ReportNO: 11I080004

IMBA-967

Rev.A0.2

Thermal Image Analysis Report

Summary	☑ **Pass** ☐ **Fail** ☐ **Pass with Deviation**

Test Result Summary				
	Critical	Major	Minor	Enhancement
Defect Found	0	0	0	0
Defect Unsolved	0	0	0	0

Issue date	Approval	Test Engineer
2011 / 09/14	Jansin Lee	Matthew Chi

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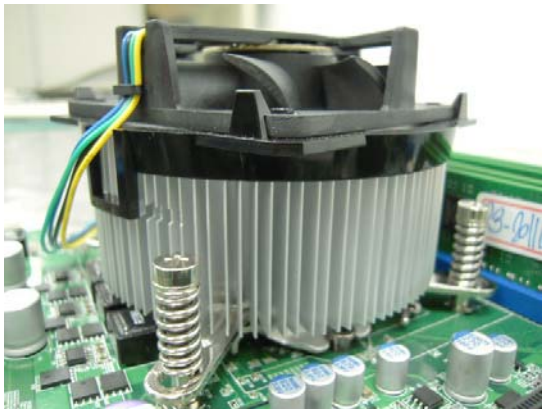
Sample Configuration & Quantity Under Test

- **Model name : IMBA-967 A0.2**
- **CPU Board : IMBA-967 A0.2**
- **CPU : Intel Core i7-2600 3.40G**
- **Memory : Kingston DDR3-1333 4GB**
- **HDD :FUJITSU 2“5 MHY2060BH 60G**
- **BIOS :I967_0.05(07/12/2011)**
- **Test Software : Windows 7 / Run PassMark Burn In Test 6.0 Pro**
- **Power : AT Power**
- **Cooler:**



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Thermal Image Analysis

1. Test Date: 2011-09-13

2. Test Product : IMBA-967 A0.2

3. Test Site: AAEON QE Dept.

4. Temperature Measurement:

1. YOKOGAWA / DARWIN DA100-100-13-1D

2. IR Scanner: Infrared Camera

NIPPON AVIONICS CO., LTD.

