ReportNO: 11I080001

HSB-525I

Thermal Image Analysis Report

Summary	☑ **Pass** ☐ **Fail** ☐ **Pass with Deviation** **Comment:** _____

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 / 05 / 10	Jansin Lee	Clement Chien

Sample Configuration & Quantity Under Test

- **Model name : HSB-525I A0.2**
- **CPU Board : HSB-525I A0.2**
- **CPU : Onboard Intel Atom Dual Core D525 / 1.80GHz**
- **Chipset : Intel Atom D525 / ICH8M**
- **Memory : DSL DDR3 1066 2GB-CL7-ELPIDA J1108BDSE-DJ-F**
- **HDD : TOSHIBA SATA 2.5“ 160G-MK1665GSX**
- **BIOS : H525I 0.05X64**
- **Test Software : Windows XP sp3 / Run Prime95 v25.6.2**
- **Power : AT Power**
- **Cooler:**

Thermal Image Analysis

1. Test Date: 2011-05-06

2. Test Product : HSB-525I A0.2

3. Test Site: AAEON Internal Lab.

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: 2010/08/10
Serial Number: 0179L2746

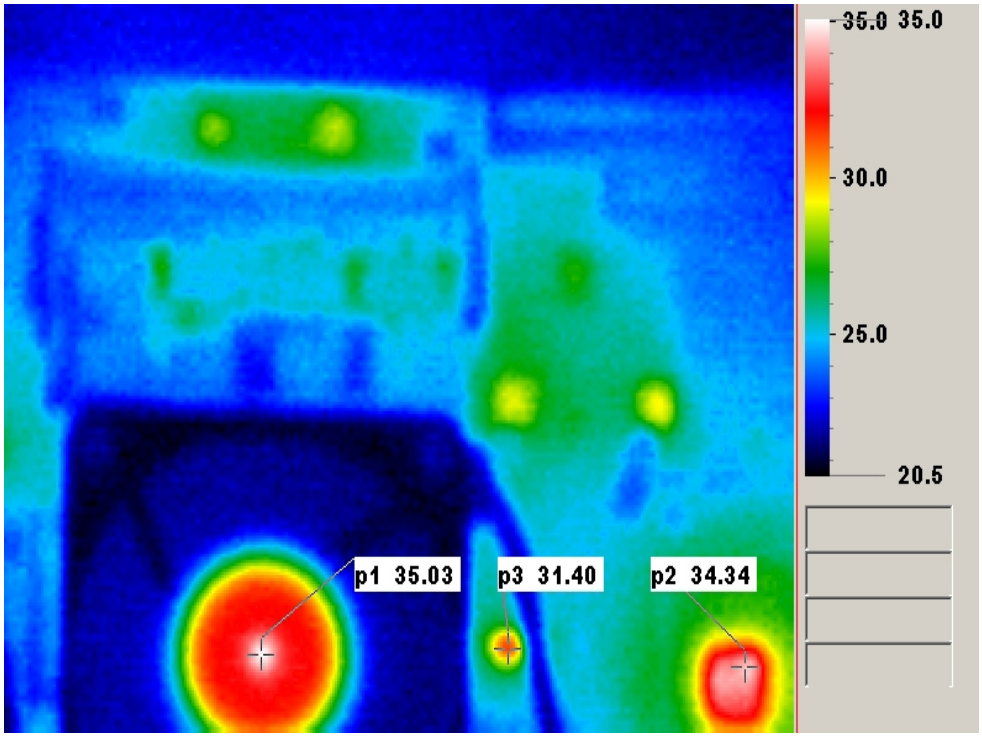
5. Test Condition:

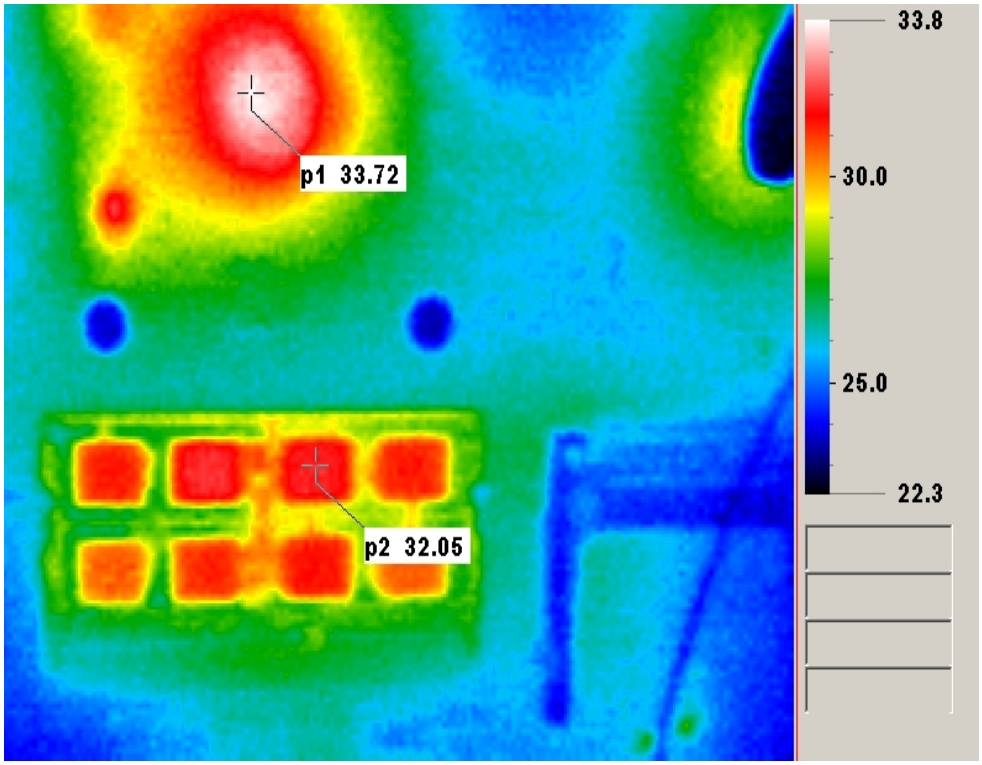
Component Side-1 (Test by DA-100): 22.5℃ With cooler

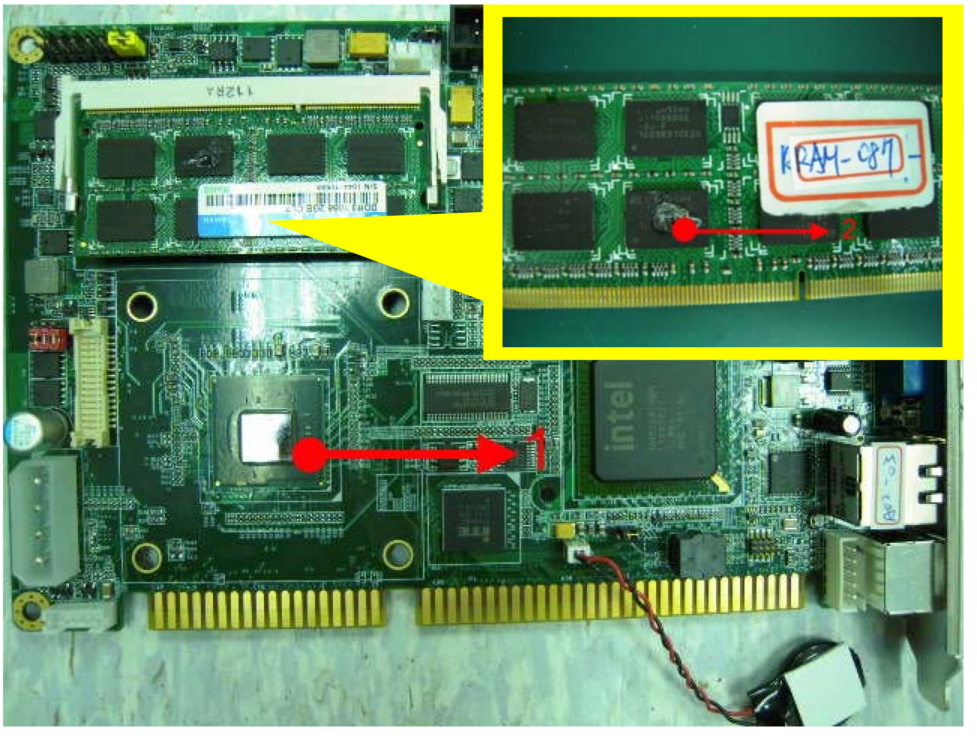
6. Take Picture Time:

After power on 2 hours

Temperature Profile Test:



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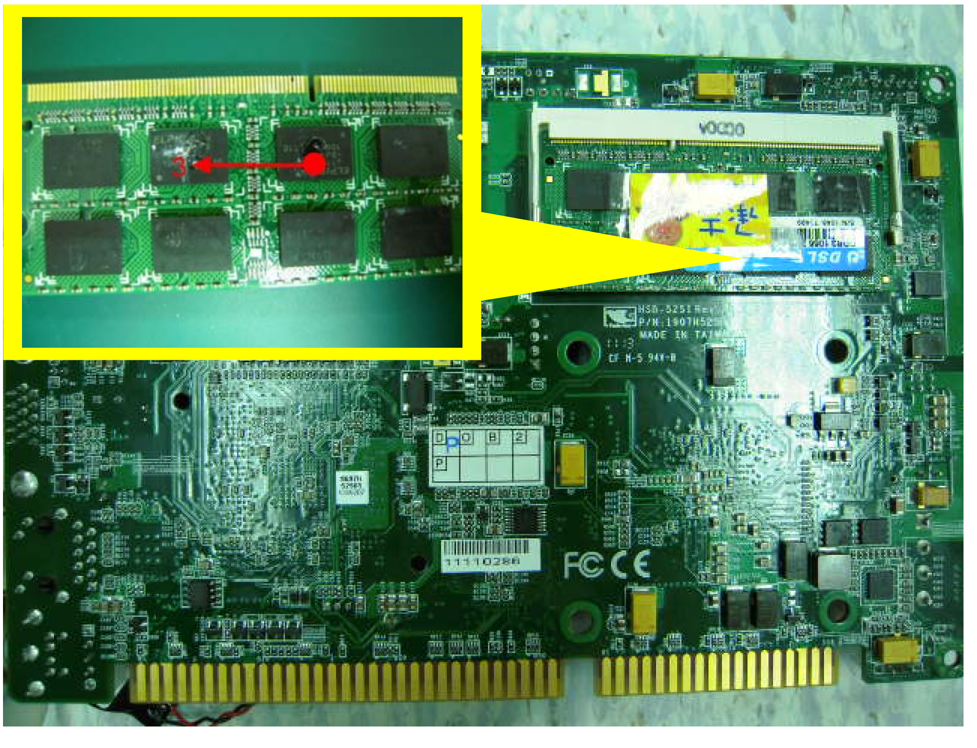
intel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Using YOKOGAWA / DARWIN DA100-100-13-1D test

Point	Position	Describe	Tc (*1) (℃)	Tm (*2) Measured Under		Note
				22.5℃	60℃	
1	U18	(TF)Intel CPU.Pinetrail D.DUAL CORE.D525.1.80GHz	100	38.5	76.0	
2	Memory	DSL DDR3 1066 2GB-CL7-ELPIDA J1108BDSE-DJ-F	95	28.1	65.6	
3	Memory	DSL DDR3 1066 2GB-CL7-ELPIDA J1108BDSE-DJ-F	95	36.2	73.7	

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.