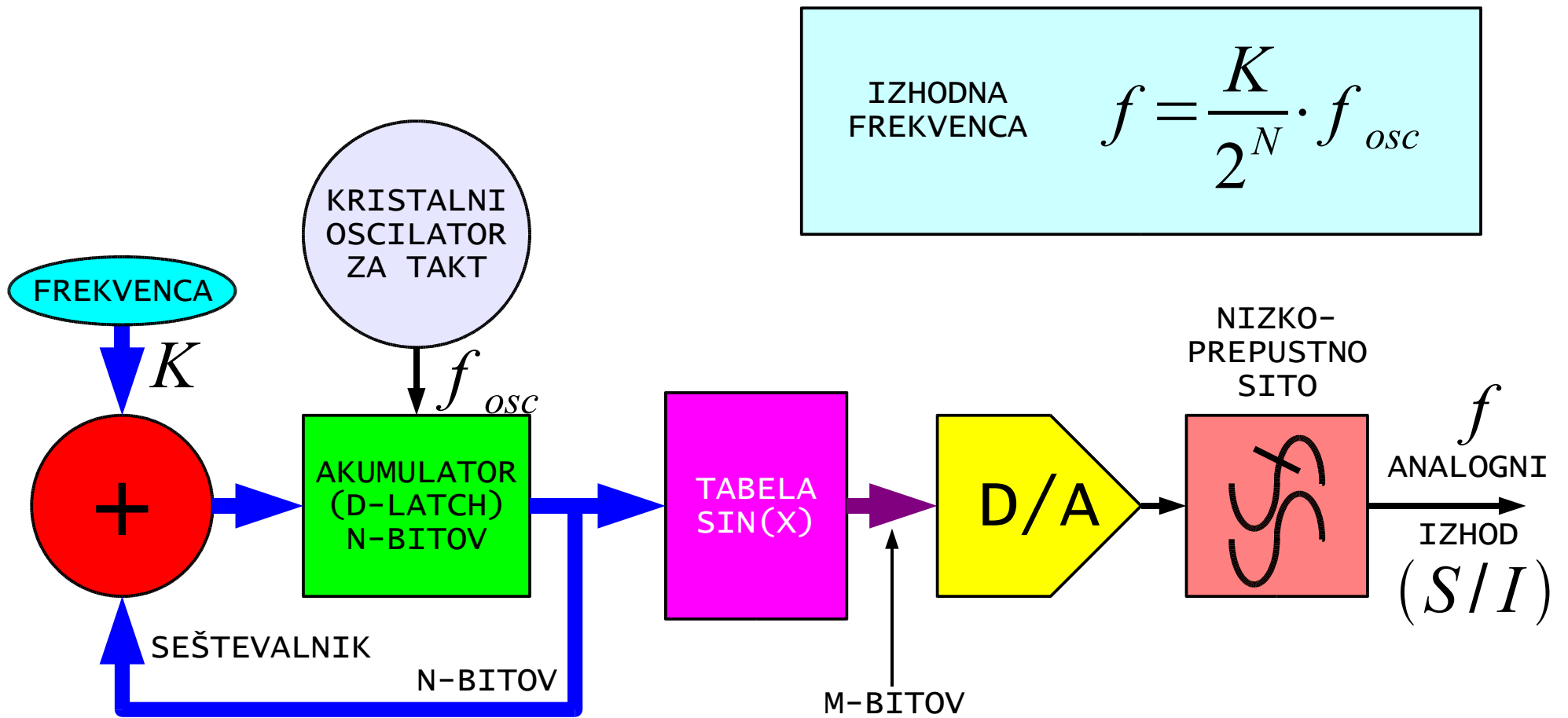


RIS 2010

# DDS VF izvor

Matjaž Vidmar, S53MV

FE, Ljubljana, 16.01.2010



IZHODNA FREKVENCA

$$f = \frac{K}{2^N} \cdot f_{osc}$$

IZHODNO RAZMERJE SIGNAL/MOTNJA (S/I) [dB]

$$(S/I) = M \cdot 6 \text{ dB}$$

# Direct Digital Synthesizer

JAKOST [dB]

