

Photo report internal components

Anti-Pilferage System operating in the bands 125kHz, 7-8MHz and 902-928MHz

Brand: Nedap

Model: ASSY AD46R RF+MD+RFID

Author	RH
Date	17 September 2017
Status	final

N.V. Nederlandsche Apparatenfabriek "Nedap"

Parallelweg 2
7141 DC Groenlo
The Netherlands

Description of EUT

Description of EUT	Anti-Pilferage System operating in the bands 125kHz, 7-8MHz and 902-928MHz
Manufacturer	Nedap N.V.
Brand	Nedap
Commercial name	Hybrid Lumen iL45
Model	ASSY AD46R RF+MD+RFID
FCC ID	CGDADRRFMDRFID
IC	1444A-ADRRFMDRFID
Type of service	New Application

Applicant Information

Applicant's representative	Mr. Reinold Hubers
Company	N.V. Nederlandsche Apparatenfabriek "Nedap"
Address	Parallelweg 2
Postal code	7141 DC
City	Groenlo
PO Box	6
Postal code	7140 AA
City	Groenlo
Country	The Netherlands
Telephone number	+31 (0) 544 471111
Telefax number	+31 (0) 544 463475

0. CONTENTS

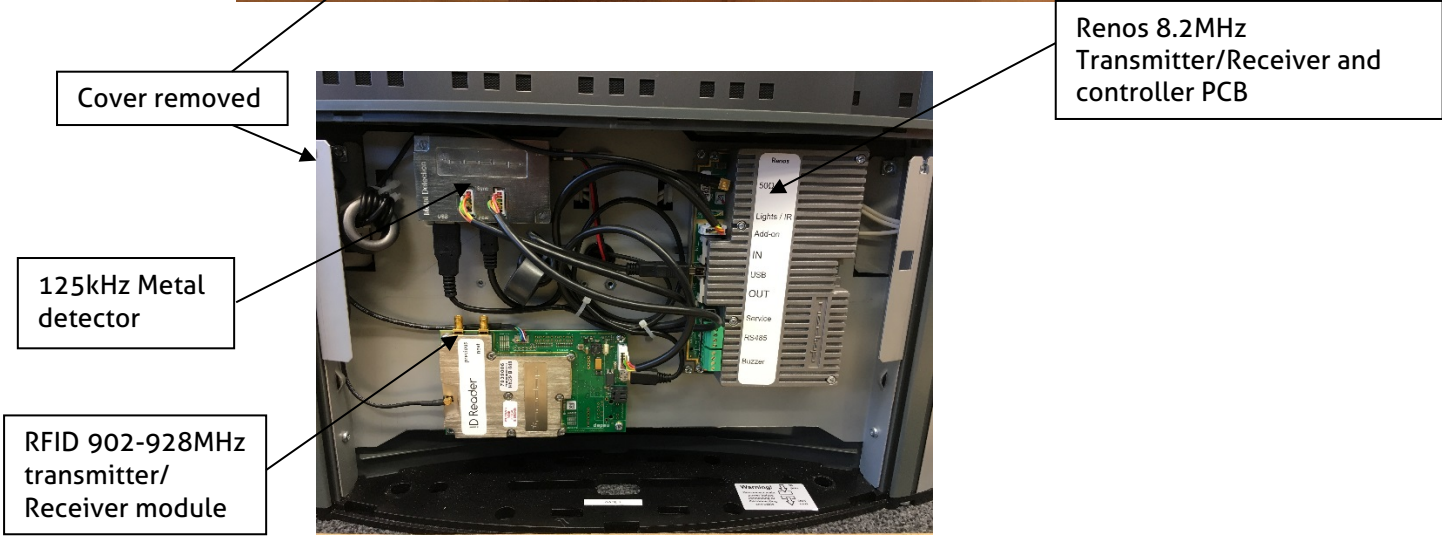
1. Overview AD46R RF+MD+RFID _____	4
2. Internal photo overview _____	5
2.1. Front view _____	5
2.2. Back view _____	6
2.3. LED/buzzer and customer counter top view _____	7
2.4. LED/buzzer and customer counter top cover removed _____	7
2.5. LED/buzzer and customer counter top reflector removed _____	7
3. Renos transmitter/receiver and controller PCB _____	8
3.1. Complete top view with metal covers _____	8
3.2. Back view with metal covers _____	8
3.3. Renos with covers removed _____	9
3.4. Renos front side PCB _____	9
3.5. Renos back side PCB _____	10
4. Antenna matching PCB _____	11
4.1. Front view _____	11
4.2. Back view _____	11
5. LED/buzzer and customer counter PCB _____	12
5.1. Front view _____	12
5.2. Back view _____	12
6. Metal detector _____	13
6.1. Total view with metal covers _____	13
6.2. Metal detector with covers removed _____	13
6.3. Metal detector front view PCB _____	14
6.4. Metal detector back view PCB _____	14
7. RFID 902-928MHz transmitter/Receiver _____	15
7.1. Front side with metal cover _____	15
7.2. Backside with metal cover _____	15
7.3. ID reader covers removed _____	16
7.4. PCB Front side _____	16
7.5. PCB Back side _____	17
8. Antenna information 902-928 MHz part _____	18
8.1. Front side antennae _____	18
8.2. Backside antennae _____	19
8.3. Antenna Printed Circuit Boards _____	20
8.3.1. Antenna PCB RHCP _____	20
8.3.2. Back side _____	22
8.3.3. Antenna PCB LHCP _____	22
8.3.4. Back side _____	24

