

Test Report of MiCAM05 Failure of FAN-STOP

Brainvision Inc.

7F UI-building, 2-2, Kanda-Ogawamachi, Chiyoda-city, Tokyo, 101-0052, Japan

ETU: MiCAM05(S/N 50021) with a MC05 Ultima-D camera

Room Temp.: 26.2C, with air conditioned Humidity: 58%

Condition : Disconnect FAN power connector with full cover. Put on a wood desk top without any forced cooling devices.

Equipment: FLIR i5 IR Camera

Date: 2016 9/12

Test site: Brainvision Kanda Office

Examiner: Michinori Ichikawa

Summary

After 180 minutes test, we confirm that;

Normal operation keeping

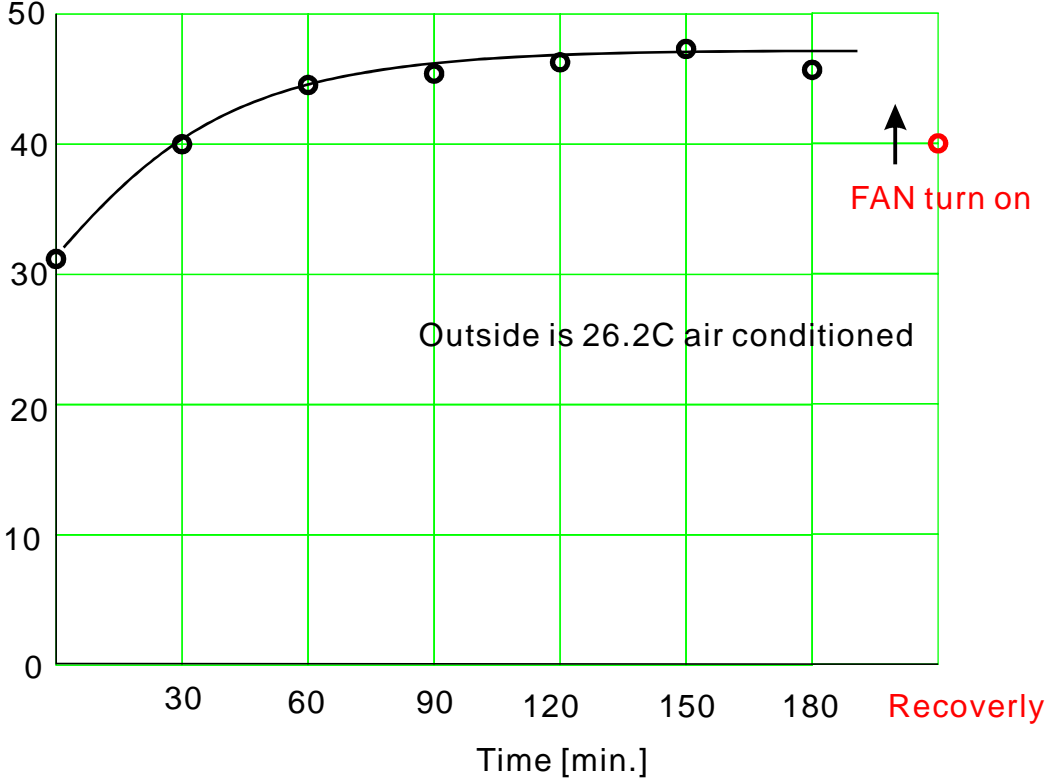
No human harmfully for anyplace of exterior surface

No risk for both of flames and fatal damages for all devices

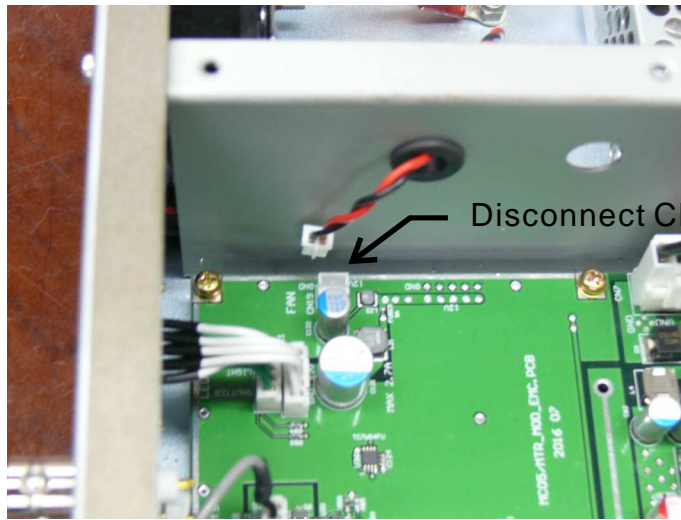
Test results for each site

1. Processor Exterior: highest point is top of the case, 47.3C
2. Processor Exterior: average temperature is 40.5C
3. Processor Interior:
 - DC-DC conv. for 3.3V (Cosel BRNS20) 90.5C
 - DC-DC conv. for 6.0V (AO AOZ1037) 75.0C
 - AC-DC conv. (Cosel PBA150-12V) 75.0C
 - Memory unit array (using XC6SLX16) 90.0C
 - Other part temperature are below than 47.0C

