

PER-T276 (nvRAM)

Thermal Image Analysis Report

Summary	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> 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
2013 / 11 / 28	Tom Lin	Ben Sun

Sample Configuration & Quantity Under Test

- **Model name : PER-T276(nvRAM)**
- **CPU Board : GENE-CV05**
- **CPU : N/A**
- **Memory : Transcend / SEC XYK0 K4B2G0846D / DDR3-1333 2GB**
- **3.5" SATA HDD : TOSHIBA MK1060GSC / 100GB**
- **BIOS : GENE-CV05 R1.4**
- **Test Software : Windows 7 / Run PassMark Burn In Test 7.0 Pro**
- **Power : N/A**
- **Heat Sink : N/A**

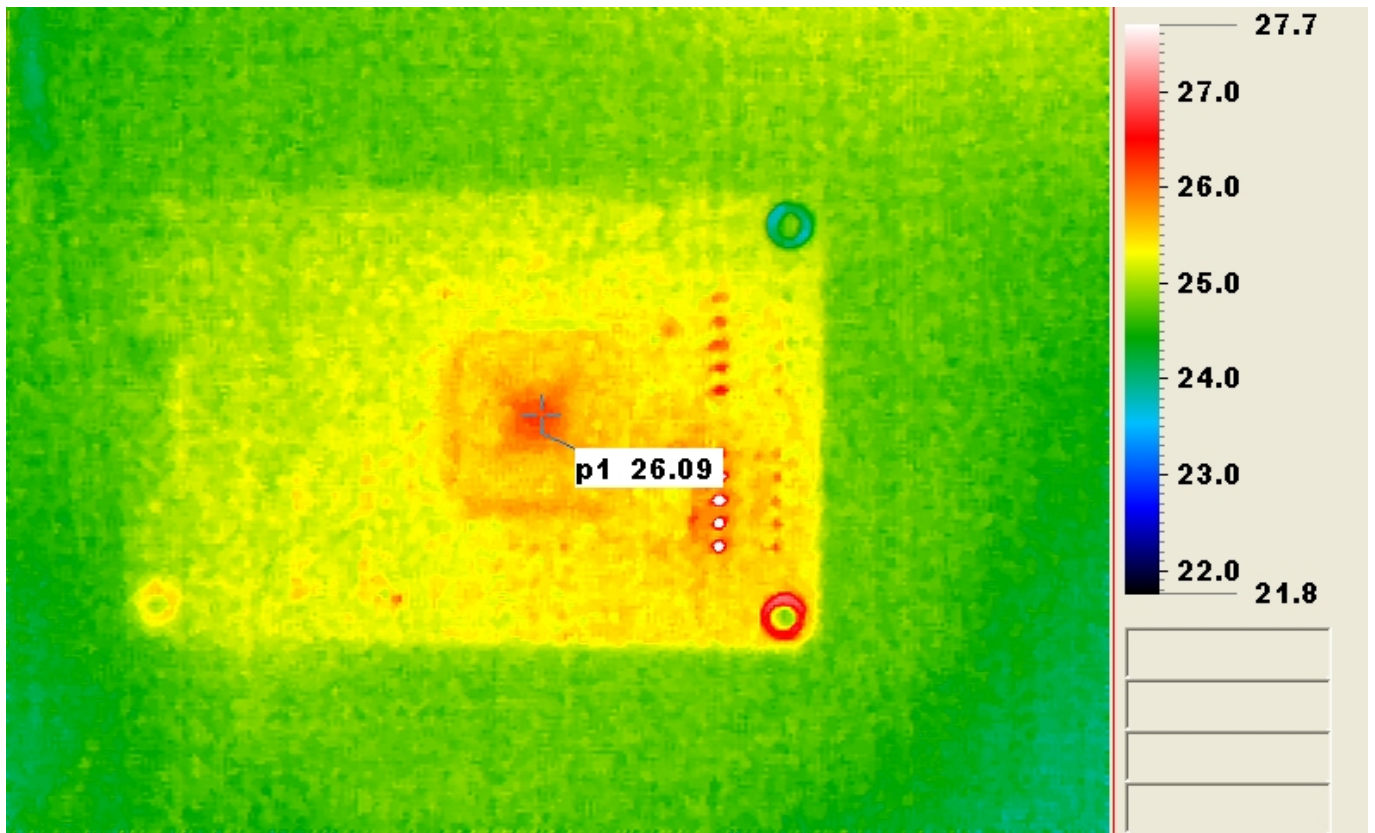
Thermal Image Analysis

1. Test Date: 2013-11-27
2. Test Product: PER-T276 (nvRAM)
3. Test Site: AAEON QE Dept.
4. Temperature Measurement:
 - 4.1. 40 Channel Thermal Recorder:
 - 4.1.1 YOKOGAWA Inc,
 - 4.2.2 Model: DA100-13-1D
Date of Calibration: 2012/10/08
Serial Number: 12A323190
 - 4.2. IR Scanner: Infrared Camera
 - 4.2.1 NEC Avio Infrared Technologies Co., Ltd.
 - 4.2.2 Model: Thermo GEAR G100W2-D
Date of Calibration: 2013/01/08
Serial Number: 1051444
5. Test Condition:

Test by DA-100: 24.9°C
6. Take Picture Time:

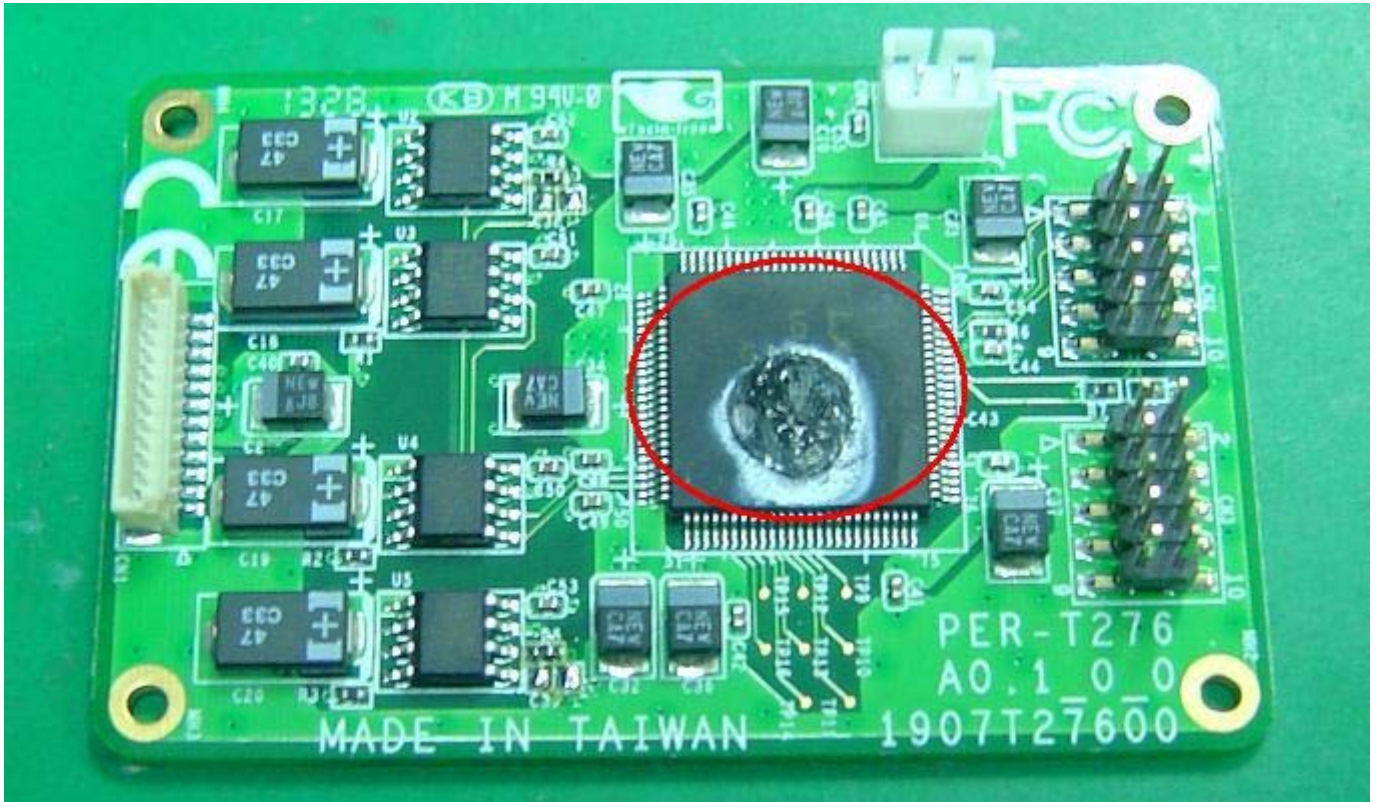
After power on 2 hours

Temperature Profile Test:
Component Side:



Terminal Recorder:

Measuring Thermal Couple Position :



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

Point	Position	Describe	Tc (*1) (°C)	Tm (*2) Measured Under		Note
				24.9°C	60°C	
1	U6	(TF)ASS'Y.LPC to I2C.PER-T276.Rev.A0.1_0_0.for NVRAM	100	26.3	61.4	

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** : $T_m > T_c + 5^\circ\text{C}$; The measured value is over specification plus margin.
 - **Margin** : $T_c + 5^\circ\text{C} > T_m > T_c - 10^\circ\text{C}$; 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** : $T_m < T_c - 10^\circ\text{C}$; The measured value is with safety margin.
4. **Defect NO.**