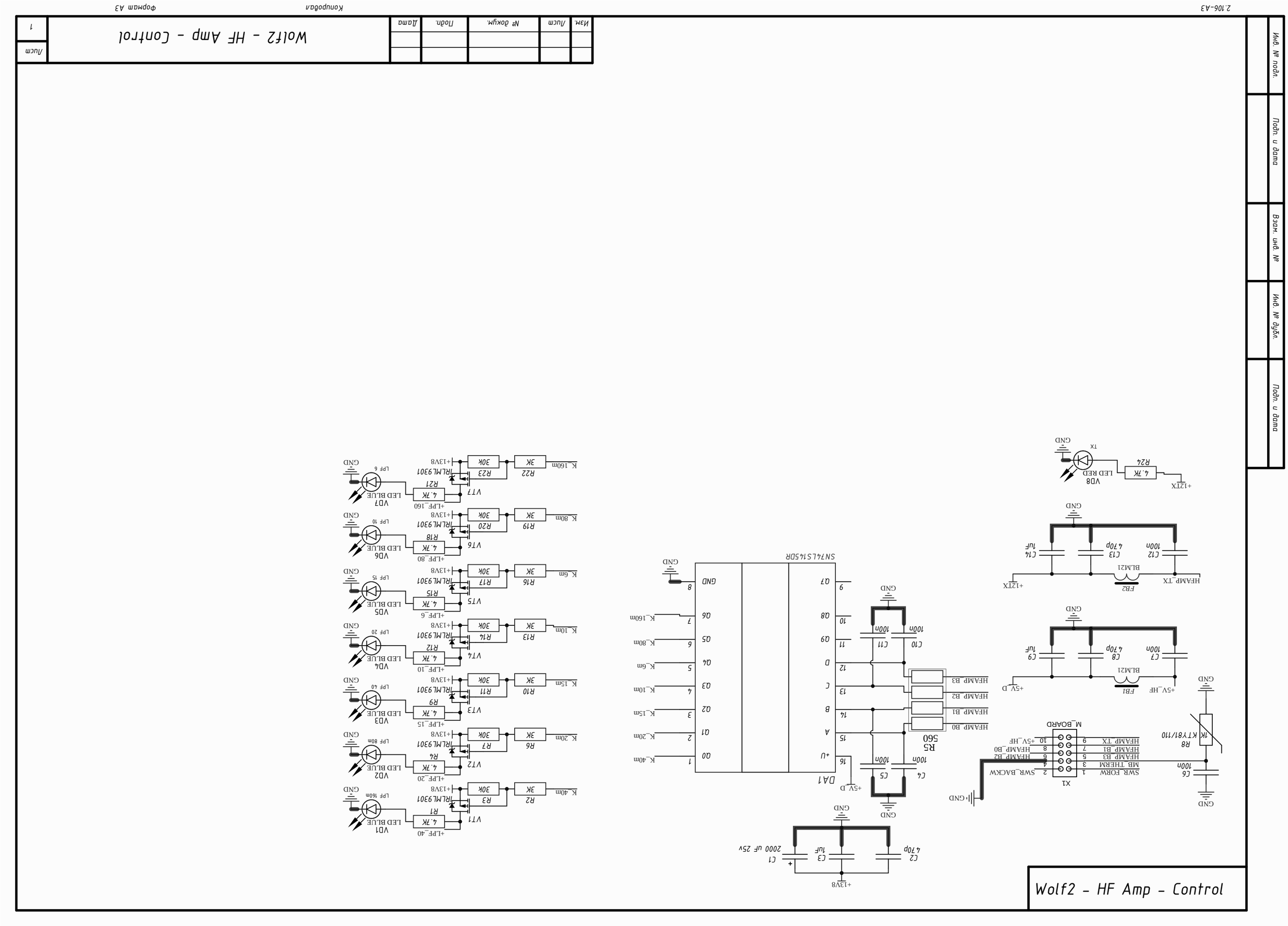
