



## Accredited testing-laboratory

**DAR registration number: DAT-P-176/94-D1**

**Federal Motor Transport Authority (KBA)  
DAR registration number: KBA-P 00070-97**

**Recognized by the Federal Communications Commission**

**Anechoic chamber registration no.: 90462 (FCC)**

**Anechoic chamber registration no.: 3462C-1 (IC)**

**Certification ID: DE 0001**

**Accreditation ID: DE 0002**

**Accredited Bluetooth® Test Facility (BQTF)**

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**Test report no. : 1-0754-02-03/08**  
**Type identification : TST PD\_FSAS**  
**Applicant : FEIG ELECTRONIC GmbH**  
**FCC ID : PJMTSTPDFSAS**  
**IC Certification No : 6633A-TSTPDFSAS**  
**Test standards : 47 CFR Part 15**  
**RSS - 210 Issue 7**

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## 1 General information

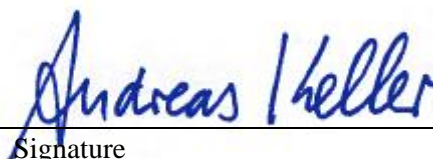
### 1.1 Notes

The test results of this test report relate exclusively to the test item specified in 3.1.1. The CETECOM ICT Services GmbH does not assume responsibility for any conclusions and generalisations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the CETECOM ICT Services GmbH.

Test laboratory manager:

2009-04-30

Andreas Keller



Date

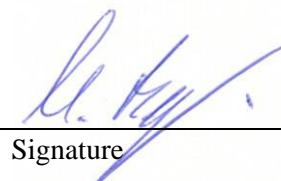
Name

Signature

Technical responsibility for area of testing:

2009-04-30

Michael Berg



Date

Name

Signature

## 1.2 Testing laboratory

**CETECOM ICT Services GmbH**

Untertürkheimer Straße 6 - 10

66117 Saarbrücken

Germany

Phone: + 49 681 5 98 - 0

Fax: + 49 681 5 98 - 9075

e-mail: info@ICT.cetecom.de

Internet: <http://www.cetecom-ict.de>

**State of accreditation:** The test laboratory (area of testing) is accredited according to  
DIN EN ISO/IEC 17025  
DAR registration number: DAT-P-176/94-D1

**Accredited by:** Federal Motor Transport Authority (KBA)  
DAR registration number: KBA-P 00070-97

**Testing location, if different from CETECOM ICT Services GmbH:**

**Name :**  
**Street :**  
**Town :**  
**Country :**  
**Phone :**  
**Fax :**

## 1.3 Details of applicant

<b>Name:</b>	<b>FEIG ELECTRONIC GmbH</b>
<b>Street:</b>	<b>Lange Str. 4</b>
<b>Town:</b>	<b>35781 Weilburg-Waldhausen</b>
<b>Country:</b>	<b>Germany</b>
<b>Telephone:</b>	<b>+49 (0) 6471 31 09-0</b>
<b>Fax:</b>	
<b>Contact:</b>	<b>Herr Frieder Heinze</b>
<b>E-mail:</b>	
<b>Telephone:</b>	<b>+49 (0) 6471 3109-0</b>

## 1.4 Application details

<b>Date of receipt of order:</b>	<b>2009-03-23</b>
<b>Date of receipt of test item:</b>	<b>2009-04-01</b>
<b>Date of start test:</b>	<b>2009-04-01</b>
<b>Date of end test:</b>	<b>2009-04-30</b>
<b>Persons(s) who have been present during the test:</b>	<b>Mr. Martin Ochs</b>

## 1.5 Test standard/s

<b>47 CFR Part 15</b>	<b>2008-07</b>	<b>Title 47 of the Code of Federal Regulations; Chapter I- Federal Communications Commission subchapter A - general, Part 15-Radio frequency devices</b>
<b>RSS - 210 Issue 7</b>	<b>2007-06</b>	<b>Spectrum Management and Telecommunications - Radio Standards Specification Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment</b>

### 1.6 Test Item

Type of equipment	:	Equipment for sliding gate control system
Model name	:	<b>TST PD_FSAS</b>
Manufacturer	:	FEIG ELECTRONIC GmbH
Address	:	Lange Str. 4
City	:	Weilburg-Waldhausen
Country	:	Germany
Tested to Radio Standards Specification(RSS) No.	:	210 Issue 7
Open Area Test Site Industry Canada Number	:	IC 3462C-1
Frequency Range (or fixed frequency)	:	2402 MHz – 2480 MHz
R F: Power in Watts	:	0.0004
Field Strength (at what distance)	:	92.9dB $\mu$ V/m at 3m
Occupied Bandwidth (99% BW)	:	754kHz
Type of Modulation	:	GFSK
Antenna Information	:	Integrated antenna
Emission Designator (TRC-43)	:	754kFXD
Transmitter Spurious (worst case)	:	54.52dB $\mu$ V/m at 1m
Receiver Spurious (worst case)	:	29.8dB $\mu$ V/m at 10m
IC no.	:	<b>PJMTSTPDFSAS</b>
FCC ID	:	<b>6633A-TSTPDFSAS</b>

**ATTESTATION:**

**DECLARATION OF COMPLIANCE:**

I declare that the testing was performed or supervised by me; that the test measurements were made in accordance with the above-mentioned Industry Canada standard(s); and that the equipment identified in this application has been subjected to all the applicable test conditions specified in the Industry Canada standards and all of the requirements of the standard have been met.

**Testing Engineer:**

2009-04-30      Andreas Keller  
 Date                      Name

Signature 

### 1.7 Test Setup

Hardware	:	-
Software	:	TST FSA-ST V00-03

## 2 Statement of Compliance

No deviations from the technical specification(s) were ascertained in the course of the tests performed.

### 2.1 Summary of Measurement Results

#### 2.1.1 CFR 47 Part 15 Radio frequency devices

Section in this Report	Test Name / Section FCC Part 15	Test Name / Section RSS 210 Issue 7	Measurement applicable	Verdict
4.1	§ 15.35 (c) Timing of the transmitter (Duty cycle correction factor )	6.5 Pulsed Operation	No	
4.2	§ 15.249 (a) FIELDSTRENGTH OF FUNDAMENTAL	6.2.2 (m2)(1) 902-928, 2400-2483.5 and 5725-5875 MHz	YES	pass
4.3	§ 15.249 (a) (d) FIELDSTRENGTH OF HARMONICS and SPURIOUS	6.2.2 (m2)(1)(3) 902-928, 2400-2483.5 and 5725-5875 MHz	YES	pass
4.4	§ 15.109 Receiver spurious emissions (radiated)	7.3 Receiver Spurious Emissions (Radiated)	YES	pass
4.5	§ 15.107 / 15.207 Conducted Limits	Section 6.6 , 7.4	YES	pass

---

### 3 Measurements and results

The radiated measurements are performed in vertical and horizontal plane in the frequency range from 9 kHz to 20 GHz in semi-anechoic chambers. The EUT is positioned on a non-conductive support with a height of 0.80 m above a conductive ground plane that covers the whole chamber.

The receiving antennas are conform with specifications ANSI C63.2-1996 clause 15 and ANSI C63.4-2003 clause 4.1.5. These antennas can be moved over the height range between 1.0 m and 4.0 m in order to search for maximum field strength emitted from EUT. The measurement distances between EUT and receiving antennas are indicated in the test set-ups for the various frequency ranges. For each measurement, the EUT is rotated in all three axes until the maximum field strength is received.

The wanted and unwanted emissions are received by spectrum analysers where the detector modes and resolution bandwidths over various frequency ranges are set according to requirement ANSI C63.4-2003 clause 4.2.

Antennas are conform with ANSI C63.2-1996 item 15.

150 kHz - 30 MHz: Quasi Peak measurement, 9 kHz Bandwidth, passive loop antenna.

30 MHz - 200 MHz: Quasi Peak measurement, 120 kHz Bandwidth, biconical antenna

200MHz - 1GHz: Quasi Peak measurement, 120 kHz Bandwidth, log periodic antenna

>1GHz: Average, RBW 1MHz, VBW 10 Hz, wave guide horn

All measurement settings are according to FCC 15.109 and 15.107



## 4 FCC Part 15 Subpart C

### 4.1 Timing of the transmitter

#### Reference

FCC	:	CFR Part SUBCLAUSE § 15.35 (c)
IC	:	RSS 210, Issue 7 6.5 PULSED OPERATION

### Measurement not applicable

#### Limits: § 15.35 (c)

(c) Unless otherwise specified, e.g. Section 15.255(b), when the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value. The exact method of calculating the average field strength shall be submitted with any application for certification or shall be retained in the measurement data file for equipment subject to notification or verification.

## 4.2 Field Strength of the Fundamental

### Reference

FCC	:	CFR Part SUBCLAUSE § 15.249 (a)
IC	:	RSS 210, Issue 7, 6.2.2 (m2)(1) 902-928, 2400-2483.5 and 5725-5875 MHz

### MAXIMUM OUTPUT POWER (QUASI PEAK) (RADIATED)

TEST CONDITIONS		MAXIMUM POWER (dB $\mu$ V/m)		
Frequency [MHz]		2402	2442	2480
T <sub>nom</sub> 22 °C	V <sub>nom</sub> 110 V	91.3	92.3	92.9
Measurement uncertainty		±3dB		

RBW/VBW : 1 MHz

### Limits

SUBCLAUSE § 15.249 (a)

Fundamental Frequency (MHz)	Field strength of Fundamental (mV/m)	Field strength of Harmonics (V/m)
902-928	50 (94 dB $\mu$ V/m)	500 (54 dB $\mu$ V/m)
2400-2483.5	50 (94 dB $\mu$ V/m)	500 (54 dB $\mu$ V/m)
5725-5875	50 (94 dB $\mu$ V/m)	500 (54 dB $\mu$ V/m)
24.0-24.25 GHz	250 (108 dB $\mu$ V/m)	2500 (68 dB $\mu$ V/m)

### 4.3 Field Strength of the Harmonics and Spurious

**Reference**

FCC	:	CFR Part SUBCLAUSE § 15.249 (a)(d)
IC	:	RSS 210, Issue 7, 6.2.2 (m2)(1)(3) 902-928, 2400-2483.5 and 5725-5875 MHz

EMISSION LIMITATIONS					
f (MHz)		amplitude of emission (dBµV/m) Average/QP	Limit max. allowed emission power	actual attenuation below frequency of operation (dB)	results
2480		92.9 / QP	94BµV/m		Operating frequency
			20 dBc or 46 dBµV/m		Complies
			20dBc or 54 dBµV/m		Complies
				Complies	
				Complies	
				Complies	
				Complies	
				Complies	
				Complies	
				Complies	
Measurement uncertainty			± 3dB		

**Limits**

**SUBCLAUSE § 15.249 (a)**

Fundamental Frequency (MHz)	Field strength of Fundamental (mV/m)	Field strength of Harmonics (µV/m)
902-928	50 (94 dBµV/m)	500 (54 dBµV/m)
2400-2483.5	50 (94 dBµV/m)	500 (54 dBµV/m)
5725-5875	50 (94 dBµV/m)	500 (54 dBµV/m)
24.0-24.25 GHz	250 (108 dBµV/m)	2500 (68 dBµV/m)