Model: TVS-100

Date of Calibration: 2011/07/11

Serial Number: 0179L2746

5. Test Condition:

Component Side-1 (Test by DA-100): 22.5℃ With cooler

6. Take Picture Time:

After power on 2 hours

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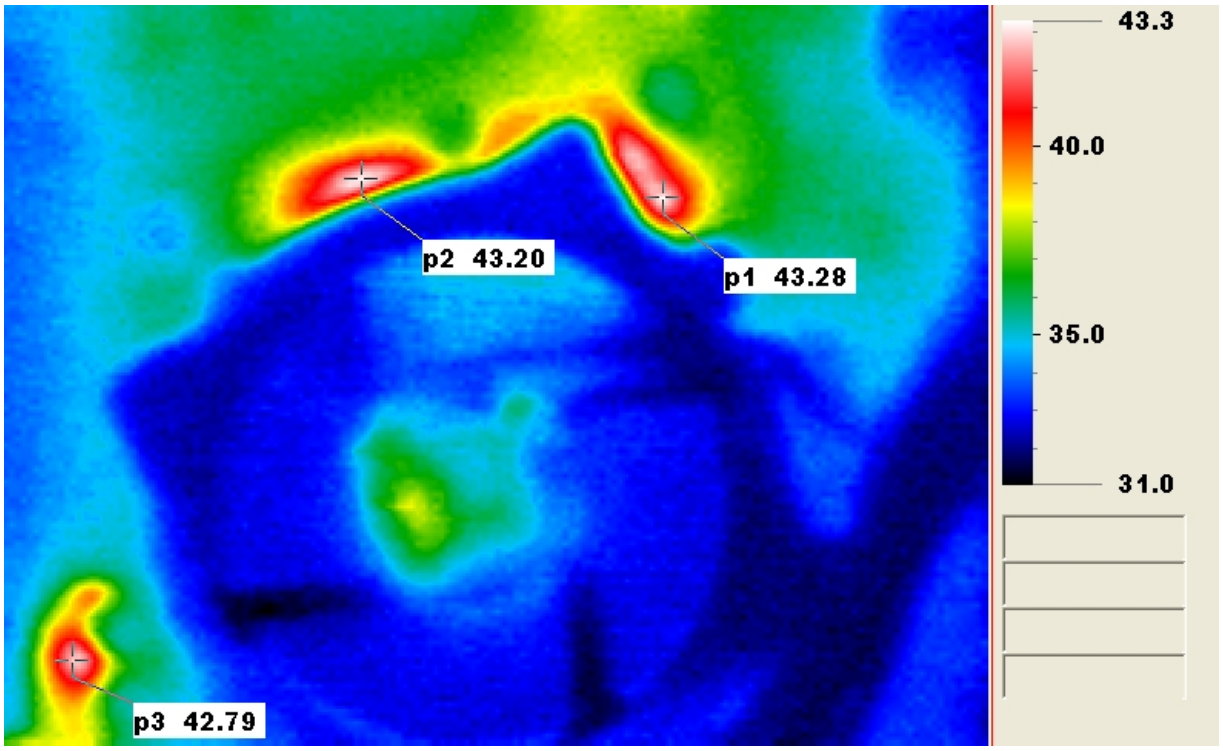
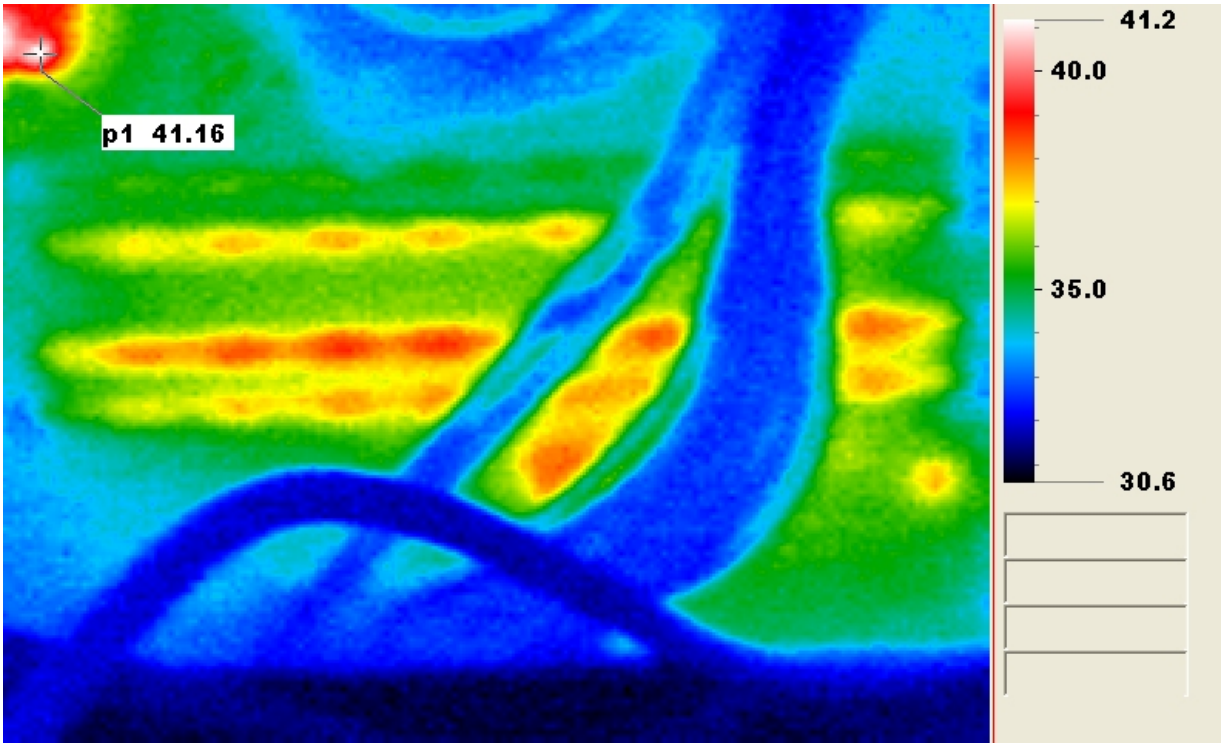
Temperature Profile Test:





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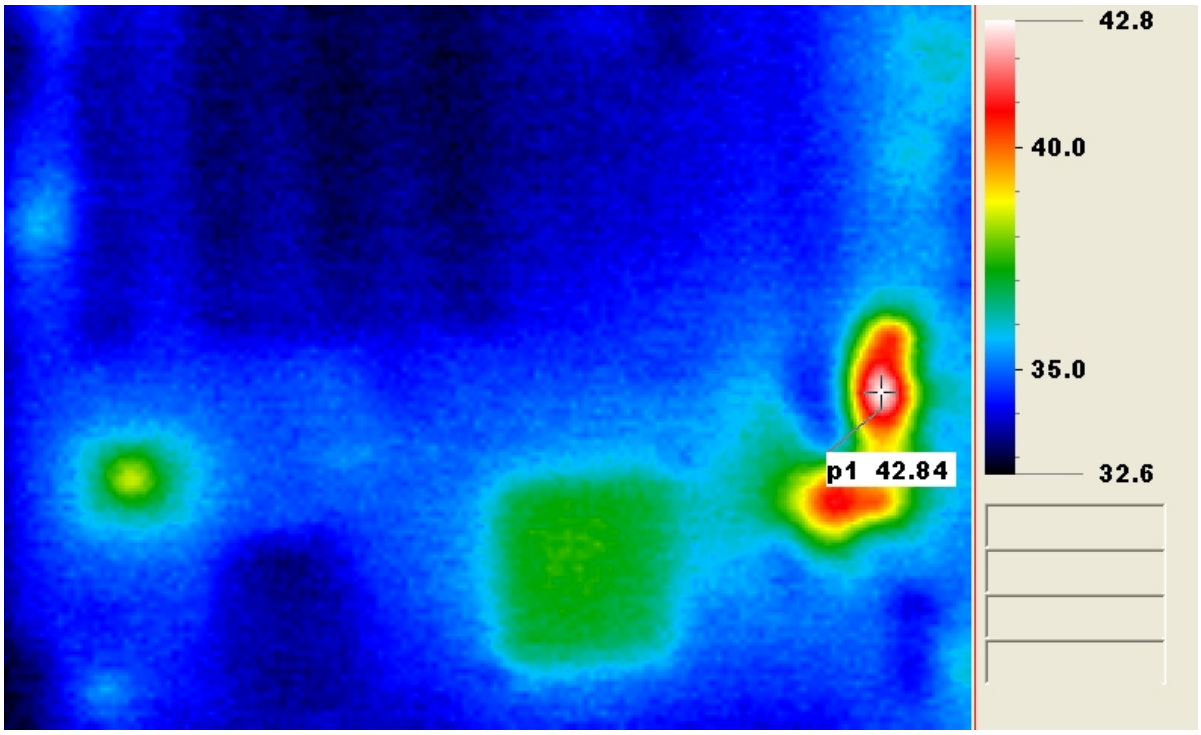