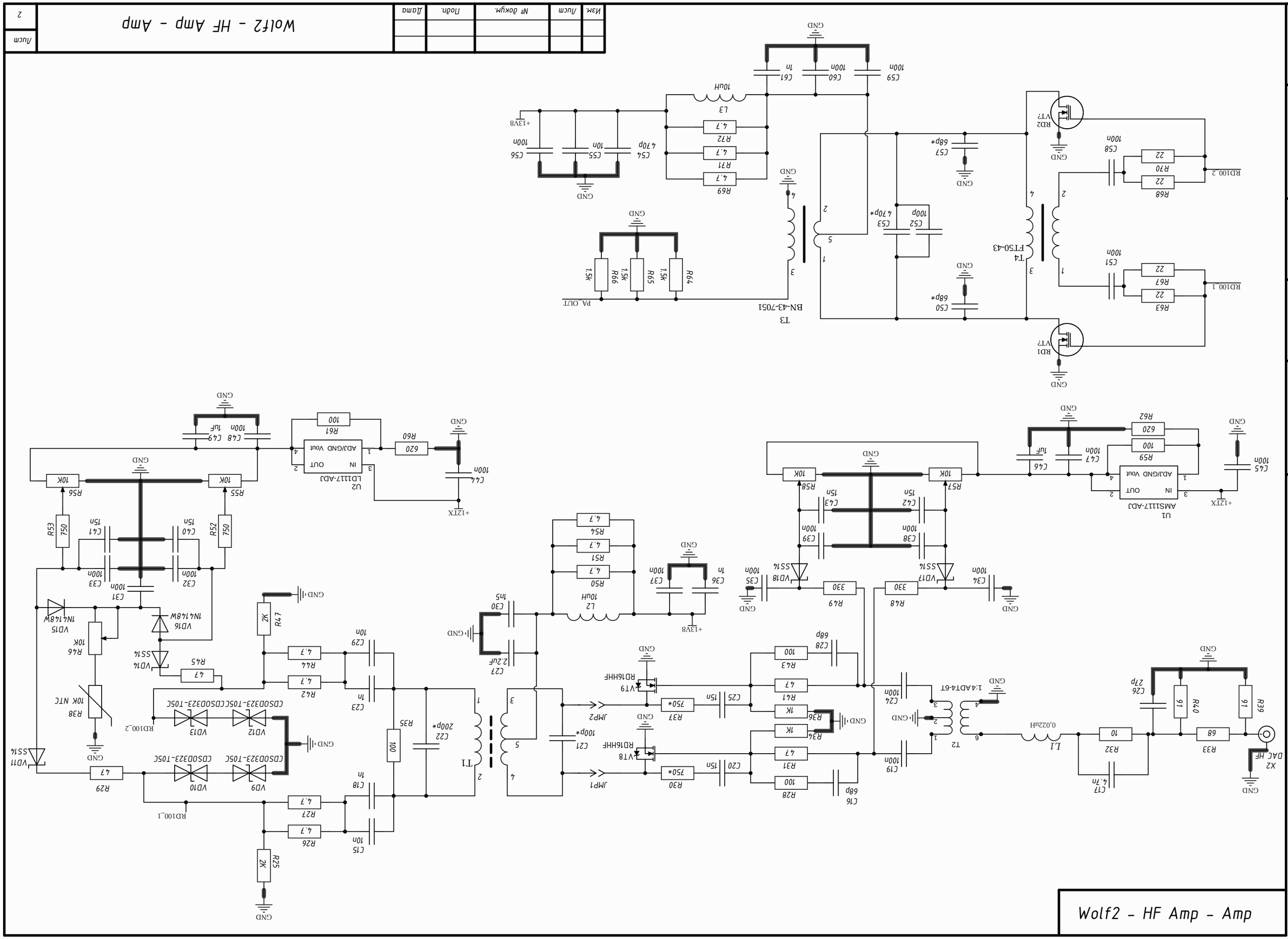