**Limits**

**SUBCLAUSE § 15.249 (d)**

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

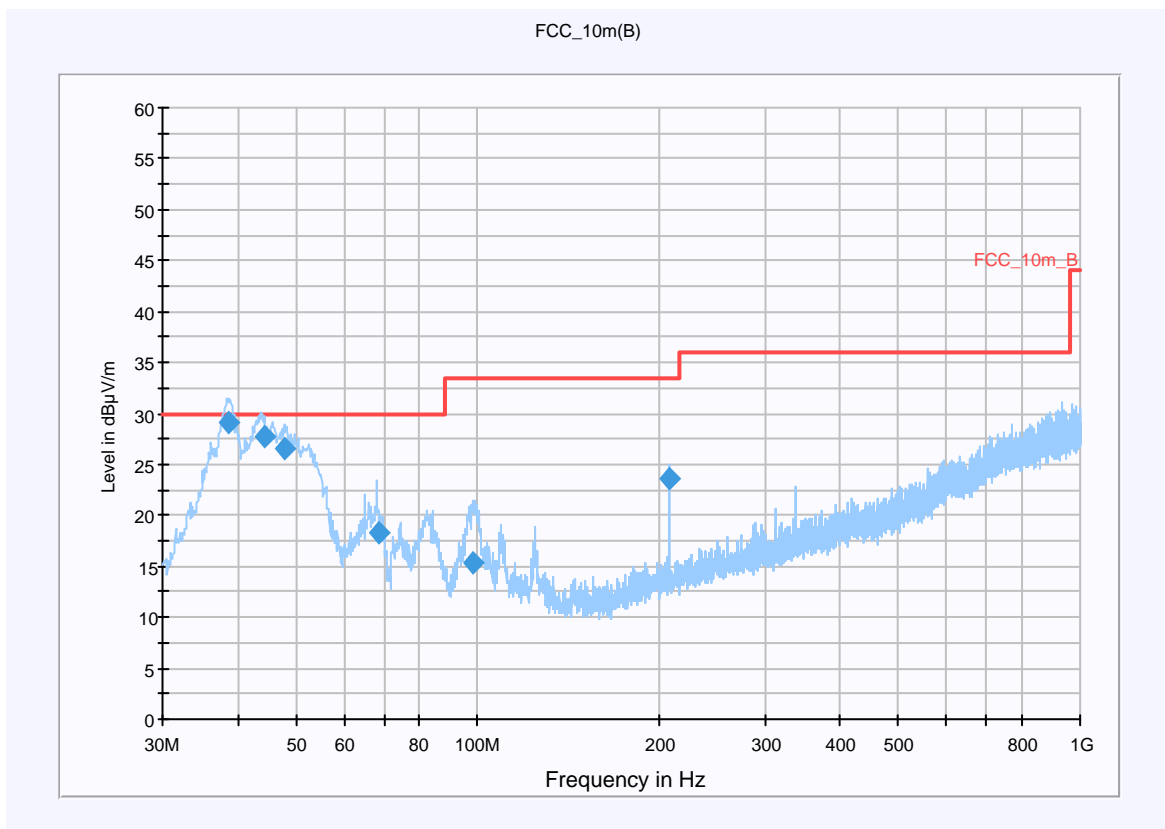
Plot 1: Channel 1 up to 1GHz

### Common Information

EUT: TST PDFSAS, TST FSAM  
 Serial Number: PP: 1716429; FP: 1813636  
 Test Description: FCC part 15 B  
 Operating Conditions: Tx Testmod Channel 1  
 Operator Name: LNG  
 Comment:

### Scan Setup: STAN\_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)  
 Level Unit: dB $\mu$ V/m  
**Subrange**                      **Detectors**                      **IF Bandwidth**                      **Meas. Time**                      **Receiver**  
 30 MHz - 1 GHz                      QuasiPeak                      120 kHz                      15 s                      Receiver



### Final Result 1

Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V/m)	Comment
38.641050	29.1	15000.000	120.000	111.0	V	266.0	13.5	0.9	30.0	
44.216700	27.7	15000.000	120.000	98.0	V	28.0	13.4	2.3	30.0	
47.962200	26.6	15000.000	120.000	98.0	V	343.0	13.5	3.4	30.0	
68.391050	18.3	15000.000	120.000	261.0	V	0.0	9.9	11.7	30.0	
98.052650	15.4	15000.000	120.000	254.0	V	44.0	12.0	18.1	33.5	
208.007750	23.5	15000.000	120.000	98.0	V	301.0	12.3	10.0	33.5	

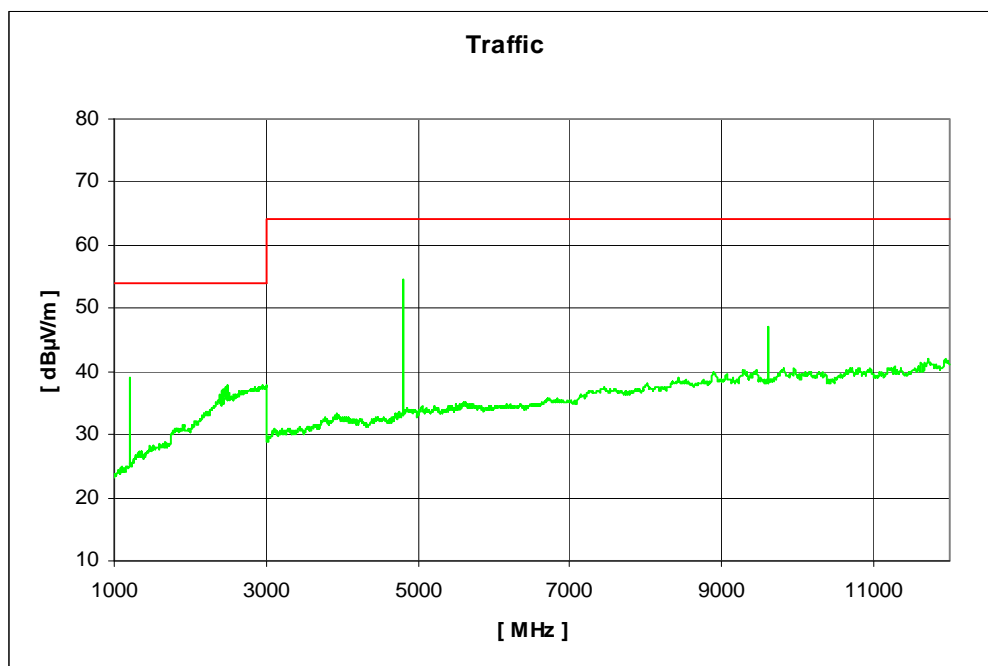
**Hardware Setup: EMI radiated\Electric Field (NOS) - [EMI radiated]**

Subrange 1

Frequency Range:	30 MHz - 2 GHz
Receiver:	Receiver [ESCI 3] @ GPIB0 (ADR 20), SN 100083/003, FW 4.32
Signal Path:	without Notch FW 1.0
Antenna:	VULB 9163 SN 9163-295, FW --- Correction Table (vertical): VULP6113 Correction Table (horizontal): VULP6113 Correction Table: Cable_EN_1GHz (0109)
Antenna Tower:	Tower [EMCO 2090 Antenna Tower] @ GPIB0 (ADR 8), FW REV 3.12
Turntable:	Turntable [EMCO Turntable] @ GPIB0 (ADR 9), FW REV 3.12

EMC 32 Version 8.10.00

Plot 2: Channel 1 1GHz to 12GHz



Plot 3: Channel 21 up to 1GHz

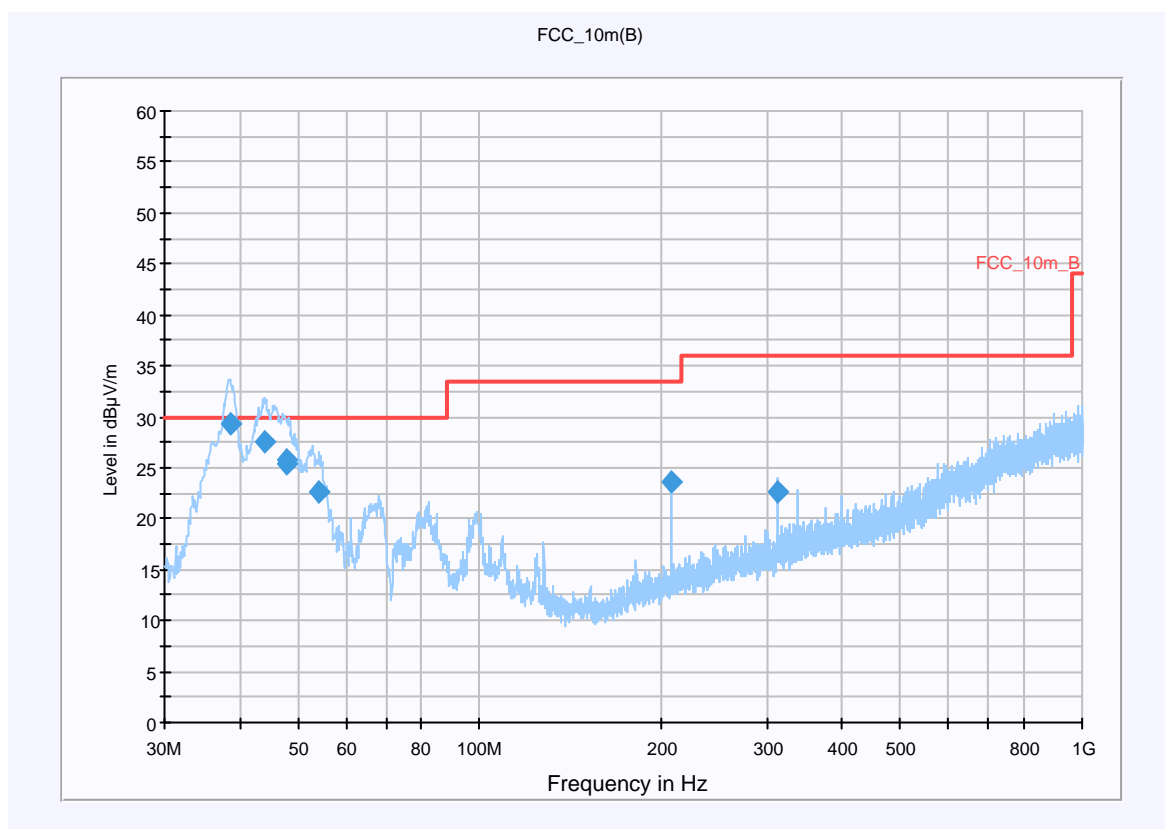
**Common Information**

EUT: TST PDFSAS, TST FSAM  
 Serial Number: PP: 1716429; FP: 1813636  
 Test Description: FCC part 15 B  
 Operating Conditions: Tx Testmod Channel 21  
 Operator Name: LNG  
 Comment:

**Scan Setup: STAN\_Fin [EMI radiated]**

Hardware Setup: Electric Field (NOS)  
 Level Unit: dBµV/m

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	QuasiPeak	120 kHz	15 s	Receiver



**Final Result 1**

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
38.663450	29.4	15000.000	120.000	107.0	V	278.0	13.5	0.6	30.0	
44.113400	27.5	15000.000	120.000	100.0	V	189.0	13.4	2.5	30.0	
47.720400	25.3	15000.000	120.000	184.0	V	143.0	13.5	4.7	30.0	
47.805900	25.7	15000.000	120.000	100.0	V	233.0	13.5	4.3	30.0	
54.265000	22.5	15000.000	120.000	230.0	V	295.0	13.1	7.5	30.0	
207.983450	23.6	15000.000	120.000	107.0	V	292.0	12.3	9.9	33.5	
311.978600	22.6	15000.000	120.000	393.0	H	290.0	15.2	13.4	36.0	

