ETX-625 A0.3

Compact Board. Intel Celeron(R) 400MHz (100x4.0)

Thermal Image Analysis Report

Report No: 05E080014

Release Date: MAR 25, 2005

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Issue Stamp	Manager	Test Engineer

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Thermal Image Analysis

Compact Board. Intel Celeron(R) 400MHz (100x4.0)

Ⅰ. Model Name :ETX-625 A0.3
Backplane:ECB-901A A0.2
(CPU: On Board CPU Intel Celeron(R) 400MHz (100x4.0))
(BIOS Rev: B1.0 (01/14/2005))

Ⅱ. Description: ETX-625 A0.3 On Board CPU Intel Celeron(R) 400MHz

Ⅲ. Date: Mar 25, 2005

Ⅳ. Measure Site: AAEON QE Dept.

Ⅴ. Issued by : Ryan Cheng

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

Ⅶ. Simulation Environment:
- Temperature: Component Side (1)： 20.4 ℃
  Component Side (2)： 20.4 ℃
- CPU: On Board CPU Intel Celeron(R) 400MHz (100x4.0)
- RAM: ELPIDA / HB52RF648DC-75B / PC133 / 512MB
- CF Card: N/A
- Application Software: Run HCT (9.5)System Stress Test under Win2000 Professional+SP4
- Take Picture Time: After Power on 2 hours.

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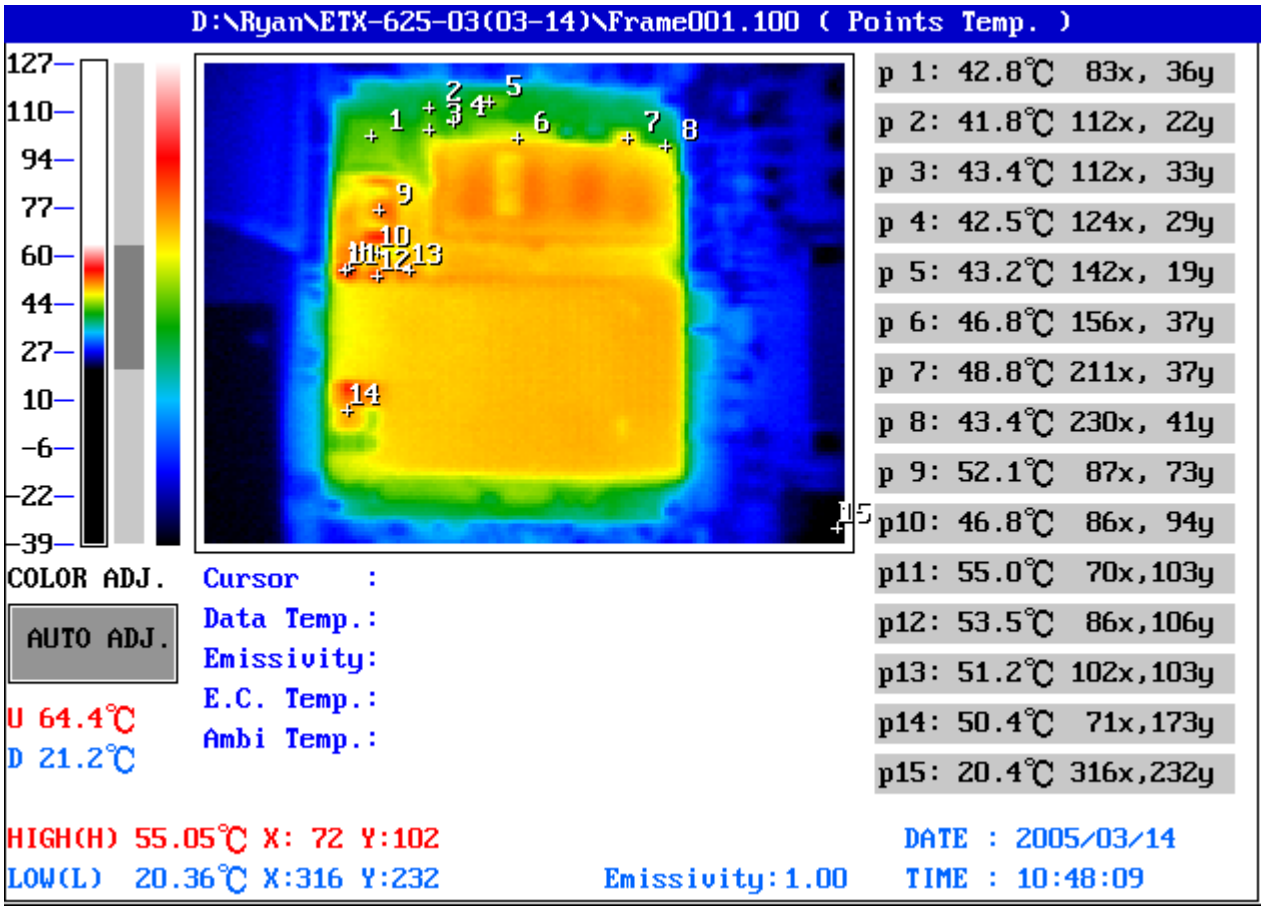
Temperature Profile Test:

Component Side (1) :



Point	Position	Describe	Tc	Tm (25℃)	Tm (60℃)	Note
1	U27	IC.PLCC.32P.2M bit Flash Memory.Winbond.W49F002UP12B	0~70℃	42.8℃	82.4℃	+12.4℃
2	U18	IC.SMD.TSSOP.Philips.74HCT245	-10~115℃	41.8℃	81.4℃	
3	U17	IC.SMD.TSSOP.Philips.74HCT245	-10~115℃	43.4℃	83℃	
4	Y2	X'TAL.32.768KHz.SMD.4P.EPSON.MC306(E-4-306-8)	-40~85℃	42.5℃	82.1℃	
5	U20	IC.SMD.SOP.TI.74F04	-30~100℃	43.2℃	82.8℃	
6	U16	IC.SMD.BGA South Bridge.VIA.VT82C686B	0~85℃	46.8℃	86.4℃	+1.4℃
7	U24	IC.SMD LQFP 48Pin.6 Channel AC'97 Audio Codec.REALTEK.ALC655	-30~100℃	48.8℃	88.4℃	
8	Y4	X'TAL SMD.24.576MHz.6*3.5*1.1mm.2P.亞陶.F62450008	-50~100℃	43.4℃	83℃	
9	U12	IC.SMD SSOP.48Pin Clock Generator.CYPRESS.CY28316	-30~100℃	52.1℃	91.7℃	
10	Y1	X'TAL SMD.14.31818MHz.6*3.5*1.1mm.2P.亞陶.F61430006	-50~100℃	46.8℃	86.4℃	
11	L2	INDUCTOR.3.3uH.20%.SMD DCR=12mohm Isat=27A.VISHAY.IHLP2525CZRZ3R3M01	-85~155℃	55.0℃	94.6℃	
12	U9	IC.SMD SOP.8Pin Switching PWM Controller.IR.IRU3037CS	-30~100℃	53.5℃	93.1℃	
13	U13	IC.SMD.SOP14.TI.74LVC14A	-70~115℃	51.2℃	90.8℃	
14	L1	INDUCTOR.2.2uH 8A.20%.SMD.2Pin.VISHAY.IHLP-2525CZRZ2R2M01	-85~155℃	50.4℃	90℃	
15		Ambient Temperature		20.4℃		

