ReportNO: 11E080009

GNEN-LN05

Rev.B1.0

Thermal Image Analysis Report

Summary	☐ **Pass** ☐ **Fail** ☑ **Pass with Deviation** **Comment: One temperature need improving**

Test Result Summary				
	Critical	Major	Minor	Enhancement
Defect Found	0	0	0	1
Defect Unsolved	0	0	0	1

Issue date	Approval	Test Engineer
2011 / 06 / 29	Jansin Lee	Matthew Chi

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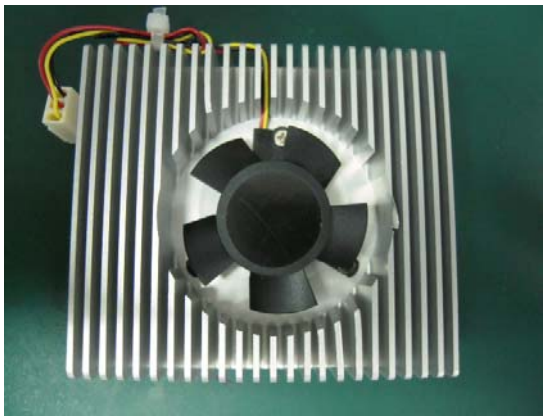
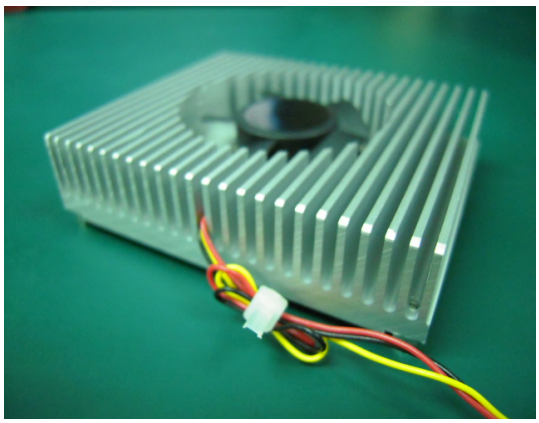
Sample Configuration & Quantity Under Test

- **Model name : GENE-LN05 B1.0**
- **CPU Board : GENE-LN05 B1.0**
- **CPU : On board Intel Atom D525 / 1.8GHz**
- **Memory : DDR3-1066 4GB**
- **HDD : Seagate 3.5” SATA ST3120827AS 120GB**
- **BIOS : GENE-LN05 1.10**
- **Test Software : Windows XP sp3 / Run Prime95 v25.6.2**
- **Power : AT Power**
- **Heat Sink:**





