

PER-C101

BROADCOM BCM5721KFB+BCM5789KFB

Dual PCI Express 10/100/1000

Ethernet Daughterboard

Thermal Image Analysis Report

Report No: 05I080006

Release Date: 10 .20. 2005

2005/10/20

Issue Stamp

Wenyuan Yang

Manager

Andrew Ku

Test Engineer

Thermal Image Analysis

I . Model Name: PER-C101 Rev.A0.1

(PCB: FSB-866G A0.2)

(BIOS: FSB-866G BIOS Rev:0.11 (8036PXE) (06/20/2005))

**II . Description: BROADCOM BCM5721KFB+BCM5789KFB Dual PCI Express 10/100/1000
Ethernet Daughterboard**

III . Date: 10.20.2005

IV . Measure Site: AAEON QE Dept.

V . Issued by : Andrew Ku

VI. Equipment:

1. TVS-100 series by NIPPON AVIONICS CO., LTD.

VII. Simulation Environment:

•Temperature: Component Side : 25.2°C

Solder Side : N/A

•CPU: Intel ®Pentium® 4 CPU 2.80GHz(200x14.0)

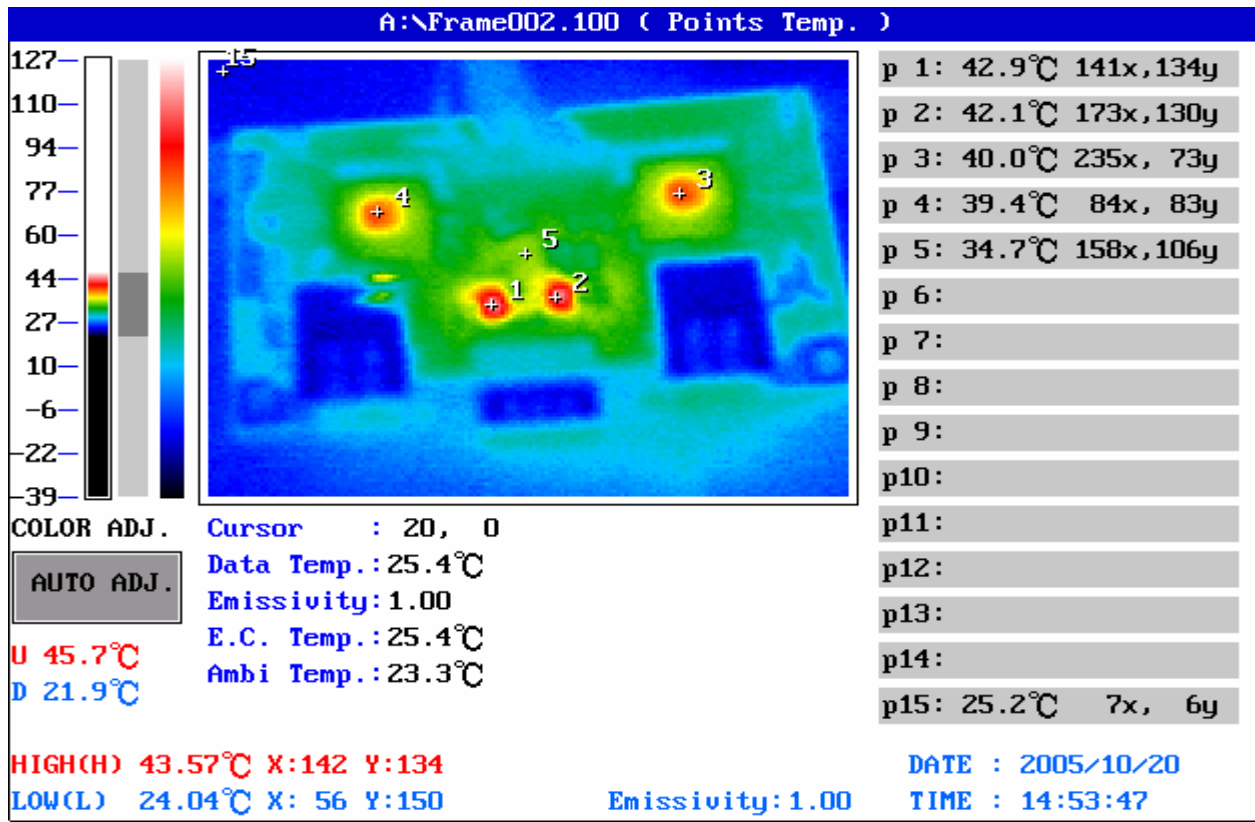
•RAM: Transcend / TS64MLD64V4F3 / 512Mb DDR400

•CF Card: N/A

•Application Software: Run HCT System Stress Test under Win2000 Professional

•Take Picture Time: After Power on 2 hours.

Temperature Profile Test:
Component Side (1)



Point	Position	Describe	Tc (°C)	Tm (25°C)	Tm (60°C)	Note
1	Q2	(TF)PNP.SMD SOT-223.1Amp.ON.BCP69T1G	-40°C~125°C	42.9°C	77.9°C	
2	Q1	(TF)PNP.SMD SOT-223.1Amp.ON.BCP69T1G	-40°C~125°C	42.1°C	77.1°C	
3	U3	(TF)IC.SMD BGA 196.PCI-E GigaBit Ethernet Chipset.Broadcom.BCM5721KFBG	-30°C~100°C	40.0°C	75.0°C	
4	U5	(TF)C.SMD BGA 196.PCI-E GigaBit Ethernet Chipset.Broadcom.BCM5751KFBG	-30°C~100°C	39.4°C	74.4°C	
5	U4	(TF)IC.SMD SOIC 8P.1M bit Flash Memory.ATMEL.AT45DB011B-SU	-45°C~85°C	34.7°C	69.7°C	
6						
7						
8						
9						
10						
11						
12						
13						
14						
15				25.2°C		

I. Operation Temperature (°C):
 $T_c(\text{Case Temp.}) = T_a(\text{Ambient Temp.}) \pm 30^\circ\text{C} = T_j(\text{Junction Temp.}) \pm 25^\circ\text{C}$

Note: The description in red states which temperature is over the specification of the device.