

PFM-550S

VIA Mark Processor PC/104 CPU Module

Thermal Image Analysis Report

Report NO: 06E080035

Release Date: September 20, 2006

2006/09/20

Issue Stamp

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Manager

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Thermal Image Analysis

I . Model Name: PFM-550S A1.0

II . Description: VIA Mark Processor PC/104 CPU Module

III. Date: September 20, 2006

IV. Measure Site: AAEON QE Dept.

V. Issued by : Jojo Lin

VI. Equipment:

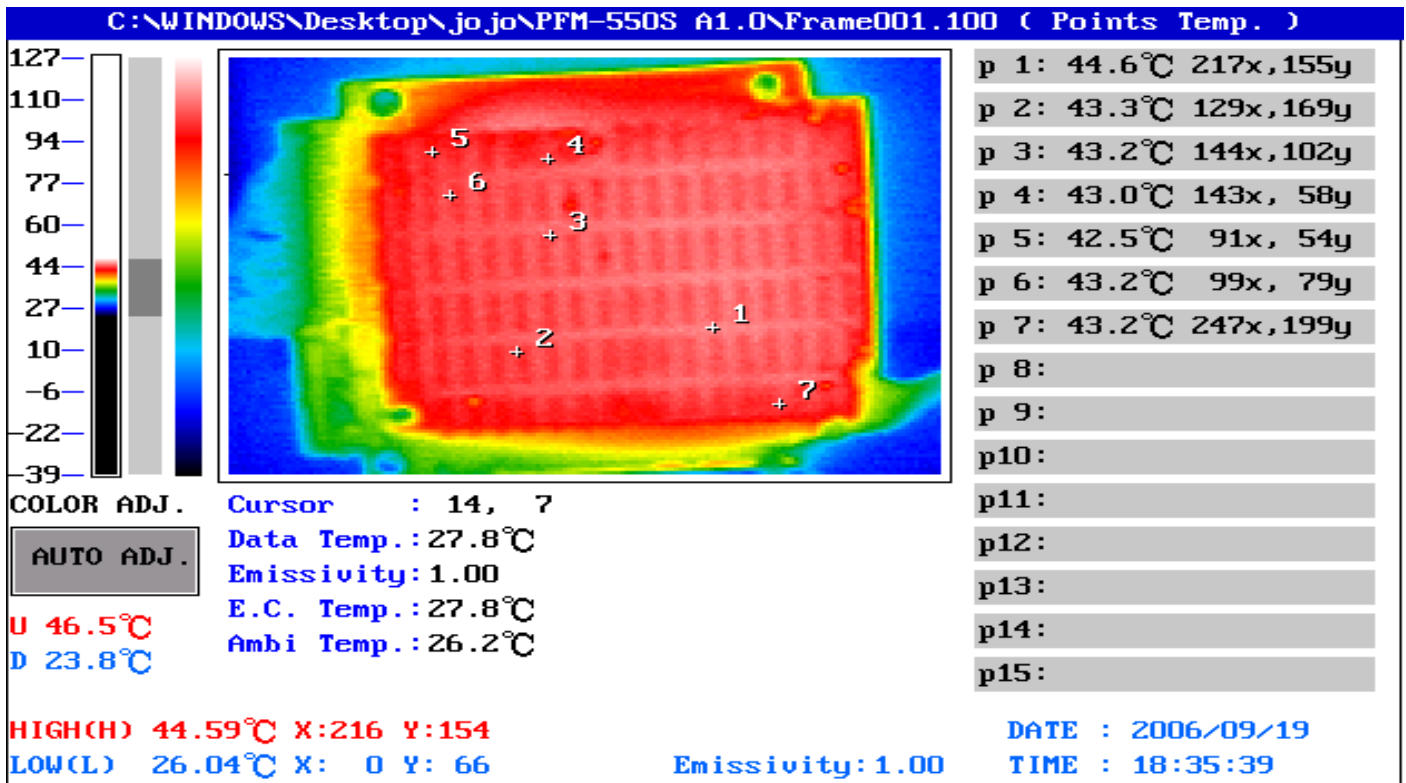
TVS-100 series by NIPPON AVIONICS CO., LTD.