**Hardware Setup: EMI radiated\Electric Field (NOS) - [EMI radiated]**

Subrange 1

Frequency Range: 30 MHz - 2 GHz

Receiver: Receiver [ESCI 3]  
@ GPIB0 (ADR 20), SN 100083/003, FW 4.32

Signal Path: without Notch  
FW 1.0

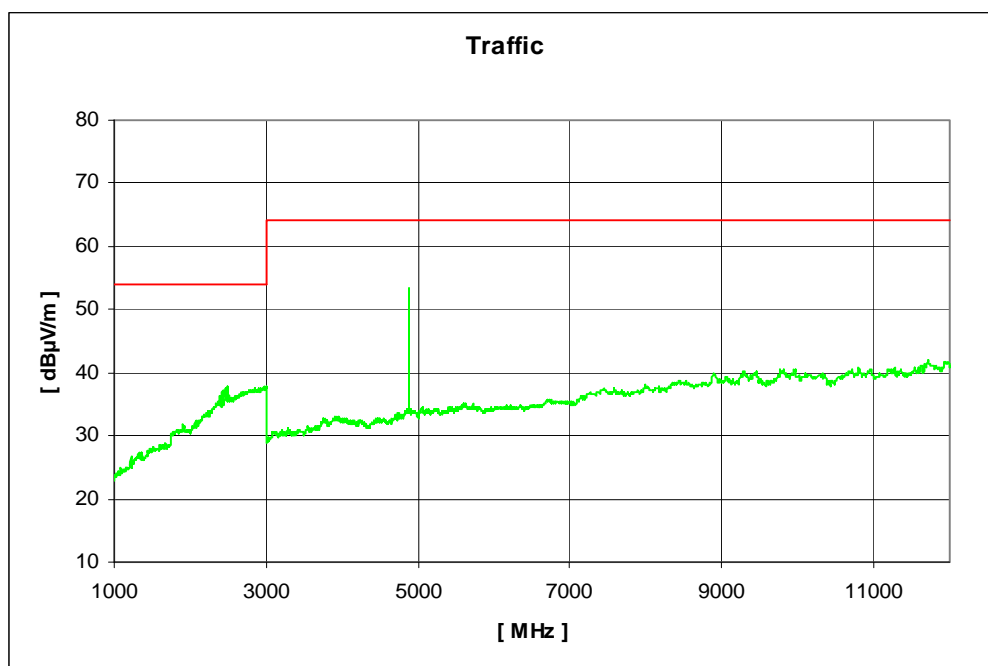
Antenna: VULB 9163  
SN 9163-295, FW ---  
Correction Table (vertical): VULP6113  
Correction Table (horizontal): VULP6113  
Correction Table: Cable\_EN\_1GHz (0109)

Antenna Tower: Tower [EMCO 2090 Antenna Tower]  
@ GPIB0 (ADR 8), FW REV 3.12

Turntable: Turntable [EMCO Turntable]  
@ GPIB0 (ADR 9), FW REV 3.12

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Plot 4: Channel 21 1GHz to 12GHz



Plot 5: Channel 40 up to 1GHz

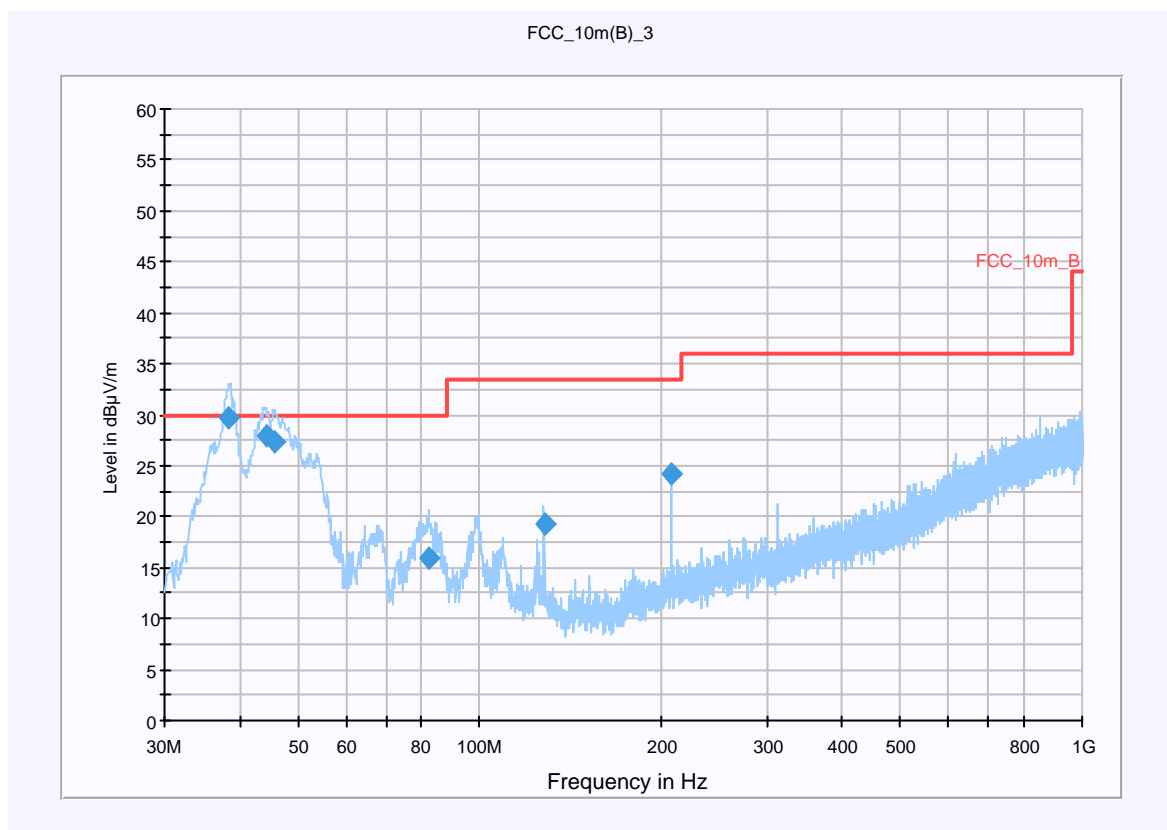
**Common Information**

EUT: TST PDFSAS, TST FSAM  
 Serial Number: PP: 1716429; FP: 1813636  
 Test Description: FCC part 15 B  
 Operating Conditions: Tx Testmod Channel 40  
 Operator Name: LNG  
 Comment:

**Scan Setup: STAN\_Fin [EMI radiated]**

Hardware Setup: Electric Field (NOS)  
 Level Unit: dBµV/m

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	QuasiPeak	120 kHz	15 s	Receiver



**Final Result 1**

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
38.415250	29.7	15000.000	120.000	98.0	V	310.0	13.5	0.3	30.0	
44.301600	27.9	15000.000	120.000	98.0	V	208.0	13.4	2.1	30.0	
45.678500	27.4	15000.000	120.000	98.0	V	222.0	13.4	2.6	30.0	
82.300150	16.0	15000.000	120.000	220.0	V	227.0	9.7	14.0	30.0	
128.017550	19.2	15000.000	120.000	105.0	V	49.0	9.8	14.3	33.5	
207.993800	24.3	15000.000	120.000	153.0	V	233.0	12.3	9.2	33.5	



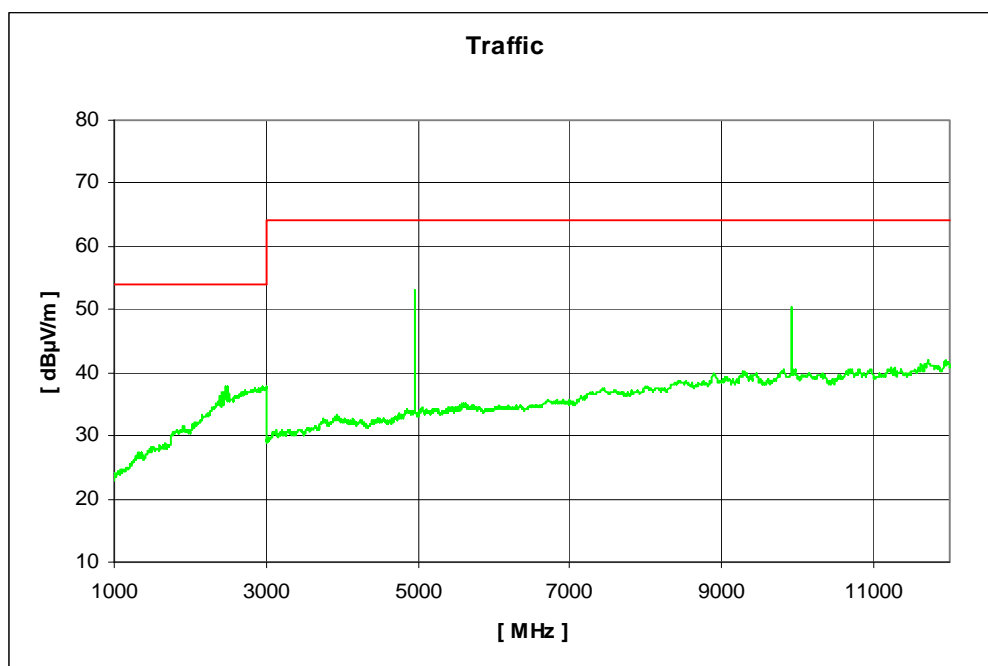
**Hardware Setup: EMI radiated\Electric Field (NOS) - [EMI radiated]**

Subrange 1

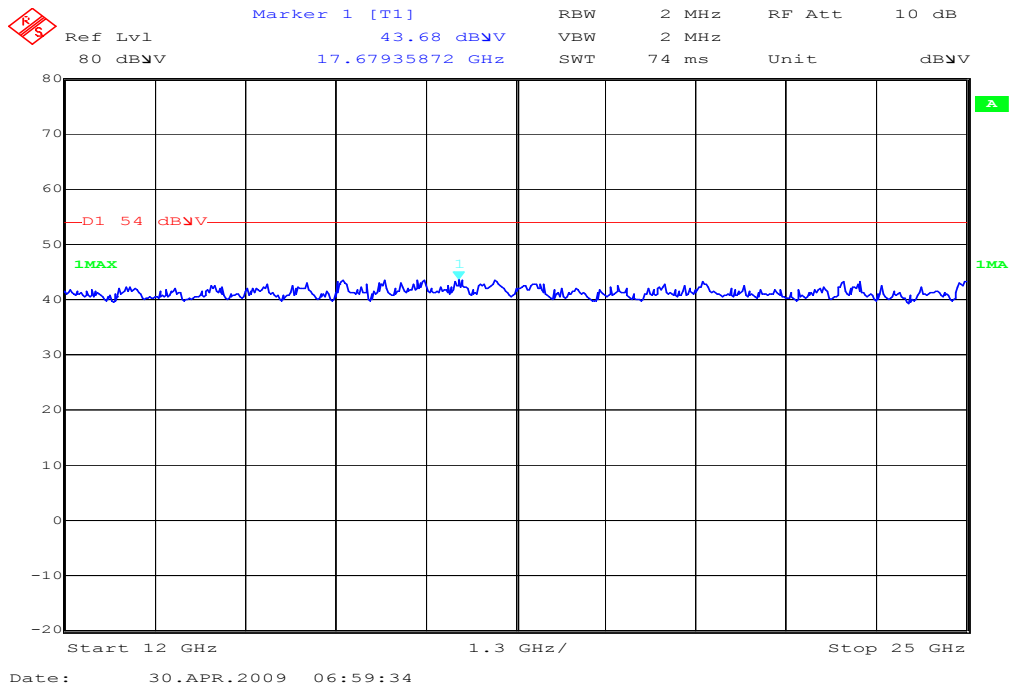
Frequency Range:	30 MHz - 2 GHz
Receiver:	Receiver [ESCI 3] @ GPIB0 (ADR 20), SN 100083/003, FW 4.32
Signal Path:	without Notch FW 1.0
Antenna:	VULB 9163 SN 9163-295, FW --- Correction Table (vertical): VULP6113 Correction Table (horizontal): VULP6113 Correction Table: Cable_EN_1GHz (0109)
Antenna Tower:	Tower [EMCO 2090 Antenna Tower] @ GPIB0 (ADR 8), FW REV 3.12
Turntable:	Turntable [EMCO Turntable] @ GPIB0 (ADR 9), FW REV 3.12

