

PFM-800P

Intel ULV Celeron M PCI-104 CPU Module

Thermal Image Analysis Report

Report NO: 08E080014

Release Date: June 17, 2008

2008/06/17

Issue Stamp

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Manager

Allen Hsu

Test Engineer

Thermal Image Analysis

I . Model Name: PFM-800P Rev A1.1

II . Description: Intel ULV Celeron M PCI-104 CPU Module

III . Date: 2008/06/17

IV. Measure Site: AAEON QE Dept.

V. Issued by : Allen Hsu

VI. Equipment:

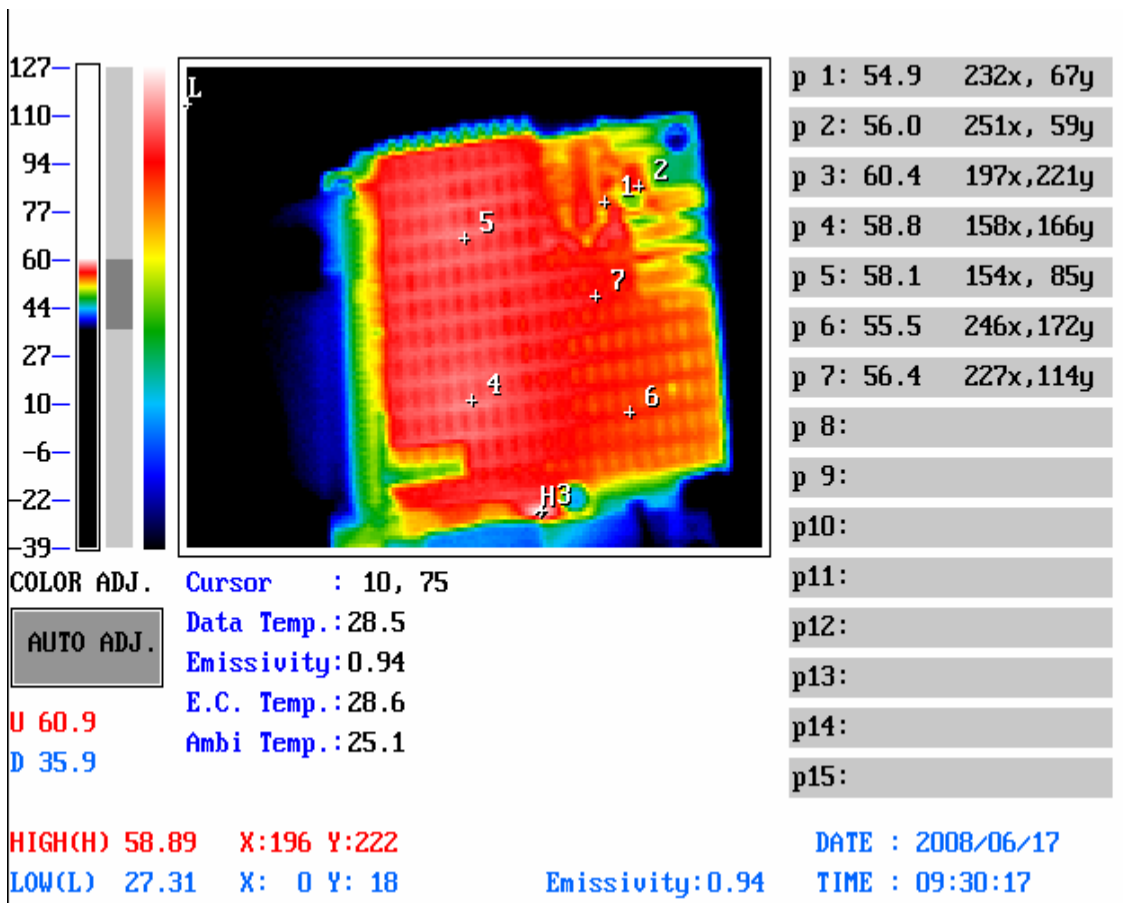
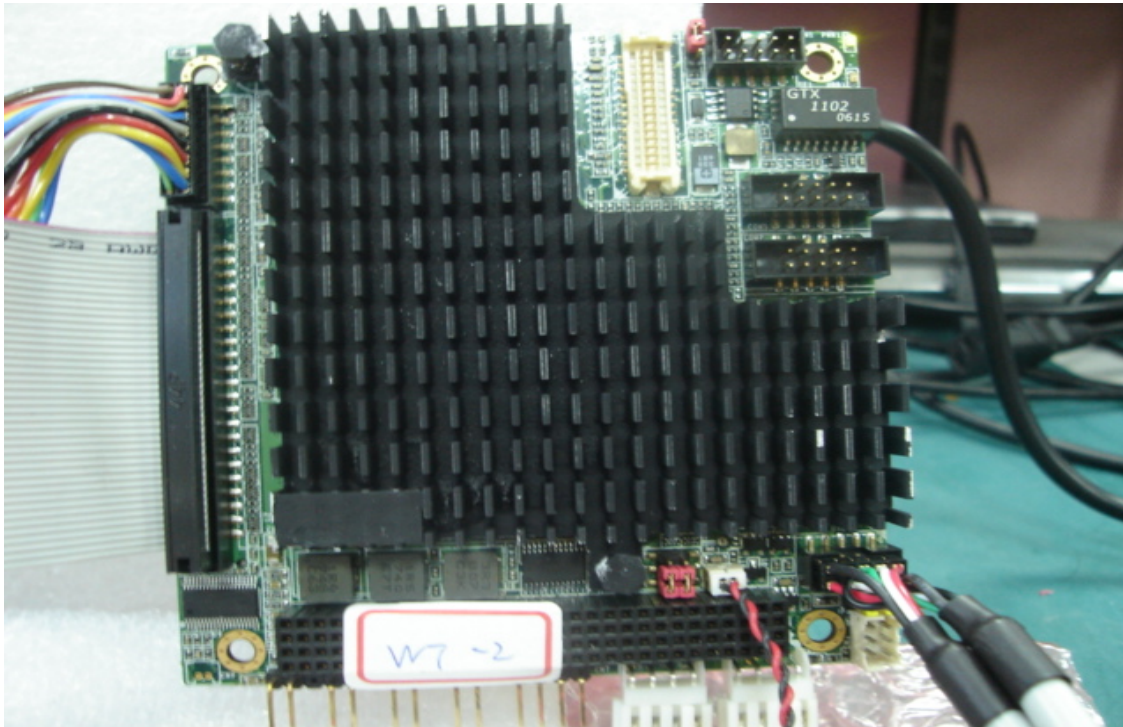
TVS-100 series by NIPPON AVIONICS CO., LTD.

