



Product Compliance Center

Thermography Test Report

Equipment under
Test (EUT):

System Board D3243-S10 GS61

Applicant:

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Document No.:

THP+1SB13-0015+K01

Test date:

October 23, 2013

Issue date:

October 29, 2013

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Signature

The results in this report apply only to the tested sample(s).

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3. Summary of standards and results

The system was tested according to the test specification listed below.

3.1. Test specifications:

Thermography A26099-Y0023-V261 FTS work specification

3.2. Summary of results

3.2.1. Evaluation of test results

see detected temperature peaks on page 7

Note: The results are only applicable for the tested configuration.

3.3. Table of used instruments

Thermography

Test- / Measure device	Equipment name			Check / Calibration	
	Manufacturer	Type	Serial-No.	last*	next*
Thermography system	FLIR	SC620	404003720	---	12.13C
Lens	FLIR	Clos-up IR lens 0.5X, f=75mm	---	---	12.13C
Lens	FLIR	IR lens, f=19mm, 45°	---	---	12.13C
Software	FLIR	ThermaCAM Researcher	---	---	---
	FLIR	Reporter pro	---	---	---
Temperature reference	AGEMA	1010	12013	11.12C	11.13C

* C = Calibration CH = Check

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4. Equipment under test

4.1. System description

Product type: System board
Manufacturer: Fujitsu Technology Solutions GmbH
Model: D3243-S10 GS61
SN: 42595763



EUT with IR-scanner

BIOS:V4.6.5.4 R1.6.2 for D3243-S1x 10/10/2013, **CPU:** Intel Core i7-4771 @3.50GHz with Cooler Master heat sink V26898-B974-V1 with fan, **RAM:**2xHMT351S6CFR8A 4GB 2Rx8 PC3L-12800S-11-12-F3 dc:1317, **SSD:** Toshiba THSNX032GMCT 32GB, **USB keyboard and mouse,** **Additional load:** +3.3V/5A, +5V/8A, **LAN-ports connected to each other**

Heat up time: >2h

Receipt date:

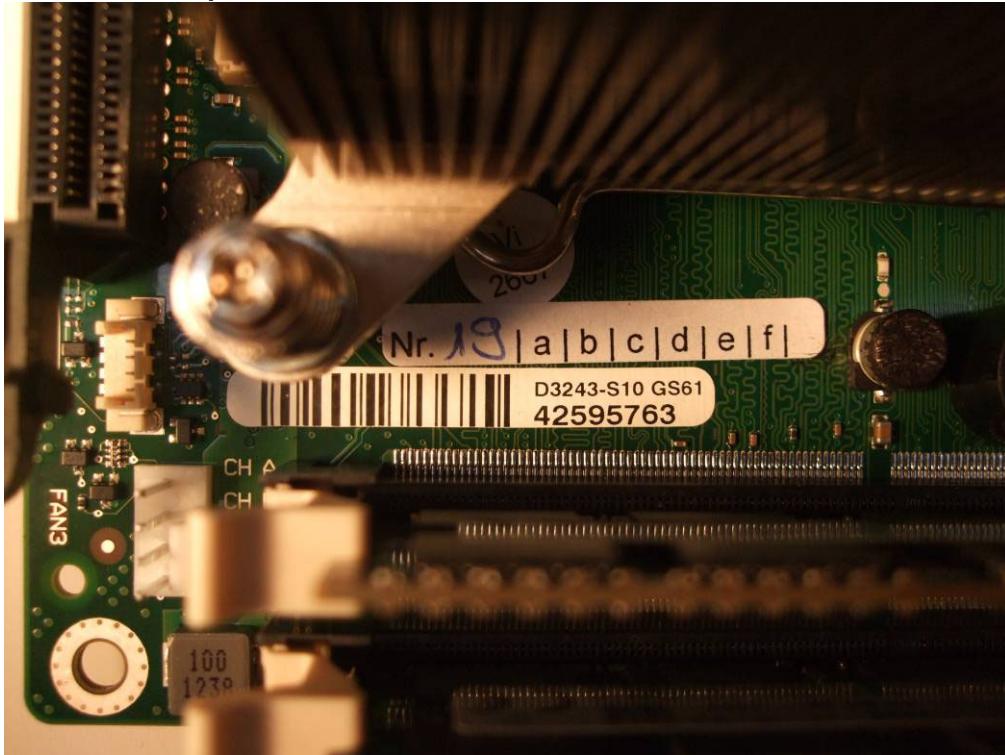
October 21, 2013

Condition when received:

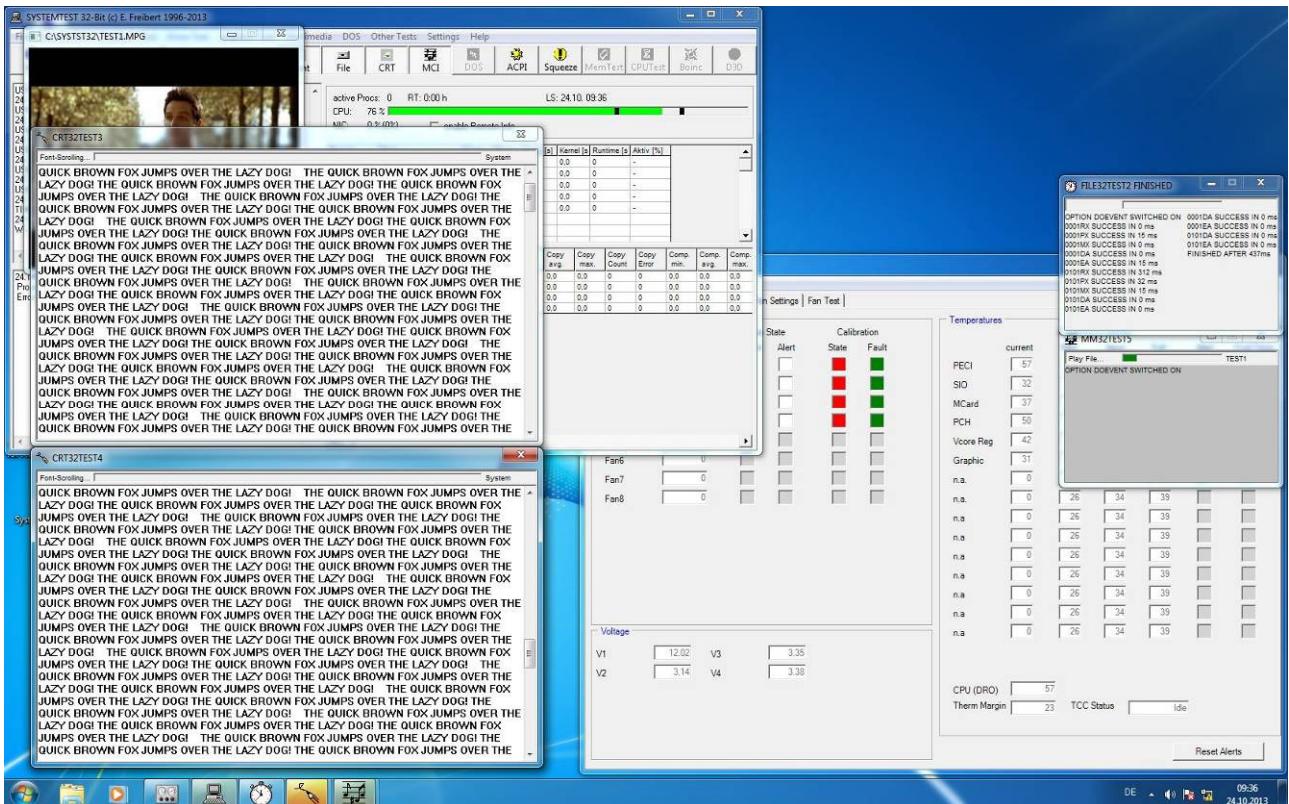
Ready for test

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4.2. EUT photos

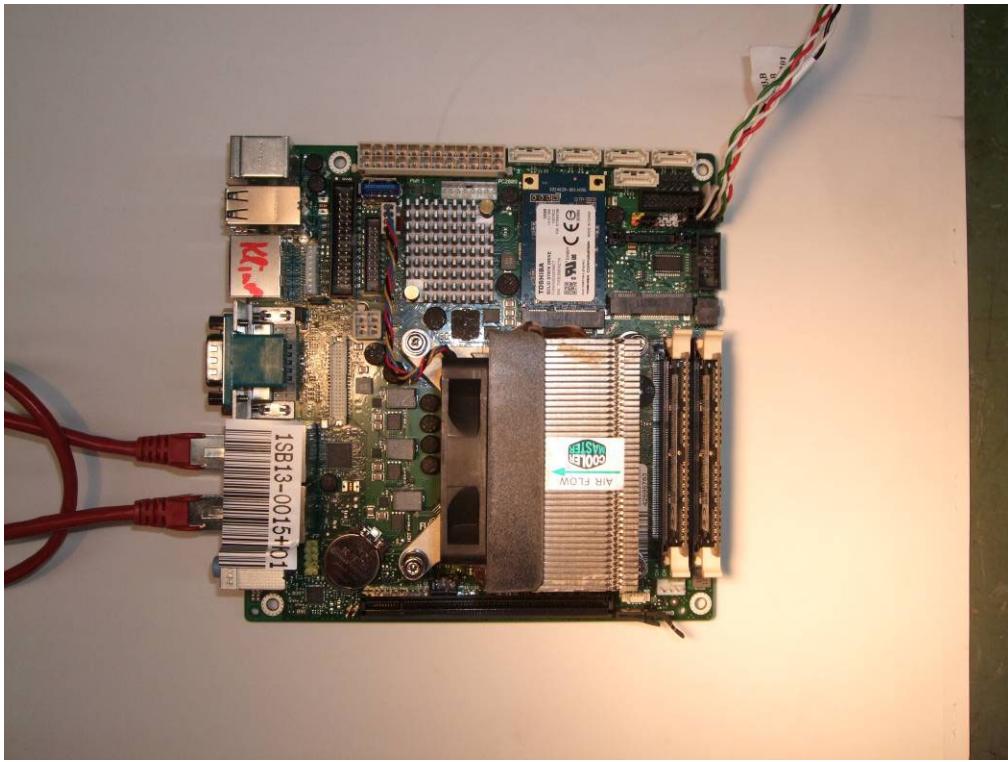


System board type label