FREKVENČNI SPEKTER  
DDS IZVORA PRI

$$f_{osc} = 200 \text{ MHz}$$

NIZKO-  
PREPUSTNO  
SITO

OVOJNICA  
 $\text{SIN}(X)/X$

40MHz

160MHz

240MHz

360MHz

440MHz

560MHz

OSNOVNI  
SIGNAL

PRESLUH  
TAKTA  
200MHz

PRESLUH  
TAKTA  
400MHz

PRESLUH  
TAKTA  
600MHz

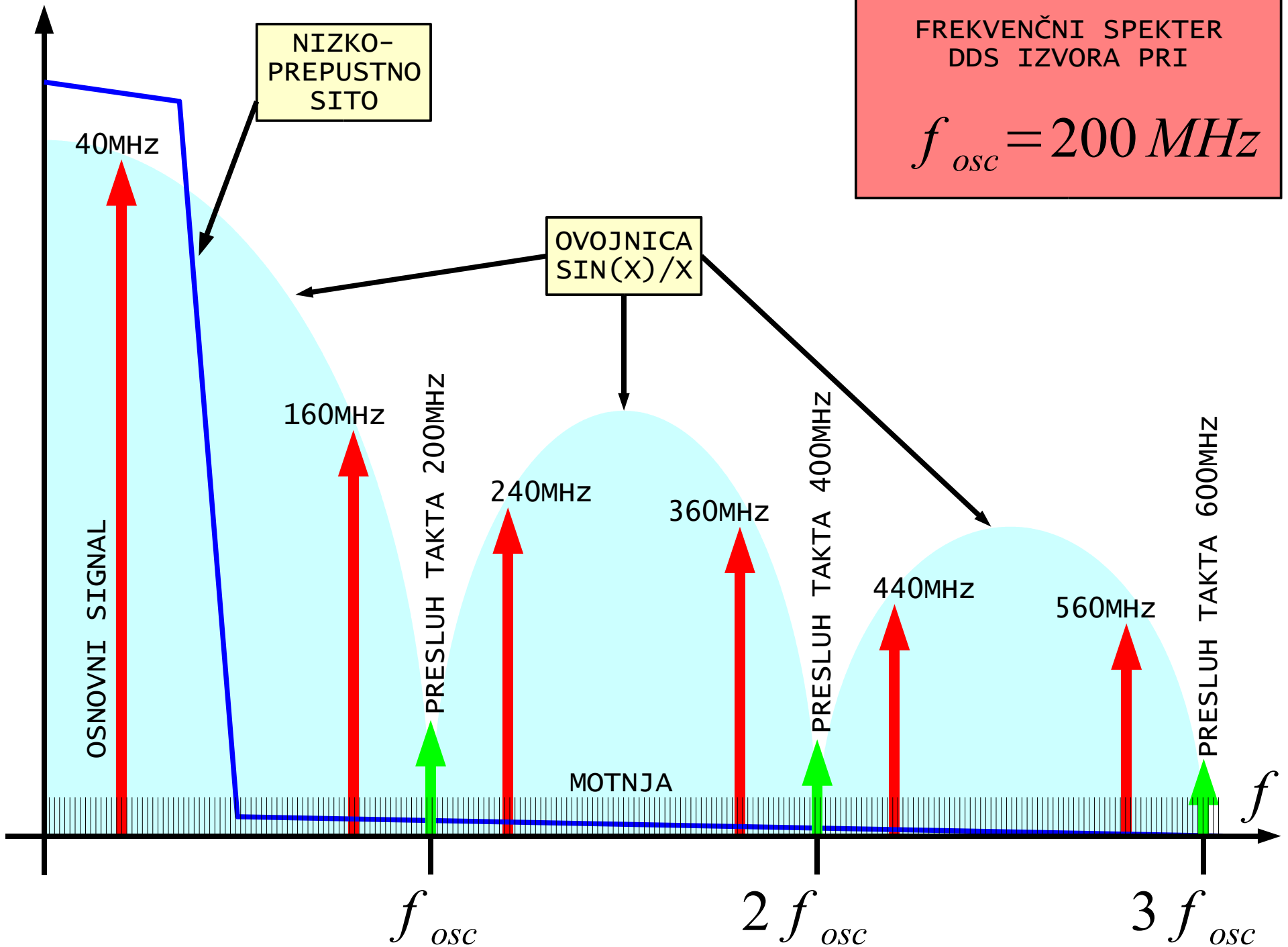
MOTNJA

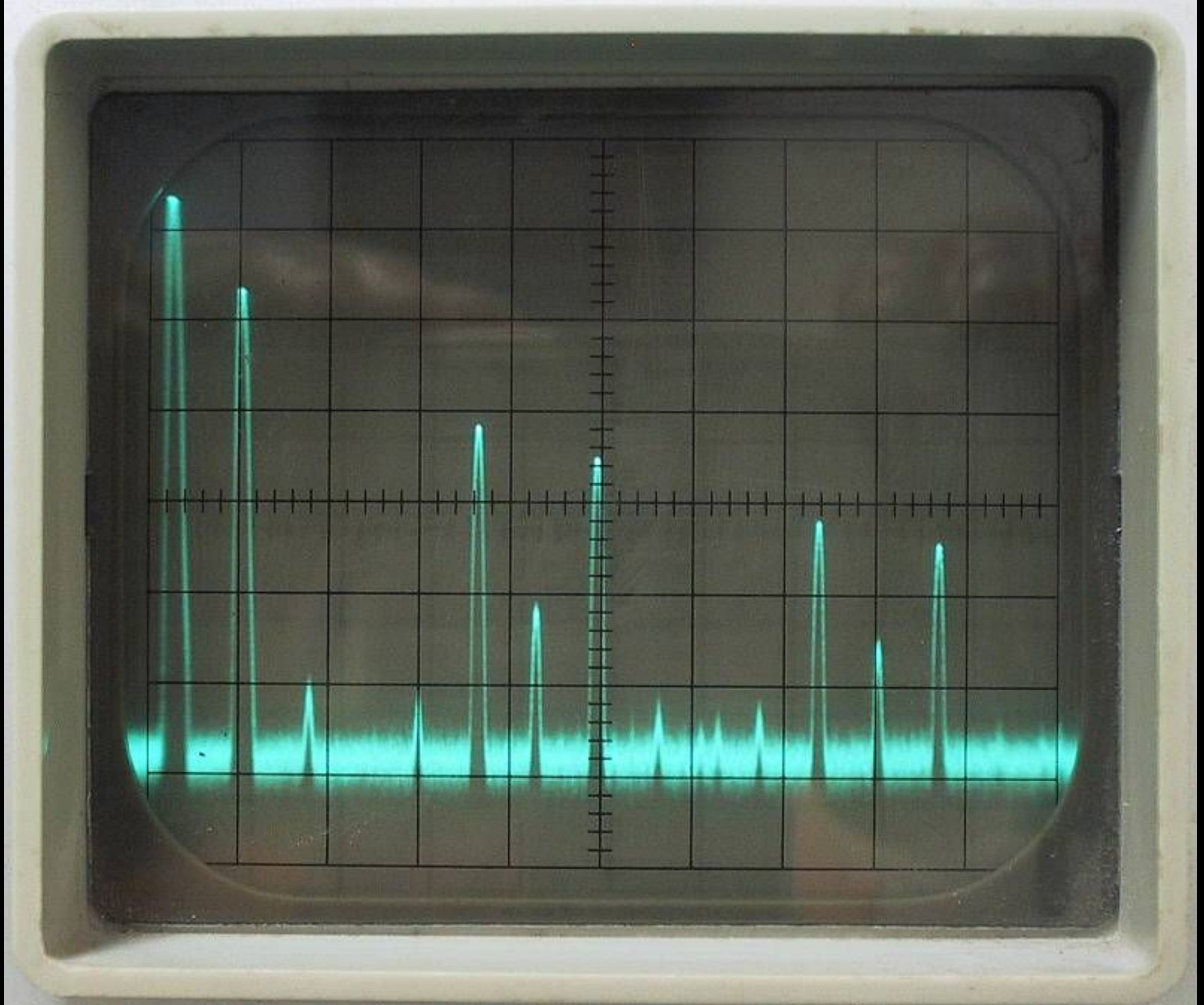
$f_{osc}$

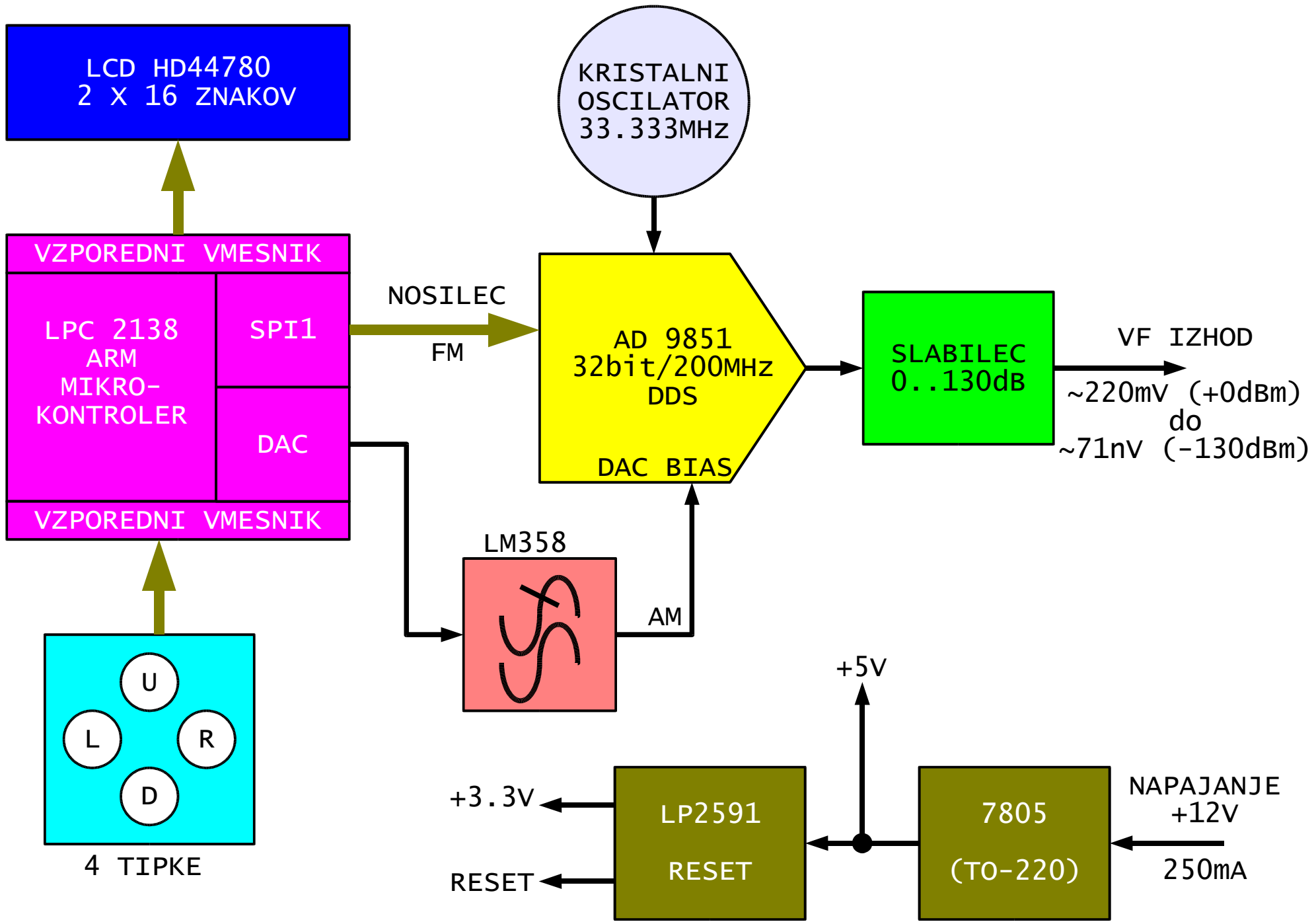
$2 f_{osc}$

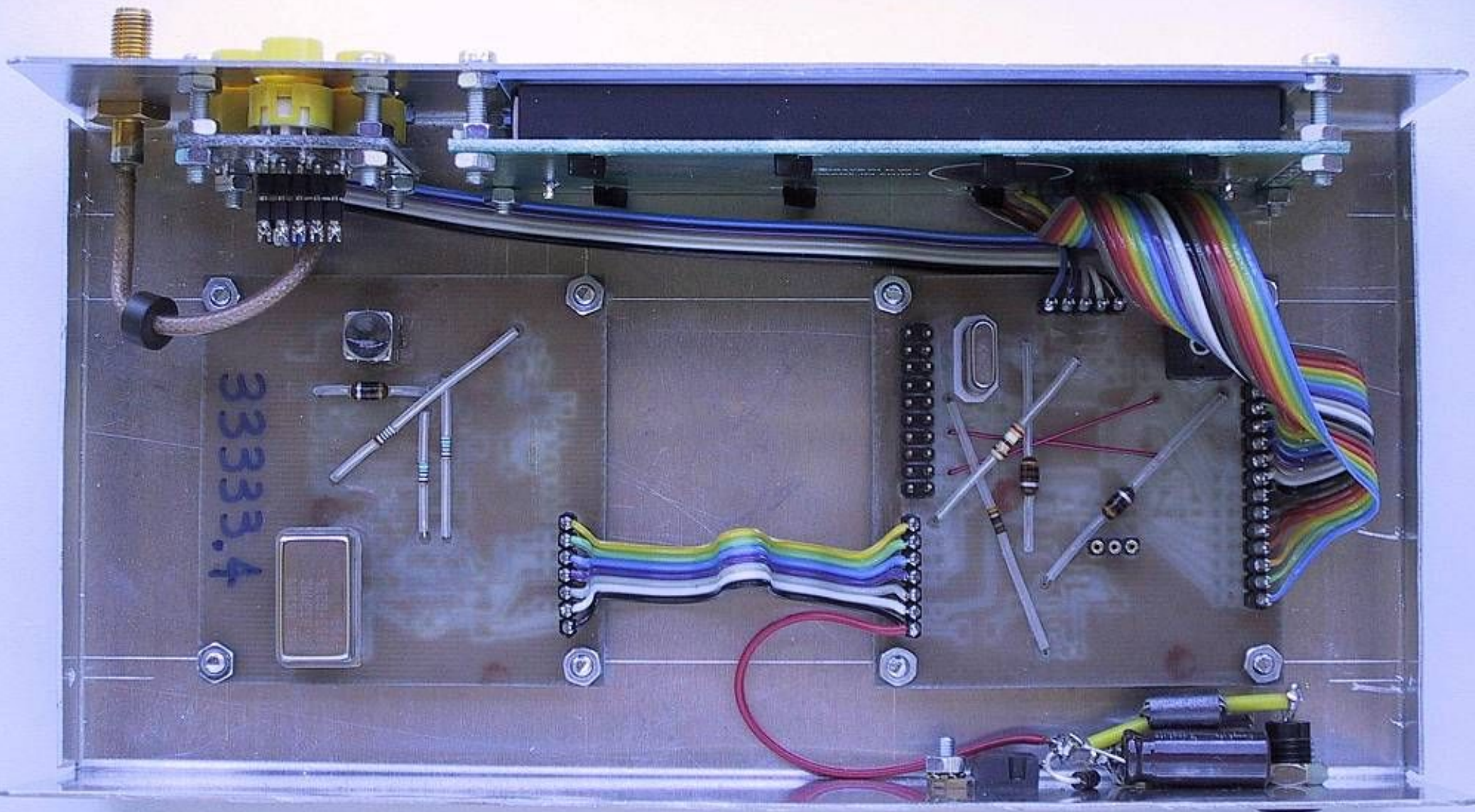
$3 f_{osc}$

$f$

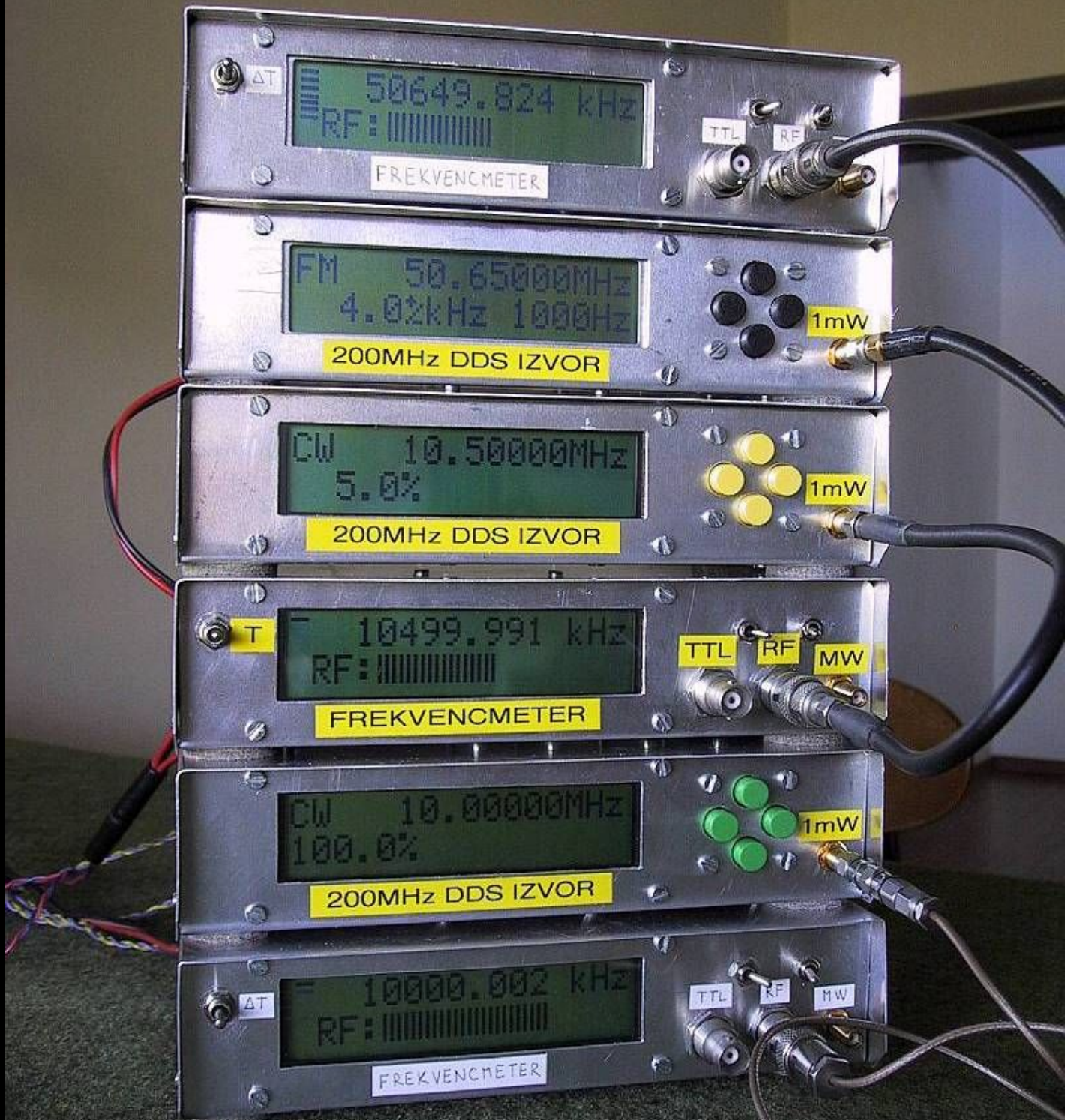








3333.4



ΔT 50649.824 kHz  
RF: [signal indicator]

FREKVENC METER

FM 50.65000MHz  
4.02kHz 1000Hz

200MHz DDS IZVOR

1mW

CW 10.50000MHz  
5.0%

200MHz DDS IZVOR

1mW

T 10499.991 kHz  
RF: [signal indicator]

FREKVENC METER

TTL

RF

MW

CW 10.00000MHz  
100.0%

200MHz DDS IZVOR

1mW

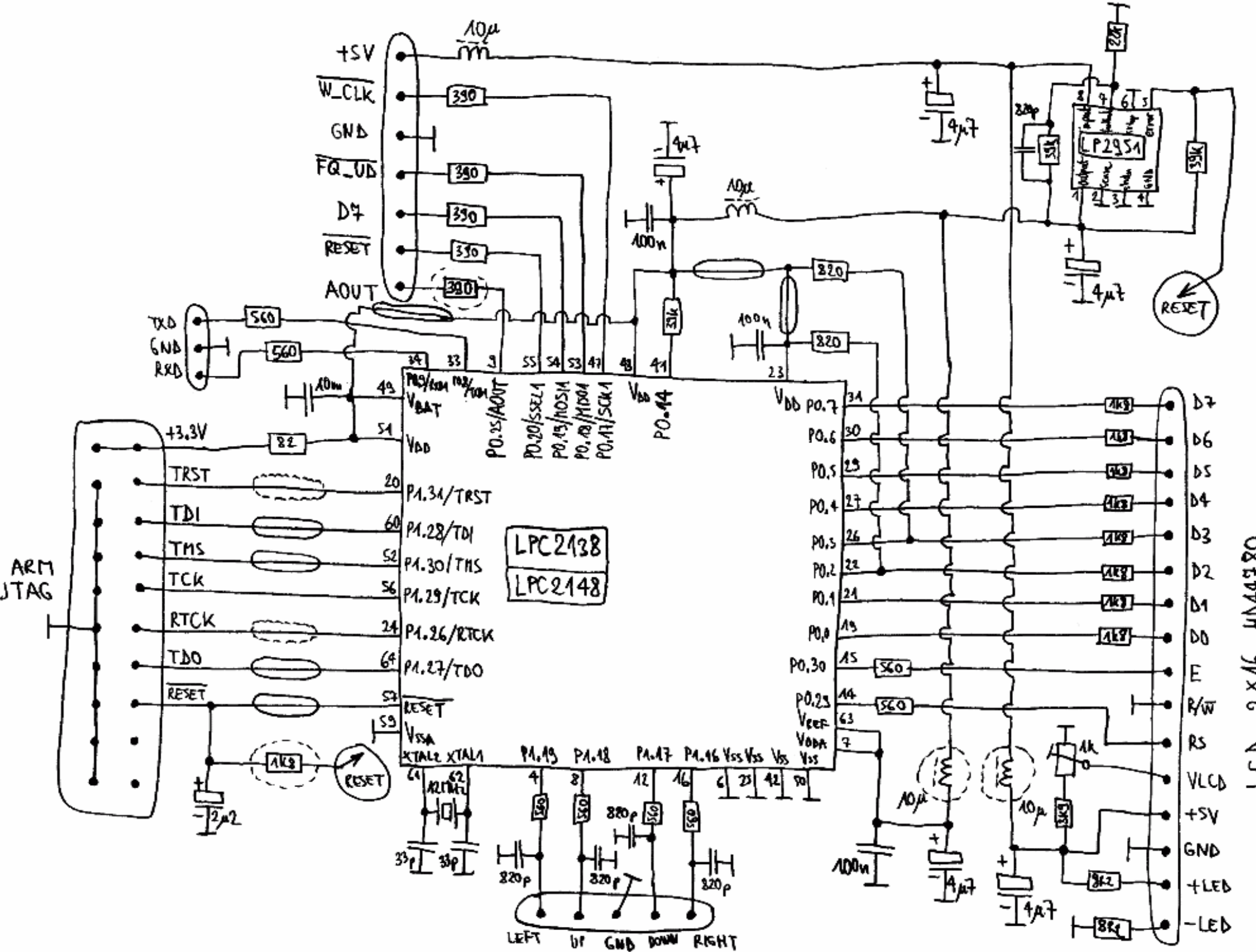
ΔT 10000.002 kHz  
RF: [signal indicator]