1. Overview AD46R RF+MD+RFID



2. Internal photo overview

2.1. Front view



2.2. Back view



Cover removed

Antenna matching PCB



2.3. LED/buzzer and customer counter top view



Transparent cover installed

2.4. LED/buzzer and customer counter top cover removed



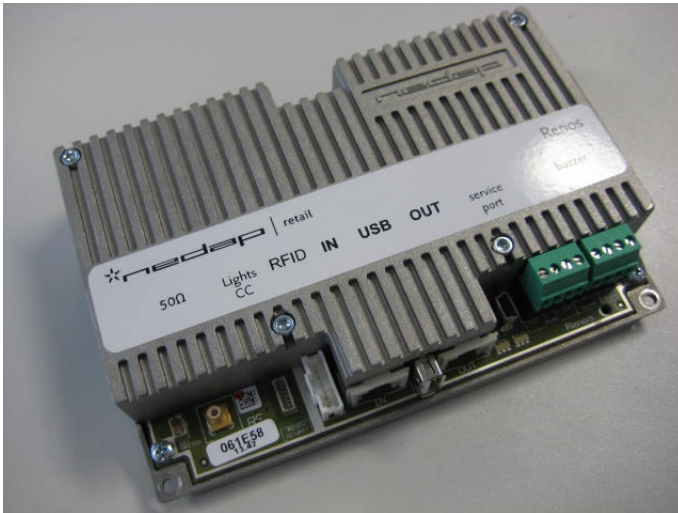
Transparent white cover removed

2.5. LED/buzzer and customer counter top reflector removed



3. Renos transmitter/receiver and controller PCB

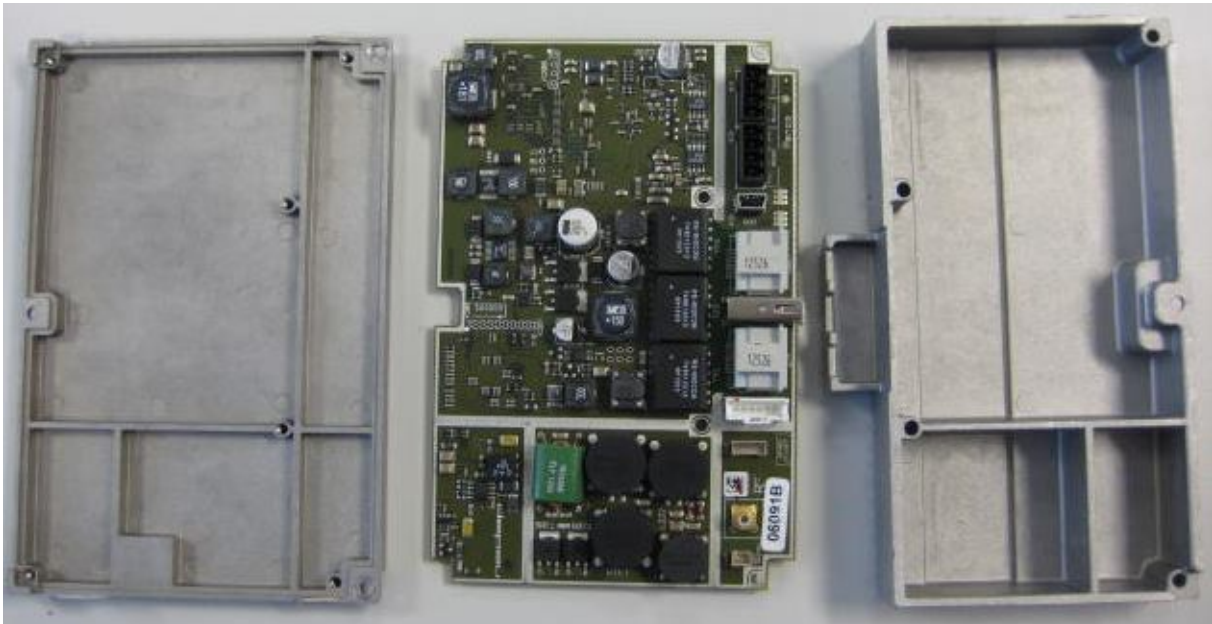
3.1. Complete top view with metal covers