Wolf2 - HF Amp - Control
Подп. и дата
Инв. № дубл.
Взам. инв. №
Подп. и дата
Инв. № подл.
Изм. Лист № докум. Подп. Дата
Лист 1
Копировал Формат А3
2.106-А3
GND
+13V8
C1 2000 uF 25v
C2 470p
C3 1uF
DA1 SN74LS145DR
Q0 Q1 Q2 Q3 Q4 Q5 Q6 Q7 GND +U A B C D Q8 Q9
K_40m K_20m K_15m K_10m K_6m K_80m K_160m
C4 100n
C5 100n
C10 100n
C11 100n
R5 560
HFAMP_B0 HFAMP_B1 HFAMP_B2 HFAMP_B3
+5V_D
C6 100n
R8 1K KTY81/110
+5V_HF
FB1 BL.M21
C7 100n
C8 470p
C9 1uF
+12TX
FB2 BL.M21
C12 100n
C13 470p
C14 1uF
HFAMP_TX
X1 M_BOARD
SWR_FORW 1
MB_THERM 3
HFAMP_B3 5
HFAMP_B1 7
HFAMP_TX 9
SWR_BACKW 2
HFAMP_B2 6
HFAMP_B0 8
+5V_HF 10
VD8 LED RED
4.7K R24
TX
VD1 LED BLUE LPF 40m
VD2 LED BLUE LPF 80m
VD3 LED BLUE LPF 40
VD4 LED BLUE LPF 20
VD5 LED BLUE LPF 15
VD6 LED BLUE LPF 10
VD7 LED BLUE LPF 6
4.7K R1 R4 R9 R12 R15 R18 R21
+LPF_40 +LPF_20 +LPF_15 +LPF_10 +LPF_6 +LPF_80 +LPF_160
IRLML9301
VT1 VT2 VT3 VT4 VT5 VT6 VT7
30K R3 R7 R11 R14 R17 R20 R23
3K R2 R6 R10 R13 R16 R19 R22
K_40m K_20m K_15m K_10m K_6m K_80m K_160m