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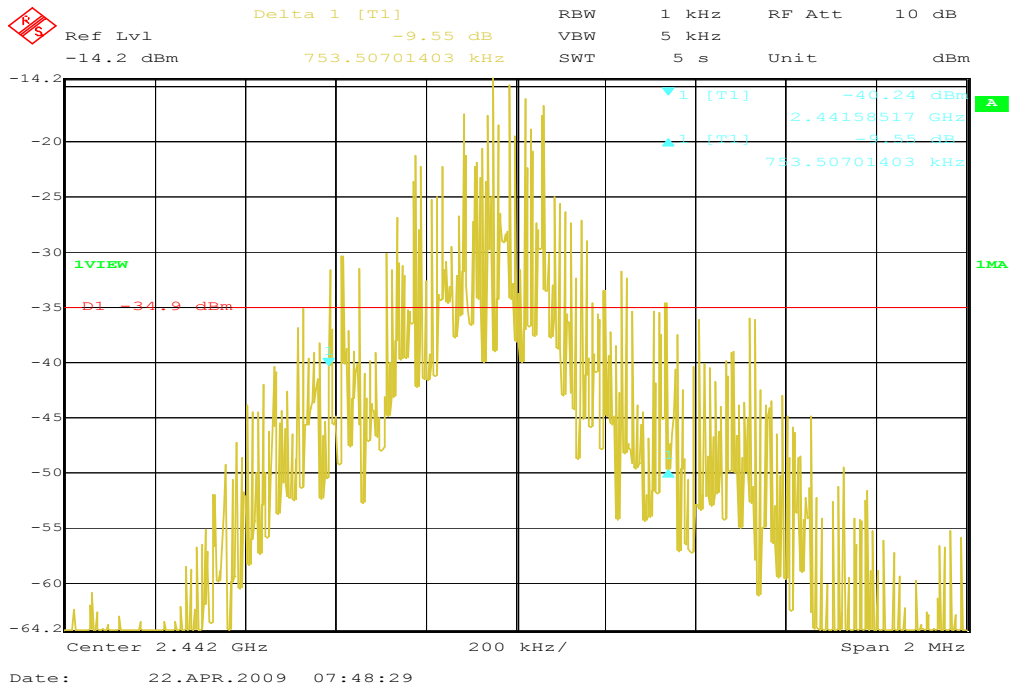
Plot 6: Channel 40 1GHz to 12GHz



Plot 6: 12GHz – 25 GHz (h/v worst case) valid for all channels



Plot 8: Bandwidth (modulated signal)



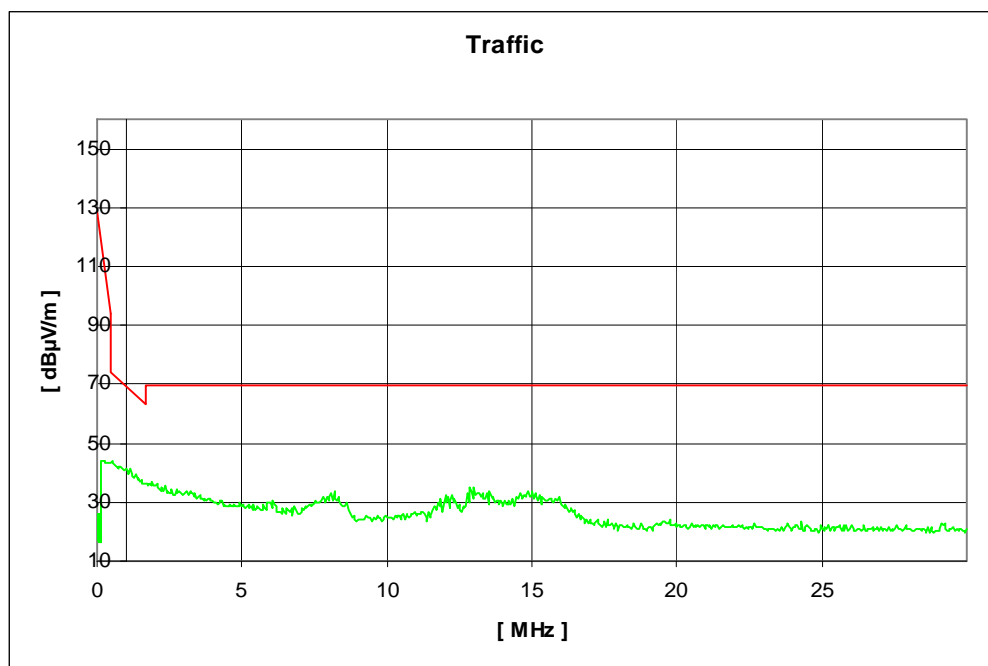
**Part 15.109 Magnetics**

( to convert the measuring distance from 3m to 30m and 30 to 300m a correction factor from 40 dB/decade was used.)

Measurement distance 3m

This measurement was done in 3 polarisation's, the plot shows the worst case

Plot 1:



**Limits**

**SUBCLAUSE § 15.209**

Frequency (MHz)	Field strength ( $\mu\text{V/m}$ )	Measurement distance (m)
0.0009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

#### 4.4 Receiver Spurious Emission (radiated)

**Reference**

FCC	:	CFR Part SUBCLAUSE § 15.109
IC	:	RSS 210, Issue 7, Section 7.3 Receiver Spurious Emissions (Radiated)

**Result:** PASS (see plots)

**Limits**

**SUBCLAUSE § 15.109**

Frequency (MHz)	Field strength (µV/m)	Measurement distance (m)
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

Plot 1: RX mode up to 1GHz

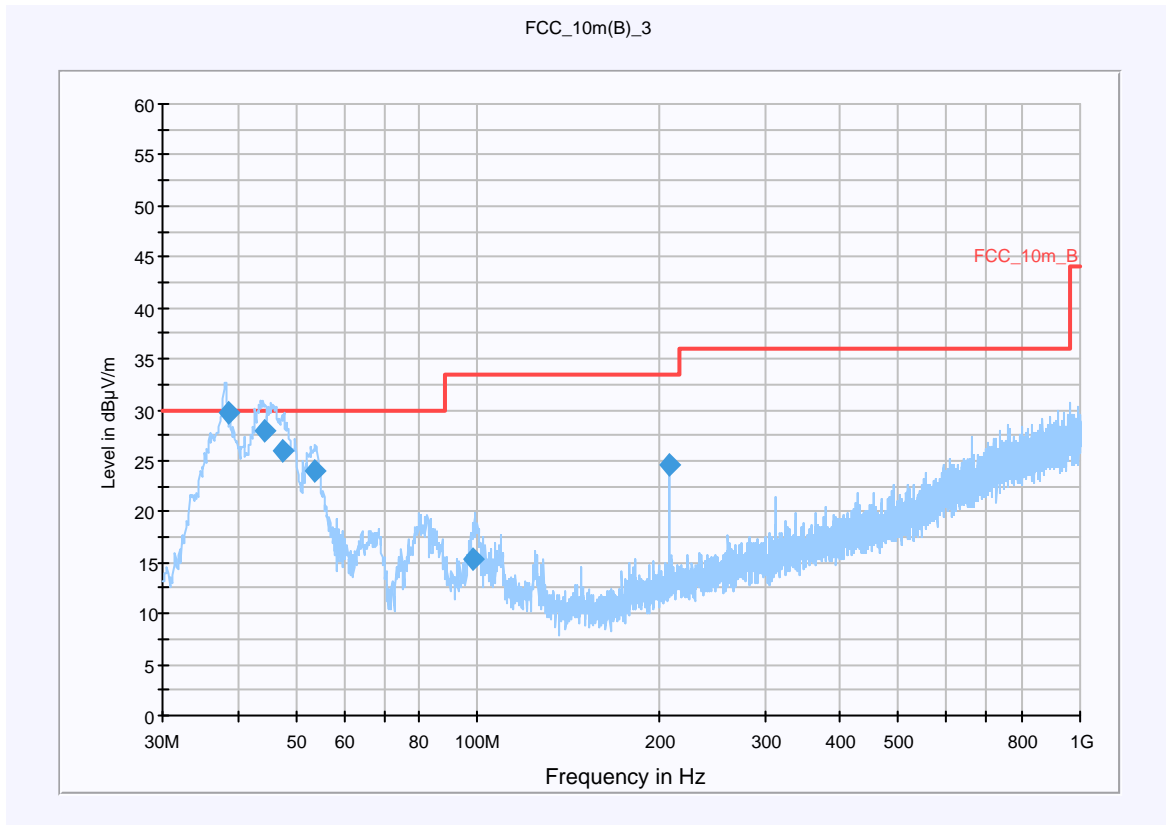
**Common Information**

EUT: TST PDFSAS, TST FSAM  
 Serial Number: PP: 1716429; FP: 1813636  
 Test Description: FCC part 15 B  
 Operating Conditions: Rx Testmod  
 Operator Name: LNG  
 Comment:

**Scan Setup: STAN\_Fin [EMI radiated]**

Hardware Setup: Electric Field (NOS)  
 Level Unit: dBµV/m

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	QuasiPeak	120 kHz	15 s	Receiver



**Final Result 1**

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
38.478850	29.8	15000.000	120.000	98.0	V	306.0	13.5	0.2	30.0	
44.208400	27.9	15000.000	120.000	98.0	V	266.0	13.4	2.1	30.0	
47.636350	25.9	15000.000	120.000	98.0	V	253.0	13.5	4.1	30.0	
53.655750	24.0	15000.000	120.000	125.0	V	268.0	13.2	6.0	30.0	
98.603100	15.3	15000.000	120.000	98.0	V	16.0	12.1	18.2	33.5	
207.986000	24.6	15000.000	120.000	98.0	V	-3.0	12.3	8.9	33.5	

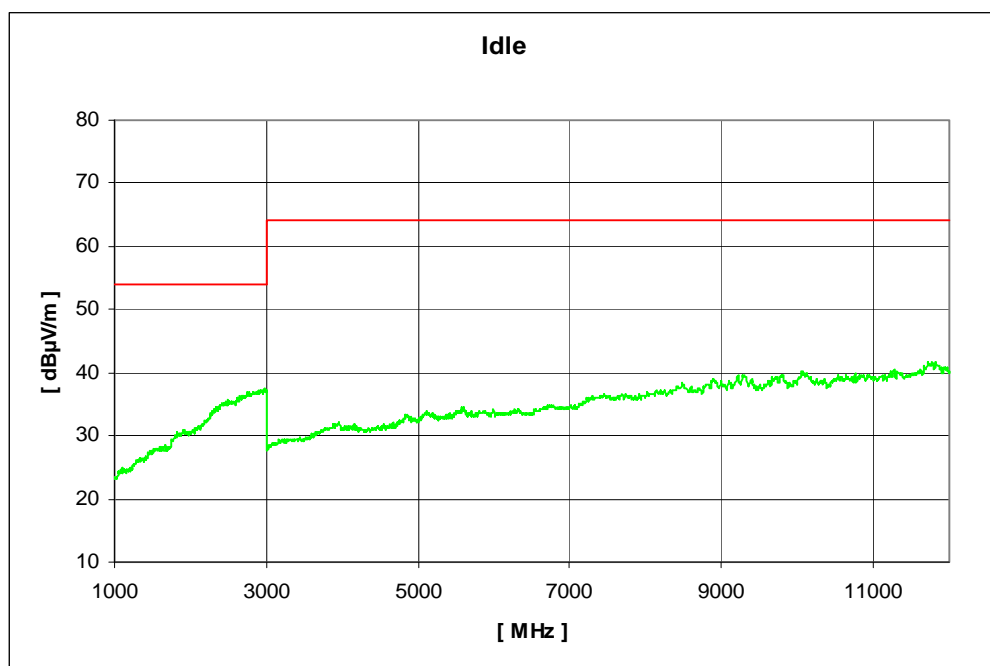
**Hardware Setup: EMI radiated\Electric Field (NOS) - [EMI radiated]**

Subrange 1

Frequency Range:	30 MHz - 2 GHz
Receiver:	Receiver [ESCI 3] @ GPIB0 (ADR 20), SN 100083/003, FW 4.32
Signal Path:	without Notch FW 1.0
Antenna:	VULB 9163 SN 9163-295, FW --- Correction Table (vertical): VULP6113 Correction Table (horizontal): VULP6113 Correction Table: Cable_EN_1GHz (0109)
Antenna Tower:	Tower [EMCO 2090 Antenna Tower] @ GPIB0 (ADR 8), FW REV 3.12
Turntable:	Turntable [EMCO Turntable] @ GPIB0 (ADR 9), FW REV 3.12