3.2. Back view with metal covers



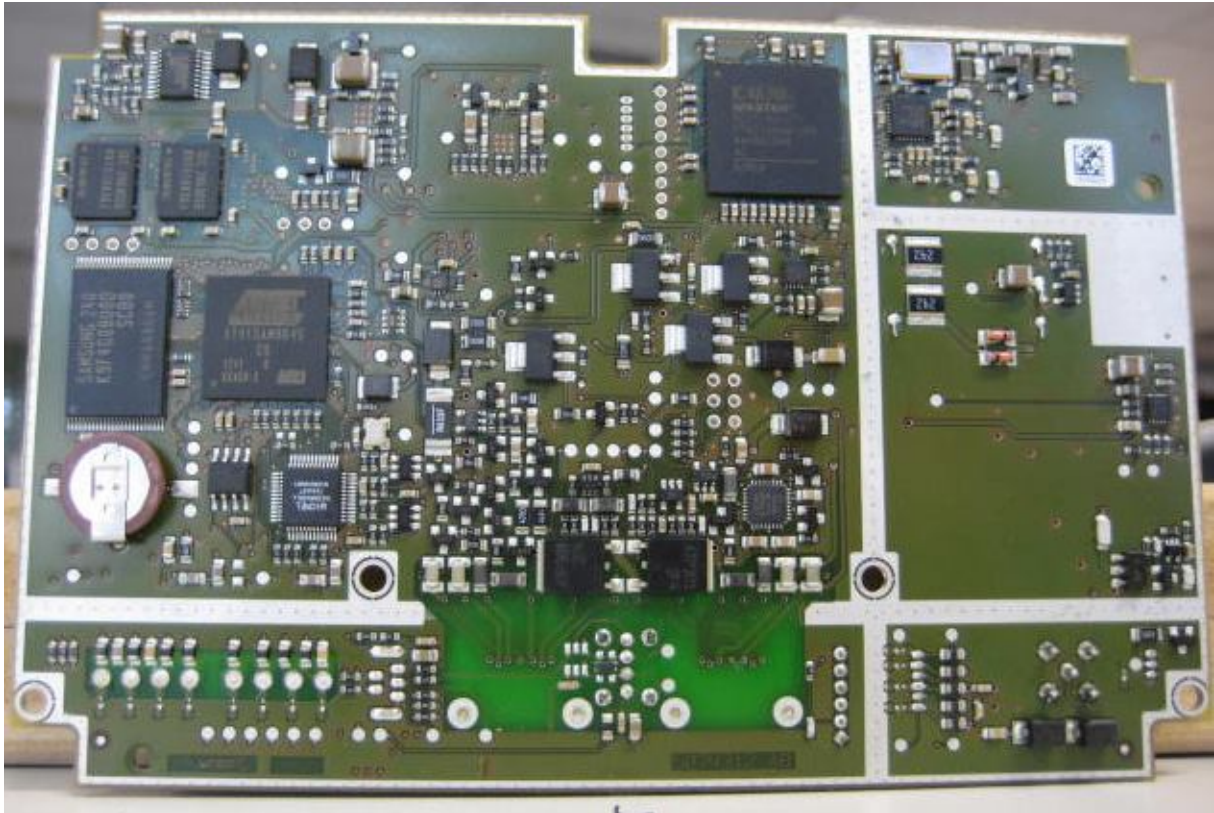
3.3. Renos with covers removed



3.4. Renos front side PCB

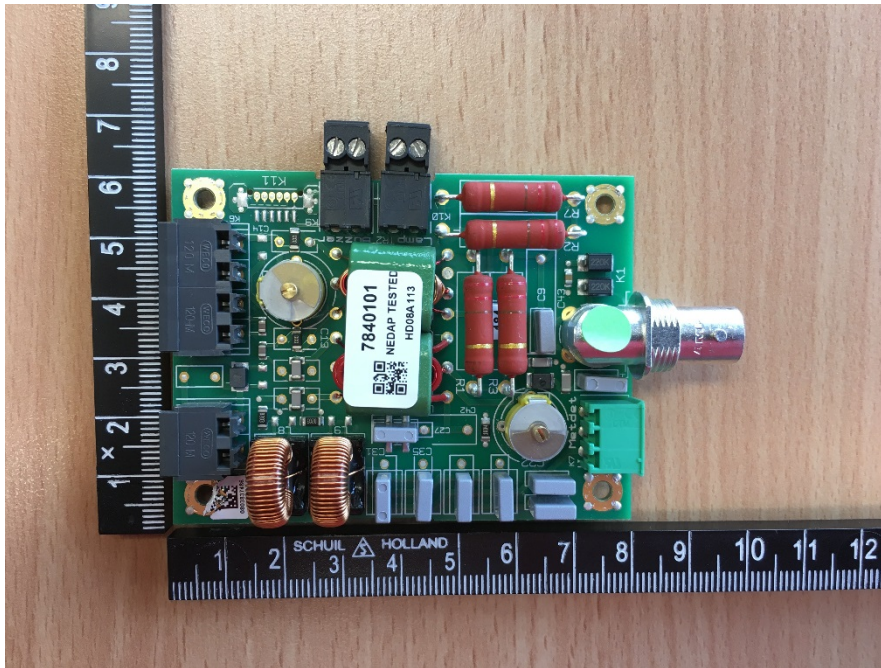


3.5. Renos back side PCB

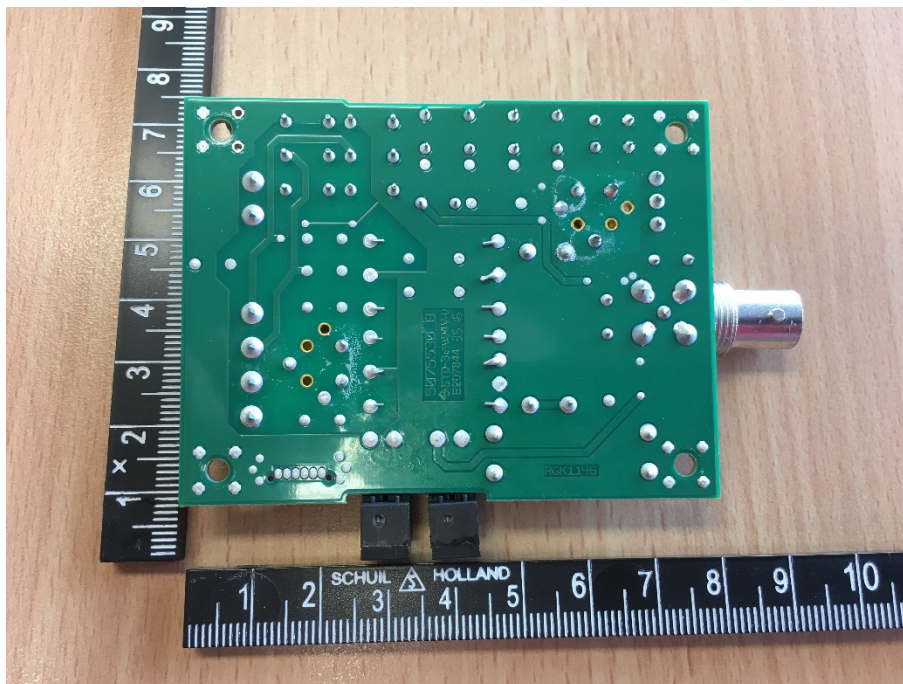


4. Antenna matching PCB

4.1. Front view

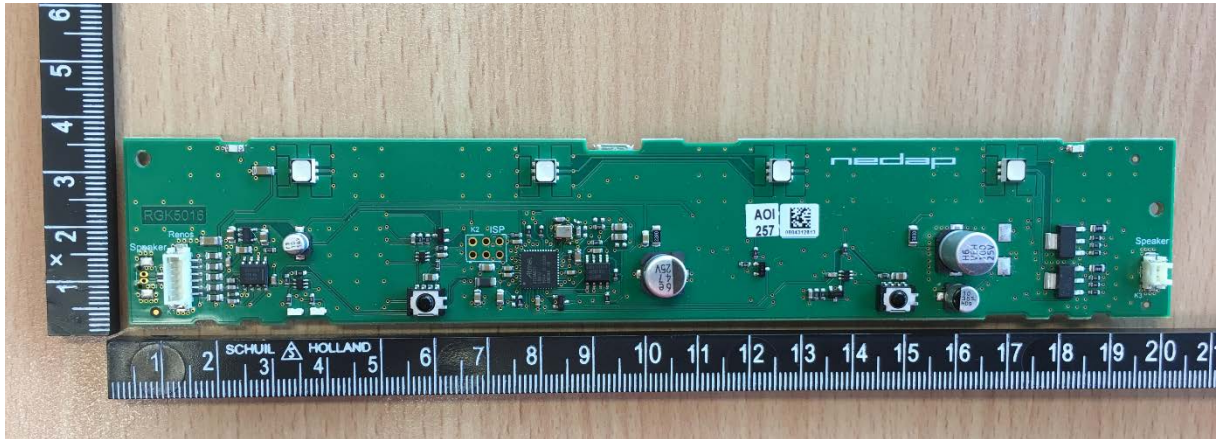


4.2. Back view

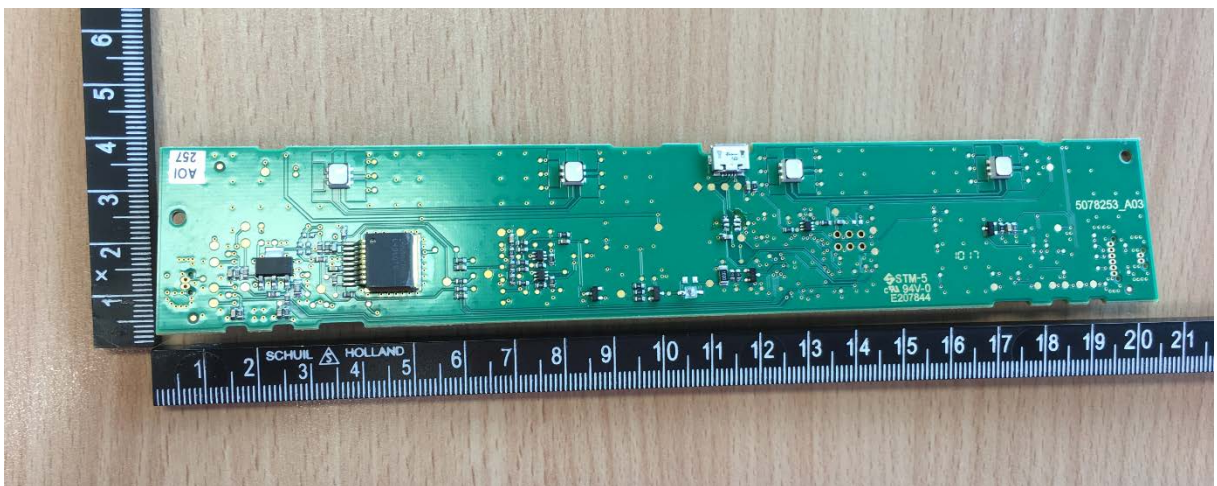


5. LED/buzzer and customer counter PCB

5.1. Front view



5.2. Back view

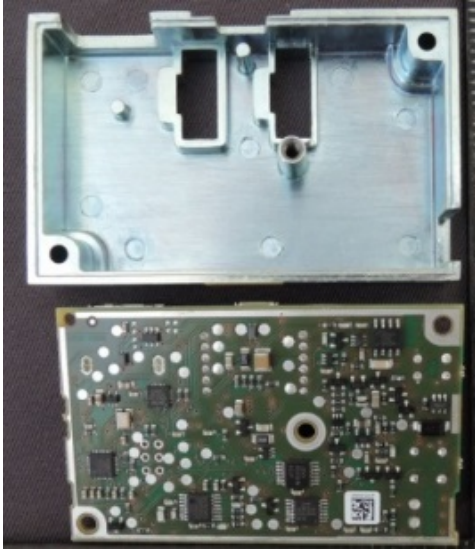
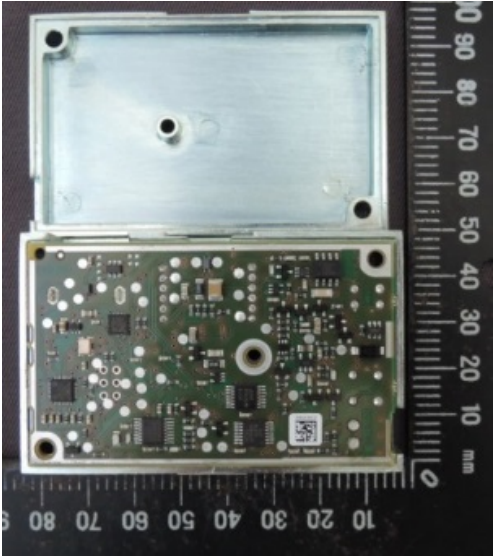