FREKVENC METER

TTL

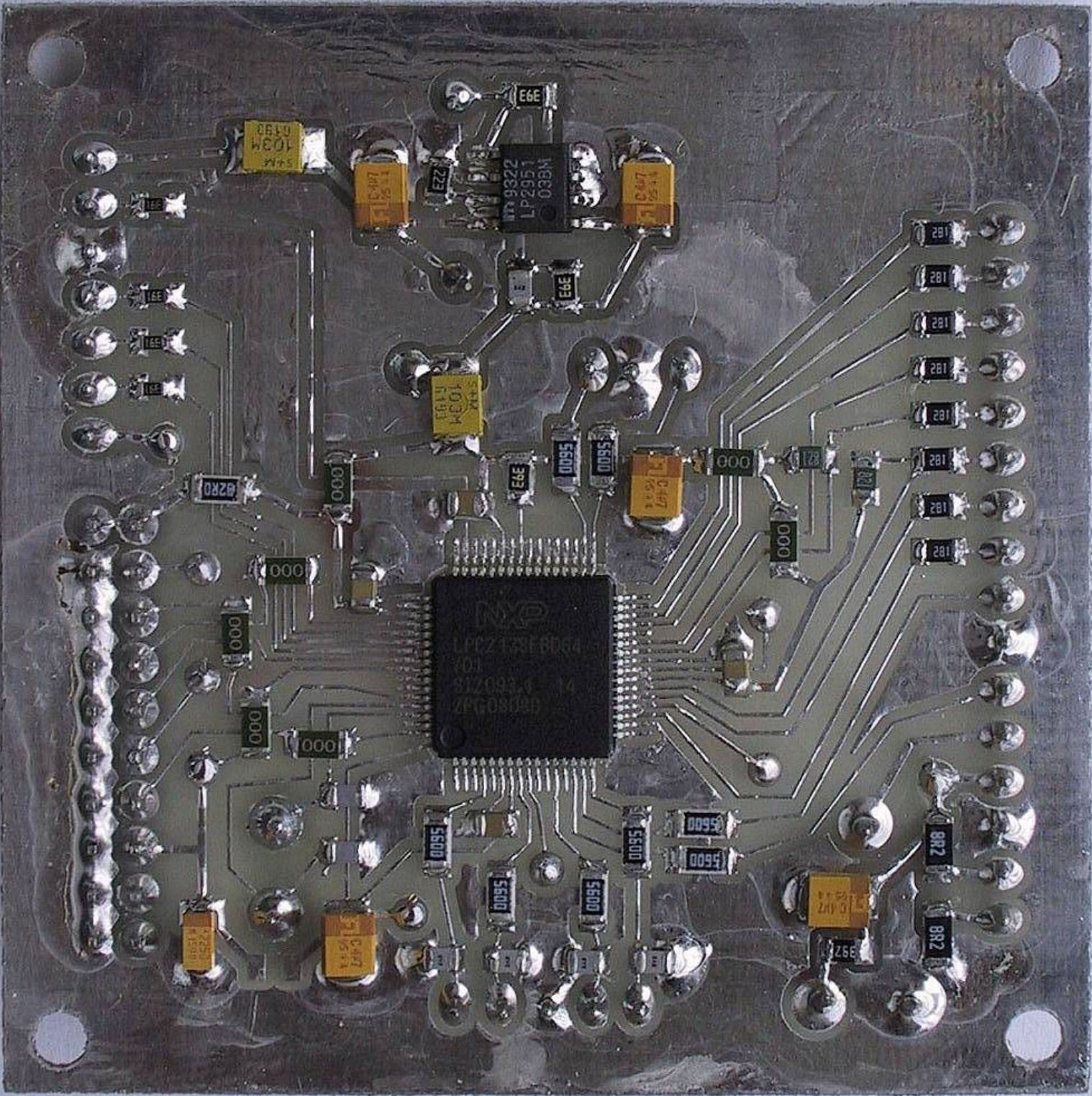
RF

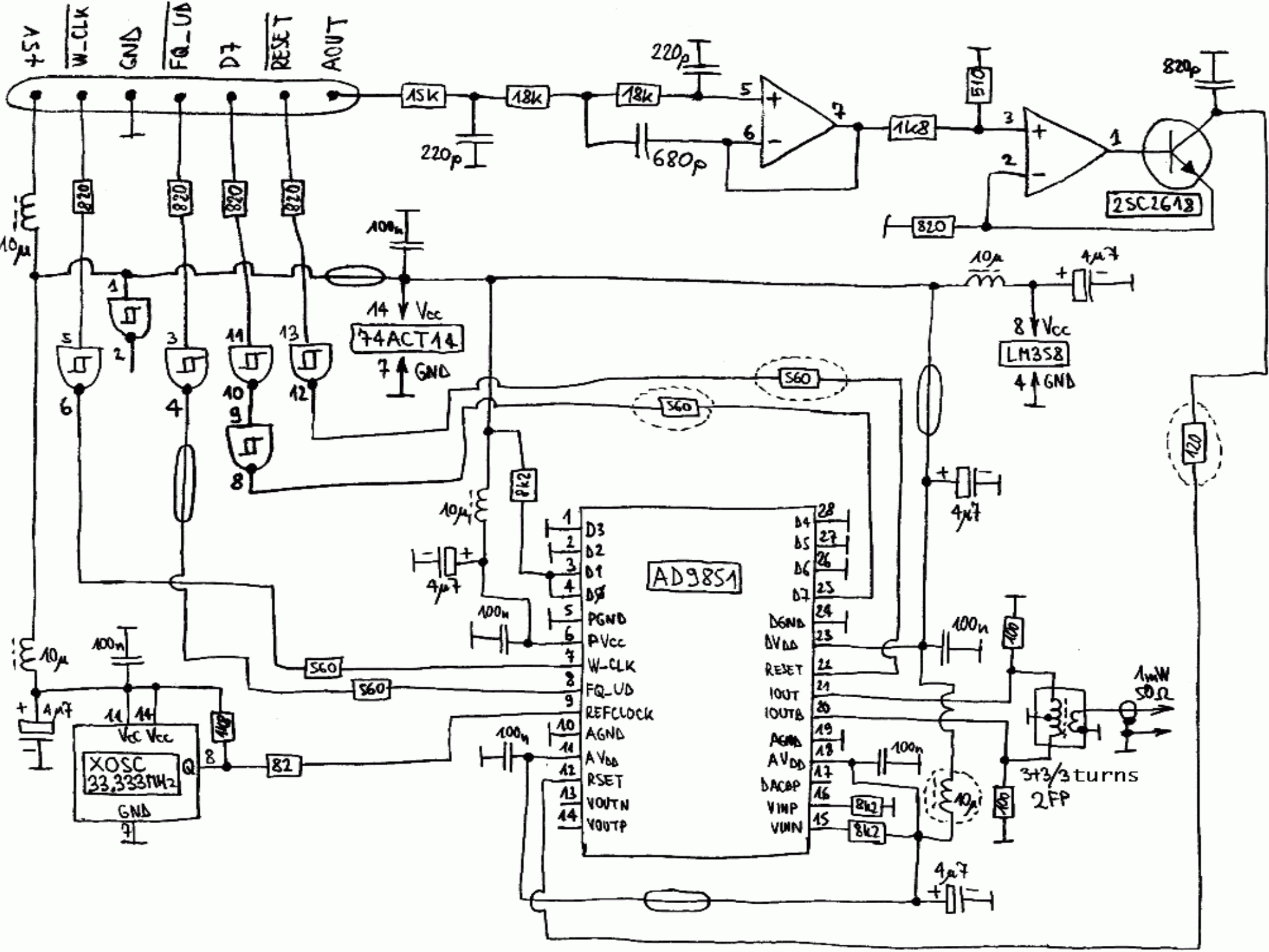
MW

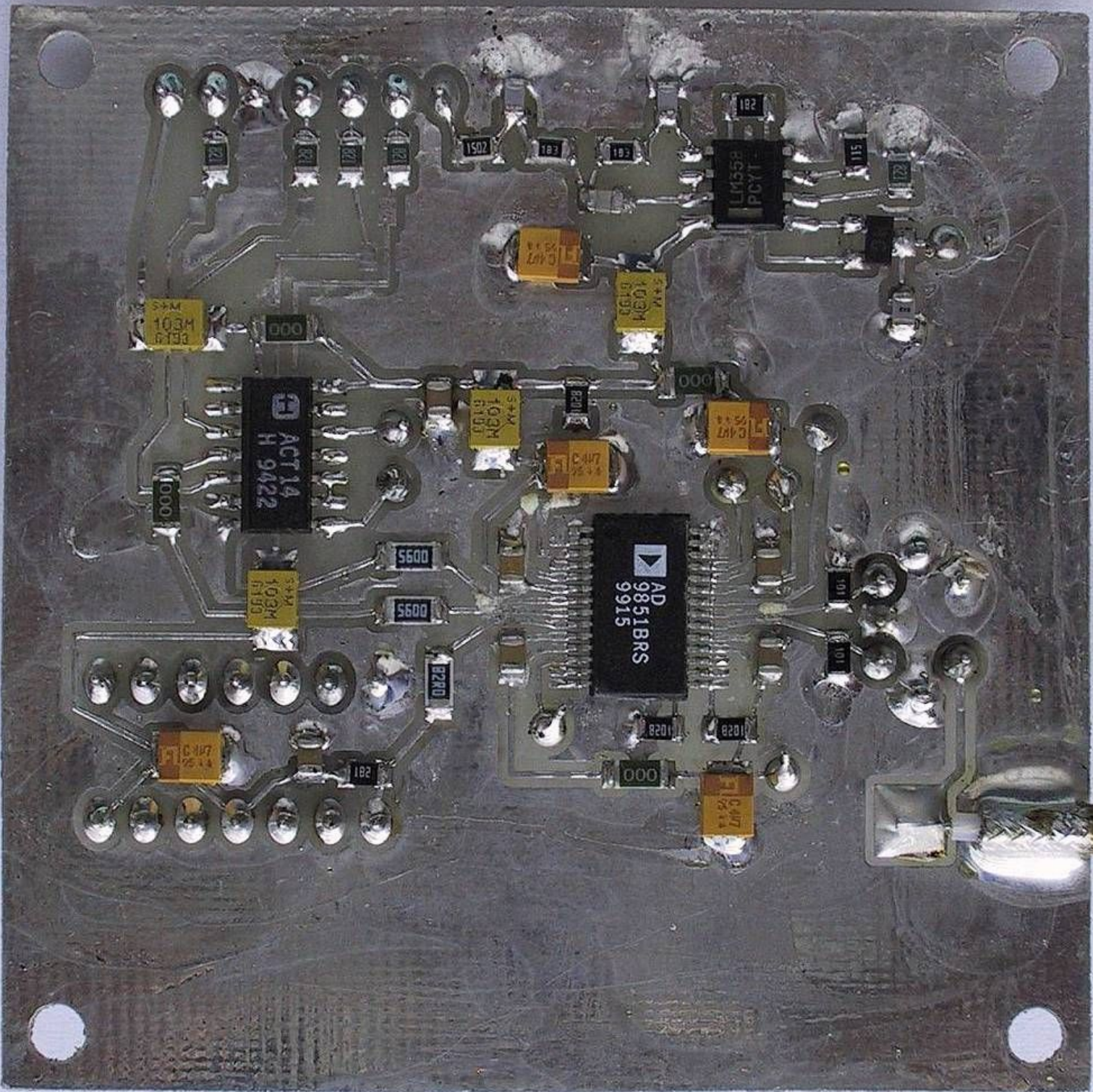


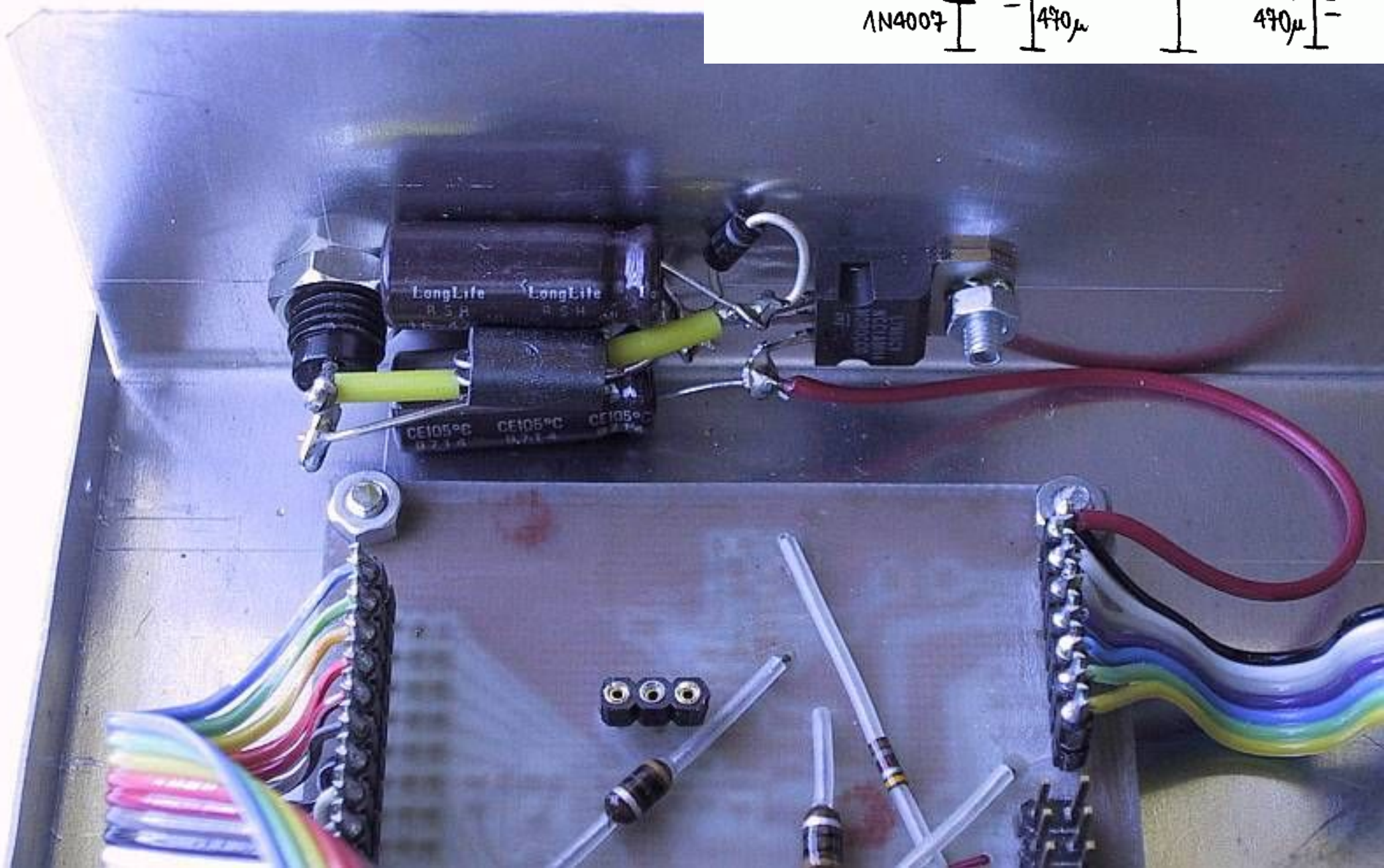
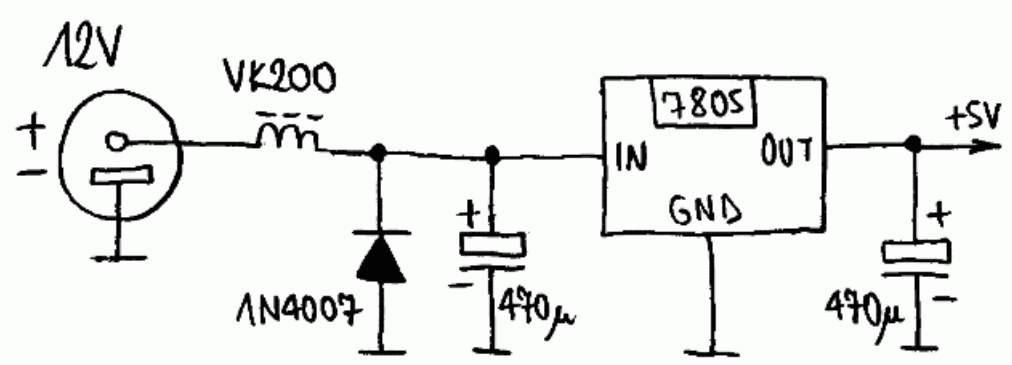
LCD 2x16 HD44780

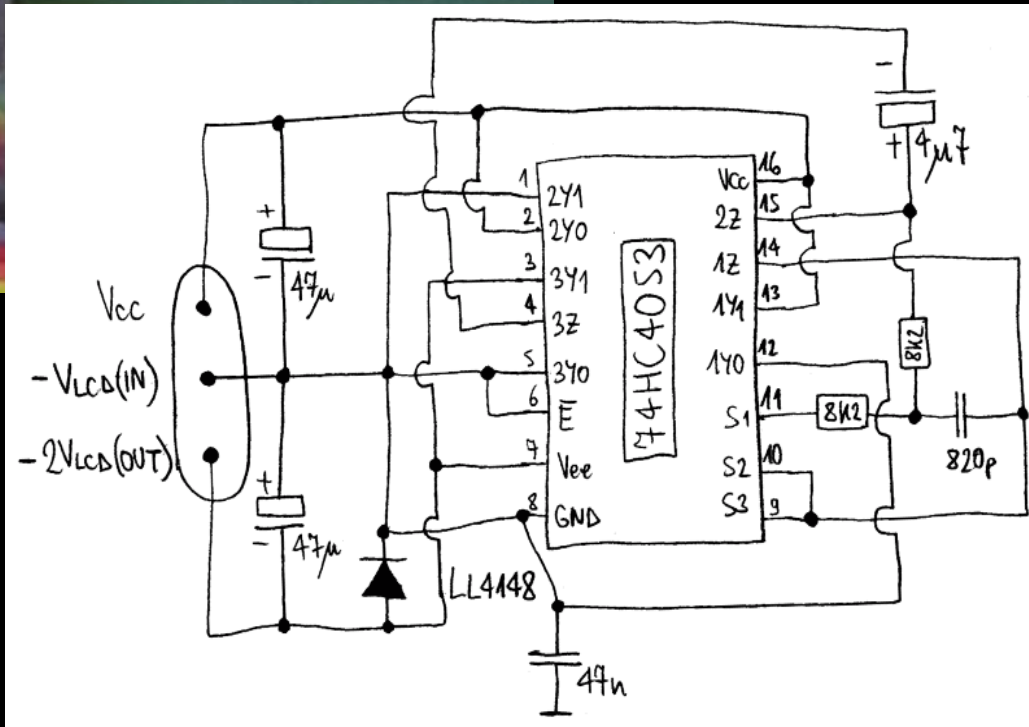
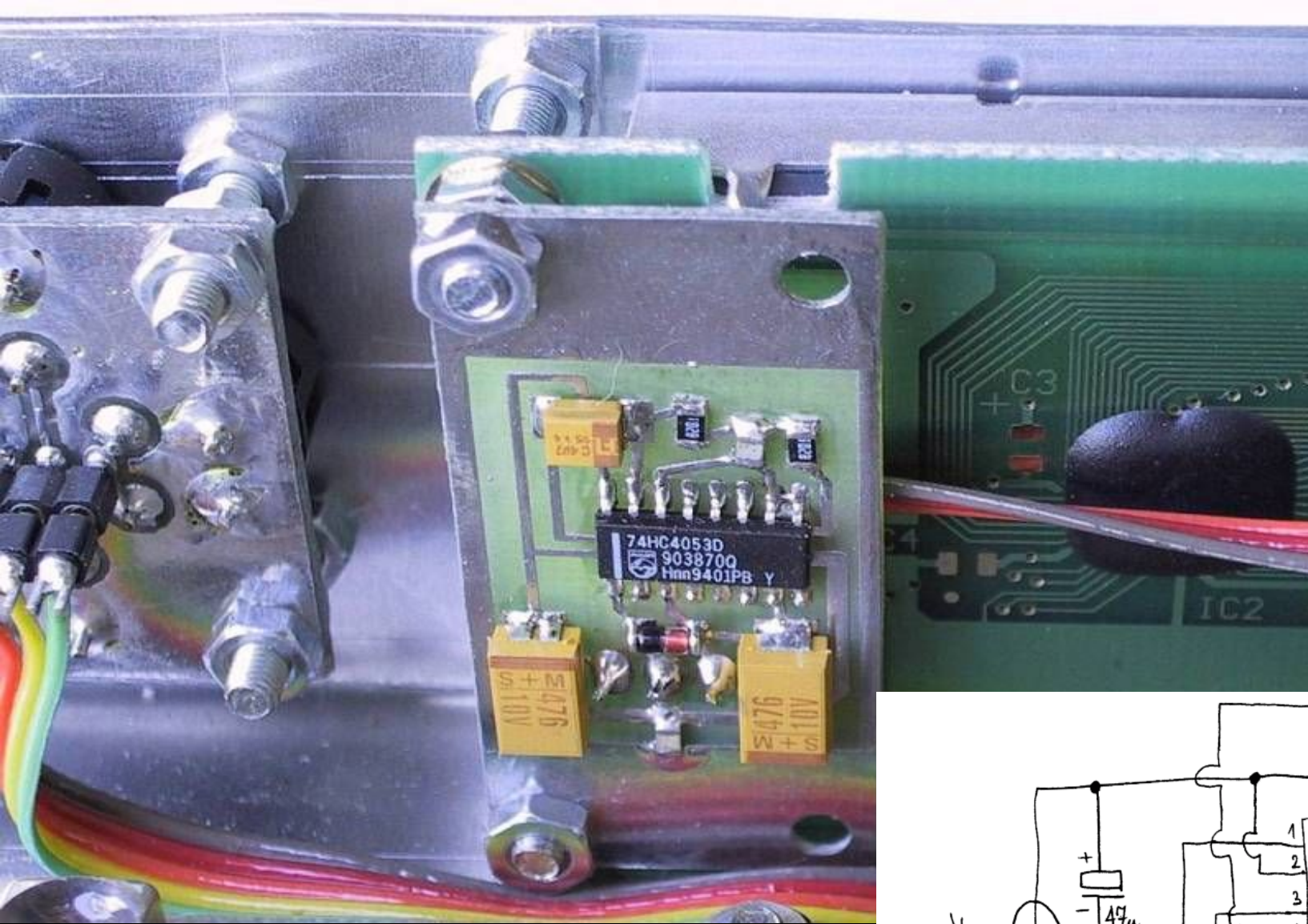


