



AAEON Technology INC.
ISO-9001/ISO-14001 Certified
Industrial Automation PCs

HSB-660S A0.2

Thermal Image Analysis Report

Release Date: Aug. 08, 2003

2003-08-08

Issue Stamp

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Test Engineer

Thermal Image Analysis

. **Model Name:** HSB-660s Rev.A0.2 (BIOS:0.2)

. **Description:** Half-size CPU Card

. **Date:** Aug. 08, 2003

. **Measure Site:** AAEON DV Dept.

. **Issued by :** Rex Chang

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

. **Simulation Environment:**

Temperature: 22.0 degrees C

CPU: Pentium 1.26GHz (133*9.5)

RAM: NEC D45128841G5-A75-9JF 128MB(PC-133)

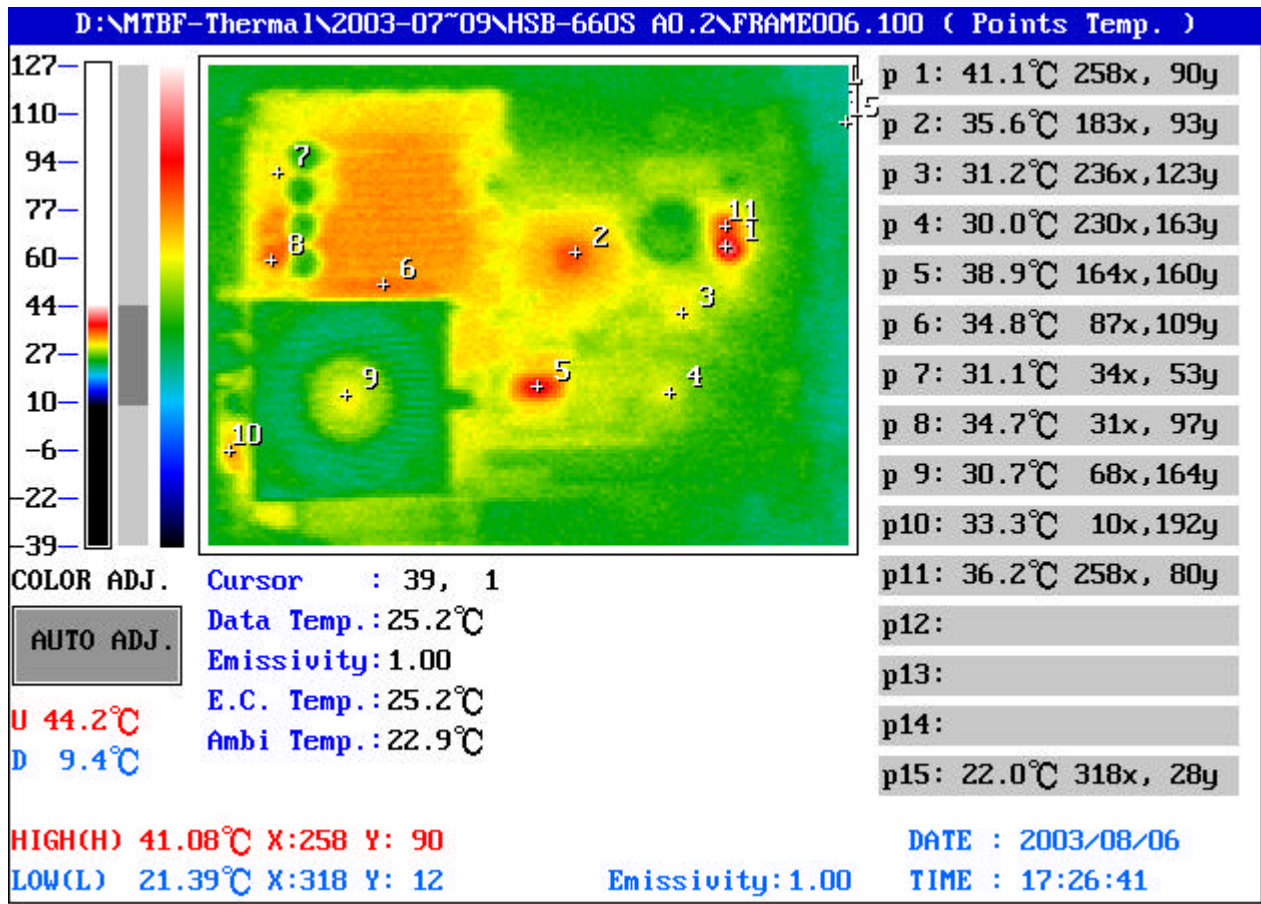
HDD : Western Digital WD400BB-75DEA0 40GB