6. Metal detector

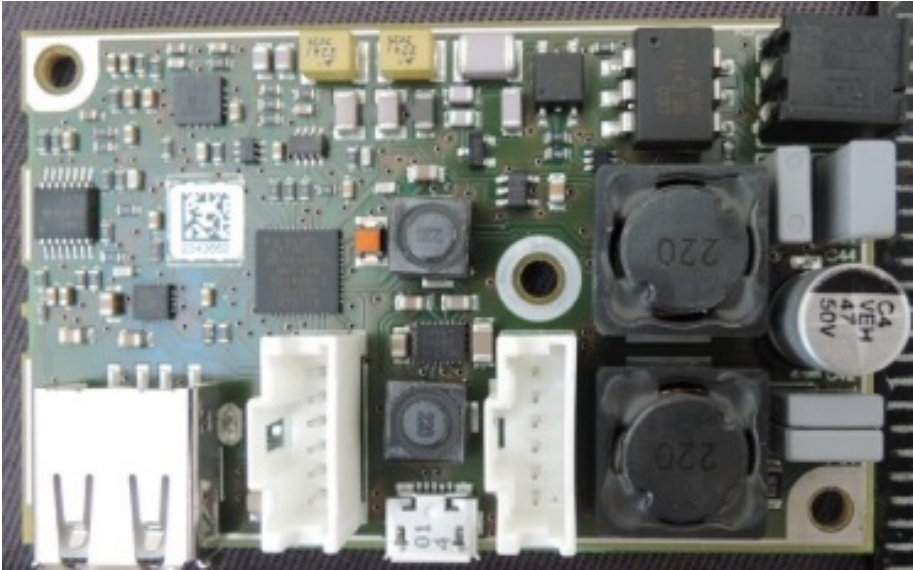
6.1. Total view with metal covers



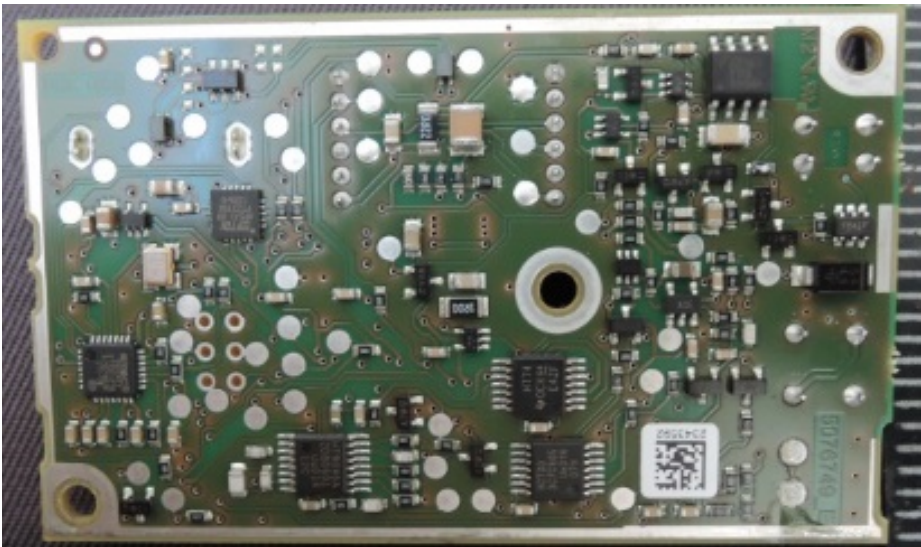
6.2. Metal detector with covers removed



6.3. Metal detector front view PCB



6.4. Metal detector back view PCB



7. RFID 902-928MHz transmitter/Receiver

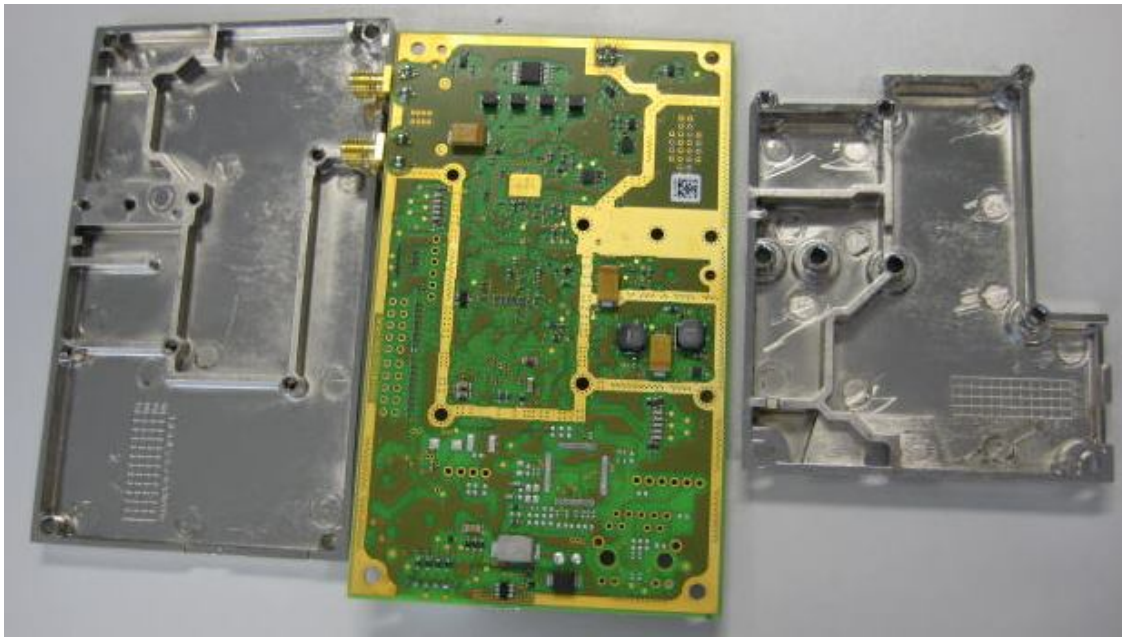
7.1. Front side with metal cover



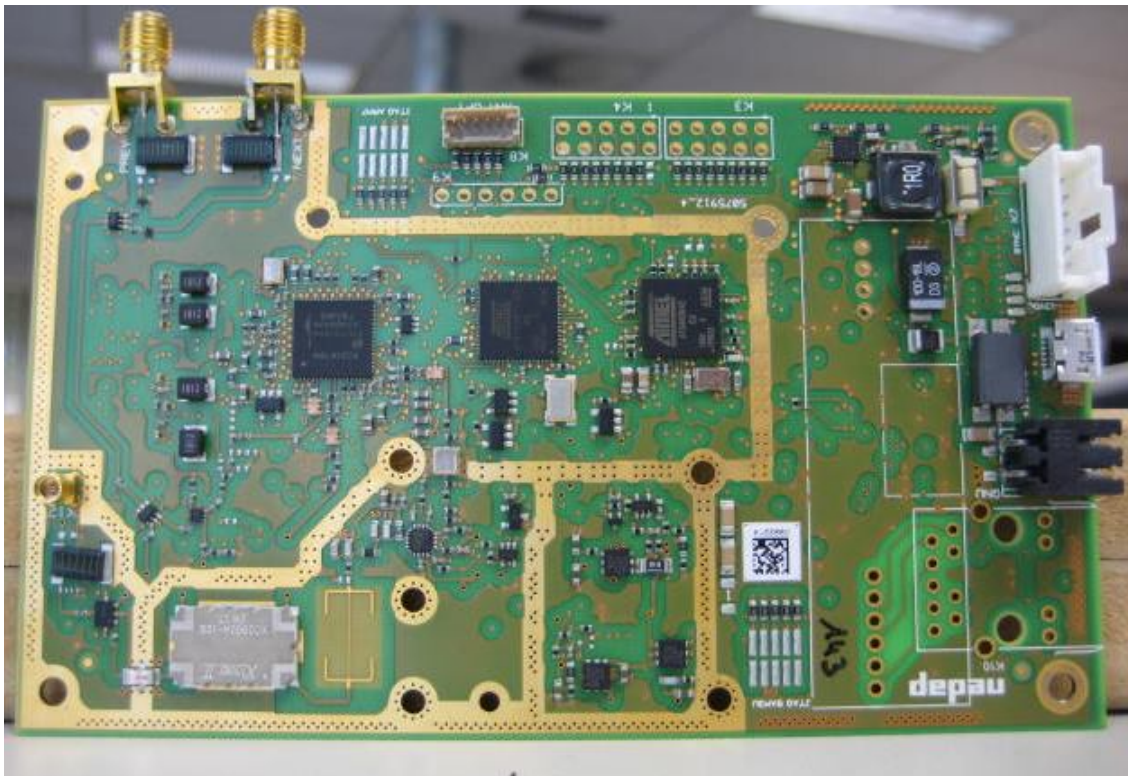
7.2. Backside with metal cover



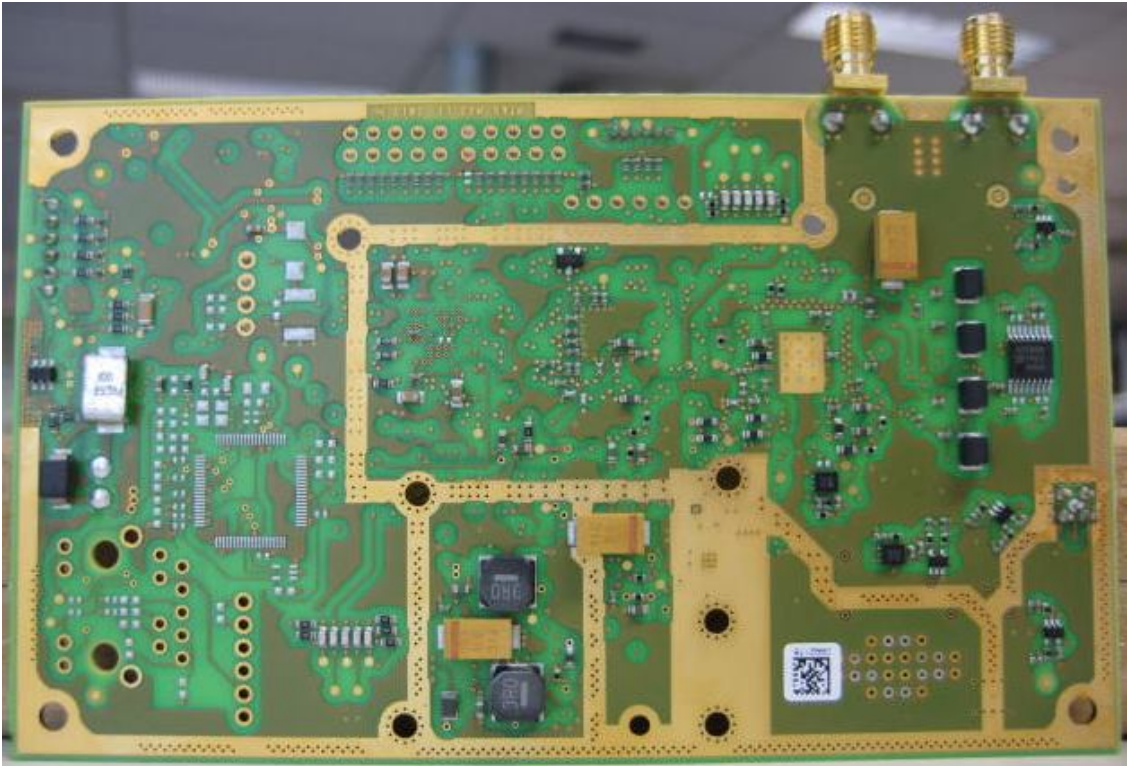
7.3. ID reader covers removed



7.4. PCB Front side



7.5. PCB Back side



8. Antenna information 902-928 MHz part

8.1. Front side antennae



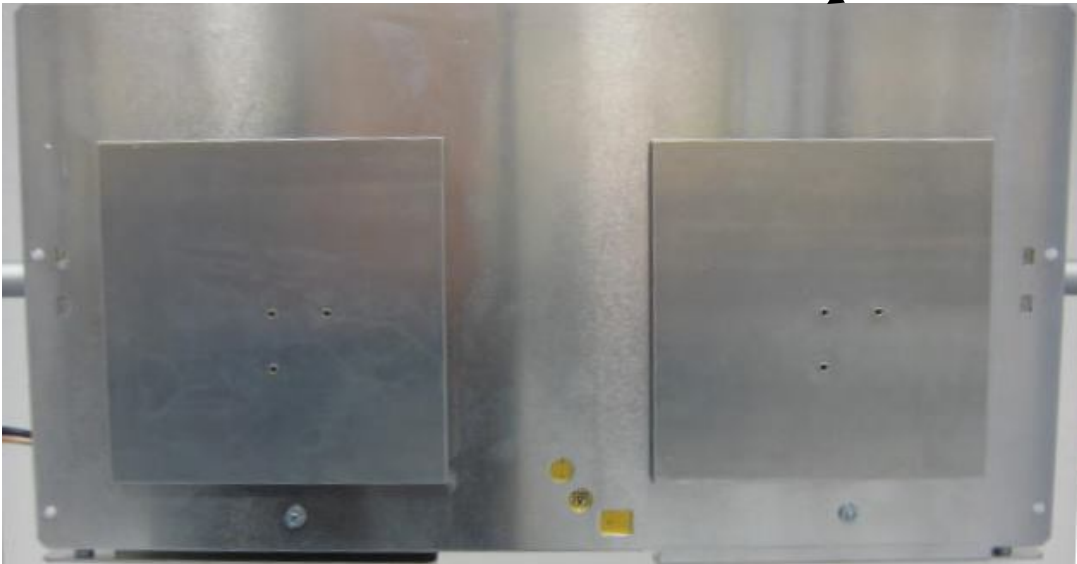
Cover removed



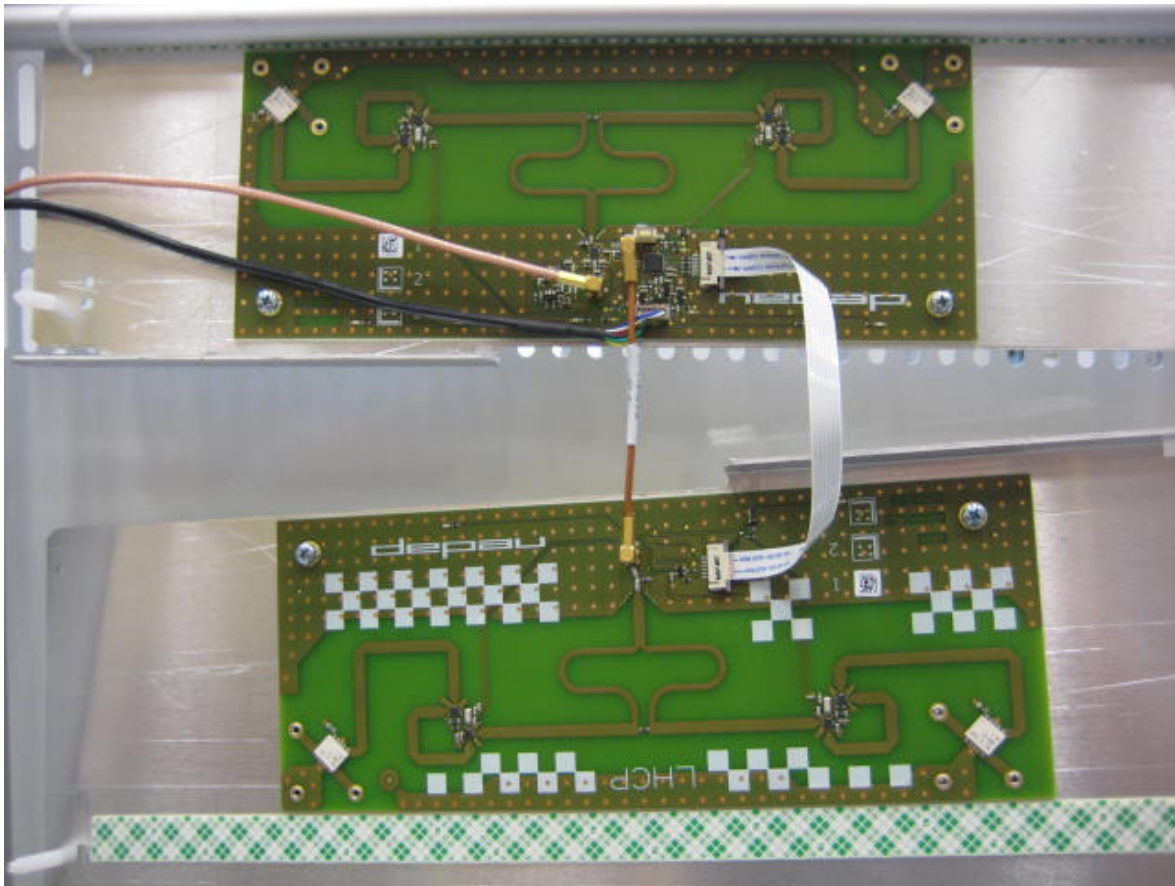
8.2. Backside antennae