Wolf2 - HF Amp - Amp
Wolf2 - HF Amp - Amp
Лист 2
Изм. Лист № докум. Подп. Дата
Подп. и дата
Инв. № дубл.
Взам. инв. №
Подп. и дата
Инв. № подл.
Копировал
Формат А3
2.106-А3
+12TX
GND
C45 100n
U1 AMS1117-ADJ
IN OUT ADJ/GND Vout
C46 1uF
C47 100n
R59 100
R62 620
R57 10K
R58 10K
C42 150
C43 150
C38 100n
C39 100n
VD17 SS14
VD18 SS14
C35 100n
C34 100n
R48 330
R49 330
C36 1n
C37 100n
L3 10UH
R69 4.7
R71 4.7
R72 4.7
C54 470p
C55 10n
C56 100n
+13V8
C59 100n
C60 100n
C61 1n
C57 68p*
C58 100n
RD2 VT?
R68 22
R70 22
RD100_2
C50 68p*
C51 100n
RD1 VT?
R63 22
R67 22
RD100_1
T4 FT50-43
C52 100p
C53 470p*
T3 BN-43-7051
PA_OUT
R64 1.5k
R65 1.5k
R66 1.5k
C16 68p
R28 100
C30 1n5
C27 2.2uF
L2 10UH
R50 4.7
R51 4.7
R54 4.7
C28 68p
R43 100
R41 4.7
R36 1K
R34 1K
R31 4.7
C19 100n
C24 100n
T2 1:4 ADT4-6T
C17 4.7n
R32 10
R33 68
C26 27p
R40 91
R39 91
L1 0,022uH
X2 DAC HF
C21 100p*
T1
C22 200p*
R35 100
C23 1n
C29 10n
R44 4.7
R42 4.7
C18 1n
C27 10n
R27 4.7
R26 4.7
C15 10n
R25 2K
R47 2K
R45 4.7
R46 10K
R38 10K NTC
VD11 SS14
VD12 CDSOD323-T05C
VD13 CDSOD323-T05C
VD9 CDSOD323-T05C
VD10 CDSOD323-T05C
VD14 SS14
VD15 1N4148W
VD16 1N4148W
R29 4.7
C31 100n
C32 100n
C33 100n
C40 150
C41 150
R52 75Ω
R53 75Ω
R55 10K
R56 10K
C48 100n
C49 1uF
R61 100
R60 620
C44 100n
U2 LD1117-ADJ
IN OUT ADJ/GND Vout
JMP1
JMP2
RD16HHF
VT8
VT9
R30 750*
R37 750*
C20 15n
C25 15n