Cover Top Temperature[°C] - FAN stop failure

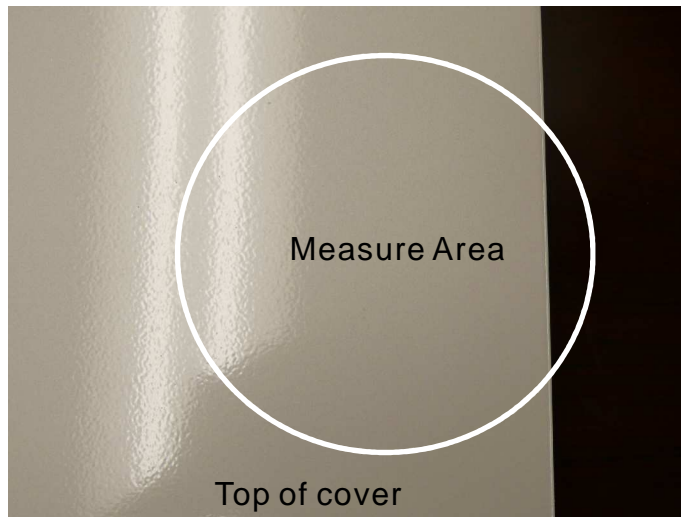


Test Setup
FAN turn off



Disconnect CN19 (FAN power)