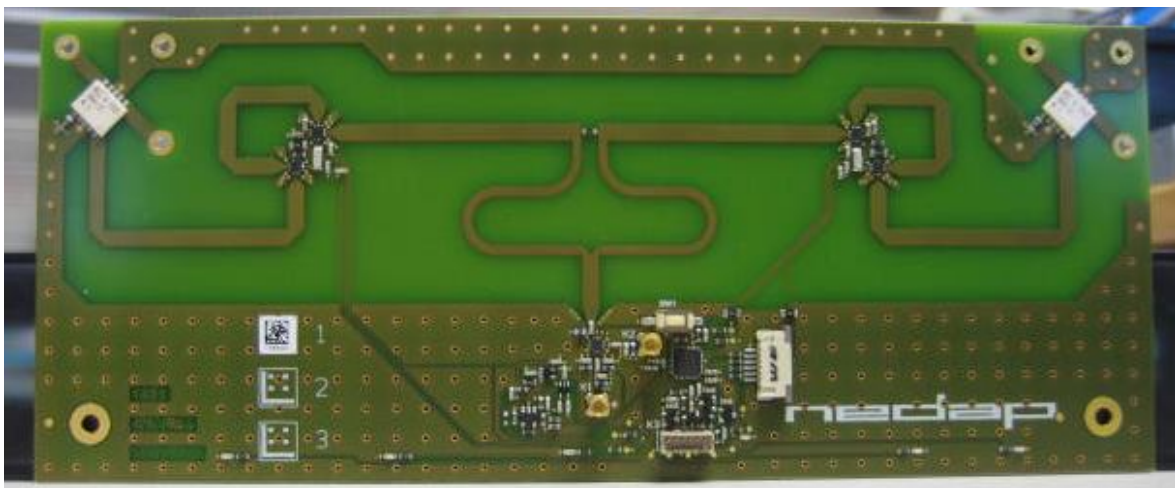
Cover removed



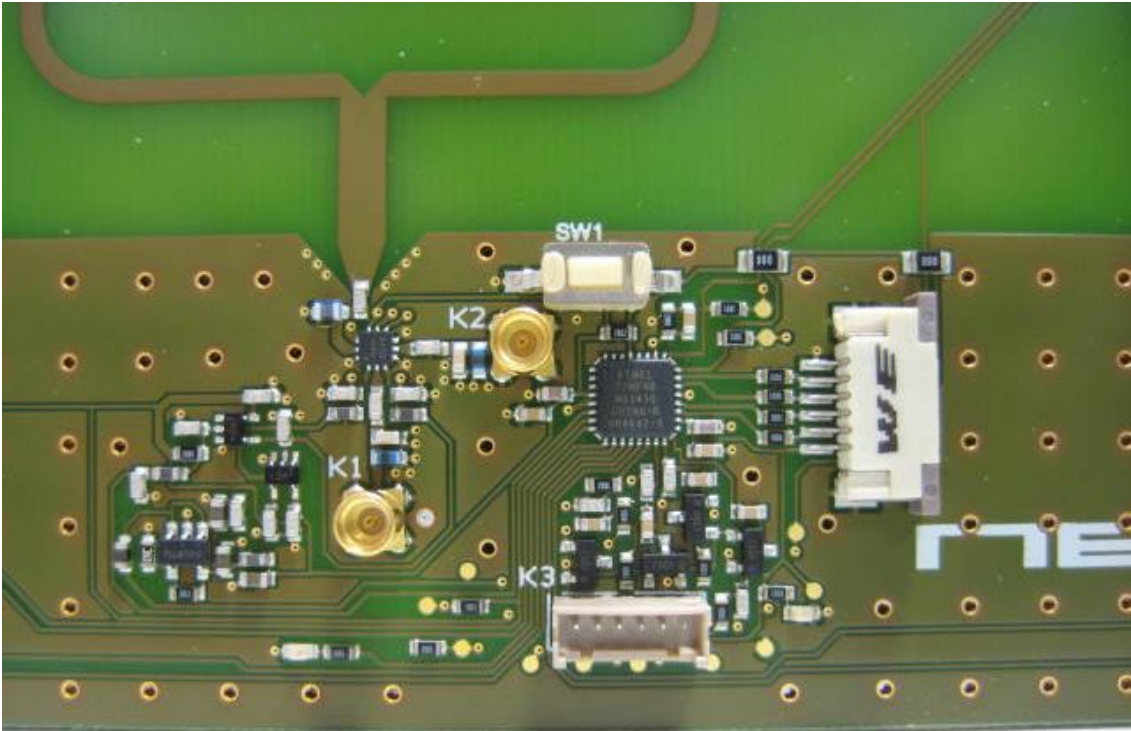
8.3. Antenna Printed Circuit Boards



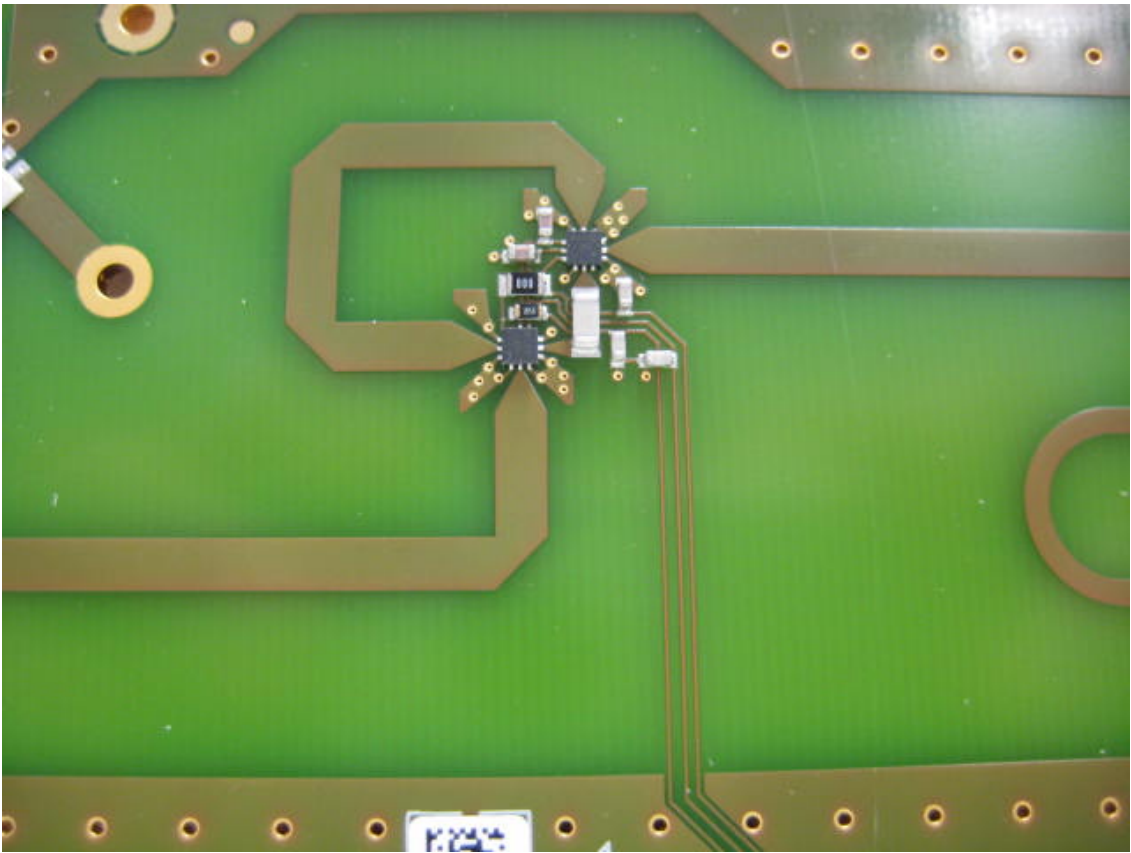
8.3.1. Antenna PCB RHCP



Overview

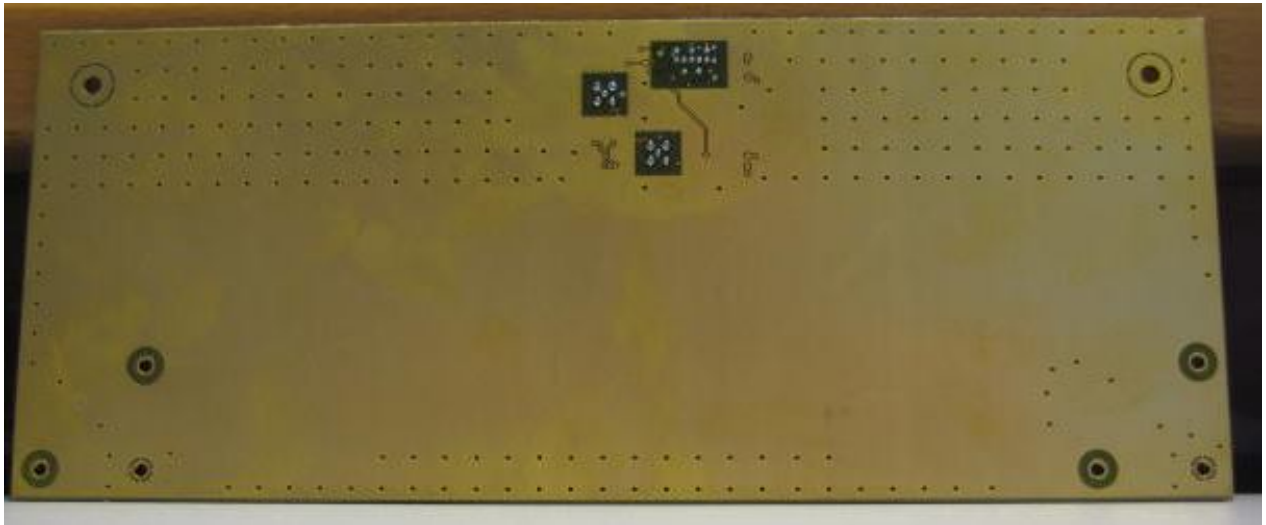