EMC 32 Version 8.10.00

Plot 2: RX mode 1GHz to 12GHz



### 4.5 Conducted Limits

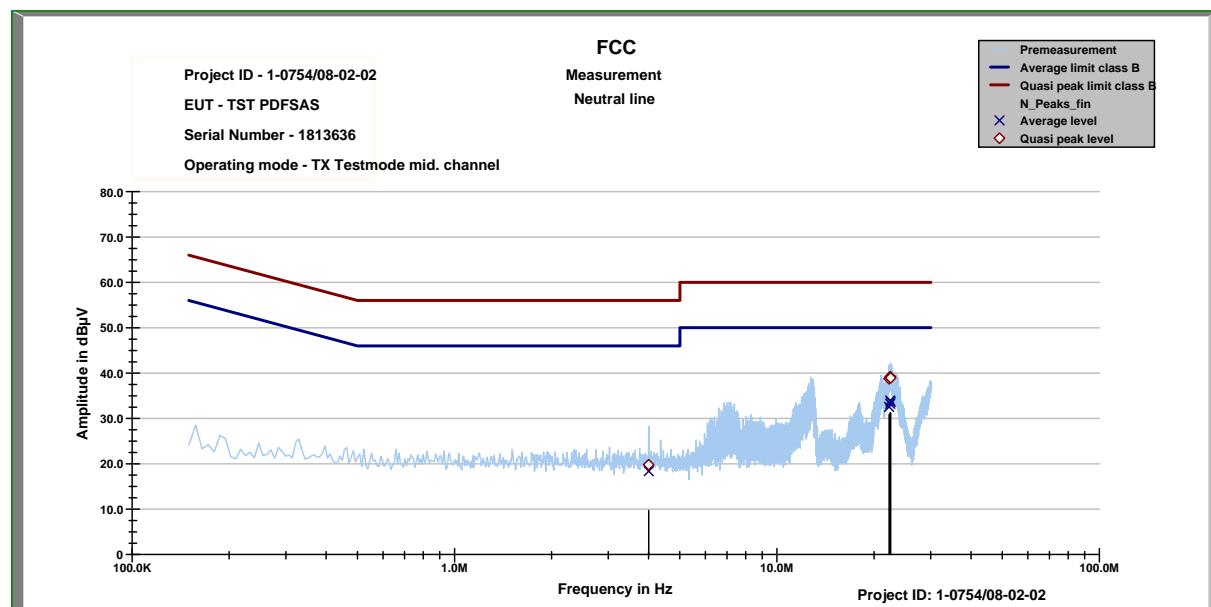
#### Reference

FCC	:	CFR Part 15.207, 15.107
IC	:	RSS 210, Issue 7, Section 6.6 , 7.4

#### Limits: § 15.107 / 15.207

Frequency of Emission (MHz)	Conducted Limit (dBµV)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56 *	56 to 46 *
0.5 – 5	56	46
5 - 30	60	50

\* Decreases with the logarithm of the frequency



Neutral line tbl  
 01:01:38 PM, Monday, March 23, 2009

Frequency	Quasi peak level	Margin quasi peak	Average level	Margin average
MHz	dBµV	dBµV	dBµV	dBµV
3.9999	19.79	36.21	18.35	27.65
22.25	38.73	21.27	32.54	17.46
22.441	39.07	20.93	33.22	16.78
22.442	39.19	20.81	33.93	16.07
22.503	38.94	21.06	33.64	16.36

Project ID - 1-0754/08-02-02  
 EUT - TST PDFSAS  
 Serial Number - 1813636  
 Operating mode - TX Testmode mid. channel

## 5 Test equipment and ancillaries used for tests

To simplify the identification on each page of the test equipment used, on each page of the test report, each item of test equipment and ancillaries such as cables are identified (numbered) by the Test Laboratory, below.

All reported calibration intervals are calibrations according to the EN/ISO/IEC 17025 standard. These calibrations were performed from an accredited external calibration laboratory.

Additional to these calibrations the laboratory performed comparison measurements with other calibrated systems and performed a weekly chamber inspection.

All used devices are connected with a 10 MHz external reference.

According to the manufacturers' instruction is it possible to establish a calibration interval for the FSP unit of 24 month, if the device has an external 10 MHz reference.

### Anechoic chamber A:

No.	Instrument/Ancillary	Manufacturer	Type	Serial-No.	Internal identification
<b>Radiated emission in chamber A</b>					
A-1	Spectrum Analyzer	Rohde & Schwarz	ESU26	100037	300003555
A-2	Signal Generator	Rohde & Schwarz	SMR20B11	1104.0002.20	300003593
A-3	RF System Panel	Rohde & Schwarz	TS RSP	---	300003556
A-4	Relais Matrix	Rohde & Schwarz	PSN	860673/009	300001385
A-5	Horn Antenna	EMCO	3115	9709-5290	300000212
A-6	Bilog.-Log. Antenna	Schwarzbeck	VULB 9163	02/00	300003696
A-7	Notch Filter GSM 900	Wainwright	WRCD 901.9/903.1EE	9	---
A-8	Notch Filter GSM 1800	Wainwright	WRCD 1747/1748-5EE	1	---
A-9	Notch Filter GSM 1900	Wainwright	WRCB 1879.5/1880.5EE	9	---
A-10	Notch Filter GSM 850	Wainwright	WRCT 837-0.2/50-8EE	1	---
A-11	Notch Filter UMTS	Wainwright	WRCD 1800/2000-0.2/40-5EEK	2	---
A-12	Notch Filter ISM 2400	Wainwright	WRCG 2400/ 2483-2375/ 2505-50/10SS	26	---
A-13	High Pass Filter 1.1 GHz	Wainwright	WHK 1.1/15G-10SS	---	---
A-14	High Pass Filter 2.6 GHz	Wainwright	WHKX 2.6/18G-12SS	---	---
A-15	High Pass Filter 7 GHz	Wainwright	WHKX 7.0/18G-8SS	---	---
A-14	Amplifier	Miteq	AFS4-00201800-15-10P-6	US42-0050 2650-28-5A	300003204
A-16	Controller	Inn co	CO 2000	2020507	---
A-17	DC Power Supply	Hewlet Packard	HP6632A	---	300000924
A-18	Computer	F+W	---	---	300003303

### Anechoic chamber F:

No	Equipment/Type	Manuf.	Serial Nr.	Inv. No. Cetecom	Last Calibration	Frequency (months)	Next Calibration
1	Control Computer	F+W	FW0502032	300003303	-/-	-/-	-/-
2	Trilog Antenna VULB 9163	Schwarzbeck	295	300003787	01.04.2008	24	01.04.2010
3	Amplifier - 0518C-138	Veritech Micro-wave Inc.	-/-	-/-	-/-	-/-	-/-
4	Switch - 3488A	HP		300000368	-/-	-/-	-/-
5	EMI Test receiver - ESCI	R&S	100083	300003312	31.01.2007	24	31.01.2009
6	Turntable Controller - 1061 3M	EMCO	1218	300000661	-/-	-/-	-/-
7	Tower Controller 1051 Controller	EMCO	1262	300000625	-/-	-/-	-/-
8	Tower - 1051	EMCO	1262	300000625	-/-	-/-	-/-
10	Ultra Notch-Filter Rejected band Ch. 62	WRCD	9	-/-	-/-	-/-	-/-



## 6 Photographs of the Test Set-up

Photo documentation

Photo 1:

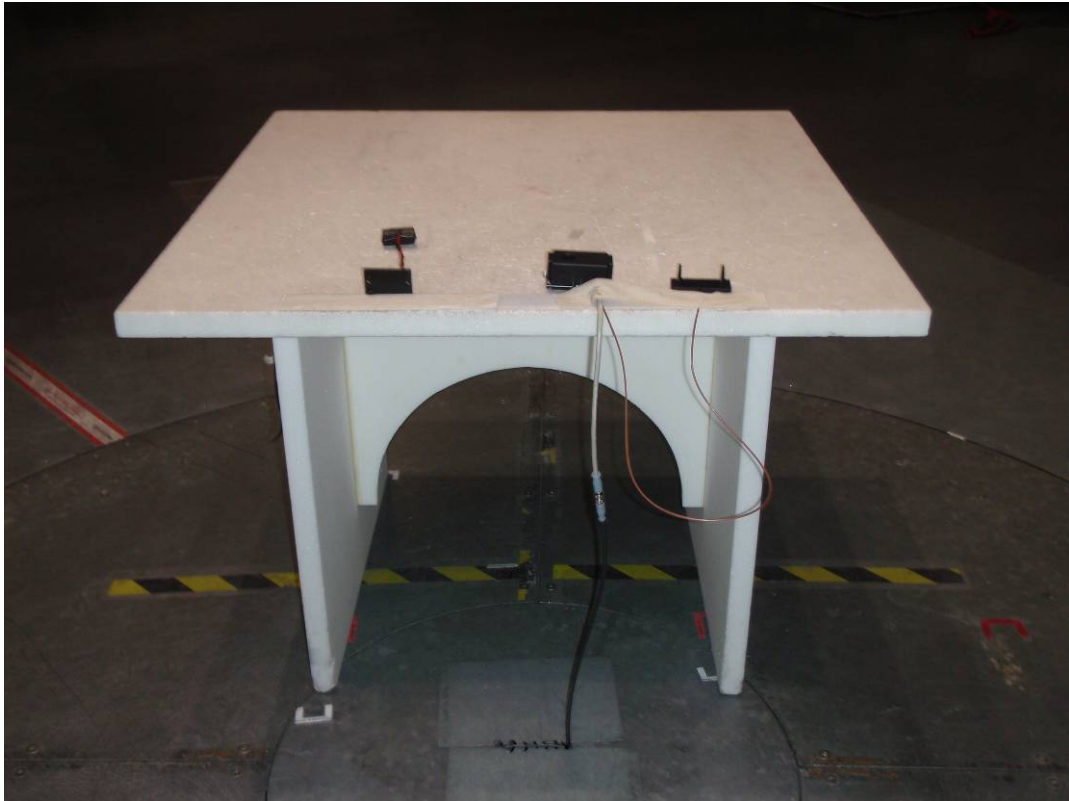


Photo 2:



Photo 3:



Photo 4:

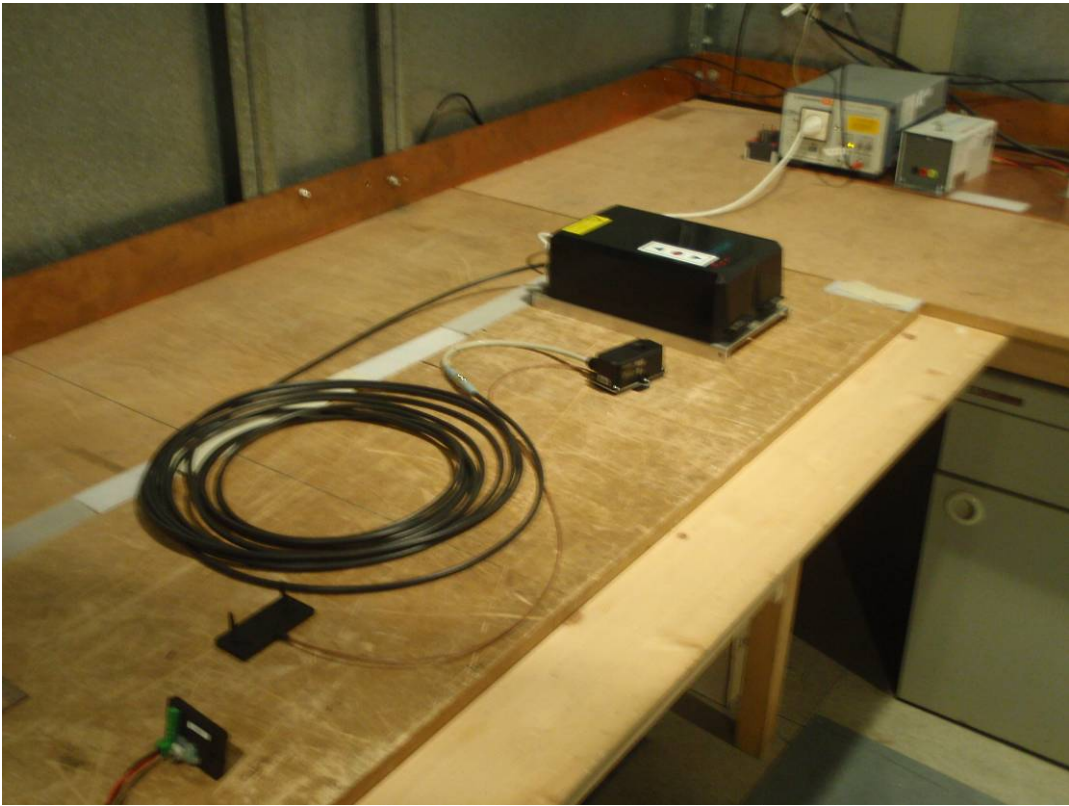


Photo 5:





## 7 Photographs of the EUT

Photo 1:

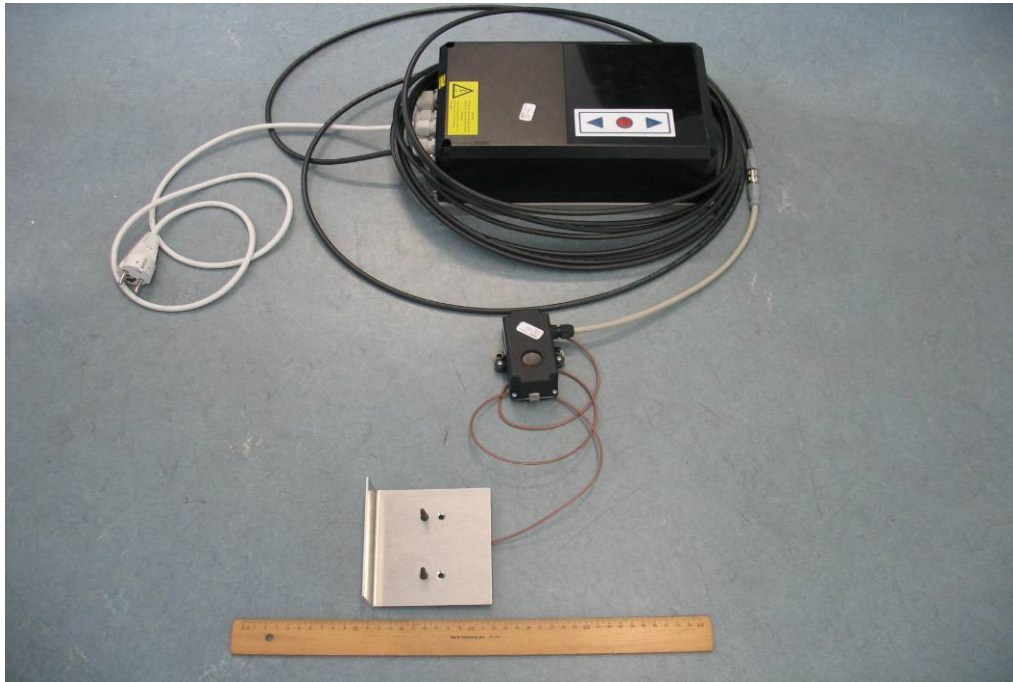
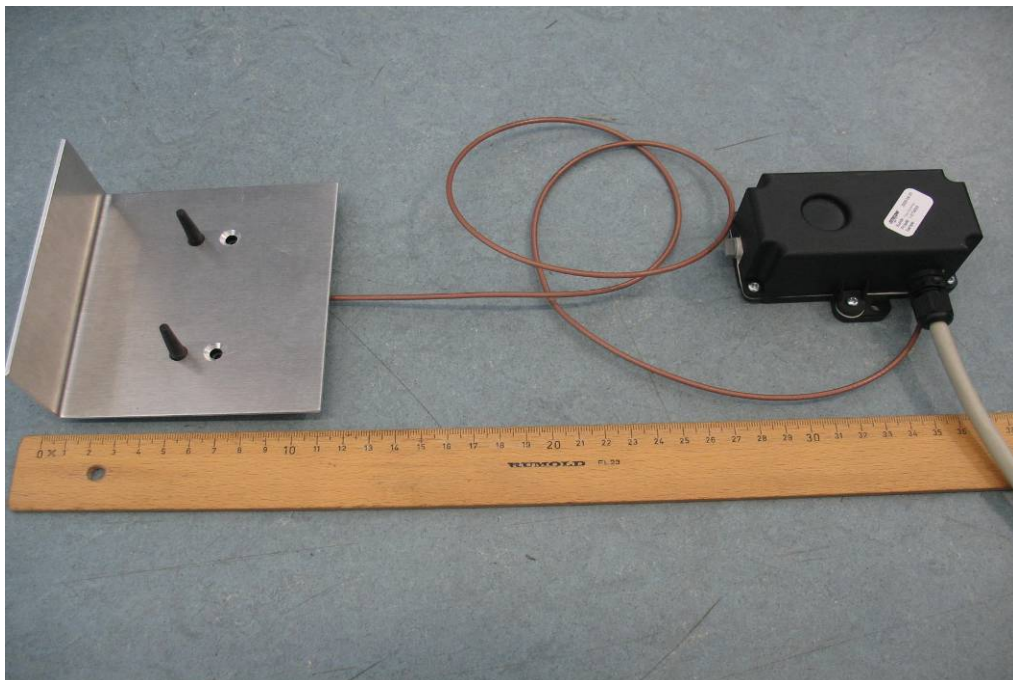


Photo 2:



Coax cable RG316/U (Huber+Suhner) length antenna to connector=1m

Photo 3:

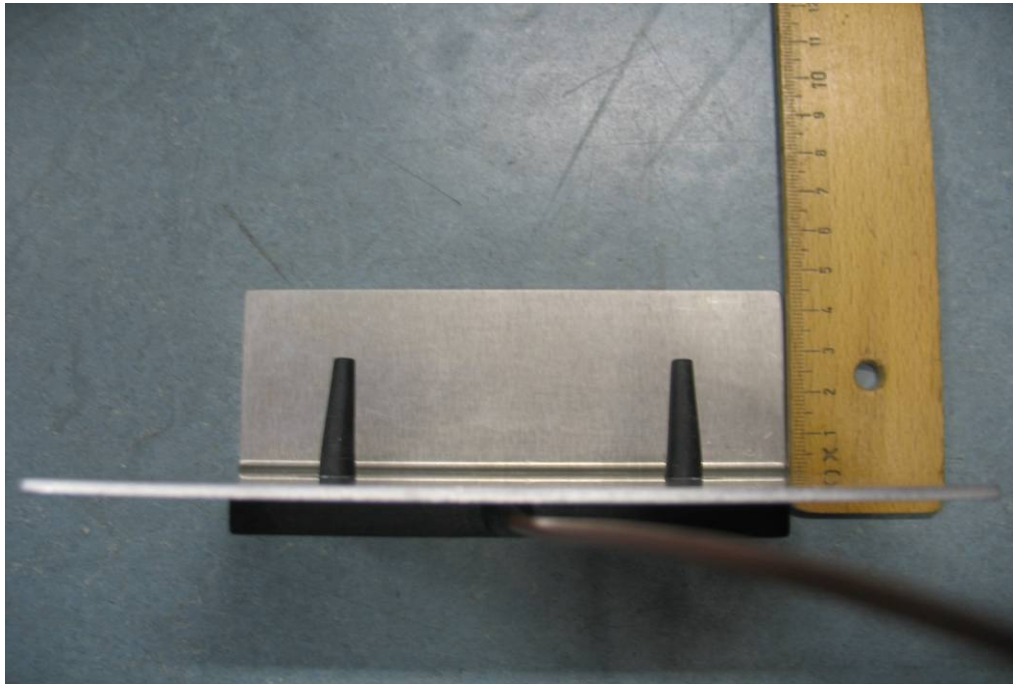


Photo 4:

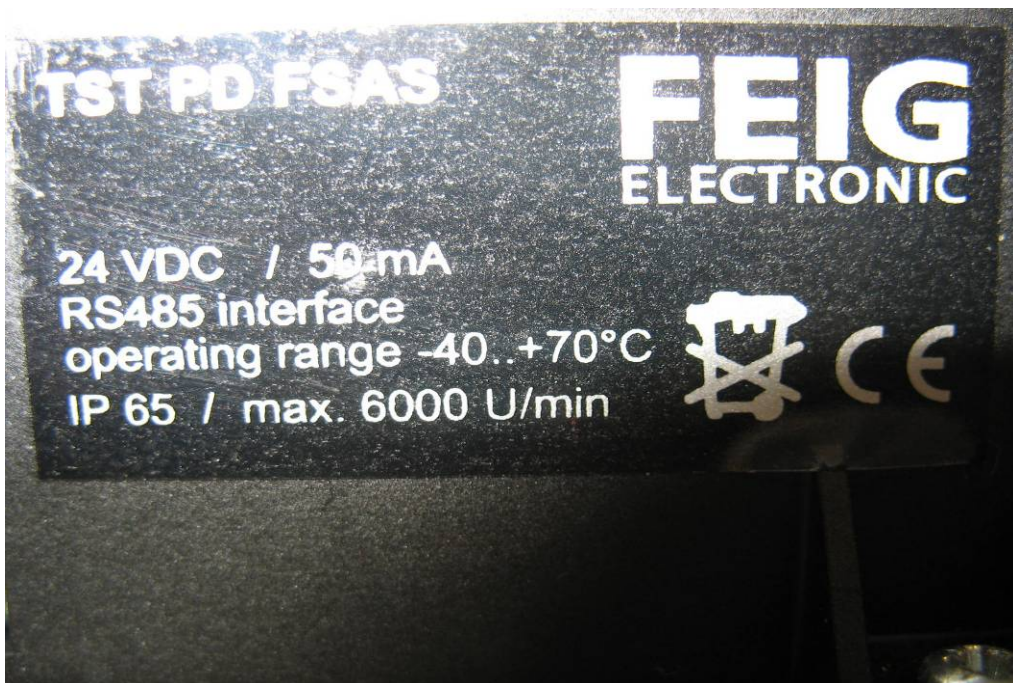




Photo 5:

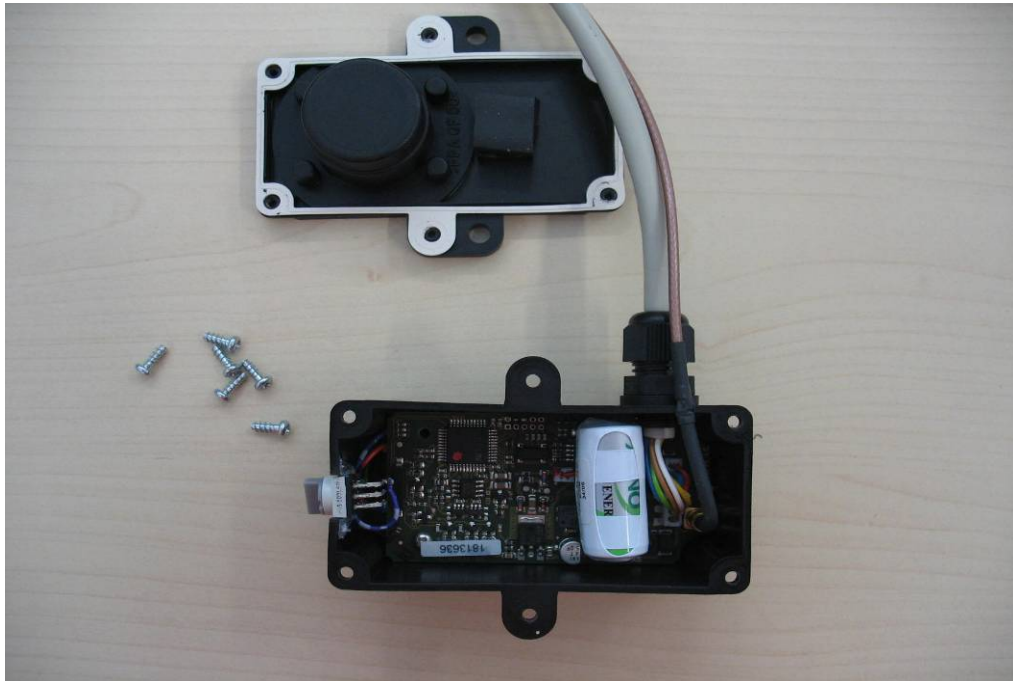


Photo 6:

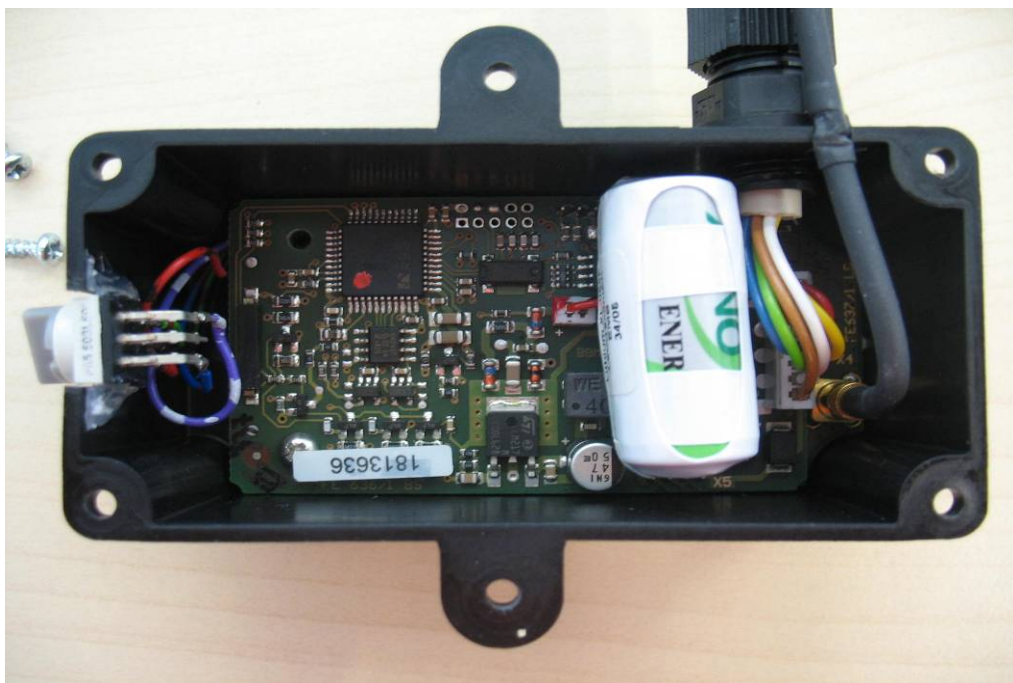


Photo 7:

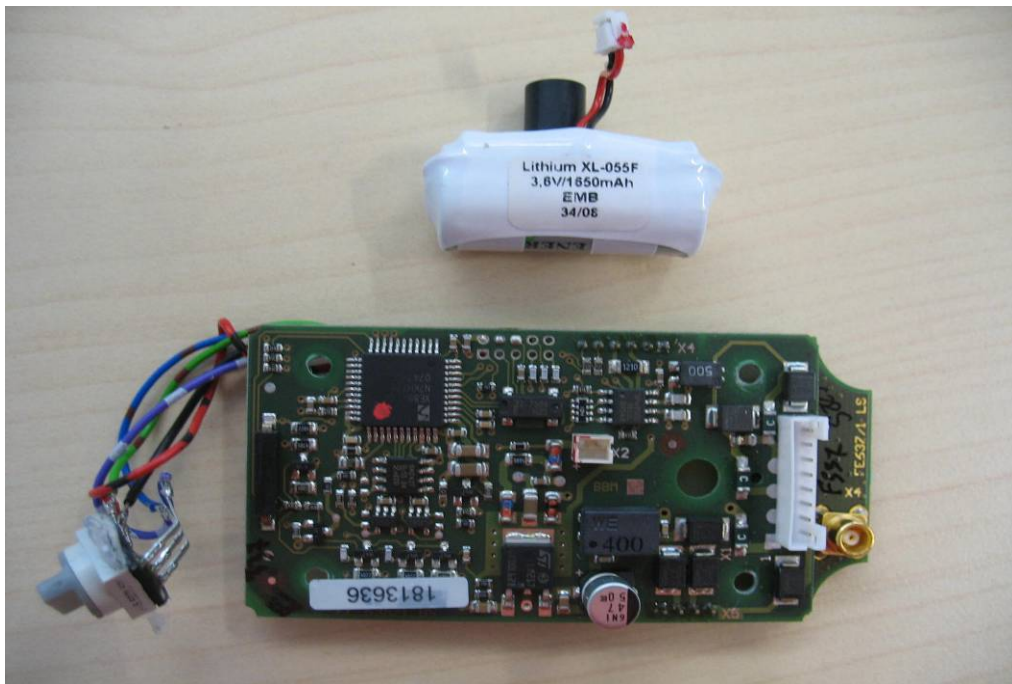


Photo 8:

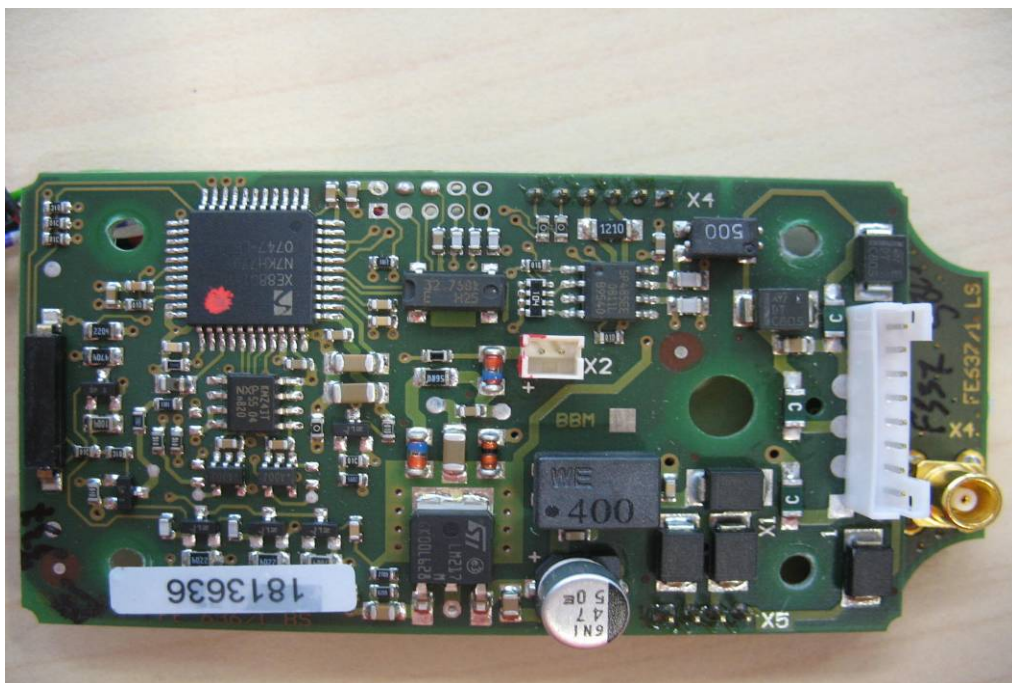




Photo 9:

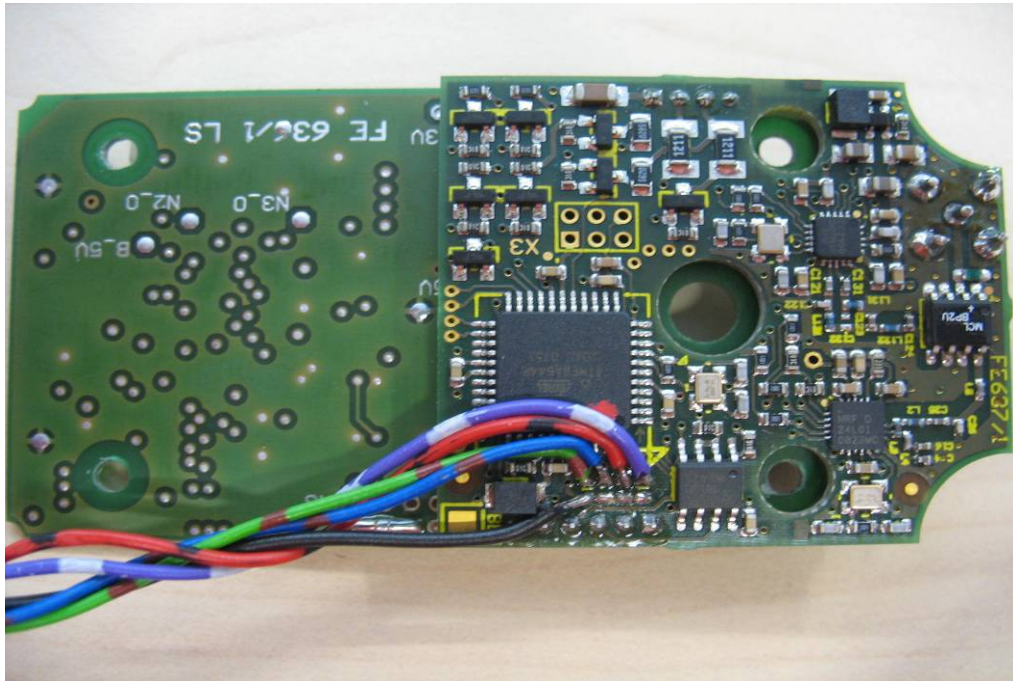


Photo 10:

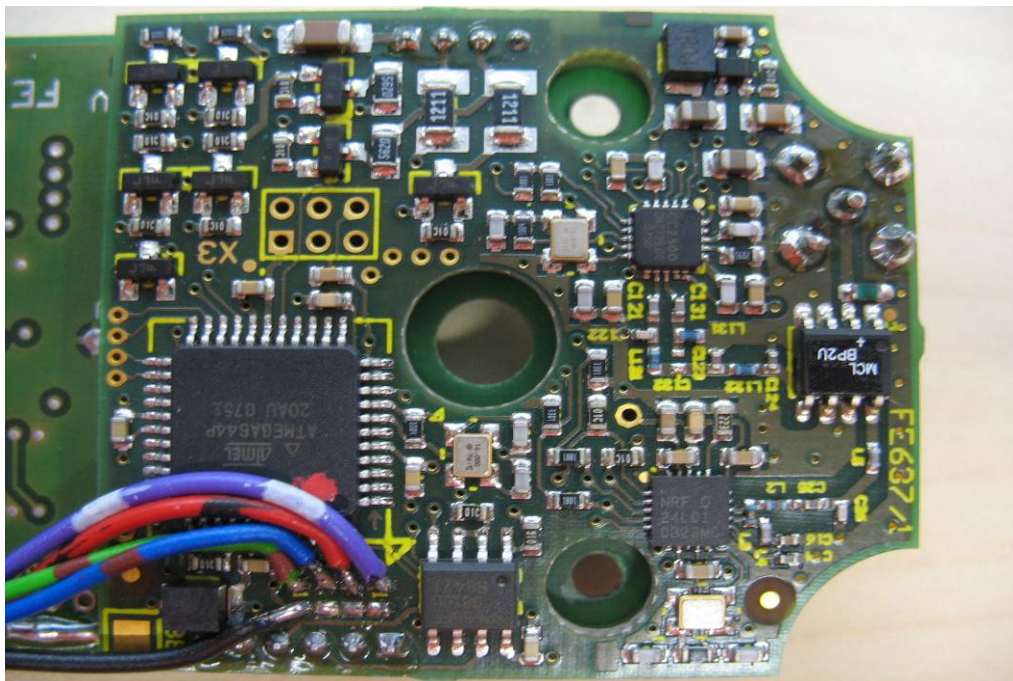




Photo 11:



Photo 12:



Photo 13:



Photo 14:

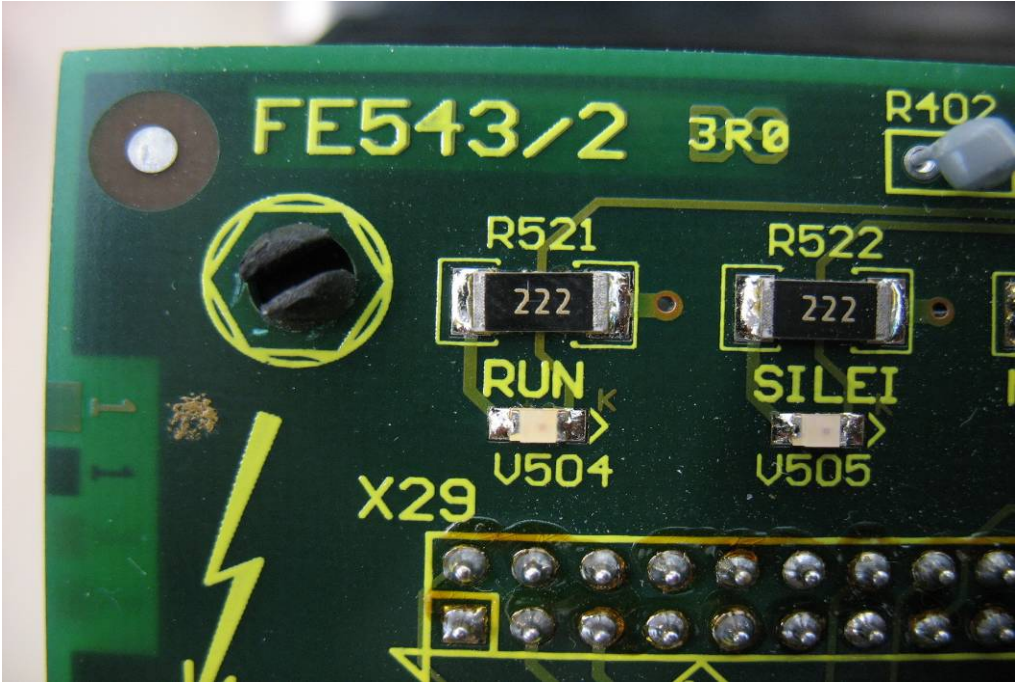




Photo 15:

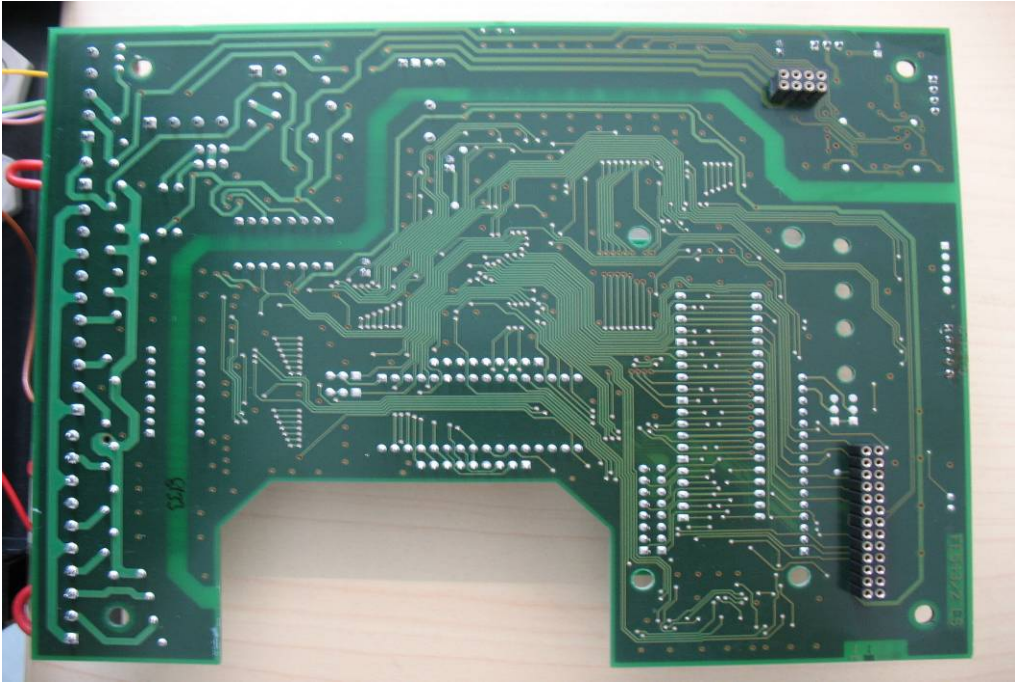


Photo 16:

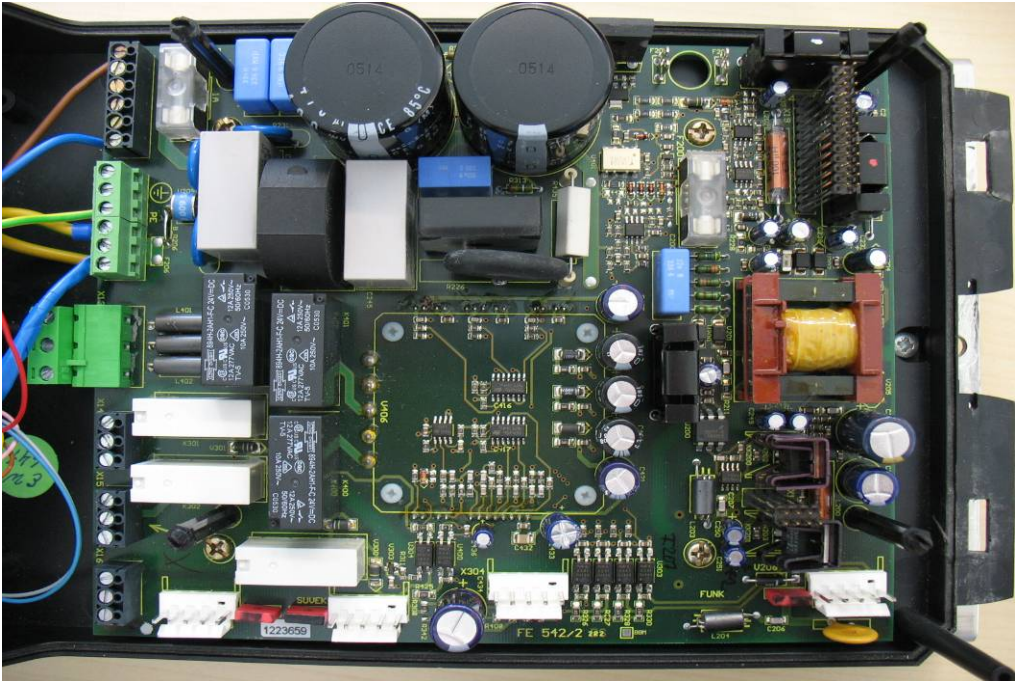


Photo 17:



Photo 18:

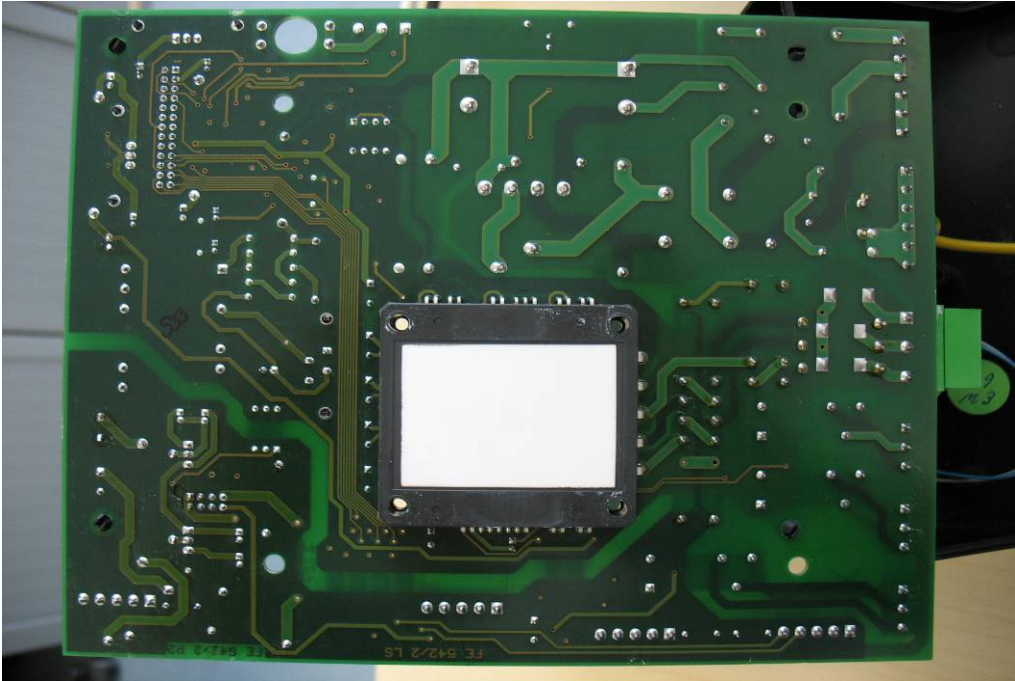




Photo 19:

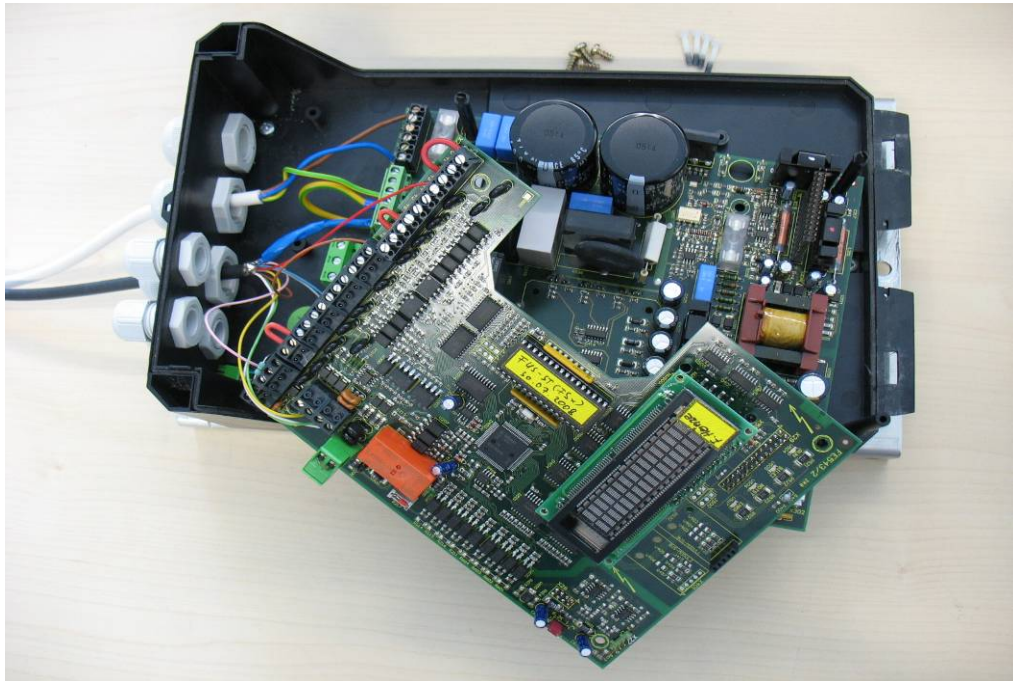


Photo 20:

