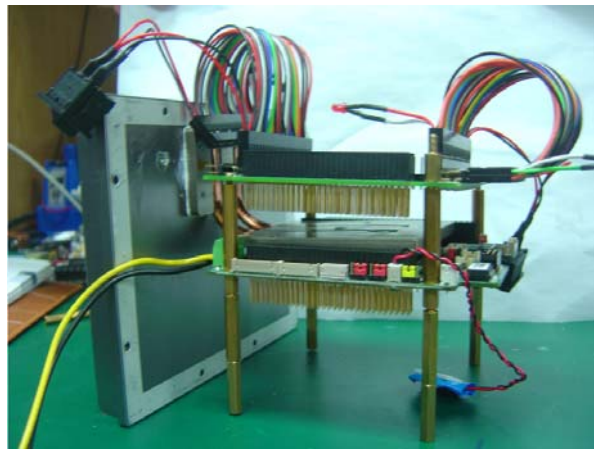


FPM-T096P

Rev.A1.0

Thermal Image Analysis Report



Summary	<input type="checkbox"/> Pass <input type="checkbox"/> Fail <input checked="" type="checkbox"/> Pass with Deviation Comment: One temperature point need improving			
	Test Result Summary			
	Critical	Major	Minor	Enhancement
Defect Found	0	0	0	1
Defect Unsolved	0	0	0	1

Issue date

2014 / 02 / 27

Approval

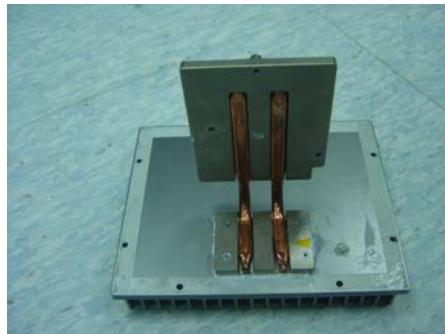
Tom Lin

Test Engineer

Ben

Sample Configuration & Quantity Under Test

- **Model name : FPM-T096P A1.0**
- **CPU Board : PFM-CVS Rev. B1.0**
- **CPU : Intel Cedarview ATOM N2600 1.6 GB**
- **Memory : DSL DDR3-1600 2 GB (ProMos Y73CAG02808RAJJ11I)**
- **HDD : Toshiba 2.5" 160GB MK6476GSX (SATA)**
- **BIOS : PFM-CVS REV.B (PFCVBM10) (05/23/2013)**
- **Test Software : Windows XP sp3 / Run Prime95 v25.6.2**
- **Power : AT Power**
- **Heat Sink (M16JPHK000)(M11JPHK000):**