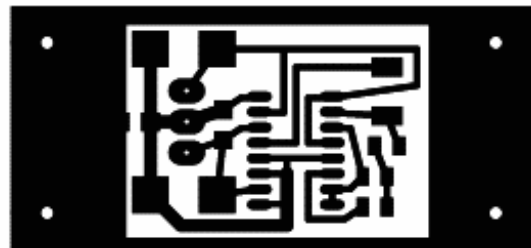
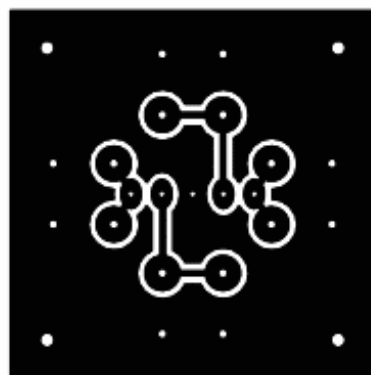
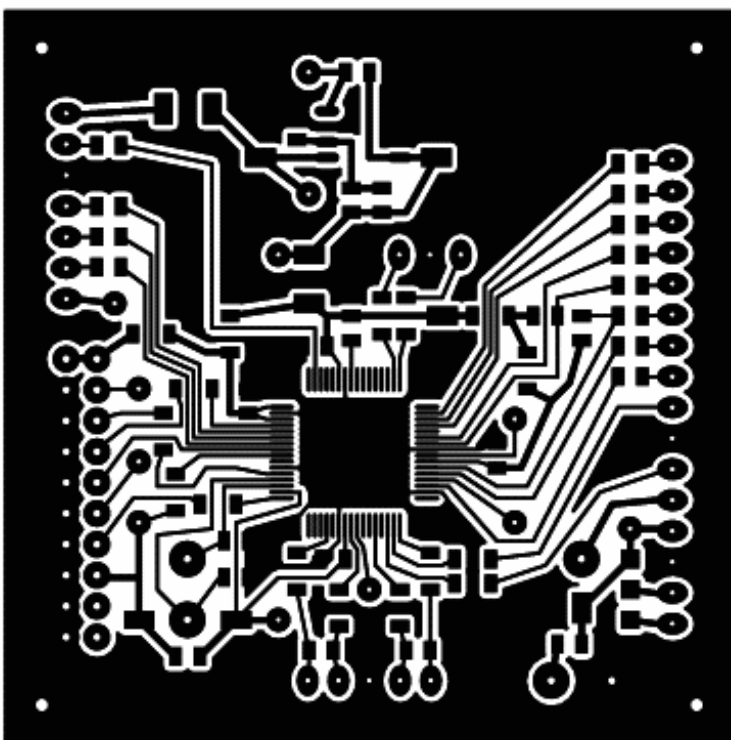
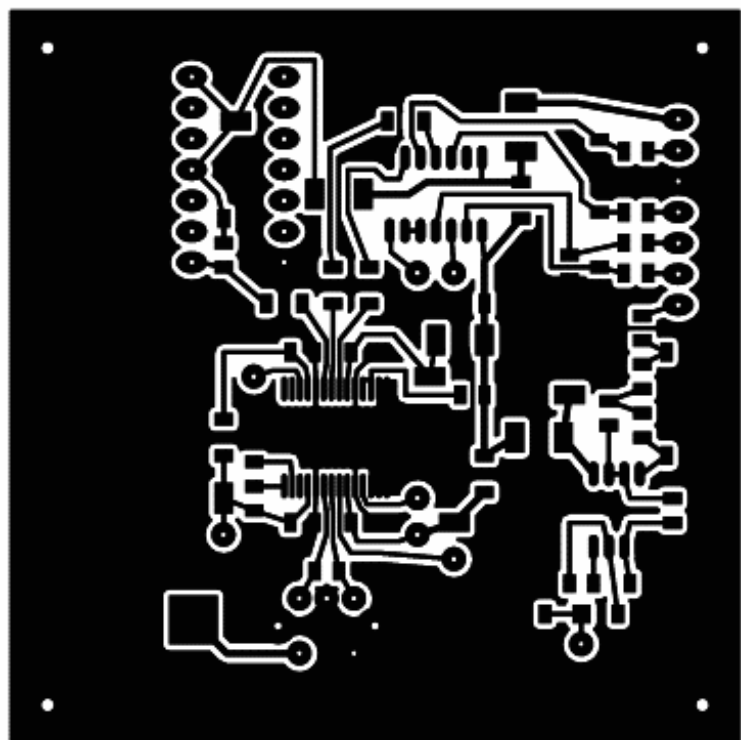


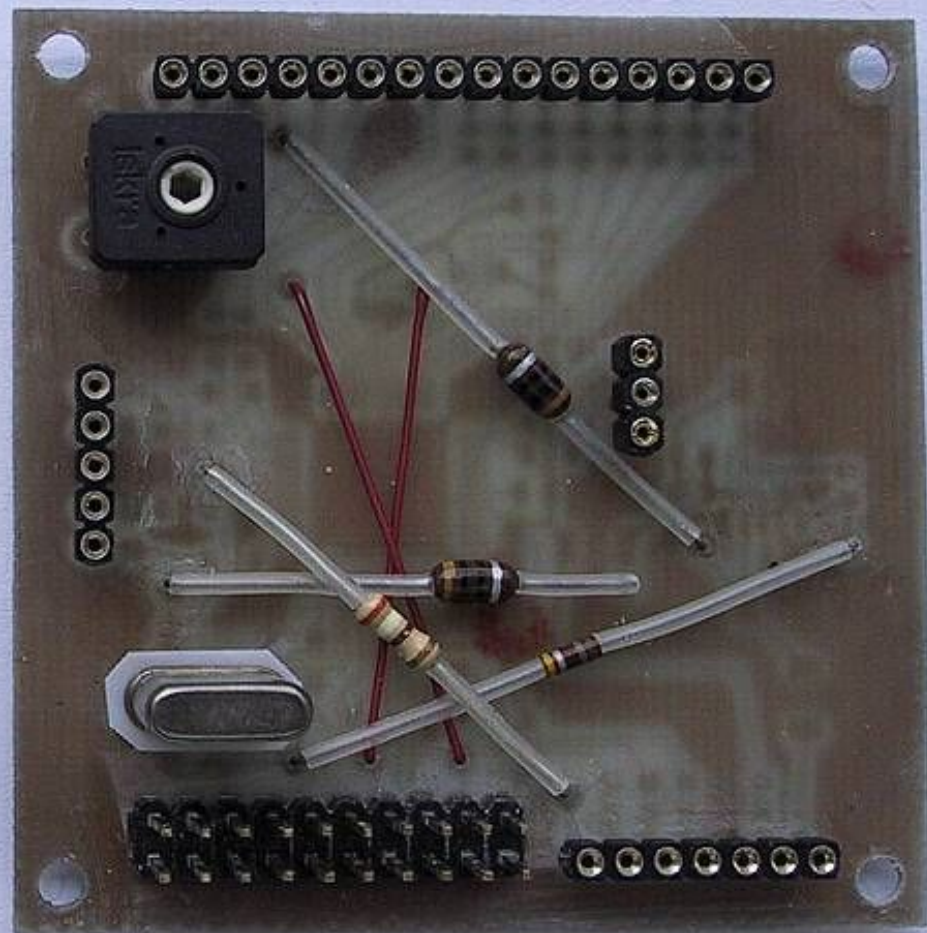
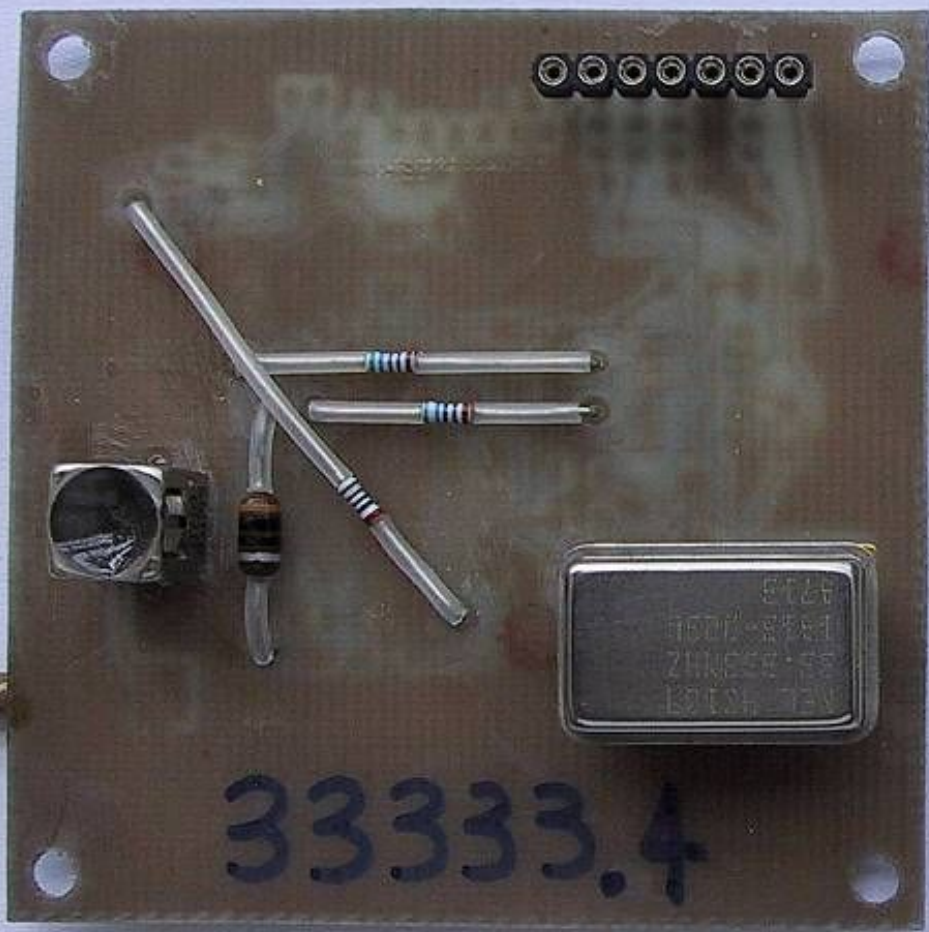