VII. Simulation Environment:

- **Temperature: Component Side-1: 26.2°C , Component Side-2: 26.8°C**
- **CPU : VIA Mark C3 533A MHz / FSB: 100MHz**
- **RAM : PC133 SODIMM SDRAM 512MB (0624PR V54C3256804VDJ7) x 1 pcs**
- **BIOS : PFM-550S BIOS Rev 1.0 (05/26/2006)**
- **CF Card : N/A**
- **HDD: Seagate ST340014A 40GB 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:**1. Heat sink for PFM-550S A1.0**

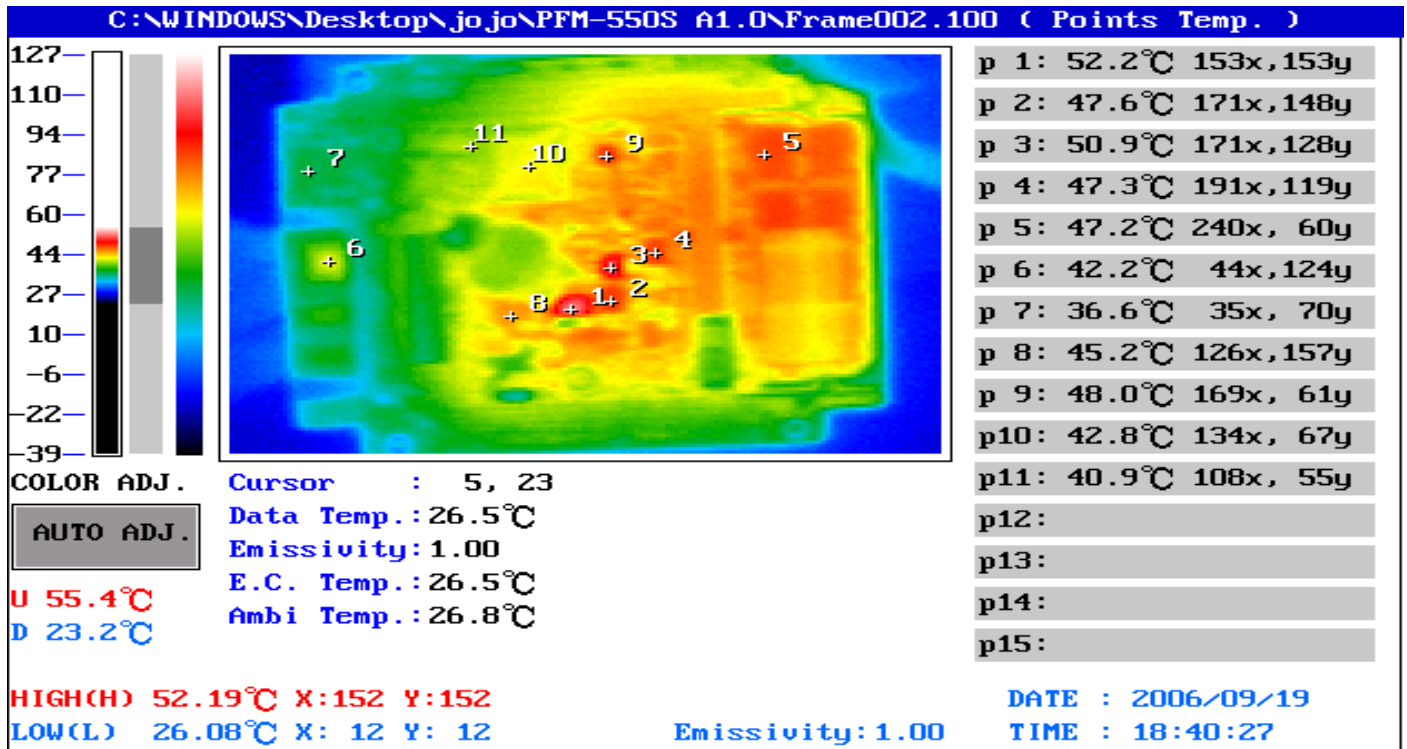
2. Component Side-1:



Point	Position	Describe	Tc (°C)	Tm (25°C)	Tm (60°C)	Note
1	U9	(TF)VIA CPU.BGA 686P. Mark 533MHz.0.9V;EE-A060308;14S4053300;TWN	85	44.6	78.4	
2	U6	(TF)IC.SMD.BGA South Bridge.VIA.VT82C686BG;EE-A050477;14S4268602;TWN	85	43.3	77.1	
3	U8	(TF)IC.SMD.LQFP 100P.PCI Ethernet CHIP.RELTEK.RTL8100BL-LF;EE-A050559;14S4810002;TWN	100	43.2	77.0	
4	U7	(TF)IC.SMD.SSOP 48Pin. Clock gen.ICS.ICS94241AFLF;EE-A060299;14S3424100;TWN	115	43.0	76.8	
5	U3	(TF)IC.SMD.10/100 Base Transformers.TAIMIC.HA-003;EE-A990173;14S3000300;TWN	115	42.5	76.3	
6	BUZZ1	(TF)Buzzer.SMD.3.3V.80mA.90dB.KINGSTATE.KSSGJ4D20;EE-A020409;1759100006;TWN	100	43.2	77.0	
7	L2	(TF)INDUCTORS.1.8uH 7.2A.+/-20%.SMD 2pin.GOTREND.GSCDK74P-1R8M;EE-A060342;1211101864;TWN	115	43.2	77.0	

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

3. Solder Side-1:



Item	Position	Describe	Tc (°C)	Tm (25°C)	Tm (60°C)	Note
1	U15	(TF)REG.SMD.TO-252.5P.3A.0.45V LOW DROPOUT REGULATOR.ANPEC.APL1582UC-TRL;EE-A040937;1314158210;TWN	100	52.2	85.4	
2	TC7	(TF)SP CAP.[8.2 μ F ~ 470 μ F].[2V ~ 8V].20%.SMD.Panasonic.EEF/ECG 系列 (可耐溫 260°C) ;EE-A060158;118*****8*;TWN	135	47.6	80.8	
3	Q11	(TF)REG.SMD SOT-223.1.5A Linear Regulator.ANPEC.APL1086-V-TRL;EE-A050238;1314108610;TWN	100	50.9	84.1	
4	TC5	(TF)SP CAP.[8.2 μ F ~ 470 μ F].[2V ~ 8V].20%.SMD.Panasonic.EEF/ECG 系列 (可耐溫 260°C) ;EE-A060158;118*****8*;TWN	135	47.3	80.5	
5	SODIMM SDRAM	PC133 SODIMM SDRAM 512MB (0624PR V54C3256804VDJ7) x 1 pcs		47.2	80.4	
6	U20	(TF)IC.SMD TQFP 44P.CS:C5E4Ch.GENE-6310.LATTICS.M4A3-64 /32-10VNC;EE-A021267;14S824A302;TWN	130	47.2	80.4	
7	U2	(TF)IC.SMD.NSOIC 8PRS-485 Transceivers.SIPEX.SP485ECN-L;EE-940827;14S4048501;TWN	100	36.6	69.8	
8	U18	(TF)IC.SMD.SOIC 8P.2.5V 1K bits.Microchip.93LC46B/SN;EE-A990454;14S6334610;TWN	155	45.2	78.4	
9	U14	(TF)IC.SMD.SO8.Step-Down DC/DC Controller.Anpec.APW7057KC-TRL;EE-A040426;14S2705700;TWN	100	48.0	81.2	
10	BIOS	(TF)IC.(1,2,4)Mbit *8 Flash Memory.SST.SST39SF Series;EE-A021023;14S62*****;TWN	100	42.8	76.0	
11	U27	(TF)IC.SMD.TSSOP 14P.Buffer w/Open-Drain Output.TI.SN74LVC07APWR;EE-A060053;14S5A00703;TWN	115	40.9	74.1	

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