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Thermal Image Analysis

1. Test Date: 2011-06-27

2. Test Product : GENE-LN05 B1.0

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): 25.0℃ With heat sink

6. Take Picture Time:

After power on 2 hours

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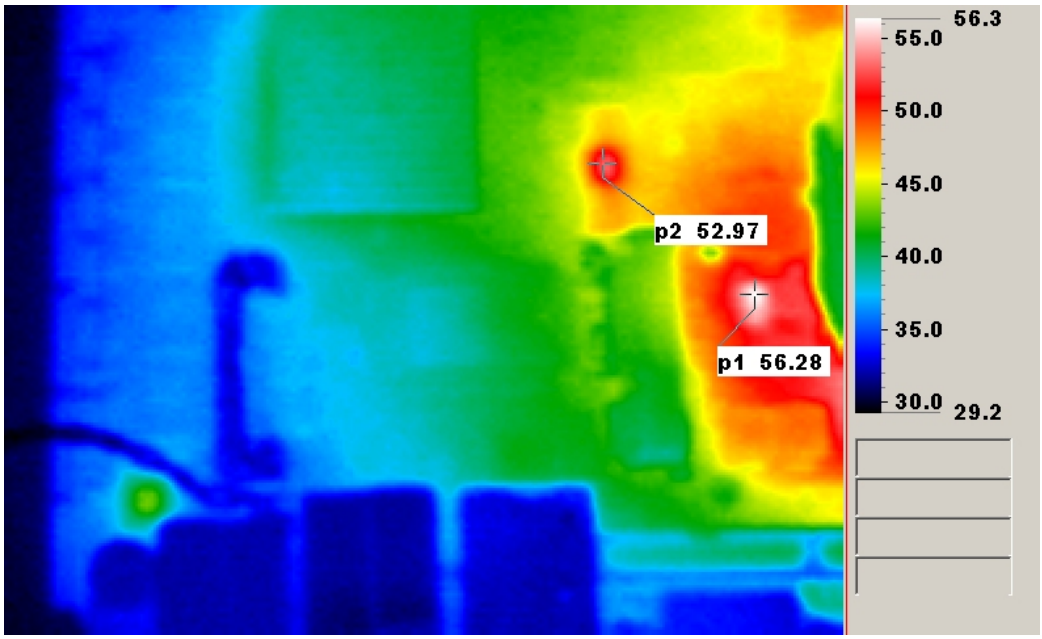
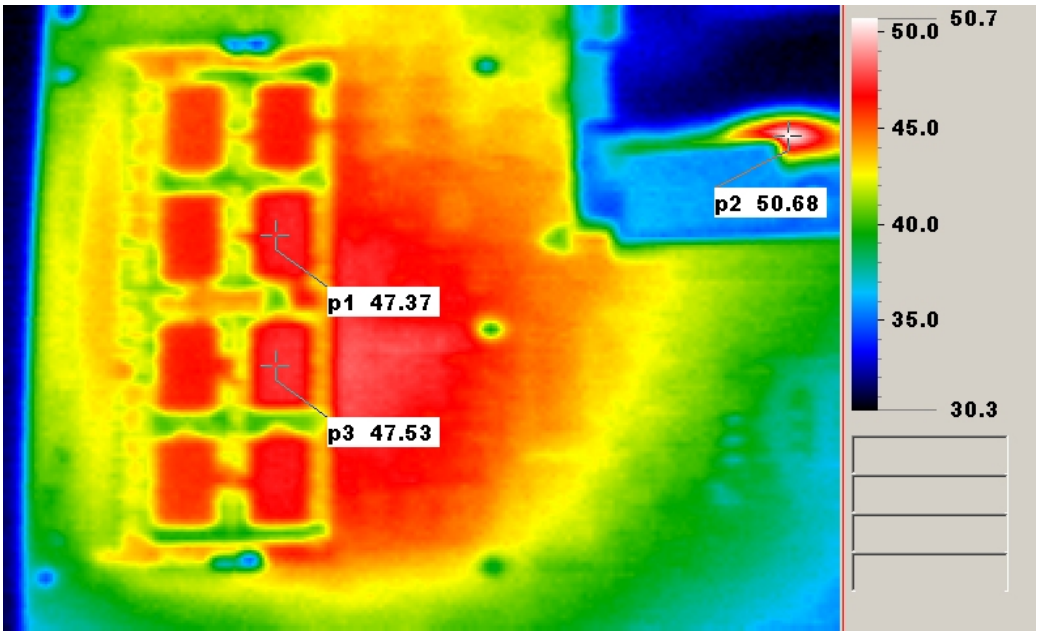
Temperature Profile Test:





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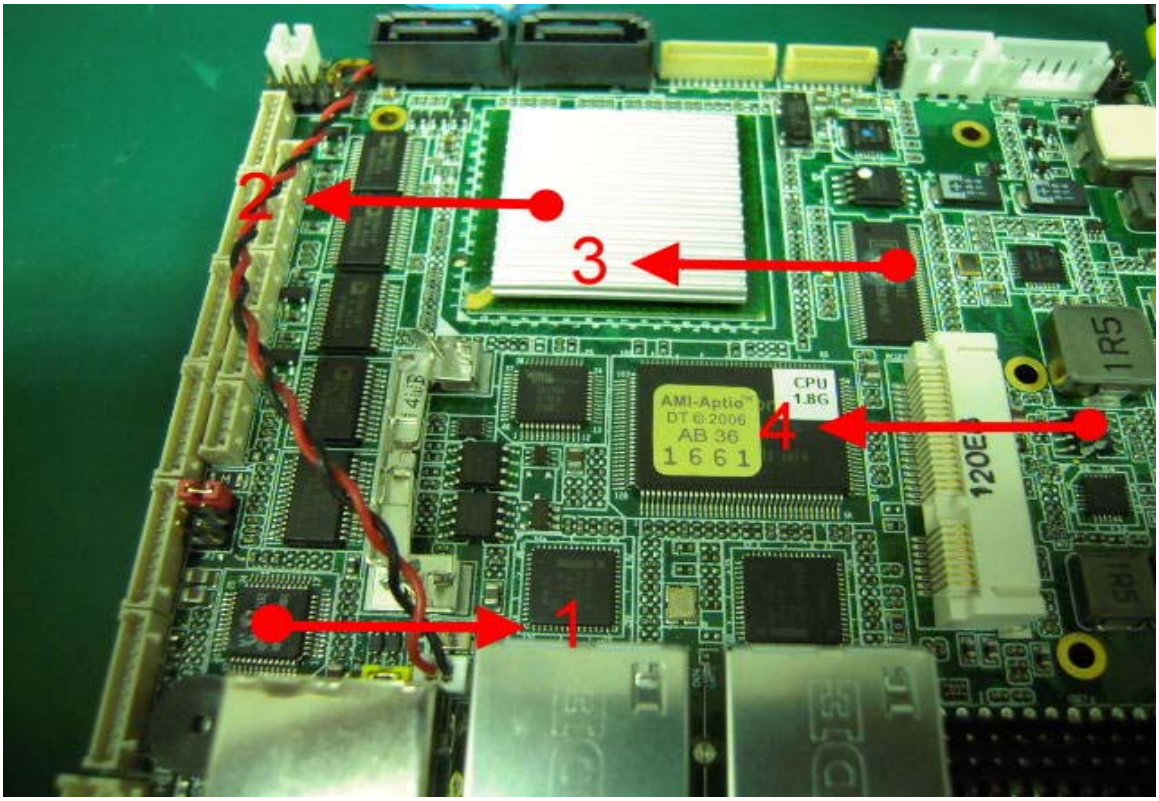

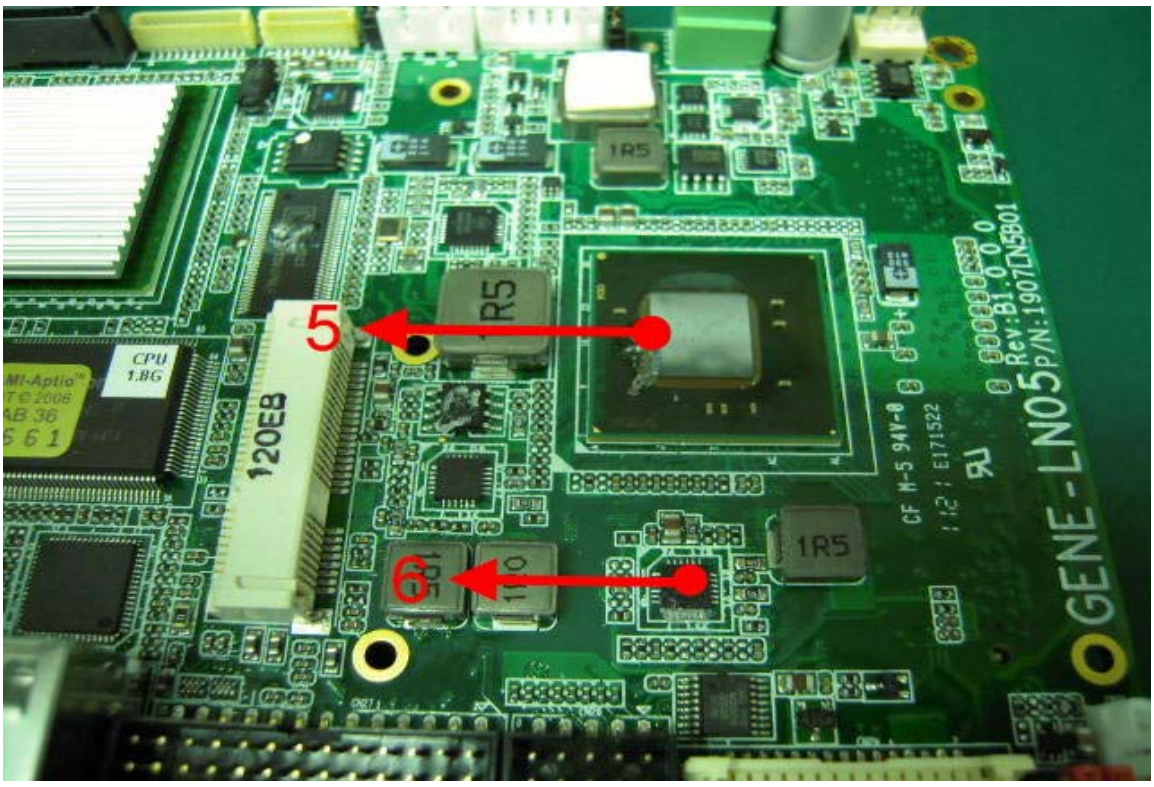

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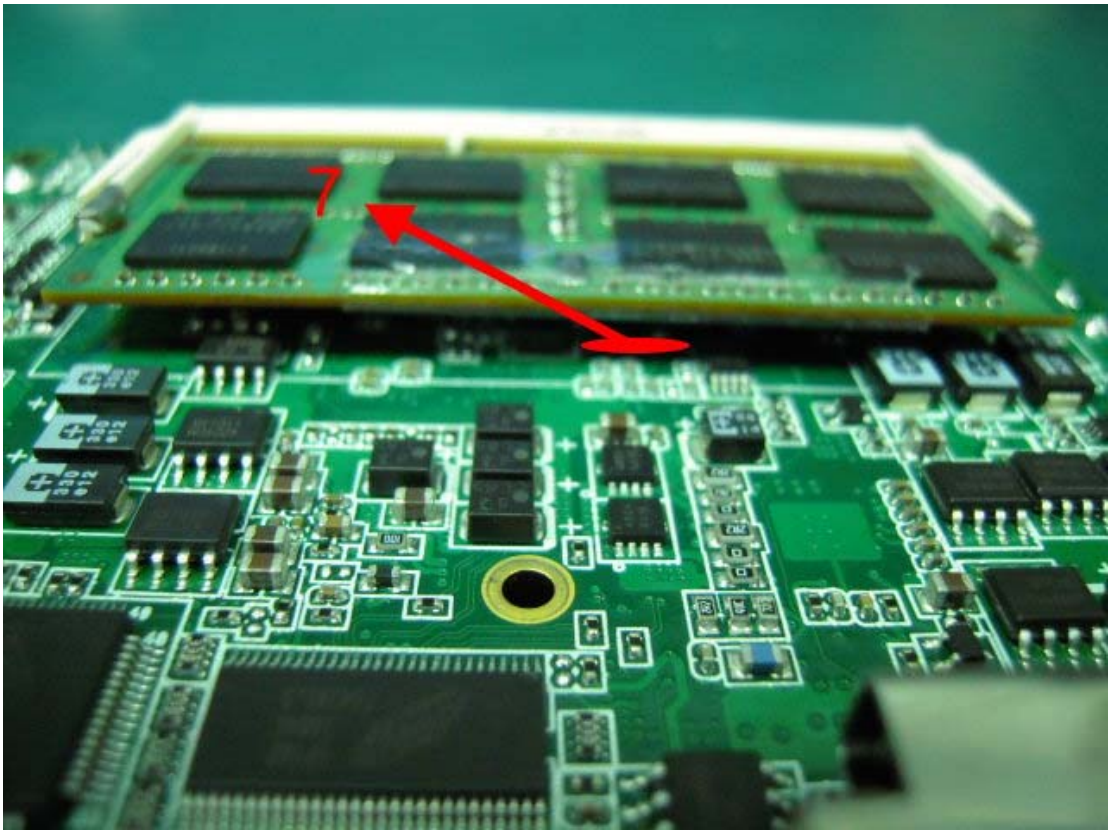

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Using YOKOGAWA / DARWIN DA100-100-13-1D test

Point	Position	Describe	Tc (*1) (℃)	Tm (*2) Measured Under		Note
				25℃	60℃	
1	U36	(TF)HIGH DEFINITIOND.AUDIO CODEC.REALTEK.ALC662-GR	100	52.0	87.0	
2	U9	(TF)Chipset ICH8M.INTEL.NH82801HBM.SLB9A	115	47.9	82.9	
3	U17	(TF) CLOCK GENERATOR.IDT.9LPRS501PGLF	115	55.4	90.4	
4	U24	(TF)Low dropout Linear Regulator.ANPEC.APL5912-KAC-TRL	125	59.6	94.4	
5	U20	(TF)Intel.CPU.D.DUAL.CORE.D525.1.80GHz.	100	50.8	85.8	
6	U33	(TF)DDR MEMORY POWER SOLUTION.SYNCHRONOUS BUCK CONTROLLER.3A.TI.TPS51116RGER	100	49.8	84.8	
7	Memory	(TF)DSL DDR3 1066 4GB SEC HCH9 K4B2G0846C	95	63.6	98.6	

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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