VII. Simulation Environment:

- Temperature: Component Side-1 : 25.1°C , Component Side-2 : 25.5°C
- CPU : Intel(R) Celeron(R) M CPU 600MHz/ 1GHz
- RAM : Kingston DDR SO-DIMM 333 512Mb
- BIOS : PFM-800P BIOS Rev.1.0 (03/07/2008)
- CF Card : N/A
- HDD : Seagate IDE 2.5" H.D 40G ST940815A
- Application Software: Run Prime95 under Windows XP Professional V2002 Service Pack 3
- Take Picture Time: After Power on 2 hours.

Temperature Profile Test:

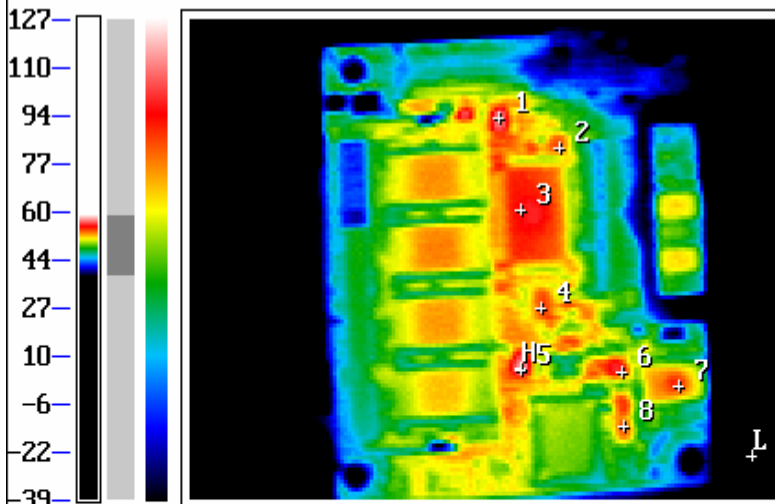
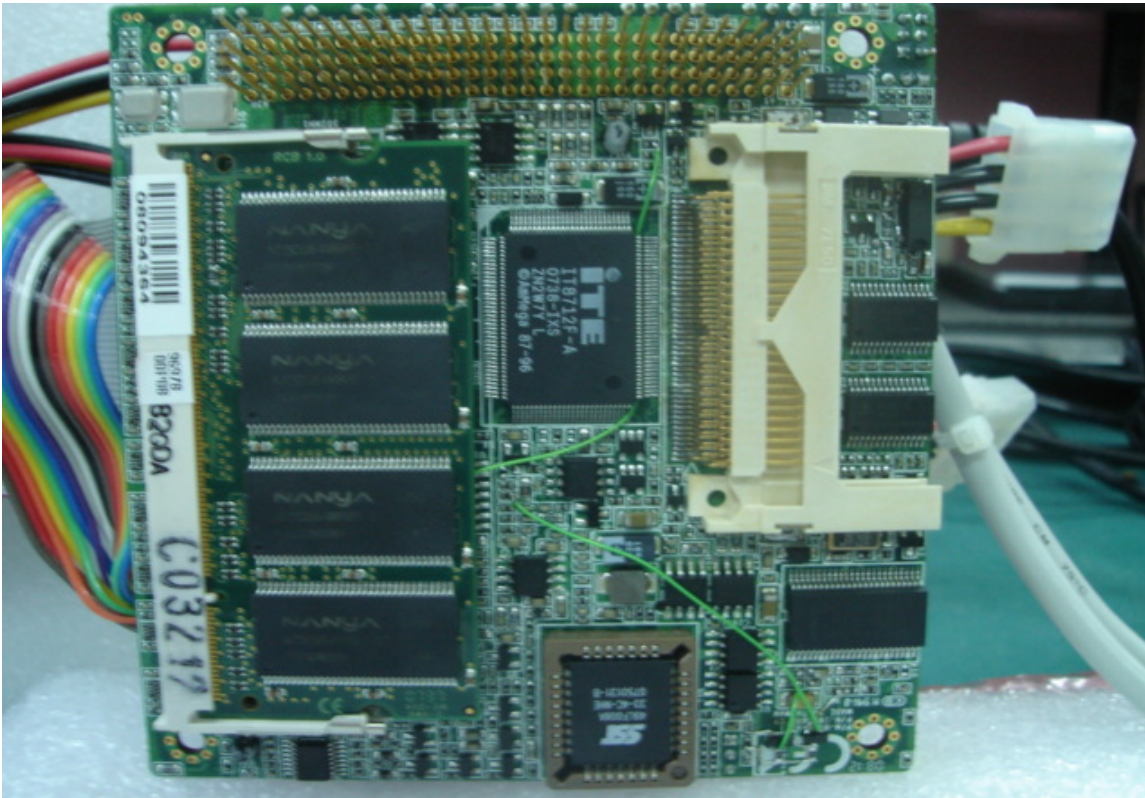
Component Side-1:



Point	Position	Describe	Tc (°C)	Tm (25.1 °C)	Tm (60°C)	Note
1	C16	(TF)POSCAP.330uF.2.5V.20%.C2(6*3.2*1.8).12mohm.3300mA.SMD.SANYO.2R5TPE330MCC2	105	54.9	89.8	
2	L1	(TF)COIL.1.0uH.±20%.SMD.4.5x4x2mm.DCR=27mohm.Idc=4.5Amp.VISHAY.IHLP1616BZER1R0M11	125	56.0	90.9	
3	U8	(TF)IC.SMD.TSSOP.24Pin.Dual PWM Buck and.Linear DDR Power Controller.Anpec.APW7116RE-TRL	125	60.4	97.5	
4	U5	(TF)INTEL CPU.Celeron-M.ULV-600MHz.512K cache.mFCBGA479.LE80535VC600512	75	58.8	93.7	
5	U2	(TF)IC.SMD.BGA732.Chipset.NB82852GM.Intel.JG82852GM-SL7VP	80	58.1	93	
6	U6	(TF)IC.SMD.Chipset ICH4.INTEL.NH82801DB SL8DE;EE-A031271;14S4280106;TWN	75	55.5	90.4	
7	U4	(TF)IC.SMD.TSSOP 56Pin Clock Generator.ICS.ICS950201AGLF	115	56.4	91.3	

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:



p 1:	56.8	168x, 49y
p 2:	53.4	201x, 64y
p 3:	55.1	180x, 95y
p 4:	53.7	191x, 144y
p 5:	57.6	180x, 175y
p 6:	54.5	235x, 176y
p 7:	53.9	266x, 183y
p 8:	53.7	236x, 203y
p 9:		
p10:		
p11:		
p12:		
p13:		
p14:		
p15:		

COLOR ADJ. Cursor : 36, 93
 AUTO ADJ. Data Temp.: 32.1
 Emissivity: 0.94
 E.C. Temp.: 32.4
 U 59.0
 D 38.4
 Ambi Temp.: 25.5

HIGH(H) 56.32 X:180 Y:174
 LOW(L) 28.00 X:306 Y:218

Emissivity: 0.94

DATE : 2008/06/17

TIME : 09:42:06

Point	Position	Describe	Tc (°C)	Tm (25.5 °C)	Tm (60°C)	Note
1	Q15	(TF)Dual N-Channel.SO-8.SMD. Vds=60V.Vgs=(+/-)25V.Ids=7/5A.Rds=21/27mohm.APEC.AP9975GM	125	56.8	91.3	
2	D8	(TF)D Schottky.30V.0.5A.SMD. SOD-123.ON.MBR0530T1G;EE-A011187;1301053040;TWN	100	53.4	87.9	
3	U25	(TF)IC.SMD.QFP128P Super I/O.ITE.IT8712F-A/IX-L; EE-A050785;14S4871203;TWN	70	55.1	89.6	
4	U18	(TF)IC.SMDSO-8.5VSupervisoryCircuits.ANALOG DEVICES.ADM706ARZ	115	53.7	88.2	
5	Q11	(TF)Dual N-Channel.SO-8.SMD. Vds=60V.Vgs=(+/-)25V.Ids=7/5A.Rds=21/27mohm.APEC.AP9975GM	125	57.6	92.1	
6	U13	(TF)IC.SMD.SOP-8P.SynchronousBuck PWM.DC-DC Controller.Fiti. FP6321ASOPTR;EE-A071256;14S2632100;TWN	125	54.5	89	
7	U14	(TF)IC.SMD.SSOP48 Chipset.INTEL.EP82562ET	85	53.9	88.4	
8	U12	(TF)IC.SMD.SOP-8P.SynchronousBuckPWM.DC-DC Controller.Fiti.FP6321ASOPTR;EE-A071256;14S2632100;TWN	125	53.7	88.2	

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