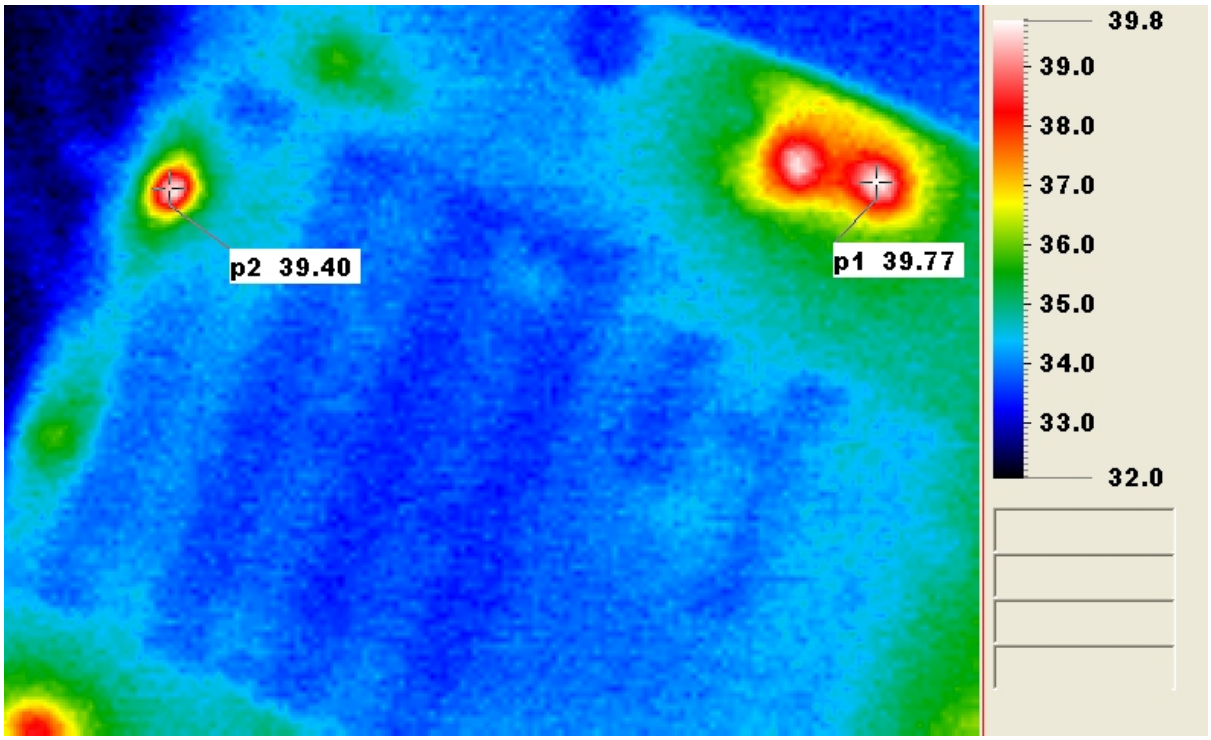

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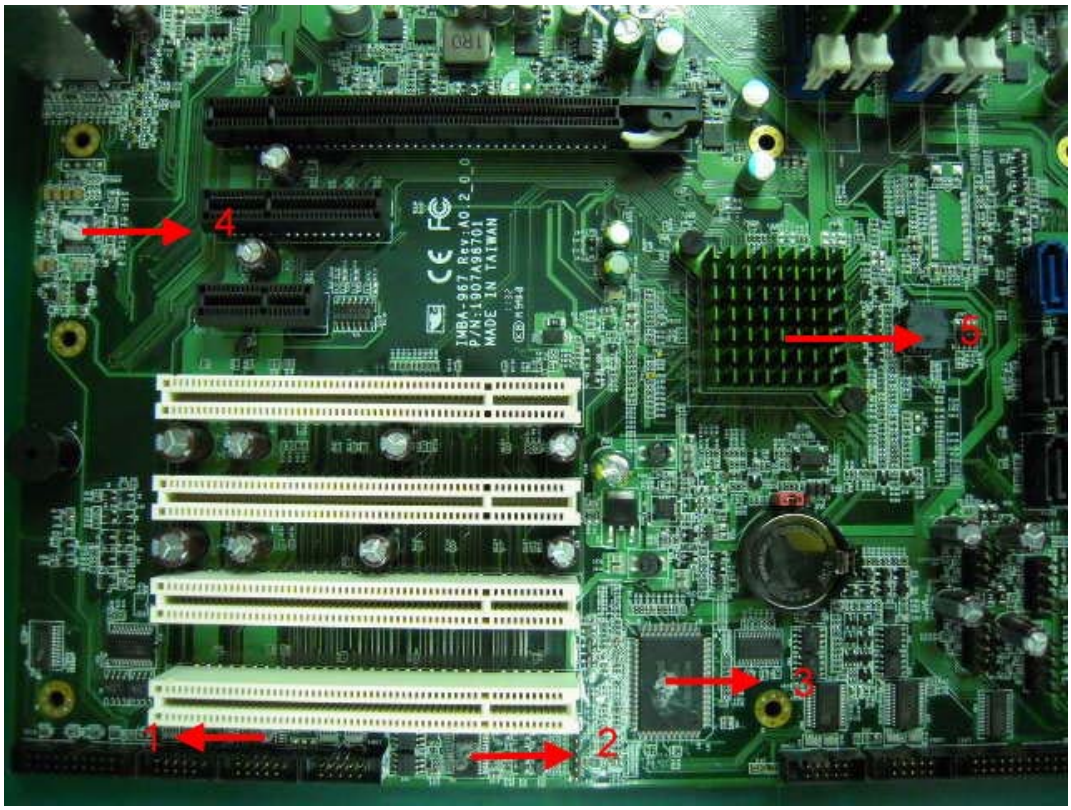