Location of
Temperature
Measurement

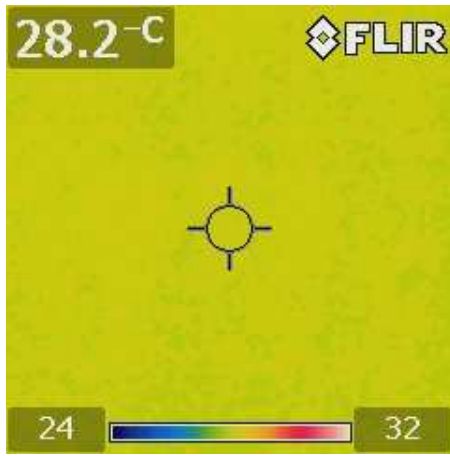


Measure Area

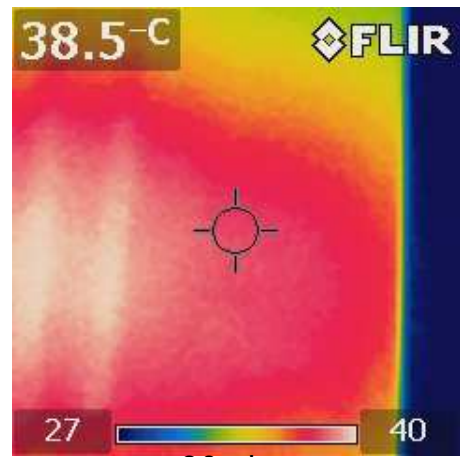
Top of cover

Test Bench

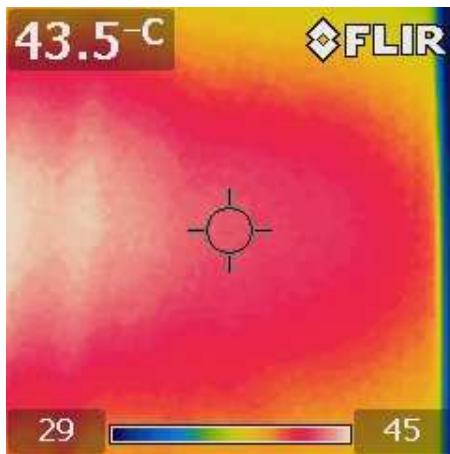




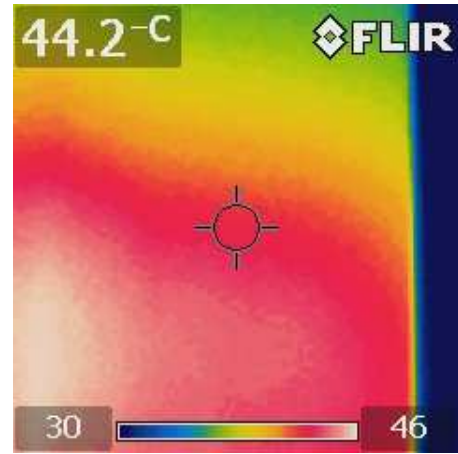
0min



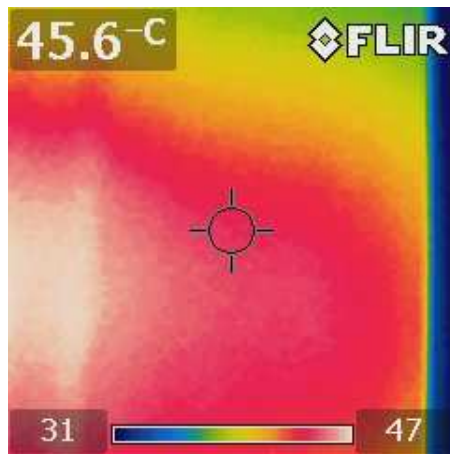
30min



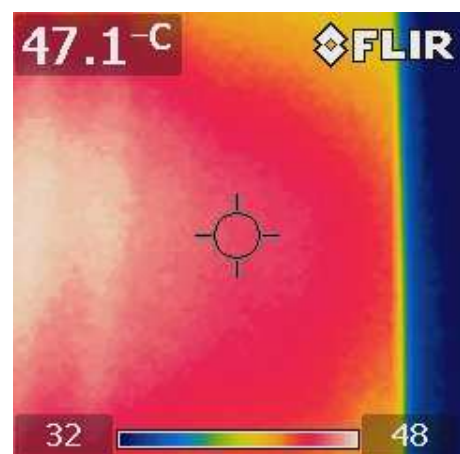