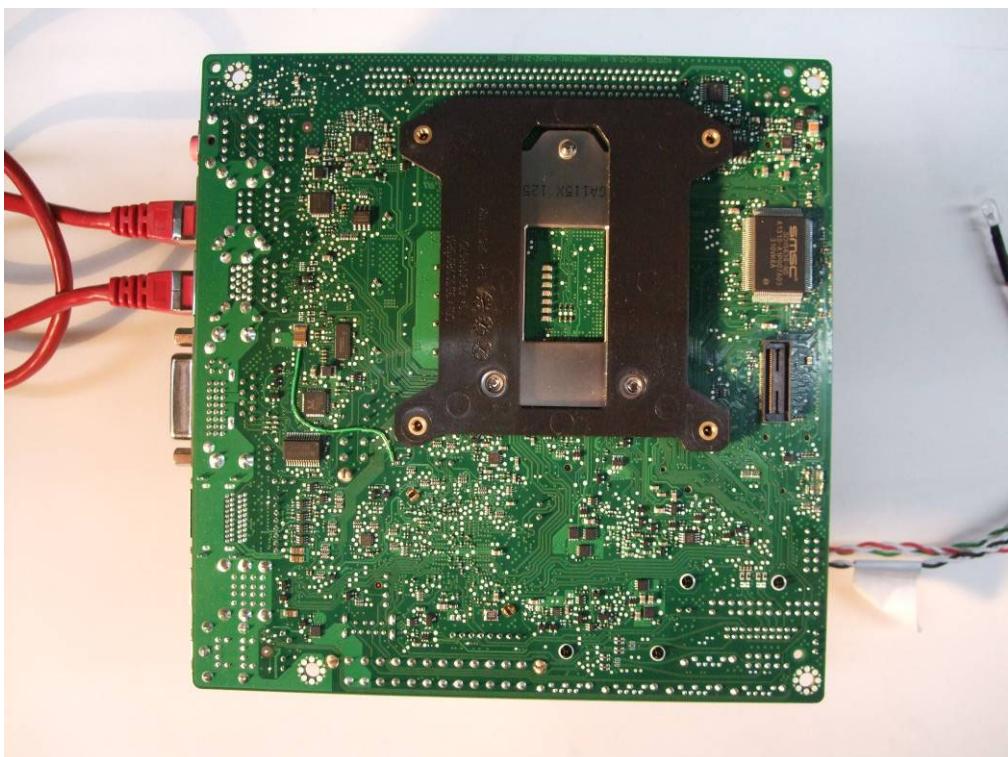


Screenshot of testing software

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System board front



System board back

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5. Test results