Application Software: Windows 2000 / HCT9.5

Take Picture Time: Power on 8 Hours after

Temperature Profile Test:

Component Side :



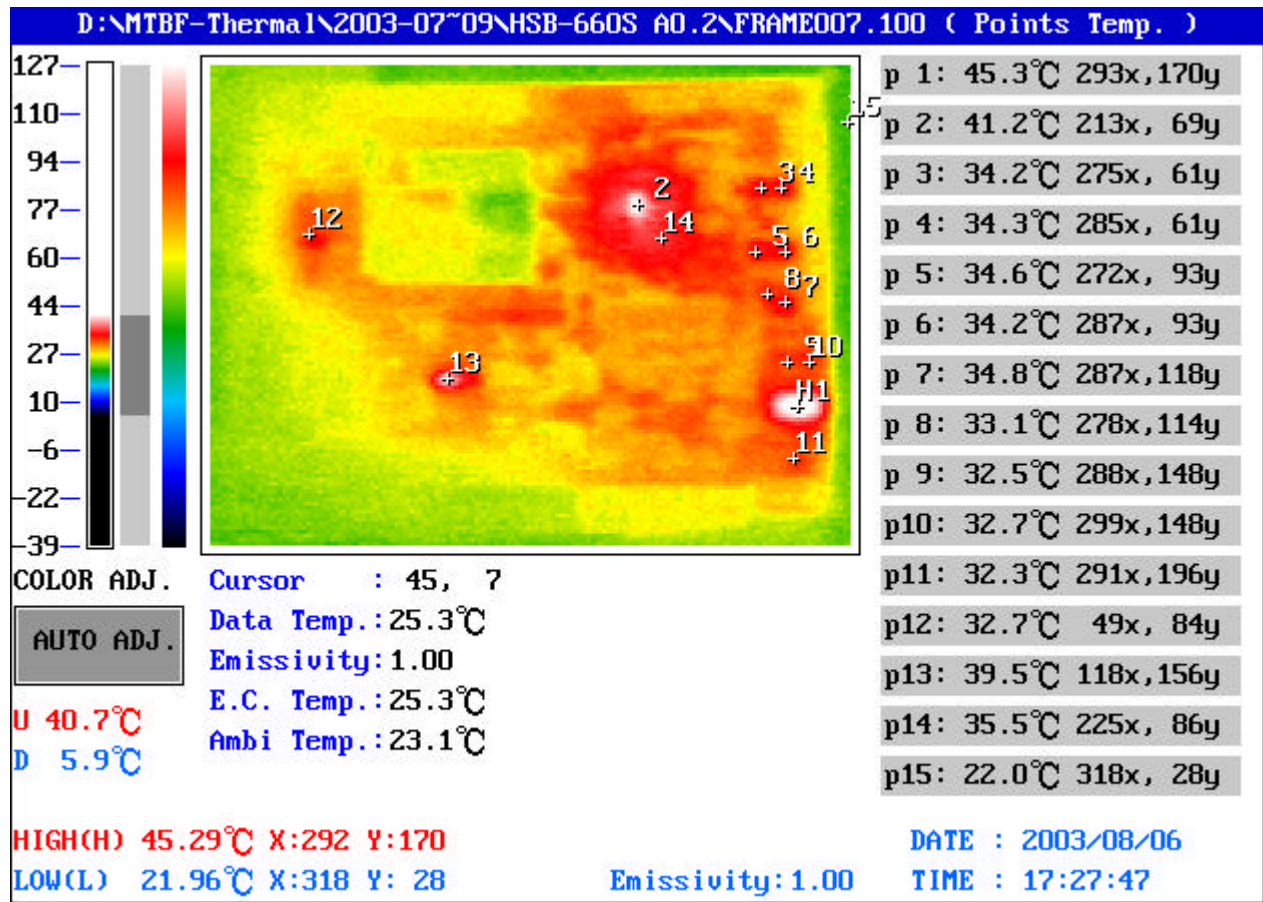
| Point | Position | Describe | Ts | Tm | Note |
|-------|----------|---|----|------|------|
| 1 | Q1 | REG.DIP(CASE29).Voltage Regulators.MOTOROLA.MOMC78L05ACPRP | | 41.1 | |
| 2 | U5 | IC.SMD.BGA South Bridge.VIA.VT82C686B | | 35.6 | |
| 3 | U9 | IC.SMD PBGA 196P.PCI Ethernet 10/100BaseT.Intel.GD82551ER | | 31.2 | |
| 4 | U13 | IC.SMD QFP 128P.PCI 32bit. Gigabit Ethernet Chip.REALTEK.RTL8110S-32 | | 30.0 | |
| 5 | U11 | IC.SMD SSOP.48Pin Clock Generator.CYPRESS.CY28316 | | 38.9 | |
| 6 | U3 | IC.SMD.552P BGA North Bridge.VIA.VT8606 | | 34.8 | |
| 7 | L1 | COIL.1uH.DIP Wire Size 1.2mm.52 材 1Wire*4 10Amp.震元.TC5052-1R0M-UL | | 31.1 | |
| 8 | L2 | COIL.2.5uH.DIP Wire Size 0.7*3Pmm.52 材 3Wire*8 30Amp.震元.TC5052-2R5M-UL | | 34.7 | |
| 9 | SKT1 | ZIF SKT.DIP.370Pin.PGA GOLD FLASHAMP.2-916783-8 | | 30.7 | |
| 10 | U33 | Reversed side of PCB(IC.SMD.SOIC 24Pin DC-DC Controller.FAIRCHILD.FAN5056V85) | | 33.3 | |
| 11 | U4 | IC.SMD.AC'97 Audio Codec.AVANCE LOGIC.ALC201 | | 36.2 | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | The Room Temperature | | 22.0 | |