W2 - HF AMP - LPF

6m

10m

15m

20m

40m

80m

160m

PA_OUT

LPF_OUT

K1 K2 K3 K4 K5 K6 K7 K8 K9 K10 K11 K12 K13 K14 K15

G6S-2-DC12

+LPF_6 +LPF_10 +LPF_15 +LPF_20 +LPF_40 +LPF_80 +LPF_160

GND

C62 10p L4 0.12uH C65 C64 22p 82p C63 10p L5 0.12uH C66 22p

C67 100n

C68 39p L6 0.2uH C71 C70 68p 180p C69 39p L7 0.2uH C72 68p

C75 100n

C76 33p L8 0.3uH C79 C78 100p 240p C77 33p L9 0.3uH C80 100p

C82 100n

C83 15p L10 0.65uH C86 C85 180p 390p C84 39p L11 0.6uH C87 180p

C88 100n

C89 100p L12 1.15uH C91 390p C92 680p+82p C90 100p L13 1.15uH C93 390p

C94 100n

C95 150p L14 2.3uH C98 C97 680p 1n C96 150p L15 2.3uH C100 C99 390p 680p

C101 100n

C102 220p L16 4.5uH C105 C104 820p 1n+1n C103 270p L17 4.5uH C106 820p

C107 100n

LPF_OUT

TR1

LPF_OUT 4 3 SWR_OUT

5 6 7 8

GND

1 2 TSWR

R73 51 R74 51

VD19 BAT46JFILM VD20 BAT46JFILM

C73 100n C74 100n

R75 10 R76 10

R77 510 R78 510

SWR_FORW SWR_BACKW

GND

D1A BAV99

R79 10K

X4 HF RX OUT

100n C81 VD21 1N4148W

K7 G6S-2-DC12

+12TX

SWR_OUT

X3 TUNER/ANT

VD22 1N4148W +LPF_6

VD23 1N4148W +LPF_10

VD24 1N4148W +LPF_15

VD25 1N4148W +LPF_20

VD26 1N4148W +LPF_40

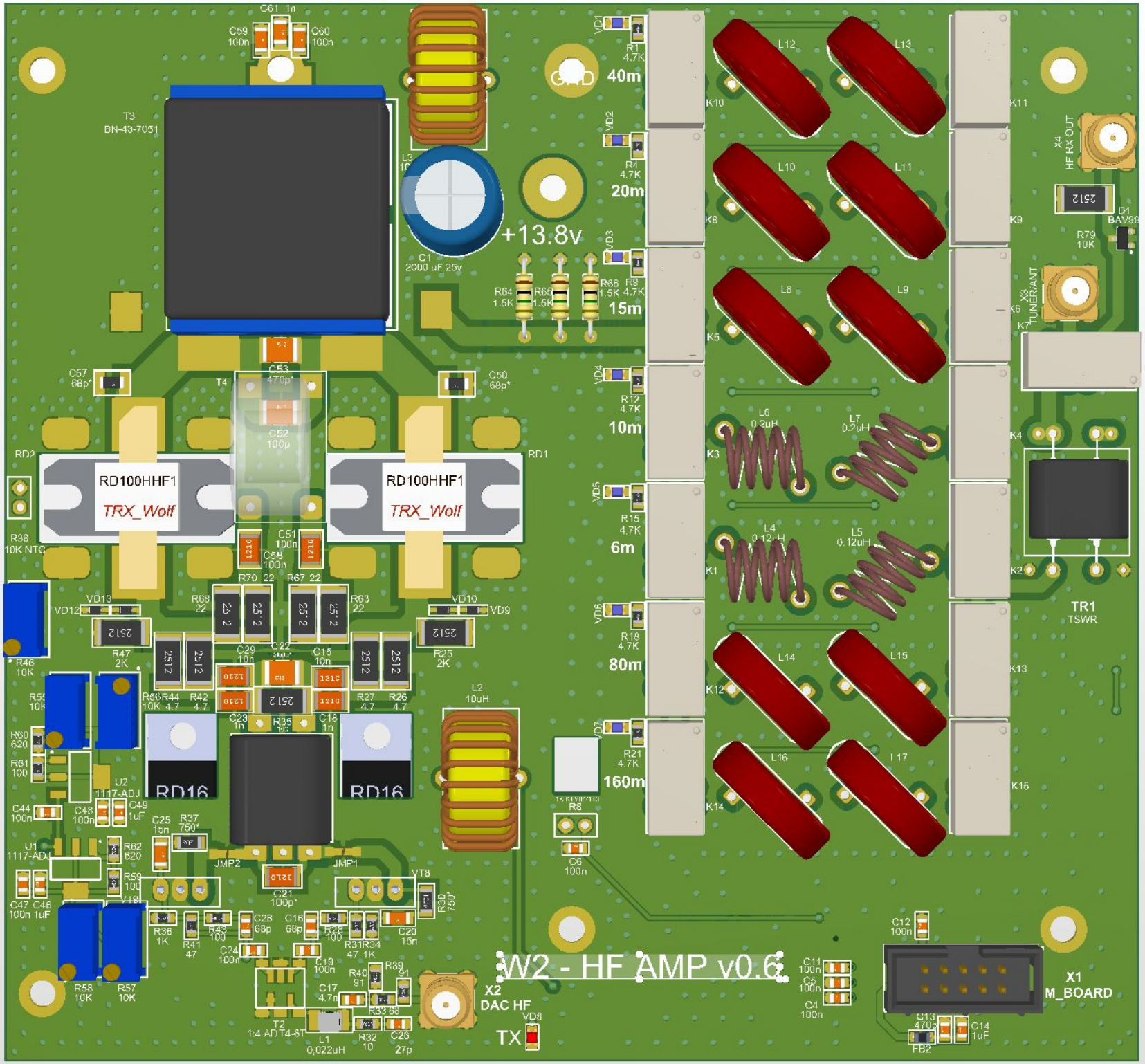
VD27 1N4148W +LPF_80

VD28 1N4148W +LPF_160

Изм.	Лист	№ докум.	Подп.	Дата	W2 - HF AMP - LPF	Лист 3

Подп. и дата | Инв. № дубл. | Взам. инв. № | Подп. и дата | Инв. № подл.

2.106-А3 Копировал Формат А3


W2 - HF AMP v0.6
RD100HHF1
TRX_Wolf
RD100HHF1
TRX_Wolf
RD16
RD16
+13.8v
40m
20m
15m
10m
6m
80m
160m
TR1
TSWR
X1
M_BOARD
X2
DAC HF
TX
X3
TUNER ANT
X4
HF RX OUT
T3
BN-43-7051
T4
T2
1:4 ADT4-6T
U2
1117-ADJ
U1
1117-ADJ
L1
0,022uH
L2
10uH
L3
L4
0,12uH
L5
0,12uH
L6
0,2uH
L7
0,2uH
C1
2000 uF 25v
FB2