1. Operation Temperature (℃):
   Tc(Case temp.) = Ta(Ambient Temp.)+/-30℃ = Tj(Junction Temp.)-/+25℃

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

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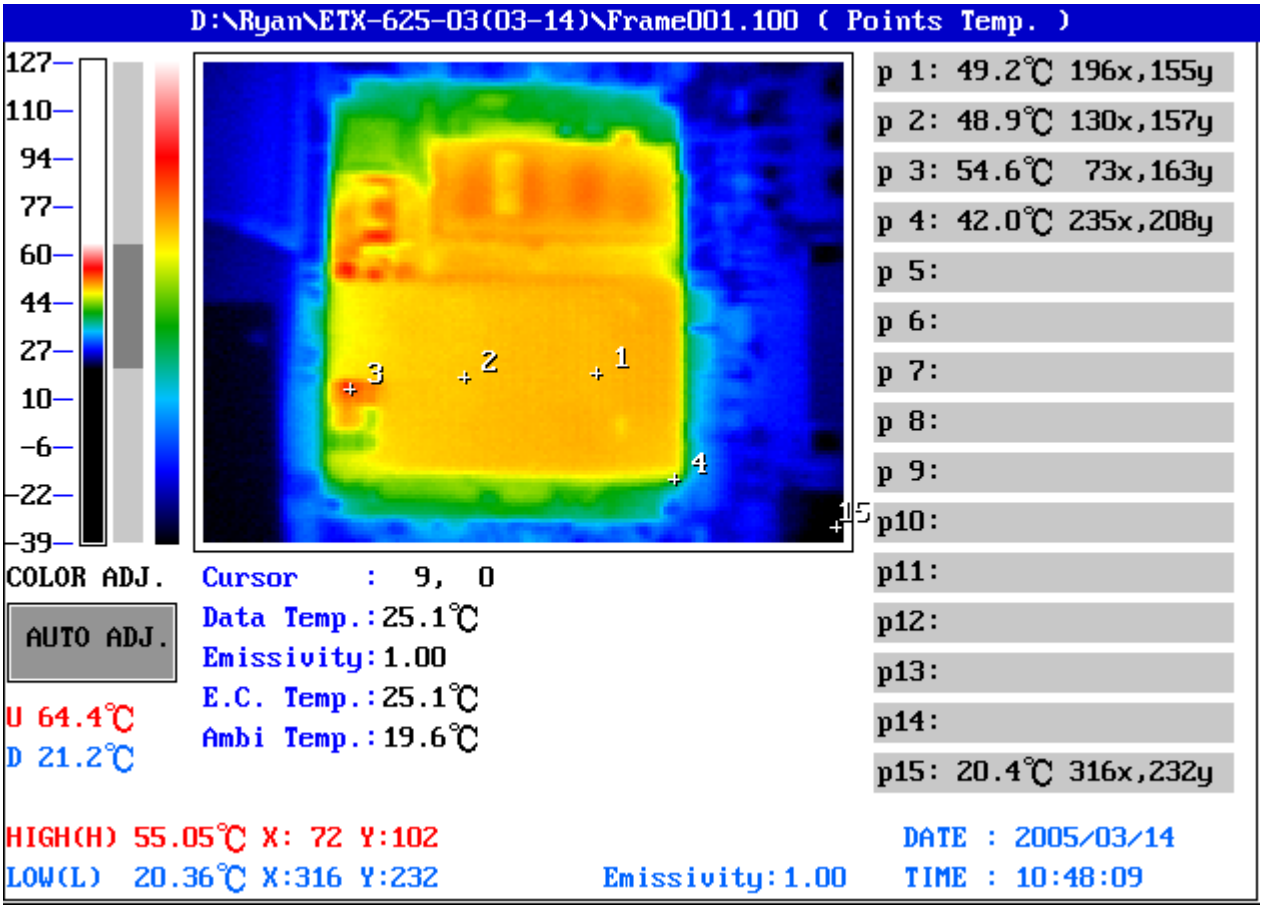
Temperature Profile Test:

Component Side (2) :



Point	Position	Describe	Tc	Tm (25℃)	Tm (60℃)	Note
1	U15	IC.SMD.552P BGA North Bridge.VIA.VT8606	0~85℃	49.2℃	88.8℃	+3.8℃
2	U14	INTEL CPU.Celeron.400MHz.Ultra Low Power.Micro FC-BGA	0~100℃	48.9℃	88.5℃	
3	U5	IC.SMD SOP.8Pin Switching PWM Controller.Intersil.ISL6520A	-30~100℃	54.6℃	94.2℃	
4	Y5	X'TAL SMD.14.31818MHz.6*3.5*1.1mm.2P.亞陶.F61430006	-50~100℃	42.0℃	81.6℃	
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15		Ambient Temperature		20.4℃		

1. Operation Temperature (℃):
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