5.1. Detected temperature peaks

Component topside temperature at an ambient temperature of 23 °C

Through film

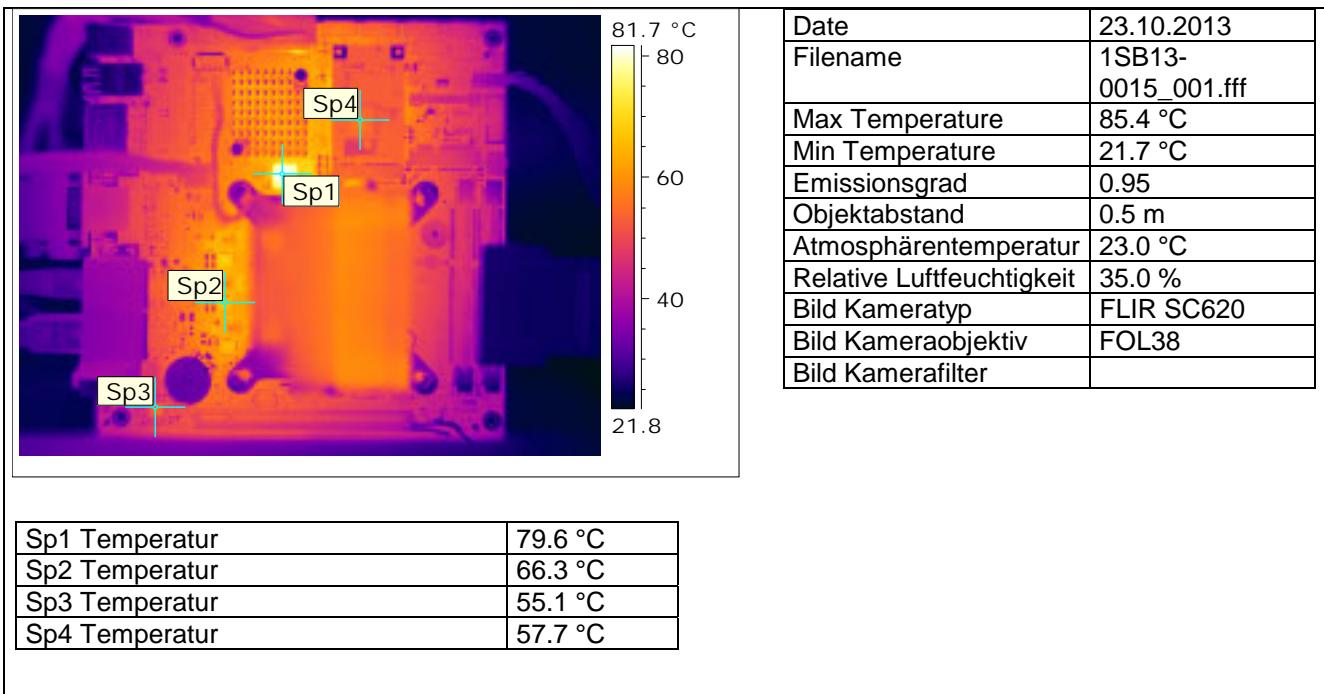
Reference black body: debit 95°C (24° lens) is **95,2** °C