1. Operation Temperature ():

Ts = Defined by component specification ; Tm = Measured by DV

Temperature Profile Test:

Solder Side :



| Point | Position | Describe | Ts | Tm | Note |
|-------|----------|---|----|------|------|
| 1 | U33 | IC.SMD.SOIC 24Pin DC-DC Controller.FAIRCHILD.FAN5056V85 | | 45.3 | |
| 2 | Q13 | PWR.SMD TO-252.N-Channel logic level | | 41.2 | |
| 3 | Q11 | PWR.SMD TO-252.30V N-Channel Power MOSFET.FAIRCHILD.FDD6680A | | 34.2 | |
| 4 | Q10 | PWR.SMD TO-252.30V N-Channel Power MOSFET.FAIRCHILD.FDD6680A | | 34.3 | |
| 5 | Q17 | PWR.SMD TO-252.30V N-Channel Power SyncFET.FAIRCHILD.FDD6680S | | 34.6 | |
| 6 | Q16 | PWR.SMD TO-252.30V N-Channel Power SyncFET.FAIRCHILD.FDD6680S | | 34.2 | |
| 7 | Q19 | REG.SMD.TO-252 3A Linear Regulator.AMS.AMS1085CD | | 34.8 | |
| 8 | CA4 | AO-CAP.220uF.2V.20%.D(7.3*4.3*2.8mm).15mOhm.SMD.KEMET.A700D 227M002AT6050 | | 33.1 | |
| 9 | U28 | IC.SMD SO-8.Supervisory Circuits.ANALOG.ADM706AR | | 32.5 | |
| 10 | U27 | IC.SMD SO.14Pin.PHILIPS.74LVC07ADT | | 32.7 | |
| 11 | Q34 | PWR.SMD TO-252.N-Channel logic level | | 32.3 | |
| 12 | U22 | IC.SMD SSOP.RS232 Driver ESD 15KV.INTERSil.HIN213ECA-T | | 32.7 | |
| 13 | U30 | IC.SSOP.TL74F244 | | 39.5 | |
| 14 | U3 | Reversed side of PCB (IC.SMD.552P BGA North Bridge.VIA.VT8606) | | 35.5 | |
| 15 | | The Room Temperature | | 22.0 | |

1. Operation Temperature ():

Ts = Defined by component specification ; Tm = Measured by DV