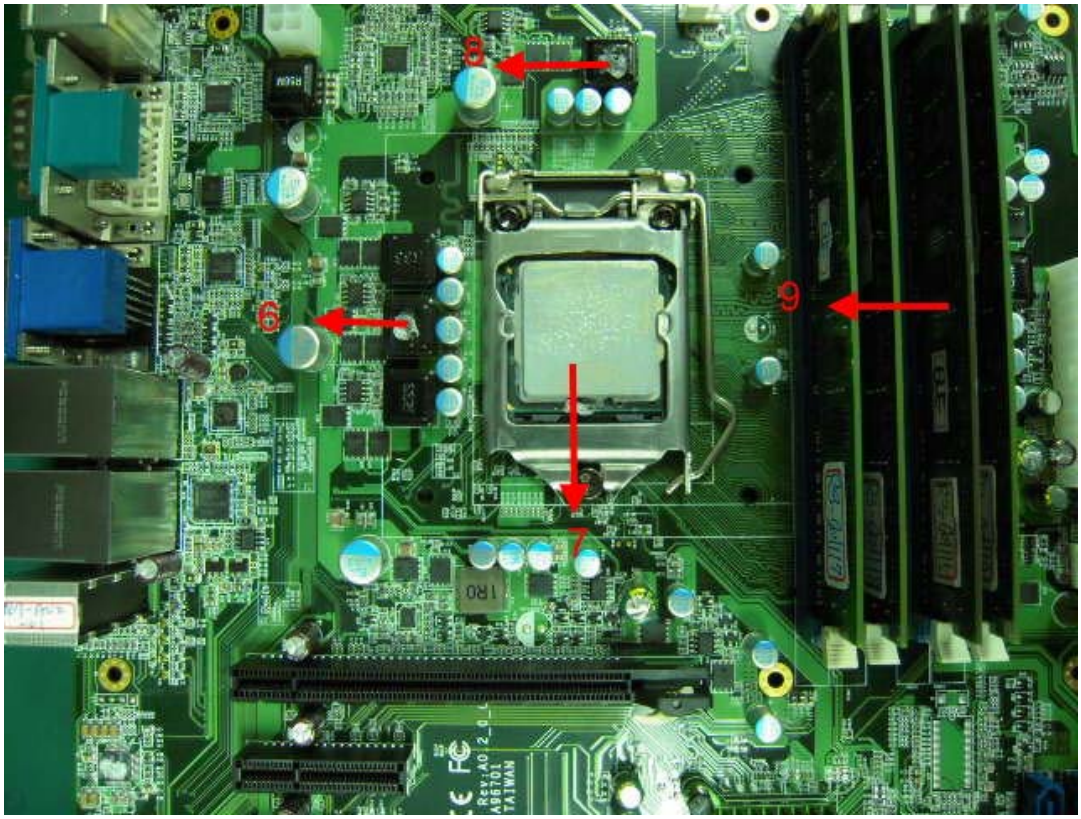

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Using YOKOGAWA / DARWIN DA100-100-13-1D test

Point	Position	Describe	Tc (*1) (℃)	Tm (*2) Measured Under		Note
				25℃	60℃	
1	U20	(TF)IC.SMD SSOP.20Pin RS-232 Driver&Receivers.TI.GD75232DBR	85	41.3	76.3	
2	U31	(TF)IC.SMD.SSOP RS232 Driver ESD 15KV.AD.ADM213EARSZ	85	34.1	69.1	
3	U39	(TF)IC.SMD.PQFP 128P.LPC Super I/O.Winbond.W83627UHG	85	38.3	73.3	
4	U2	(TF)IC.SMD.AUDIO CODEC.REALTEK.ALC662-GR	100	39.2	74.2	
5	U44	(TF)IC.SMD.Platform Controller Hub.INTEL.BD82Q67,SLJ4D,B3	140	39.6	74.6	
6	L12	(TF)COIL.0.33uH.20%.DIP.40A.GOTREND.GMBT131211P-R33M	85	37.2	72.2	
7.	U34	(TF) Plate.for Piketon.IMBI-Q57.FOXCONN.PT44A68-6401	100	37.9	72.9	
8	L15	(TF)COIL.0.56uH.20%.DIP.35A.GOTREND.GMAT-131210-P-R56-M	85	34.4	69.4	
9	Memory	(TF)Kingston DDR3 1333 4GB SEC HCH9 K4B2G0846C	95	42.3	77.3	

Note(*):

1. "Tc" indicates the component's case maximum temperature value specified in its datasheet.

2. "Tm" indicates the measured Tc value under working environmental temperature within product specification.

3. Judgment Criteria:

- **Fail** : Tm > Tc+5℃; The measured value is over specification plus margin.
- **Margin** : Tc+5℃ > Tm > Tc-10℃; The measured value is within specification with margin. For FANLESS system application, it is strongly recommended to add thermal dissipation design for better reliability.
- **Pass** : Tm < Tc-10℃; The measured value is with safety margin.

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