no#	Location	Component	Temperature		IR-images no:	Comment:	Sens point
			with film	without film			
01	D3243-S10 front	920L70	---°C	---°C	5.2.1.	SP1	Overview to see hot spots
02	-“-	120V13	---°C	---°C	-“-	SP2	-“-
03	-“-	780D00	---°C	---°C	-“-	SP3	-“-
04	-“-	mSATA-module	---°C	---°C	-“-	SP4	-“-
05	-“-	920L70	---°C	79,6°C	5.2.2.	SP1	
06	-“-	120V33	---°C	69,1°C	5.2.3.	SP1	
07	-“-	120V13	---°C	66,6°C	-“-	SP2	
08	-“-	120V23	---°C	65,5°C	-“-	SP3	
09	-“-	820D00	---°C	61,3°C	-“-	SP4	
10	-“-	780D00	---°C	56,1°C	5.2.4.	SP1	
11	-“-	mSATA-module	---°C	62,5°C	5.2.5.	SP1	
12	-“- back side	922V51	---°C	---°C	5.2.6.	SP1	Overview to see hot spots
13	-“-	340N00	---°C	---°C	-“-	SP2	-“-
14	-“-	120N50	---°C	---°C	-“-	SP3	-“-
15	-“-	922V51	---°C	69,6°C	5.2.7.	SP1	
16	-“-	340N00	---°C	69,1°C	-“-	SP2	
17	-“-	120N50	---°C	66,1°C	5.2.8.	SP1	

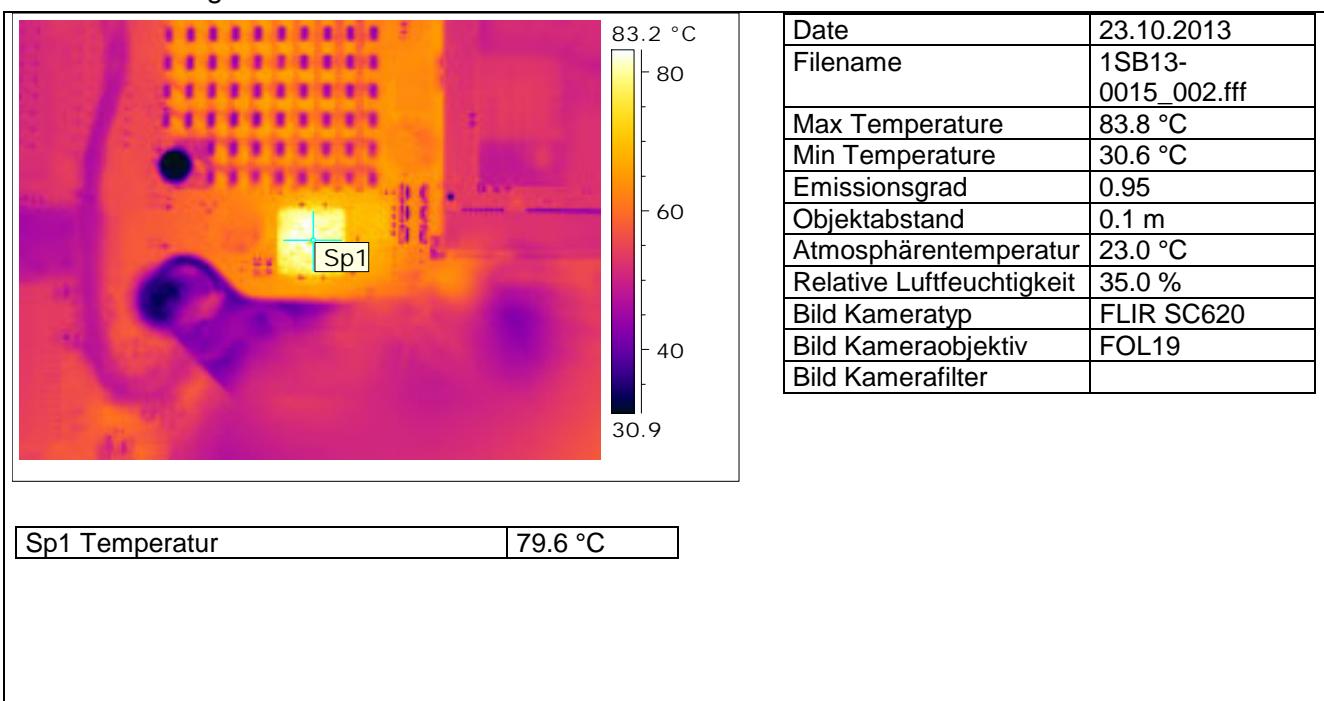
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5.2. IR-Images

