PFM-C20N

PC/104 CAN bus Module

Thermal Image Analysis Report

Report NO: 09E080018

2009/07/23	*Wenyuan Yang*	*Allen Hsu*
Issue Stamp	**Manager**	**Test Engineer**

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Thermal Image Analysis

Ⅰ. Model Name:PFM-C20N
BIOS: EPIC-8526 BIOS Rev 1.1(06/20/2008)

Ⅱ. Description: PC/104 CAN bus Module

Ⅲ. Date: 2009/07/23

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 : 24.2 ℃**
- **CPU : Intel Pentium M 745 / Dothan / 1.8GHz /FSB-400MHz**
- **RAM : Apacer DDR SO-DIMM / 512Mb / PC3200 /Chip-0841VPR V58C2512804SAI5I**
- **BIOS : EPIC-8526 BIOS Rev 1.1(06/20/2008)**
- **CF Card : N/A**
- **HDD : FUJITSU 2.5” IDE H.D / 40G / MHW2040AT**
- **PCB Model : EPIC-8526 Rev A0.4**
- **Application Software: Run Prime95 under Windows XP Professional V2002 Service Pack 3**
- **Take Picture Time: After Power on 2 hours.**

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Temperature Profile Test:

Component Side-1:

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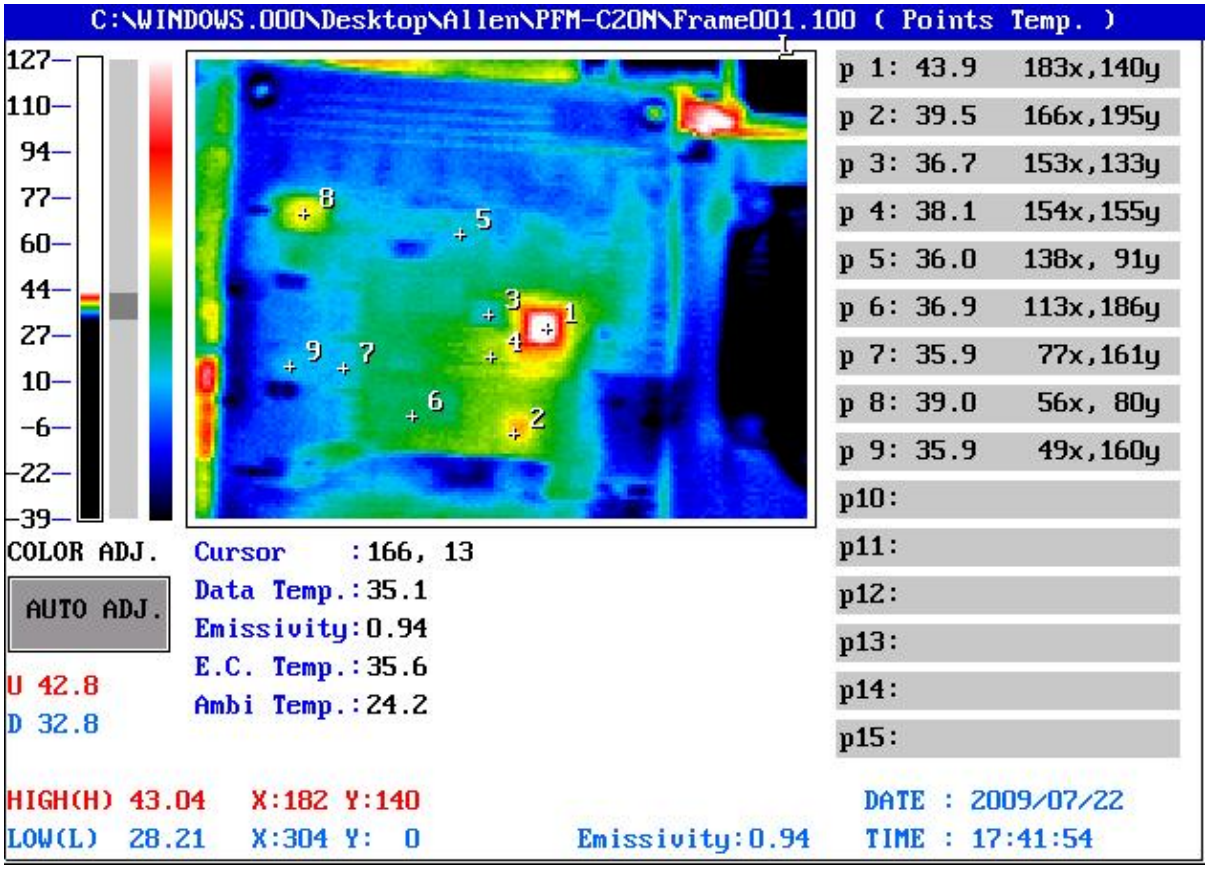

Point	Position	Describe	Tc (℃)*1	Tm*2 Measured Under		Note
				24.2℃	60℃	
1	U8	(TF)IC.SMD.CPLDVQFP44P.CS:0093h.Xilinx.XC9536-15VQG44C;EE-A090427;14S8253608;TWN	125	43.9	79.7	
2	U1	(TF)IC.SMD TFBGA.160P.PCI to ISA Bridge Chip.ITE.IT8888G-L;EE-A051091;14S4888801;TWN	100	39.5	75.3	
3	OSC1	(TF)OSC.24MHz.7*5*1.4mm.4P.SMD3.3V.50PPM.eCERA.FN2400002;EE-A050217;1233324052;TWN	100	36.7	72.5	
4	U12	(TF)IC.SMD.SOP8.PrecisionTimers.TI.SA555D;EE-A081701;14S9055503;TWN	125	38.1	73.9	
5	U4	(TF)IC.SMDTSSOP.20P.TI.SN74HCT245PWR;EE-A050390;14S5824501;TWN	115	36.0	71.8	
6	U14	(TF)IC.SMDSO28.Stand-aloneCANController.PHILIPS.SJA1000T/N1;EE-A030759;14S4100001;TWN	155	36.9	72.7	
7	U15	(TF)Photocoupler.8PDIP.SHARP.PC910L0NSZ0F;EE-A081552;14D7091000;TWN	115	35.9	71.7	
8	U21	(TF)CONVERTER.DIP.5V.1W.3KVDCIsolatedDC-DC.MORNSUN.F0505M -1W;EE-A090433;1251005055;TWN	115	39.0	77.5	
9	U17	(TF)IC.SMDSO8.HighSpeedCANTransceiver.PHILIPS.TJA1050T/N1;EE-A030755;14S4105000;TWN	125	35.9	71.7	

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Note(*):
1. Tc is meaning the component Tcase value that specified in the component datasheet.
2. Tm is meaning the Measured Tcase value when the component operated under temperature stably.
3. The Tm value showed in **BLUE** words which meaning the MEASURED operation temperature within (Tc-10℃)>Tm >(Tc +5℃), particular thermal dissipation design is needed if you wanna to utilize this board in an enclosure box or chassis.
4. Any Tm value showed in **RED** words which meaning the operation temperature is over (Tc+5 degree C). The result is "Failed" and must be solved before the product launched into next design stage.

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