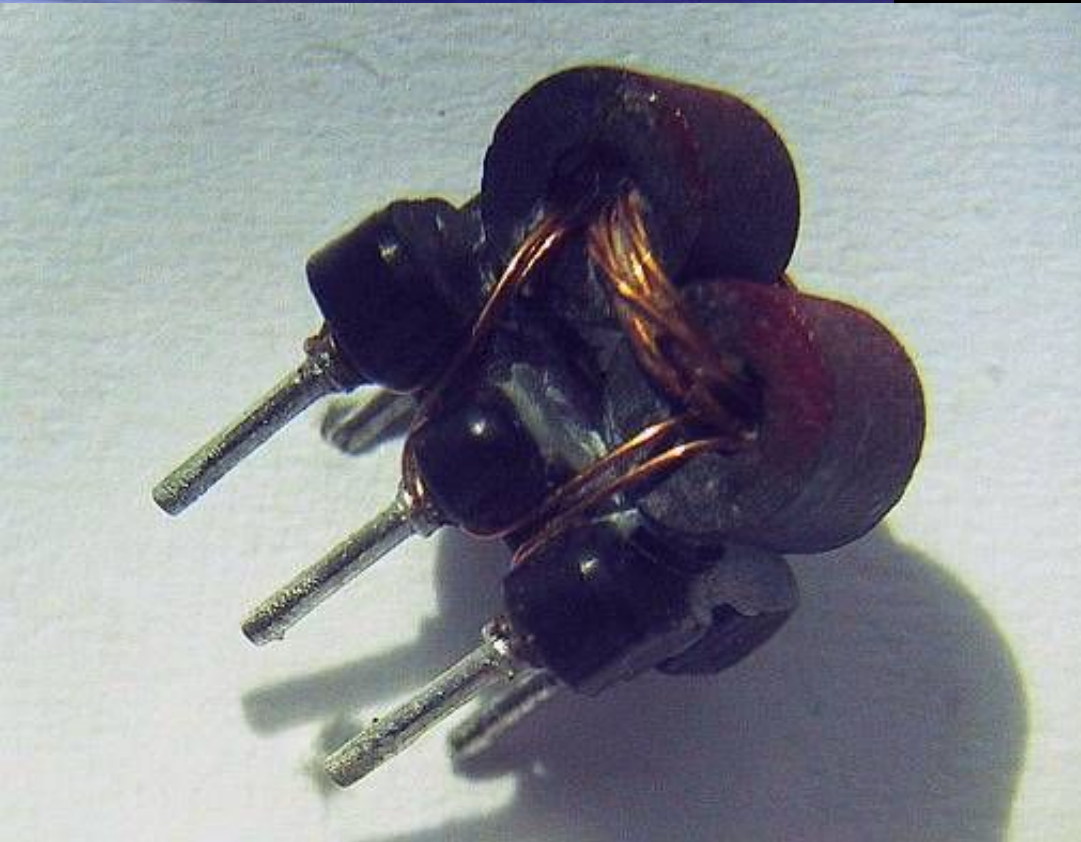
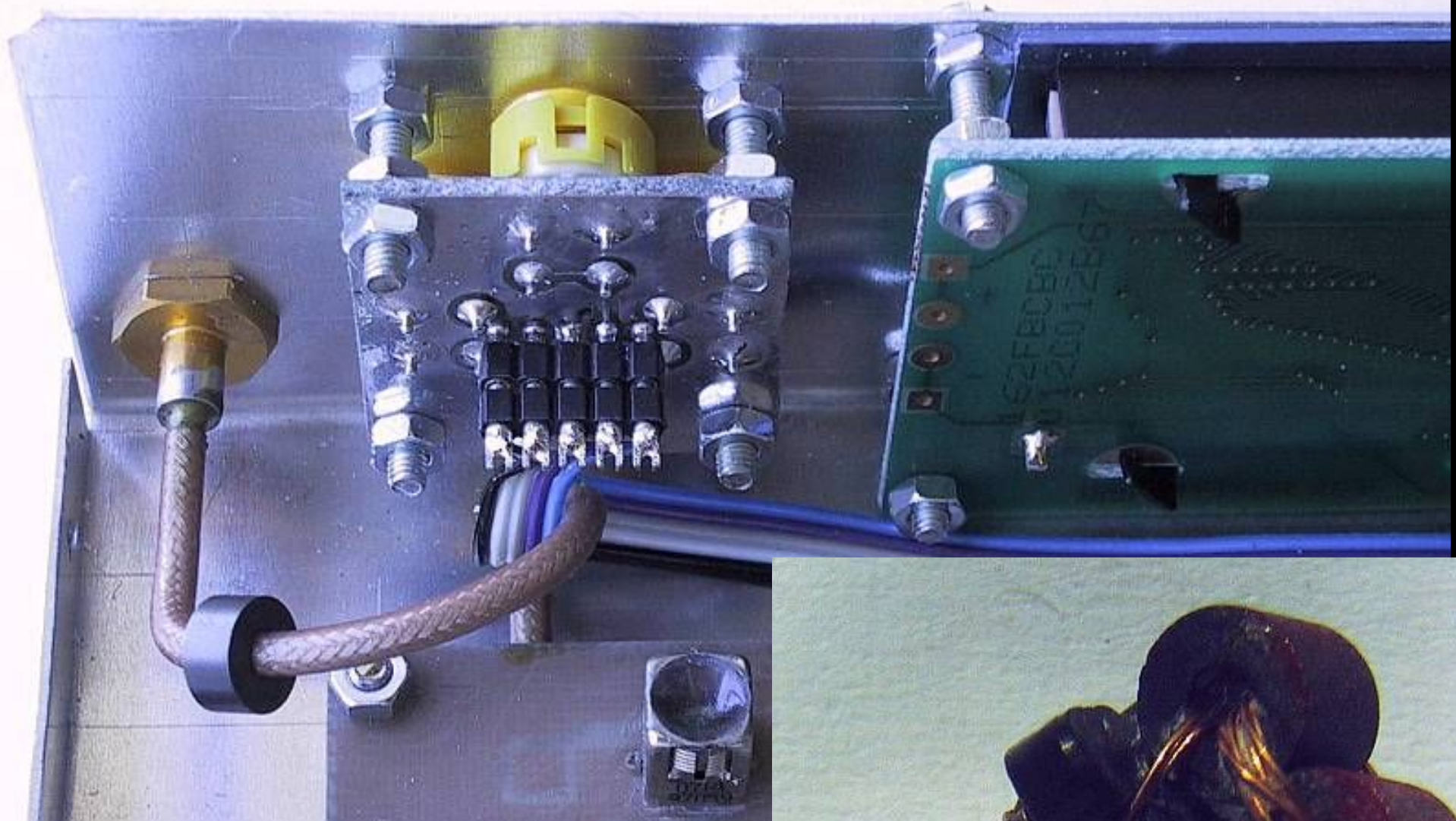