5.2.1. IR-Image

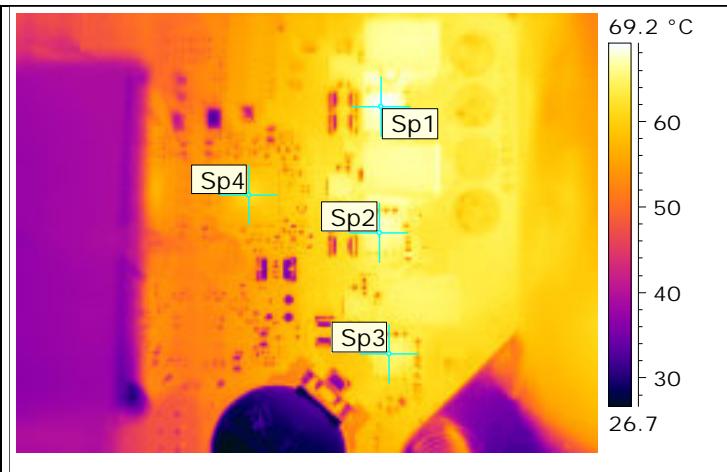


5.2.2. IR-Image



EUT : System Board D3243-S10 GS61

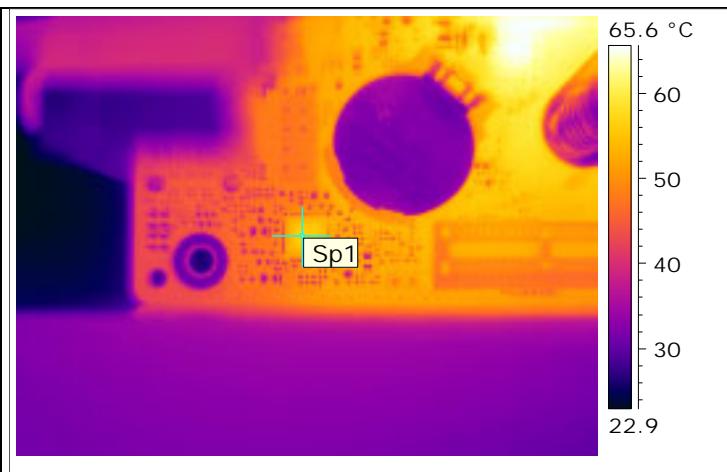
5.2.3. IR-Image



Date	23.10.2013
Filename	1SB13-0015_003.fff
Max Temperature	69.5 °C
Min Temperature	26.5 °C
Emissionsgrad	0.95
Objektabstand	0.1 m
Atmosphärentemperatur	23.0 °C
Relative Luftfeuchtigkeit	35.0 %
Bild Kameratyp	FLIR SC620
Bild Kameraobjektiv	FOL19
Bild Kamerafilter	

Sp1 Temperatur	69.1 °C
Sp2 Temperatur	66.6 °C
Sp3 Temperatur	65.5 °C
Sp4 Temperatur	61.3 °C