Thermal Image Analysis

1. Test Date: 2014-02-27

2. Test Product : FPM-T096P A1.0

3. Test Site: QE Dept.

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: 2013/12/30

Serial Number: 0179L2746

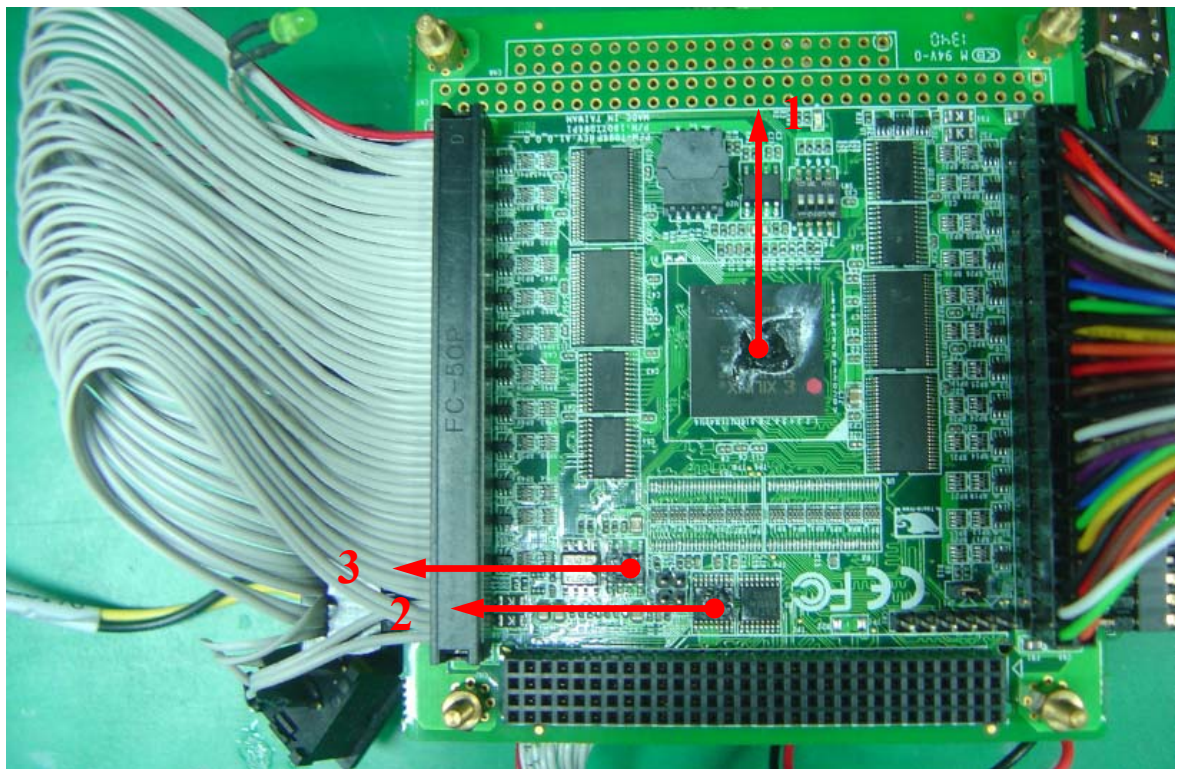
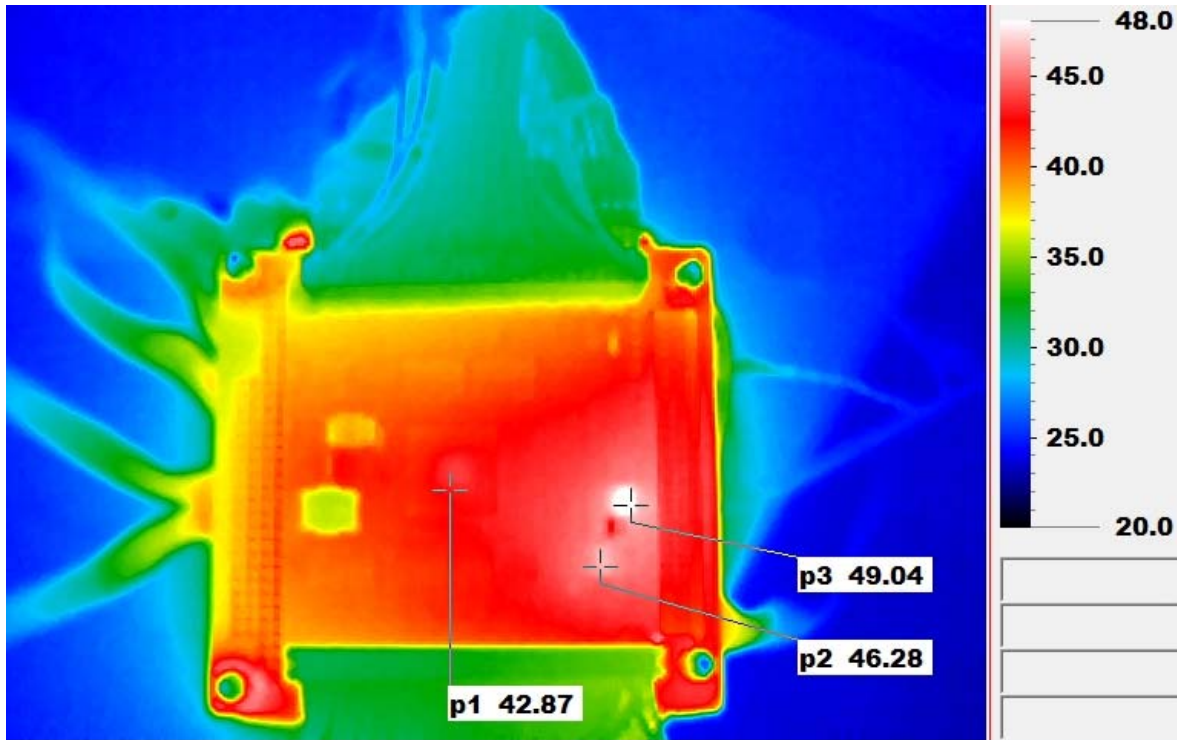
5. Test Condition:

Component Side-1 (Test by DA-100): 25.0°C With heat sink

6. Take Picture Time:

After power on 2 hours

Temperature Profile Test:



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

Point	Position	Describe	Tc (*1) (°C)	Tm (*2) Measured Under		Note
				25°C	60°C	
1	U1	(TF)IC.Spartan-3AN .SMD.XILINX.XC3S200AN-4FTG256C	70	32.2	67.2	Note 3
2	U5	(TF)IC.SMD.TSSOP-16.Dual 1-of-4 FET TI.SN74CBTLV3253PWR	100	31.9	66.9	
3	U19	(TF)REG.SMD.PSOP-8.Low-Voltage UPI.UP0104PSU8	125	32.6	67.6	

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 : $T_m > T_c + 5^{\circ}\text{C}$; 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.