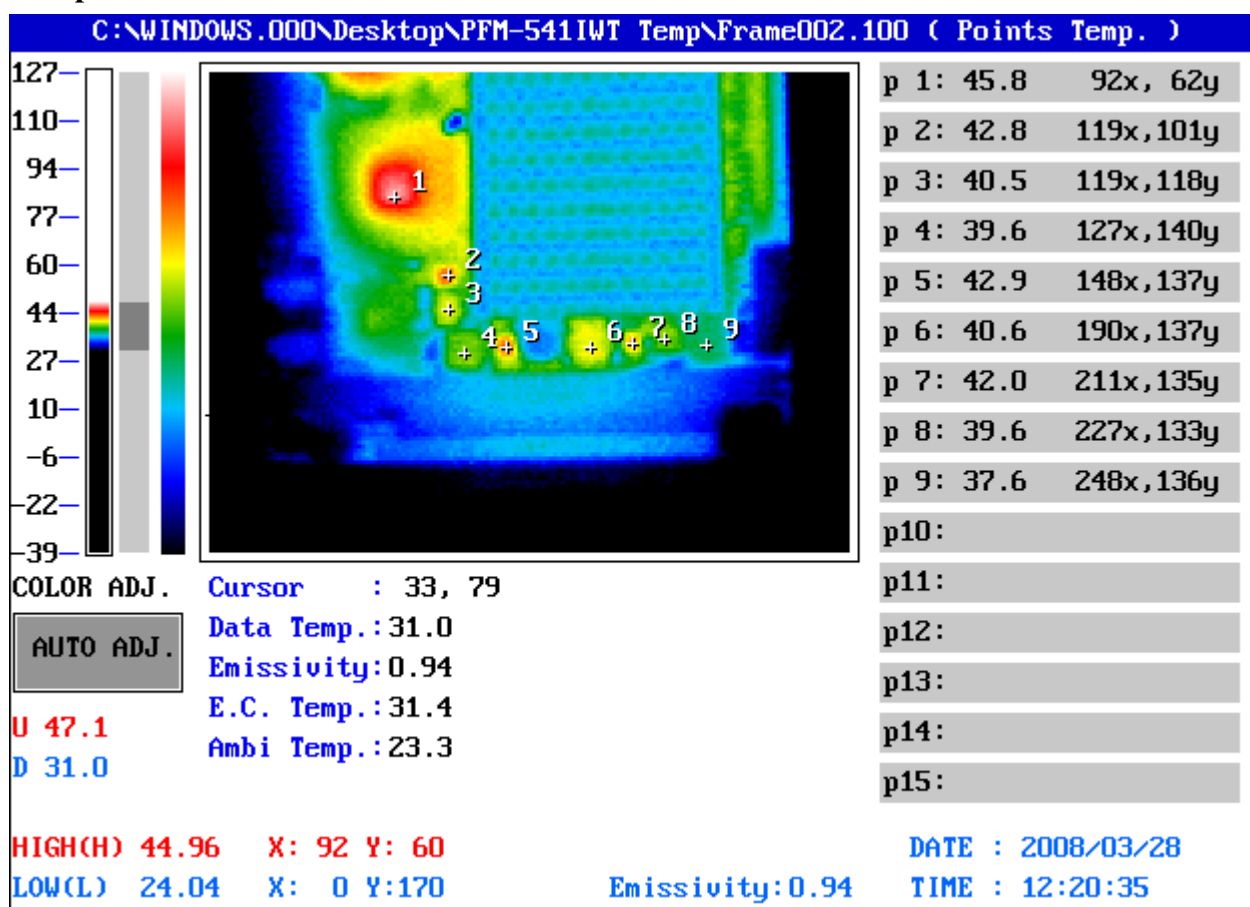
Component Side-1:



Point	Position	Describe	Tc (°C)	Tm (21.3 °C)	Tm (60°C)	Note
1	U10	(TF)IC.SMD.SSOP28.Clock Generator.ICS.MK1491-09FLN;EE-A051233;14S3149103;TWN	100	46.1	84.8	
2	U23	(TF)IC.SMD.SOIC 8P.2.5V 1K bits.Microchip.93LC46B/SN;EE-A990454;14S6334610;TWN	100	42.9	81.6	
3	U7	(TF)IC.SMD PBGA 196P.PCI Ethernet 10/100BaseT.Intel.LU82551ER;EE-A031178;14S4255101;TWN	85	45.8	84.5	
4	U6	(TF)IC.SMD 208PBGA.I/O Companion.Multi-Function South Bridge.AMD.CS5536AD;EE-A061313;14S4553600;TWN	85	45.3	84	