5.2.4. IR-Image

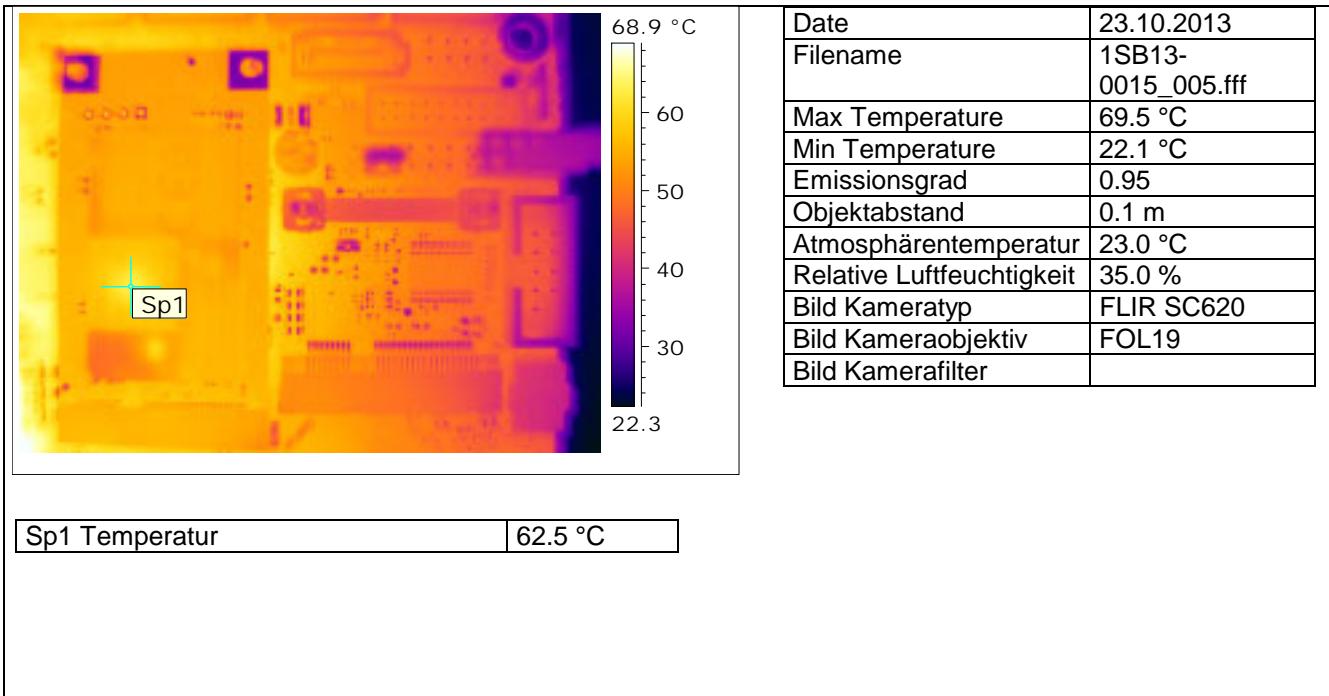


Date	23.10.2013
Filename	1SB13-0015_004.fff
Max Temperature	65.8 °C
Min Temperature	22.8 °C
Emissionsgrad	0.95
Objektabstand	0.1 m
Atmosphärentemperatur	23.0 °C
Relative Luftfeuchtigkeit	35.0 %
Bild Kameratyp	FLIR SC620
Bild Kameraobjektiv	FOL19
Bild Kamerafilter	

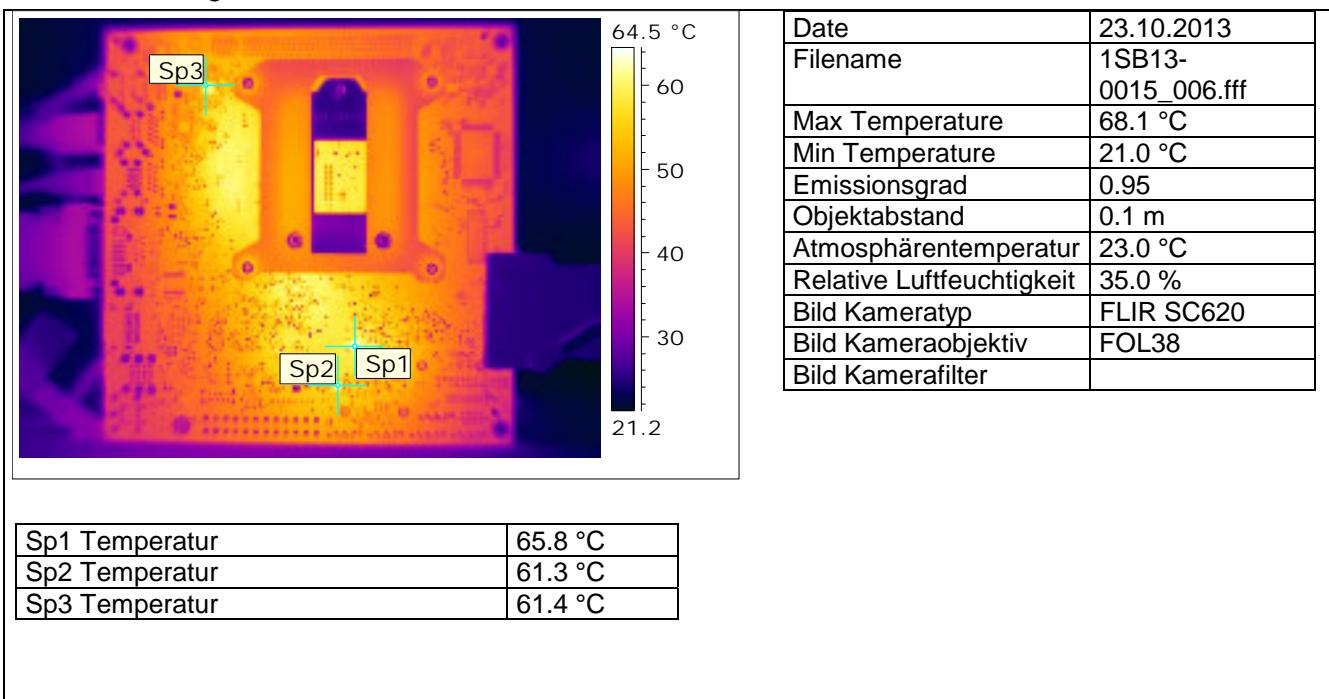
Sp1 Temperatur	56.1 °C
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5.2.5. IR-Image