60min



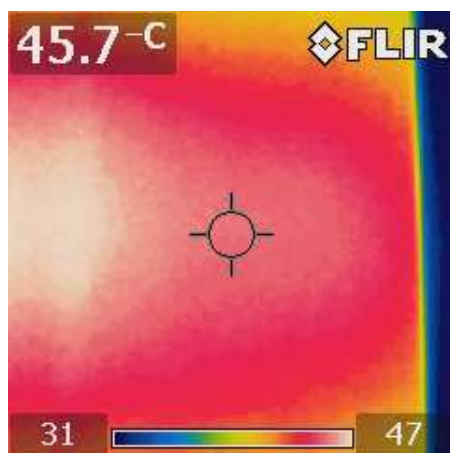
90min



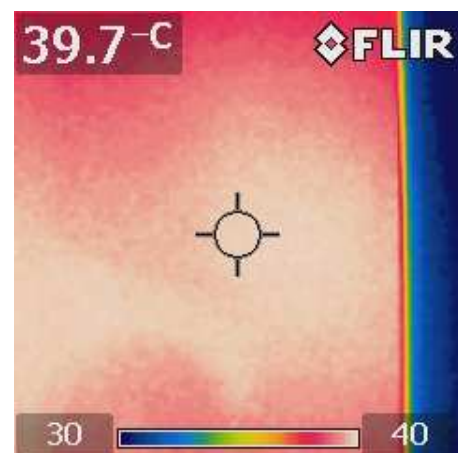
120min



150min

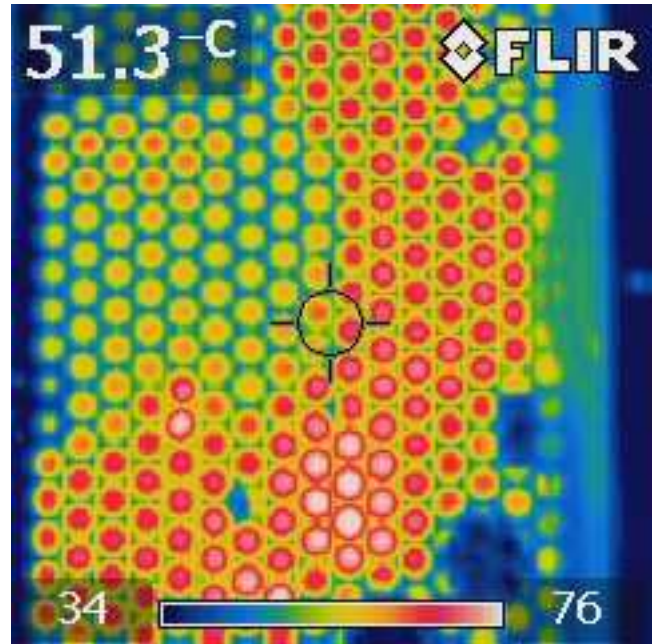
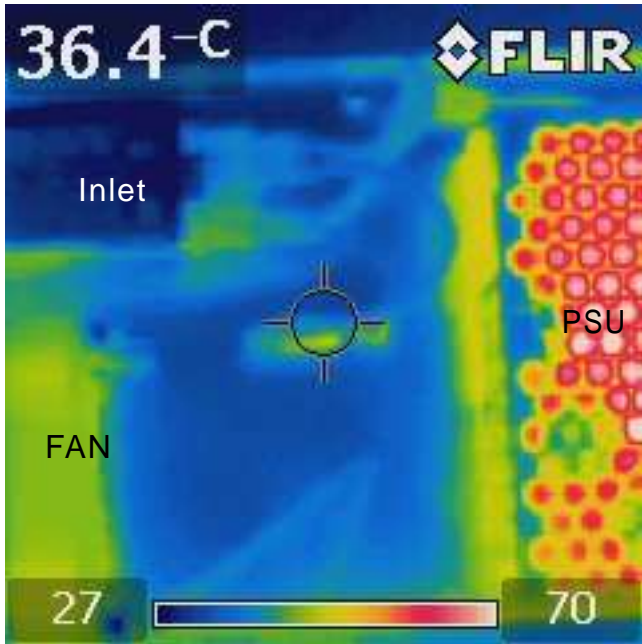


180min

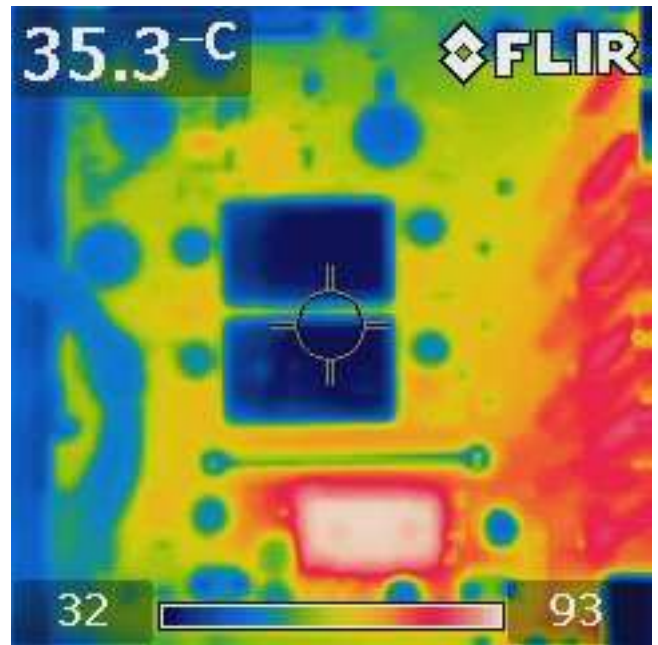
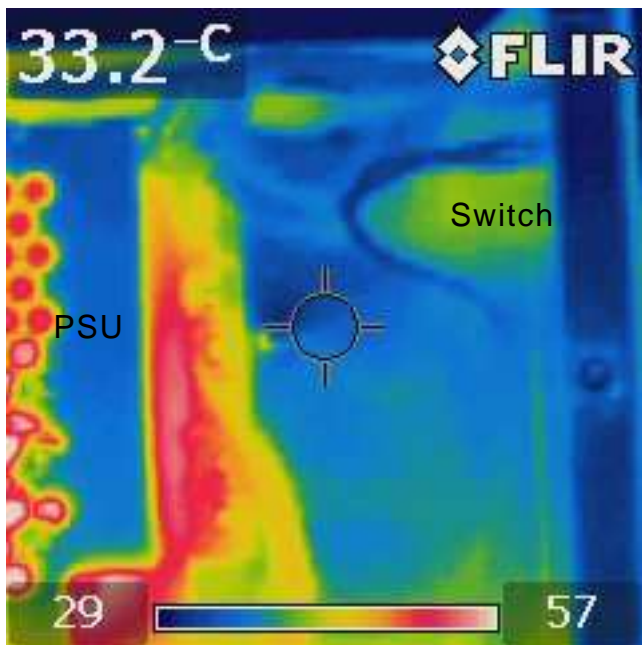


Recover (FAN on 10min)

Interior



PSU



DC-DC converters