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:



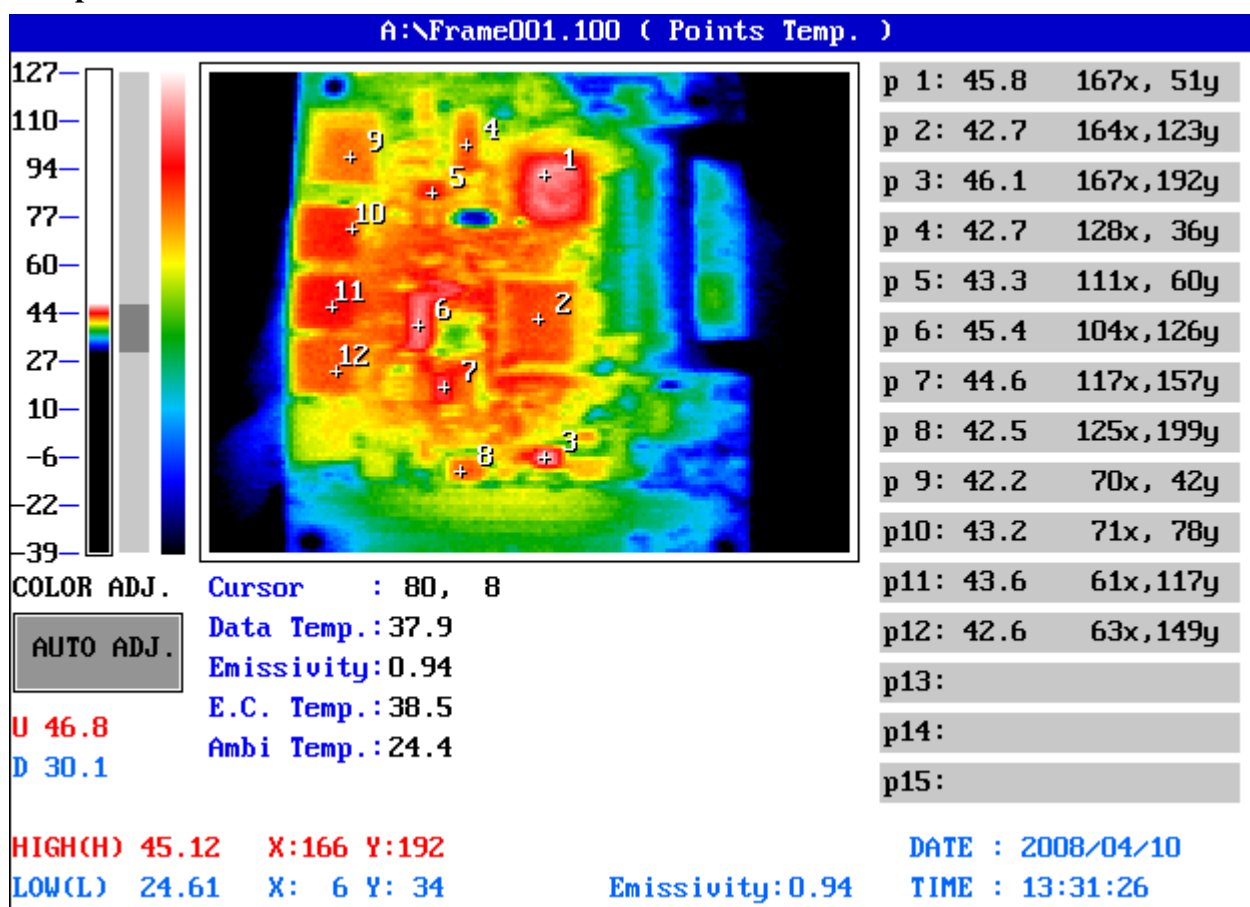
Point	Position	Describe	Tc (°C)	Tm (23.3 °C)	Tm (60°C)	Note
1	U6	(TF)IC.SMD 208PBGA.I/O Companion.Multi-Function South Bridge.AMD.CS5536AD;EE-A061313;14S4553600;TWN	85	45.8	82.5	
2	U1	(TF)IC.SMD MLPD-10.PWM BUCK CONTROLLER.IR.IR3624MTRPBF;EE-A061341;14S2362400;TWN	100	42.8	79.5	
3	Q1	(TF)Dual N-Channel.SO-8.SMD.Vds=30V.Ids=6A.Rds=21/27mohm.Vgs=10/4.5V .ANPEC.APM7313KC-TRL;EE-A060563;1315731310;TWN	125	40.5	77.2	
4	L1	(TF)COIL.1.5uH.Irms=9A.Isat=18A.20%.SMD(7.3x6.8x3.0).2pin.RD C=15m Ohm.GOTREND.GSTC063P-1R5MN;EE-A061612;121110156A;TW N	125	39.6	76.3	
5	U2	(TF)IC.SMD MLPD-10.PWM BUCK CONTROLLER.IR.IR3624MTRPBF;EE-A061341;14S2362400;TWN	100	42.9	79.6	

6	L2	(TF)COIL.1.5uH.Irms=9A.Isat=18A.20%.SMD(7.3x6.8x3.0).2pin.RD C=15m Ohm.GOTREND.GSTC063P-1R5MN;EE-A061612;121110156A;TW N	125	40.6	77.3	
7	U4	(TF)IC.SMD MLPD-10.PWM BUCK CONTROLLER.IR.IR3624MTRPBF;EE-A061341;14S2362400;TWN	100	42.0	78.7	
8	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	39.6	76.3	
9	L3	(TF)COIL.1.5uH.Irms=9A.Isat=18A.20%.SMD(7.3x6.8x3.0).2pin.RD C=15m Ohm.GOTREND.GSTC063P-1R5MN;EE-A061612;121110156A;TW N	125	37.6	74.3	

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Component Side-3:



Point	Position	Describe	Tc (°C)	Tm (24.4 °C)	Tm (60 °C)	Note
1	U34	(TF)IC.SMD PBGA 196P.PCI Ethernet 10/100BaseT.Intel.LU82551ER;EE-A031178;14S4255101;TWN	85	45.8	81.4	
2	SKT1	(TF)IC.SMD.PLCC 32P.8M Bit Flash Memory.SST.49LF008A-33-4C-NHE	85	42.7	78.3	
3	TC1	(TF)SP CAP.150uF.6.3V.20%.D(7.3*4.3*2.8mm).18mOhm SMD.Panasonic.ECGUD0J151ER	105	46.1	81.7	
4	U31	(TF)IC.SMD.SSOP RS232 Driver ESD 15KV.AD.ADM213EARSZ	150	42.7	78.3	
5	U12	(TF)IC.SMD.SO8.RS-485 Transceiver.Analog.ADM485ARZ	85	43.3	78.9	
6	U20	(TF)IC.SMD.QSOP 28P.IEEE 1284 Termination Network.CMD.PACSZ1284-04QR	85	45.4	81	
7	U19	(TF)IC.SMD.QSOP 16P.VGA ESD Protection Array.CMD.CM2009-02QR	85	44.6	80.2	

8	TC2	(TF)SP CAP.220uF.2V.-35~+10%.D(7.3*4.3*1.9mm).9mOhm SMD.Panasonic.EEFSX0D221EY	105	42.5	78.1	
9	U28	(TF)IC.SMD.VTQF-128Pin.Super I/O.SMSC.SCH3114-NU	100	42.2	77.8	
10	U21	(TF)IC.DDR-SDRAM.32M*16(bit).SMDFBGA 60 PIN 2.6V.PROMOS.V58C2512164SAJ5I	100	43.2	78.8	
11	U22	(TF)IC.DDR-SDRAM.32M*16(bit).SMDFBGA 60 PIN 2.6V.PROMOS.V58C2512164SAJ5I	100	43.6	79.2	
12	U27	(TF)IC.DDR-SDRAM.32M*16(bit).SMDFBGA 60 PIN 2.6V.PROMOS.V58C2512164SAJ5I	100	42.6	78.2	

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