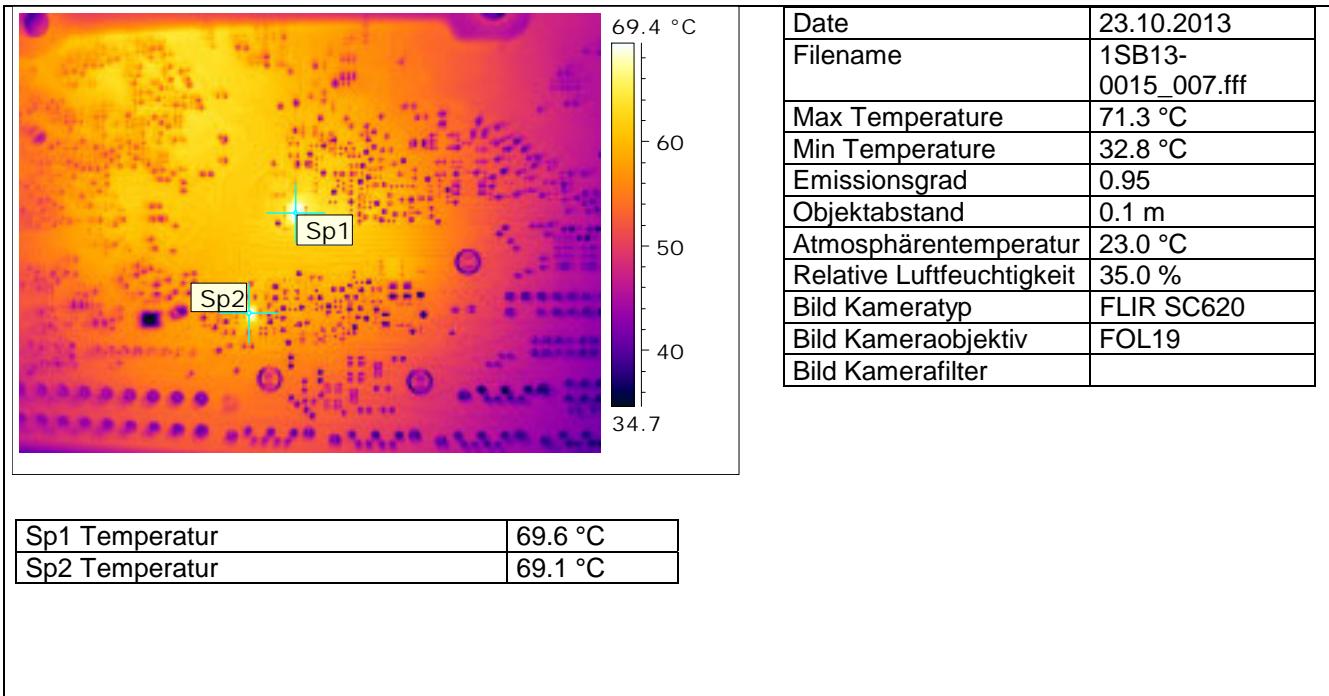


5.2.6. IR-Image



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5.2.7. IR-Image



5.2.8. IR-Image