Comment	Description	Designator	Footprint	LibRef	Quantity
2000 uF 25v		C1	D13C5H20	AlumCap	1
470p		C2, C8, C13	CH0805C	Capacitor	3
1uF		C3, C9, C14, C46, C49	CH0805C	Capacitor	5
100n		C4, C5, C6, C7, C10, C11, C12, C19, C24, C31, C32, C33, C34, C35, C37, C38, C39, C44, C45, C47, C48, C67, C75, C82, C88, C94, C101, C107	CH0805C	Capacitor	28
10n		C15, C29	CH1210C	Capacitor	2
68p		C16, C28	CH0805C	Capacitor	2
4.7n		C17	CH0805C	Capacitor	1
1n		C18, C23	CH1210C	Capacitor	2
15n		C20, C25	CH1206C	Capacitor	2
100p*		C21	CH1210C	Capacitor	1
200p*		C22	CH1812C	Capacitor	1
27p		C26	CH0805C	Capacitor	1
2.2uF		C27	CH1206C	Capacitor	1
1n5		C30	CH1206C	Capacitor	1
1n		C36	CH0805C	Capacitor	1
15n		C40, C41, C42, C43	CH0805C	Capacitor	4
68p*		C50, C57	CH1206ATC	Capacitor	2
100n		C51, C58	CH1210C	Capacitor	2
100p		C52	CH1812C	Capacitor	1
470p*		C53	CH1812C	Capacitor	1
470p		C54	CH1206C	Capacitor	1
10n		C55	CH1206C	Capacitor	1
100n		C56, C59, C60, C73, C74, C81	CH1206C	Capacitor	6
1n		C61	CH1206C	Capacitor	1
10p		C62, C63	CH1206ATC	Capacitor	2
22p		C64, C66	CH1206ATC	Capacitor	2
82p		C65	CH1206ATC	Capacitor	1
39p		C68, C69, C84	CH1206ATC	Capacitor	3
68p		C70, C72	CH1206ATC	Capacitor	2
180p		C71, C85, C87	CH1206ATC	Capacitor	3
33p		C76, C77	CH1206ATC	Capacitor	2
100p		C78, C80, C89, C90	CH1206ATC	Capacitor	4
240p		C79	CH1206ATC	Capacitor	1
15p		C83	CH1206ATC	Capacitor	1
390p		C86, C91, C93, C99	CH1206ATC	Capacitor	4
680p+82p		C92	CH1206ATC	Capacitor	1
150p		C95, C96	CH1206ATC	Capacitor	2
680p		C97, C100	CH1206ATC	Capacitor	2
1n		C98	CH1206ATC	Capacitor	1
220p		C102	CH1206ATC	Capacitor	1
270p		C103	CH1206ATC	Capacitor	1
820p		C104, C106	CH1206ATC	Capacitor	2
1n+1n		C105	CH1206ATC	Capacitor	1
BAV99		D1	SOT23_132	BAV99	1
SN74LS145DR		DA1	16-SOP	SN74LS145N	1
BLM21		FB1, FB2	CH0805L	FB-1	2
Jumper_2	Jumper	JMP1, JMP2	CON: JUMPER_2	Jumper_2	2
G6S-2-DC12		K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K13, K14, K15	G6S-2-DC12	G6S-2-12VDC	15
0.022uH		L1	CH1210L	Inductor-2	1
10uH		L2, L3	IND: R24	Inductor ring	2
0.12uH		L4, L5	DR1	Inductor ring	2
0.2uH		L6, L7	DR1	Inductor ring	2
0.3uH		L8, L9	T68-0	Inductor ring	2
0.65uH		L10	T68-0	Inductor ring	1
0.6uH		L11	T68-0	Inductor ring	1
1.15uH		L12, L13	T68-0	Inductor ring	2
2.3uH		L14, L15	T68-0	Inductor ring	2
4.5uH		L16, L17	T68-0	Inductor ring	2
4.7K		R1, R4, R9, R12, R15, R18, R21, R24	CH0805R	Resistor	8
3K		R2, R6, R10, R13, R16, R19, R22	CH0805R	Resistor	7
30k		R3, R7, R11, R14, R17, R20, R23	CH0805R	Resistor	7
560		R5	CAT16	CAT10-0804	1
1K KTY81/110		R8	CON: PBS-2	NTC	1
2K		R25, R47	CH2512R	Resistor	2
4.7		R26, R27, R42, R44, R50, R51, R54, R69, R71, R72	CH2512R	Resistor	10
100		R28, R43, R59, R61	CH0805R	Resistor	4
47		R29, R31, R41, R45	CH0805R	Resistor	4
750*		R30, R37	CH1206R	Resistor	2
10		R32, R75, R76	CH0805R	Resistor	3
68		R33	CH0805R	Resistor	1
1K		R34, R36	CH0805R	Resistor	2
100		R35	CH2512R	Resistor	1
10K NTC		R38	CON: PBS-2	NTC	1
91		R39, R40	CH0805R	Resistor	2
10K		R46, R55, R56, R57, R58	RES: 3296W	ADJ resistor	5
330		R48, R49	CH0805R	Resistor	2
750		R52, R53	CH0805R	Resistor	2
620		R60, R62	CH0805R	Resistor	2
22		R63, R67, R68, R70	CH2512R	Resistor	4
1.5k		R64, R65, R66	R-DIP	Resistor	3
51		R73, R74	CH1206R	Resistor	2
510		R77, R78	CH0805R	Resistor	2
10K		R79	CH2512R	Resistor	1
VT?	[NoValue], RD100	RD1, RD2	RD100	N-1	2
		T1	BN43-202-RD16	TRANS-RD16	1
1:4 ADT4-6T	Transformer	T2	TRANSF_ACORE2	TRANSF_ACORE2	1
BN-43-7051		T3	BN61-002-V2	BN-43-7051_1	1
FT50-43		T4	TRANS OS W2	Trans_L	1
TSWR		TR1	TANDEM	BN43-302	1
1117-ADJ	LT1117CST-ADJ	U1	LT1117CST-3.3	LT1117CST-3.3	1
1117-ADJ	LT1117CST-ADJ	U2	LT1117CST-3.3_2	LT1117CST-3.3	1
LED BLUE		VD1, VD2, VD3, VD4, VD5, VD6, VD7	LED: 0805B	LED_single	7
LED RED		VD8	LED: 0805R	LED_single	1
CDSOD323-T05C		VD9, VD10, VD12, VD13	SOD323	TVS-diod	4
SS14		VD11, VD14, VD17, VD18	SMA	Diod Schottky	4
1N4148W		VD15, VD16, VD21, VD22, VD23, VD24, VD25, VD26, VD27, VD28	SOD123	Diod	10
BAT46JFILM		VD19, VD20	SOD323	Diod Schottky	2
IRLML9301	Mosfet	VT1, VT2, VT3, VT4, VT5, VT6, VT7	SOT23_132	IRLML9301	7
MOSFET N-channel transistor, 80V, 7A, 9.1nC, 2.5W, 34mOhm, 756pF, 8-TDSON, -55...+150°C		VT8, VT9	rd16	MOSFET_N_132	2
M_BOARD	2*5 Pin	X1	CON: BH-10	IDC10	1
DAC HF	RF	X2	CON: SMA	SMA	1
TUNER/ANT	RF	X3	CON: SMA	SMA	1
HF RX OUT	RF	X4	CON: SMA	SMA	1