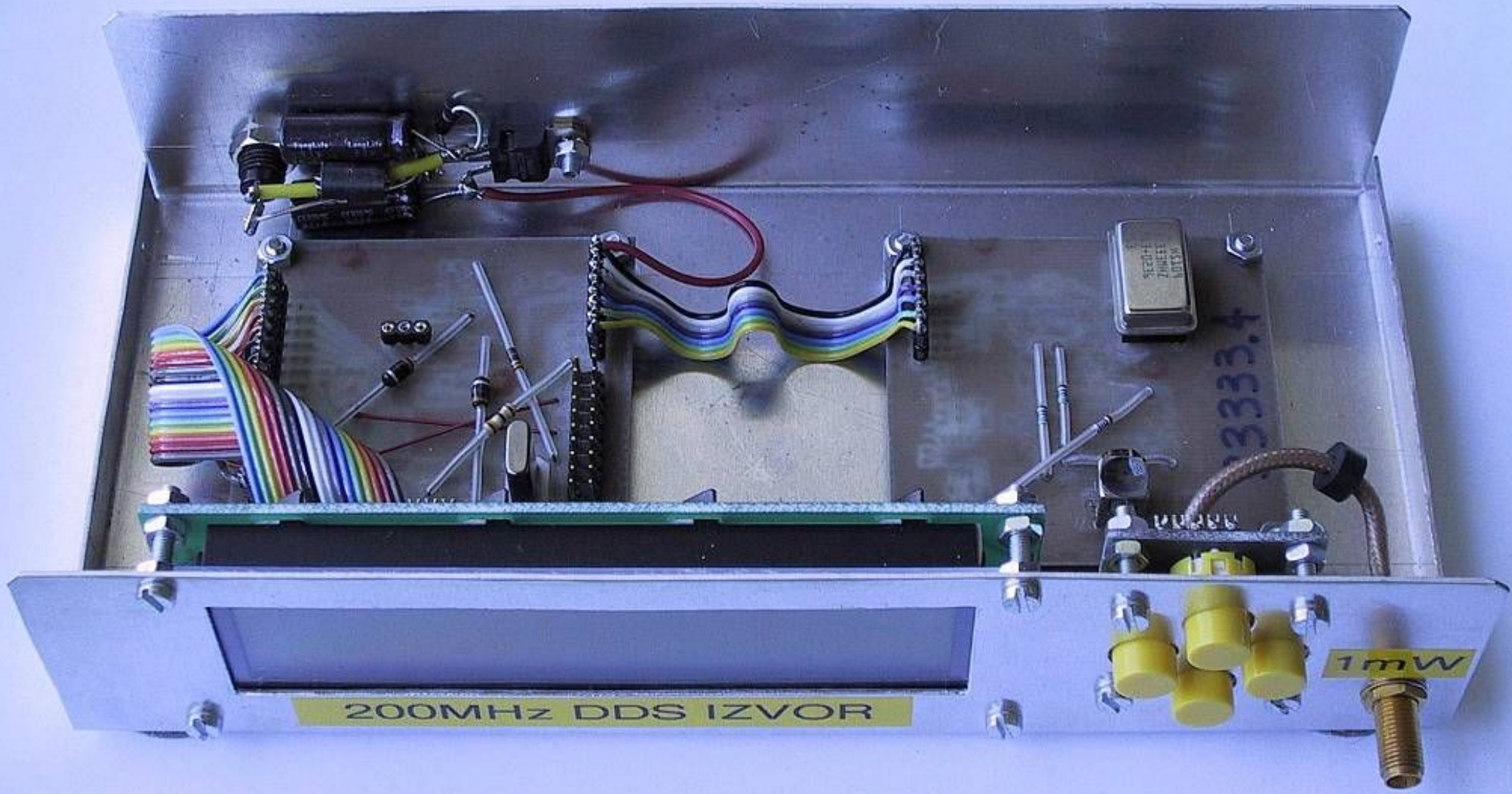










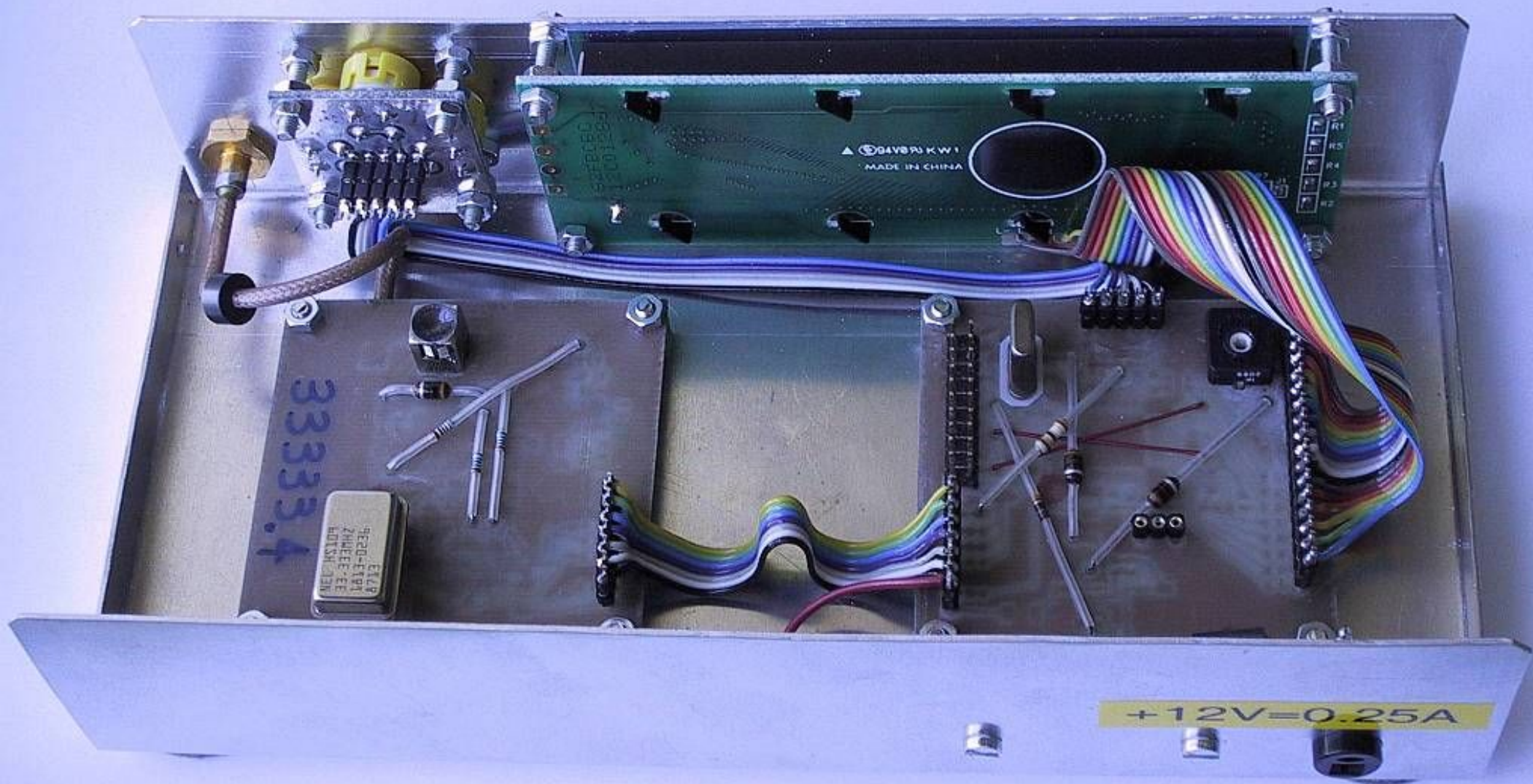


200MHz DDS IZVOR

1mW

SEKURITE  
ZINCELE  
BATERIA

3333.4



33333.4

04V83 KW1  
MADE IN CHINA

+12V=0.25A

DDS RF GENERATOR  
553MV 20.07.2008

200MHz DDS IZVOR

1mW

CW 50.000000MHz  
5.0%

200MHz DDS IZVOR

1mW

FM 50.00000MHz  
5.0%kHz 1000Hz

200MHz DDS IZVOR



1mW



AM 50.00000MHz  
80.0% 400Hz

200MHz DDS IZVOR



1mW



VOR 110.000000MHz  
300.0°RAD 60.0%

200MHz DDS IZVOR



1mW



ILS 110.500000MHz  
+0.0%DDM 60.0%

200MHz DDS IZVOR



1mW



REF 199.99951MHz  
5.0% 110.50000

200MHz DDS IZVOR



1mW



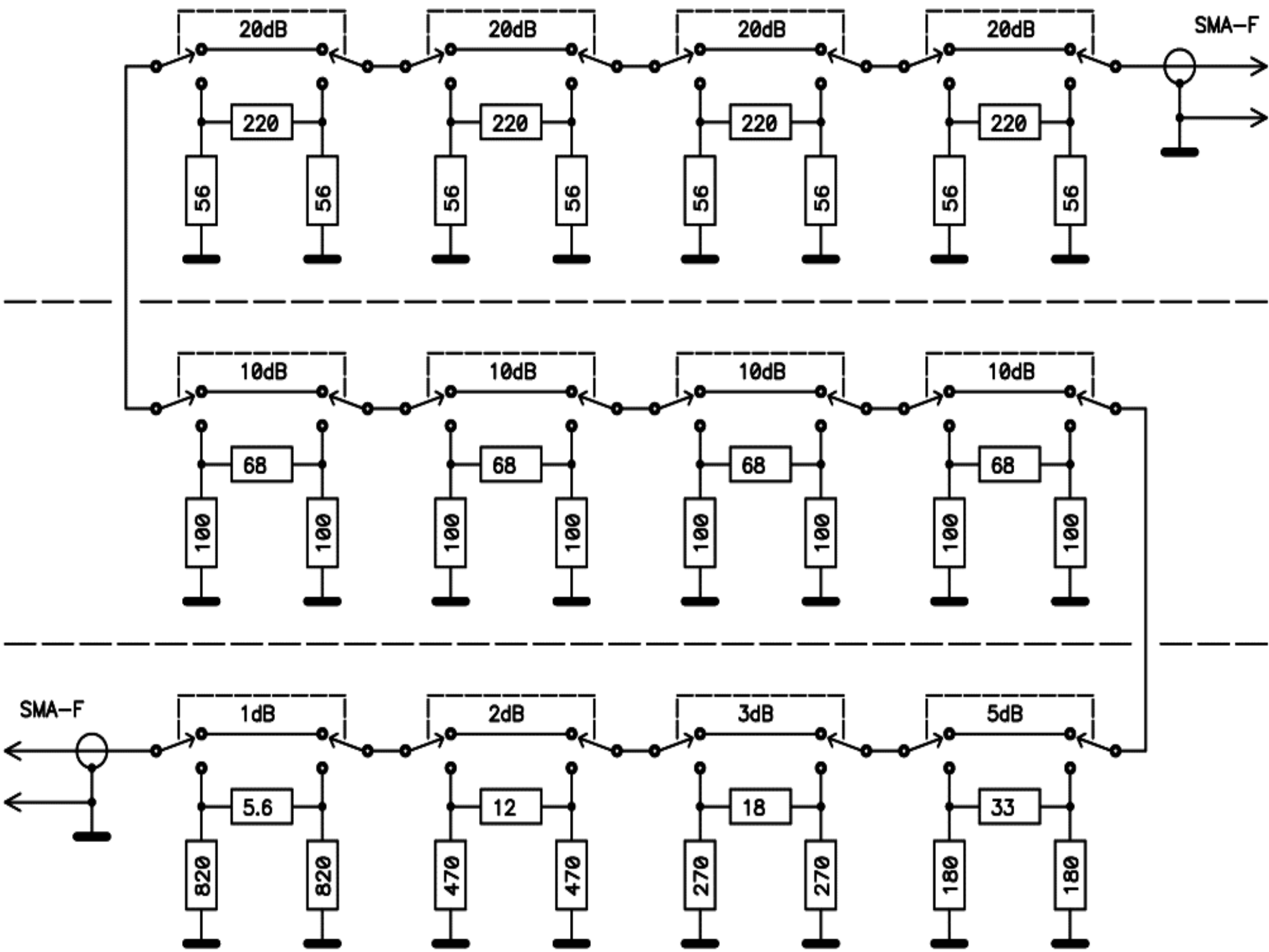
\*\*\* EEPROM \*\*\*

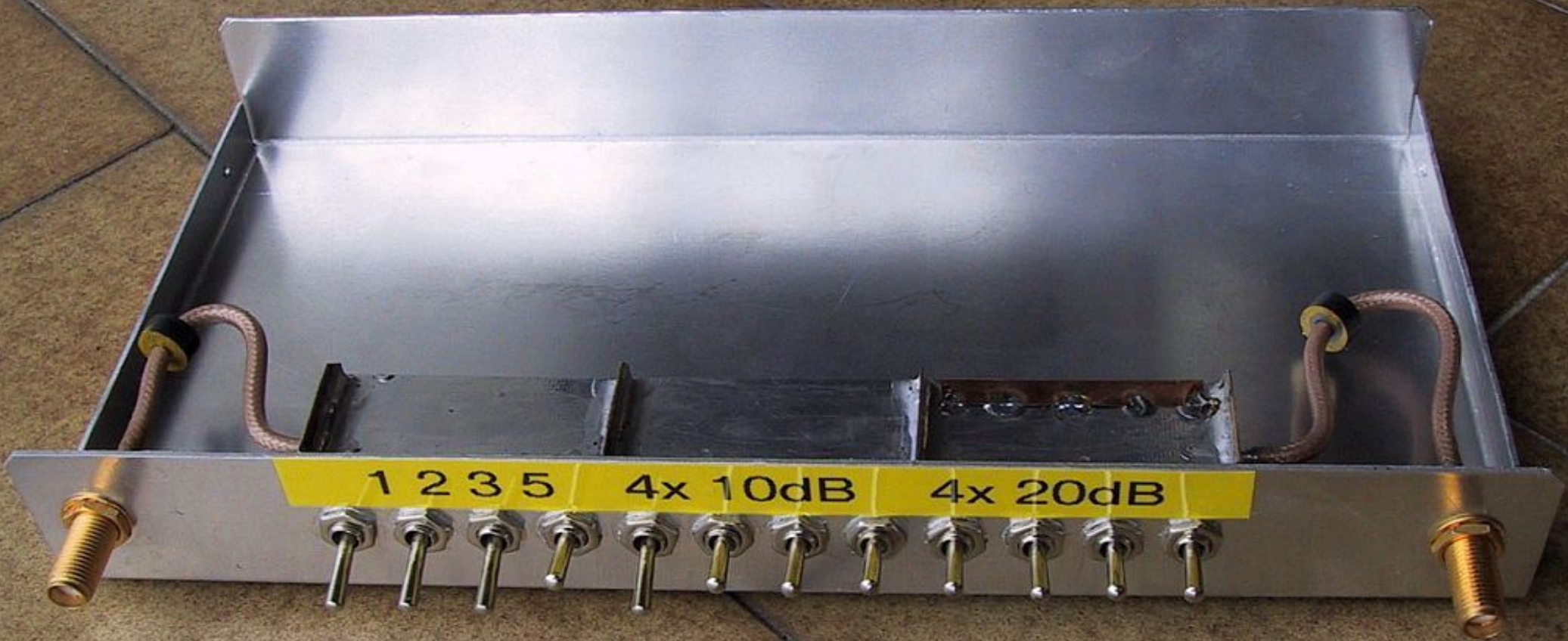
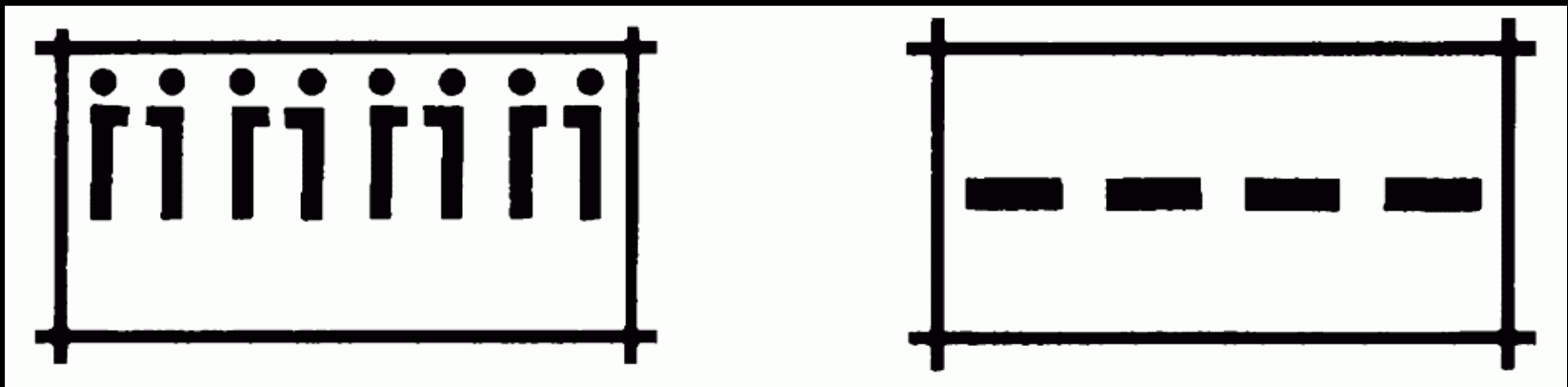
200MHz DDS IZVOR