Detail1

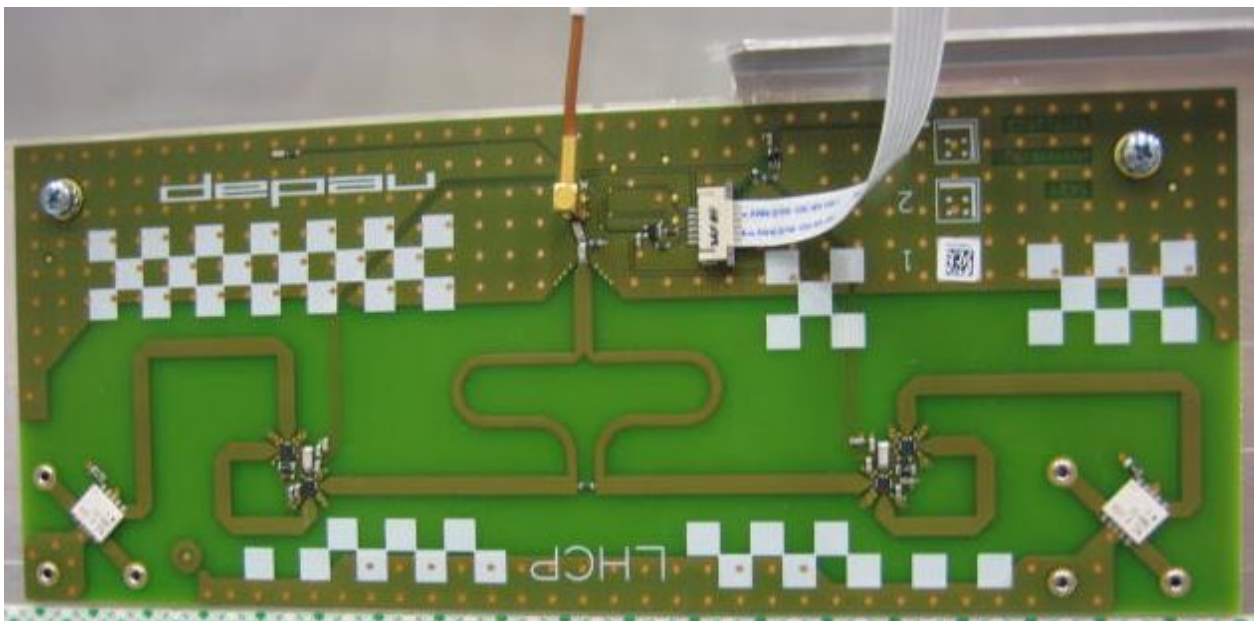


Detail 2

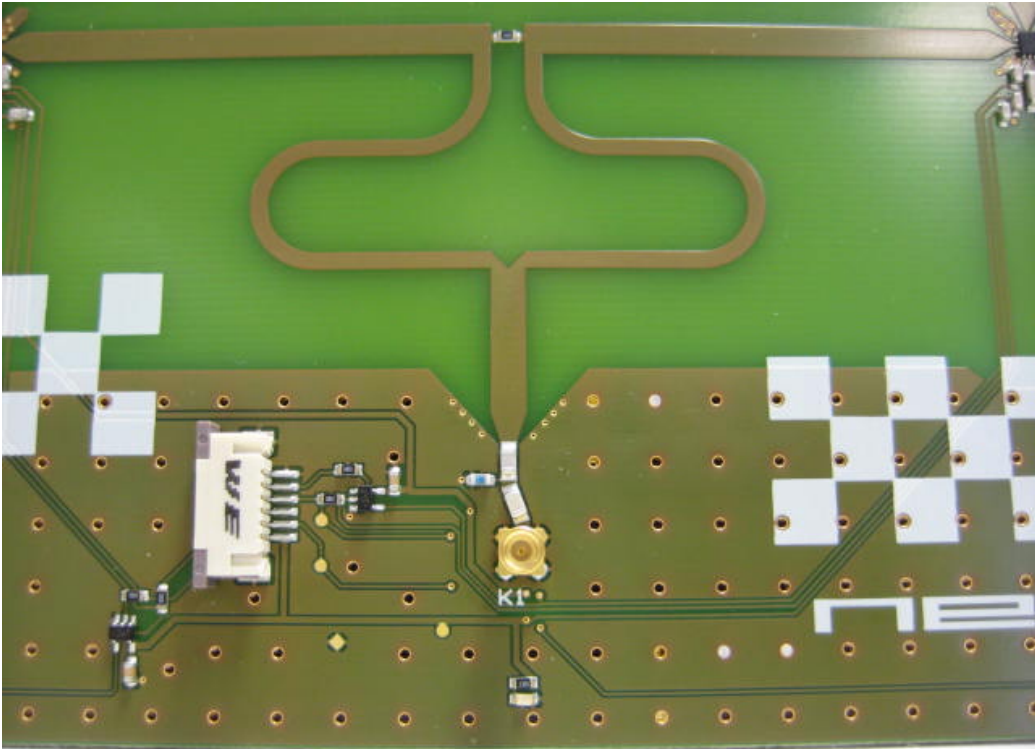
8.3.2. Back side



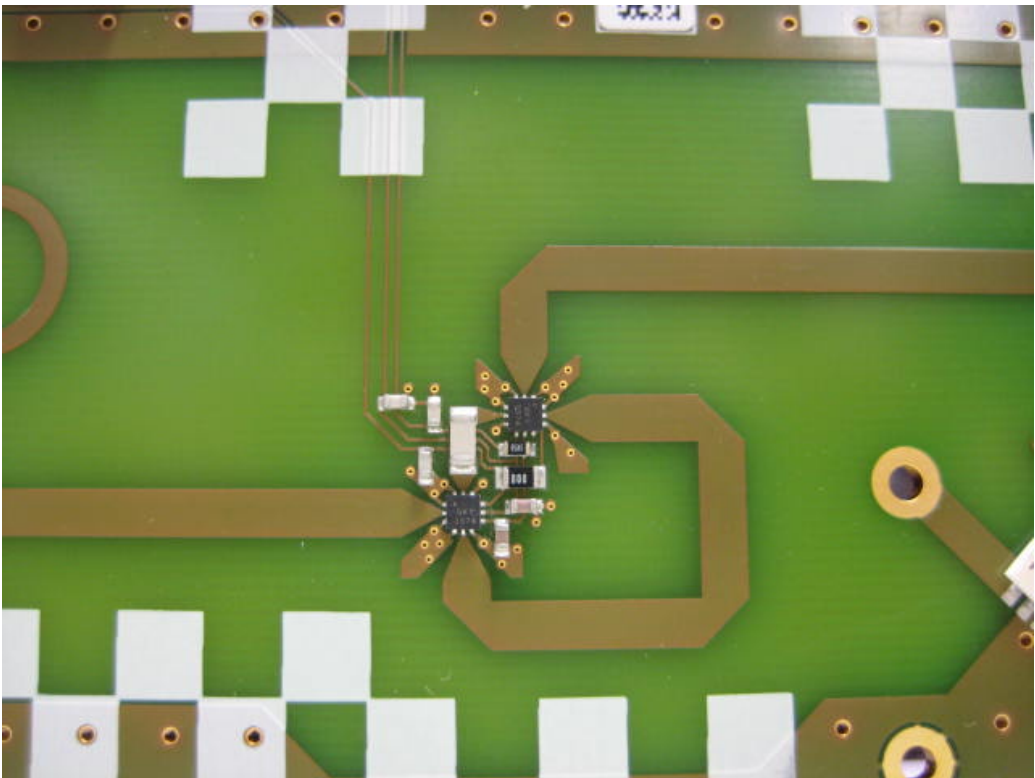
8.3.3. Antenna PCB LHCP



Overview



Detail1



Detail2

8.3.4. Back side

