ReportNO: 11E080002

ECB-930G

Thermal Image Analysis Report

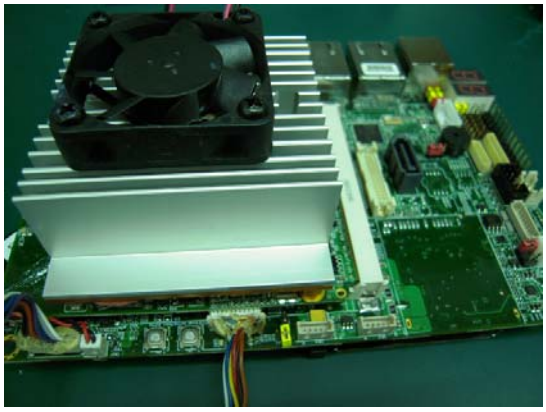
Summary	☑ **Pass** ☐ **Fail** ☐ **Pass with Deviation** **Comment:** _____

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 / 04 / 19	Jansin Lee	Rex Chang

Sample Configuration & Quantity Under Test

- **Model name : ECB-930G A1.0_0_0**
- **Carrier Board : ECB-930G A1.0_0_0**
- **CPU Board : AQ7-LN B1.0_0_0**
- **CPU : Intel CPU.Pineview M.SINGLE CORE.N450.1.66GHz**
- **Memory : Onboard DDRII 1GB / SEC K4T1G084QE**
- **SSD : SST Onboaed 4GB**
- **BIOS : AQ7-LN 1.0X64**
- **Test Software : Windows XP sp3 / Run Prime95 v25.6.2**
- **ATX Power : Adaptor / FSP065-AAC**
- **Cooler:**



Thermal Image Analysis

1. Test Date: 2011-04-18

2. Test Product : ECB-930G A1.0_0_0 with AQ7-LN A1.0_0_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

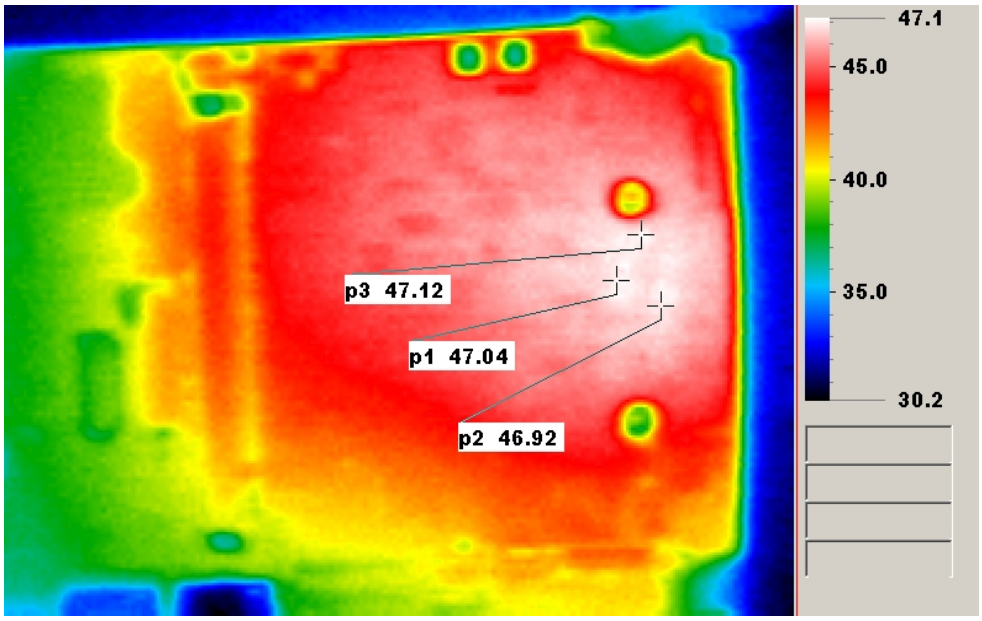
5. Test Condition:

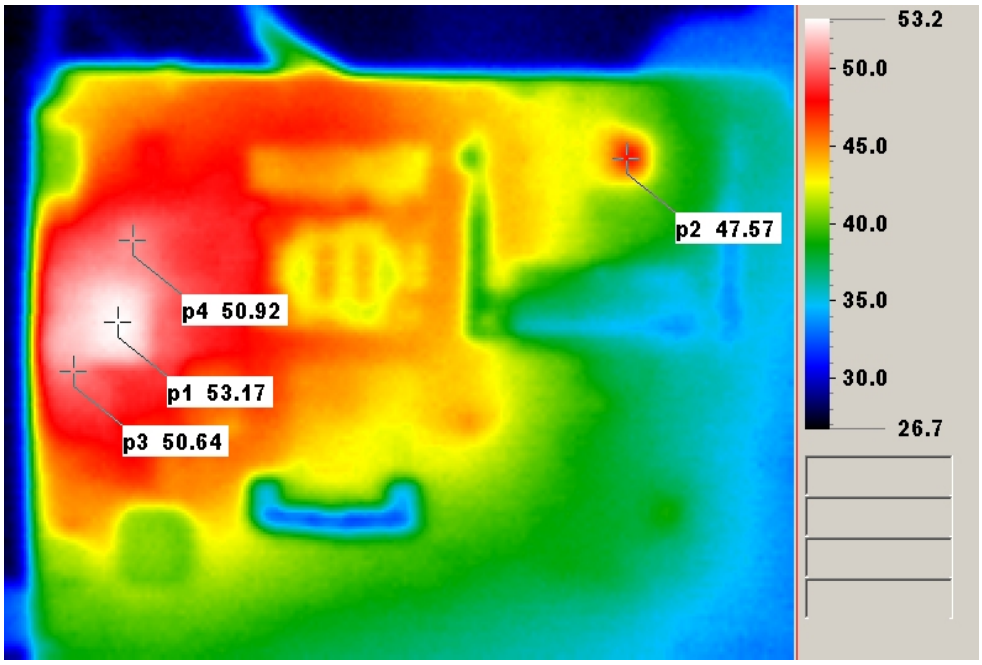
Component Side-1 (Test by DA-100): 22.5℃ With cooler

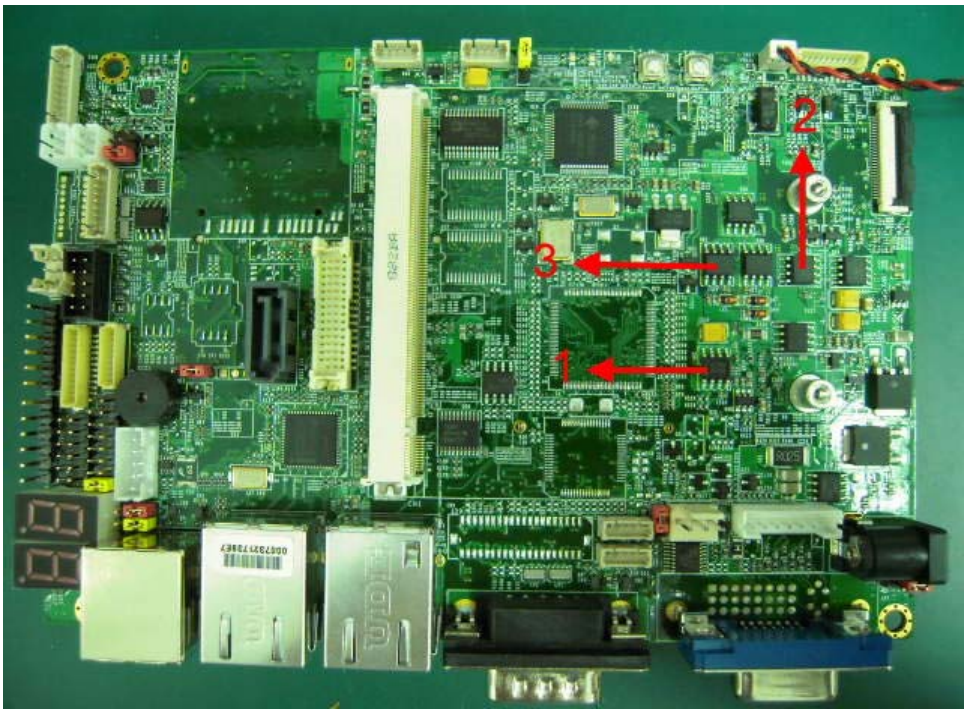
6. Take Picture Time:

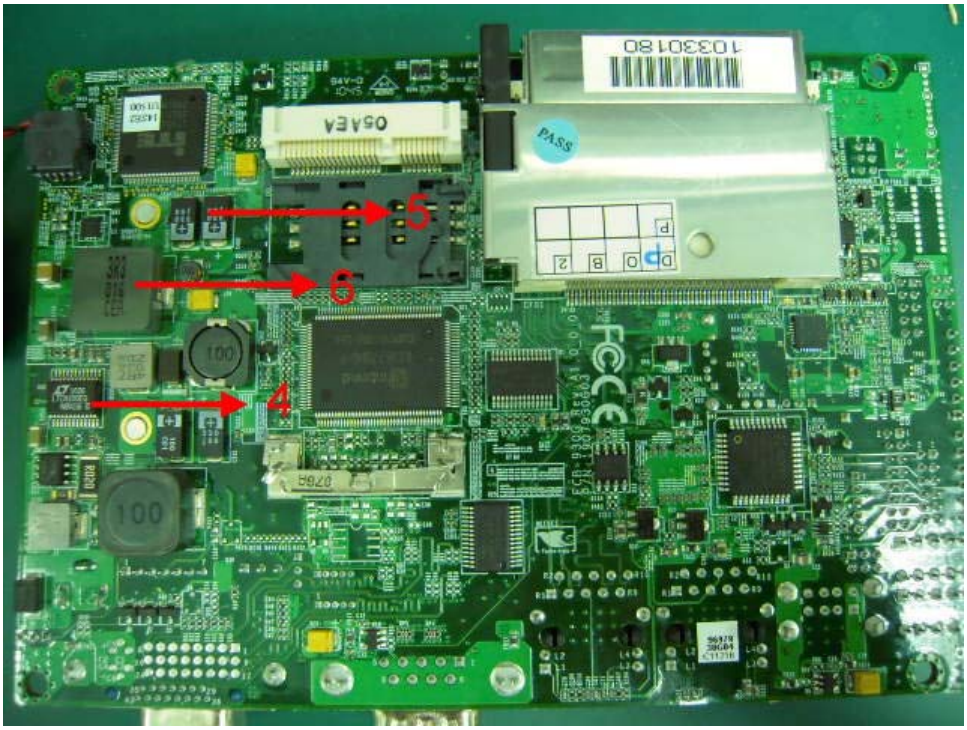
After power on 2 hours

Temperature Profile Test:






1
2
3


1033018O
PASS
4
5
6

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

Point	Position	Describe	Tc (*1) (℃)	Tm (*2) Measured Under		Note
				22.5℃	60℃	
1	Q59	(TF)PWR.N-Channel MOSFET 30V 15A.FAIRCHILD.FDS8896	150	39.1	76.6	
2	Q54	(TF)PWR.N-Channel.30V.10A.13.5mΩ.MOSFET.APEC.AP4410GM	150	43.6	81.1	
3	Q60	(TF)Dual N-Channel.MOSFET.APEC.AP9926GM	150	39.4	76.9	
4	U35	(TF)Battery Charger Controller Linear Techmology.Ltc4100EG	85	37.8	75.3	
5	C492	(TF)CAP.330uF.6.3V.20%.SANYO.6TPE330MAP	105	36.8	74.3	
6	L3	(TF)COIL.3.3Uh.GOTREND.GSTC135P-3R3MF	125	41.1	78.6	

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.