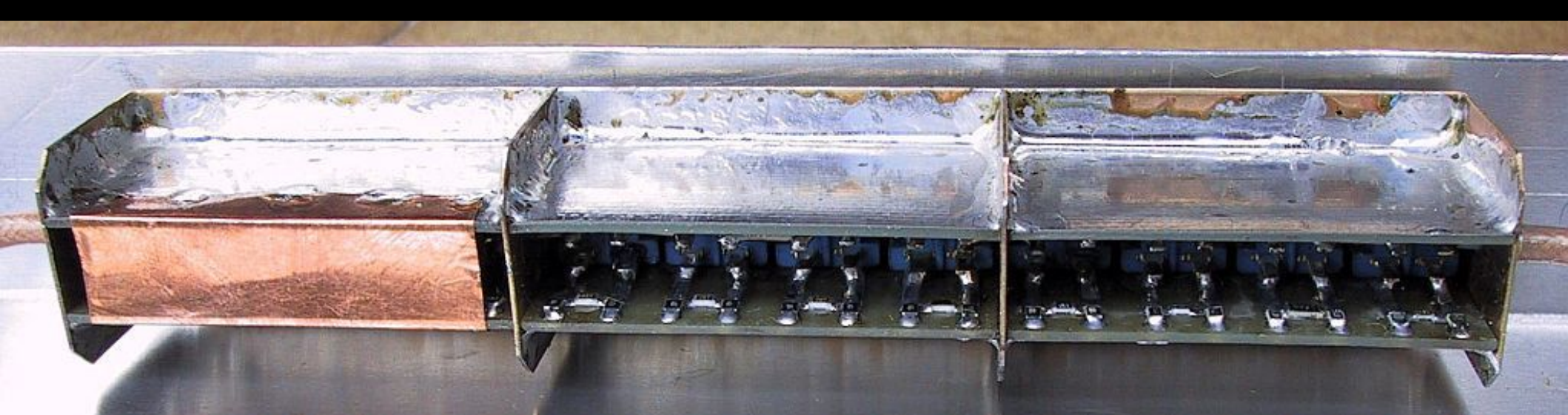
1mW

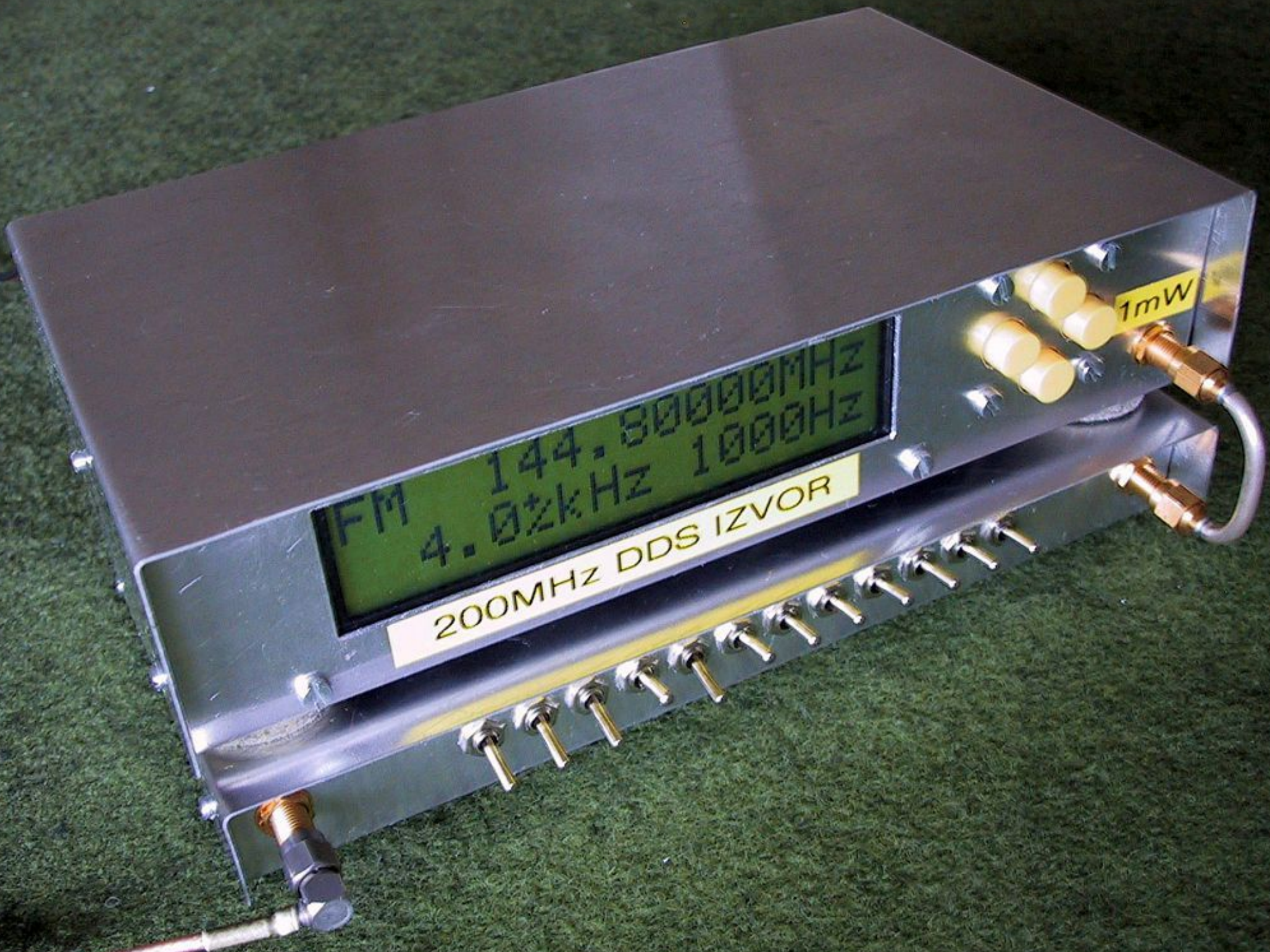












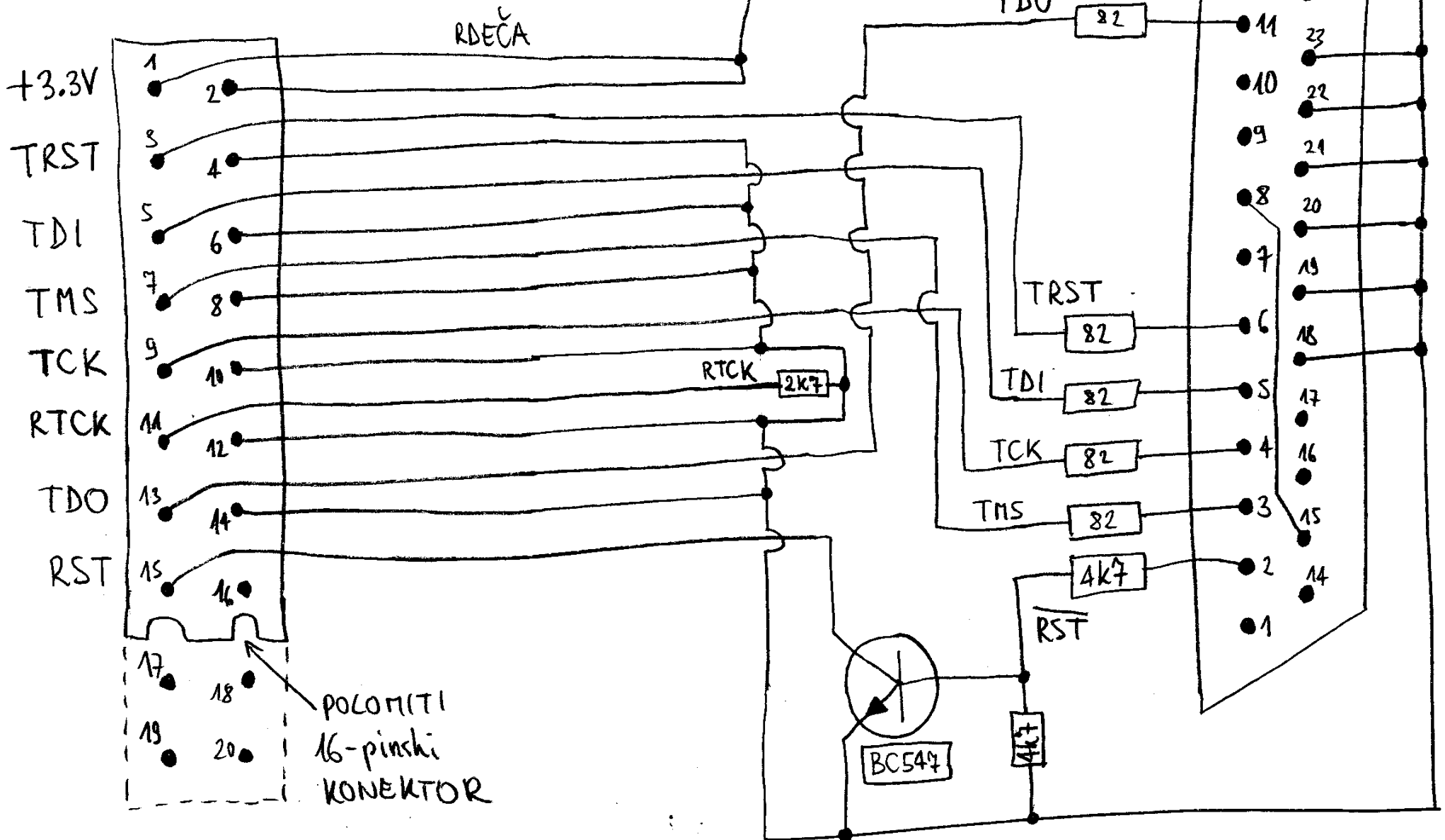
FM 144.80000MHz  
4.0kHz 1000Hz

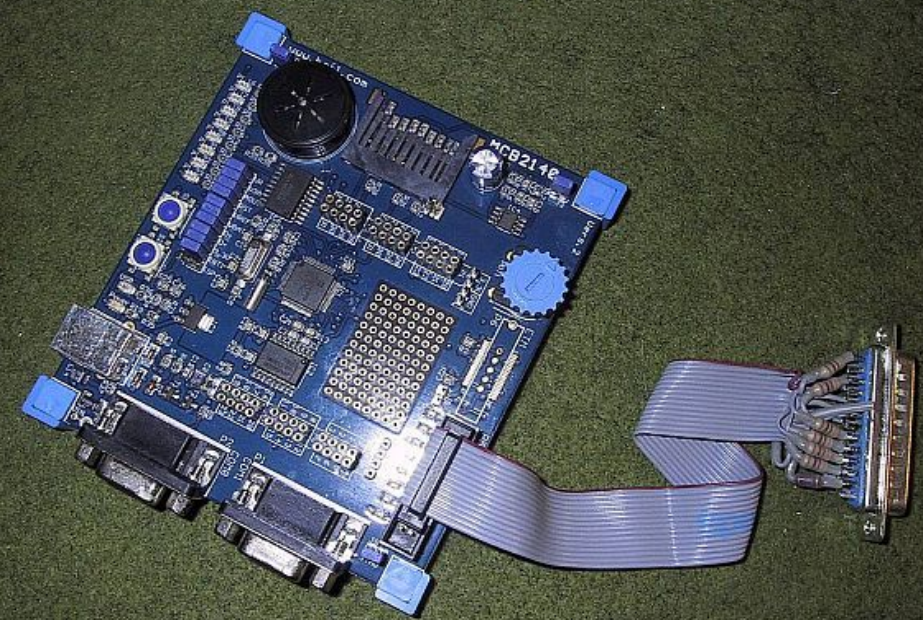
200MHz DDS IZVOR

1mW

# CIGOTAG

S53MV  
7/12/2007





**H-JTAG Server**

File Operations Target Settings Help

**Jtag Settings**

Jtag Selection

- Wiggler (Predefined)
- Sdt Jtag (Predefined)
- User Defined

Reset Signal Output

- nTRST output inverted
- nSRST output inverted

Wiggler Pin Assignment

TMS Pin3 D1

TCK Pin4 D2

TDI Pin5 D3

TDO Pin11 Busy

nTRST Pin2 D0

nSRST Pin6 D4

OK Cancel

Ready AXD RDI 1.5.1 0x40000400

**H-JTAG Server**

File Operations Flasher Script Settings Options Help

ARM7TDMI-S  
0x4F1F0F0F

Ready

CrossWorks for ARM 1.7 WPP.EXE

Eclipse

Flash Magic

Jtag Selection

- Wiggler (Predefined)
- Sdt Jtag (Predefined)
- User Defined

Reset Signal Output

- nTRST output inverted
- nSRST output inverted

TCK Control

TCK Speed : MAX / 1

Wiggler Pin Assignment

TMS Pin3 D1

TCK Pin4 D2

TDI Pin5 D3

TDO Pin11 Busy

nTRST Pin2 D0

nSRST Pin6 D4

OK Cancel