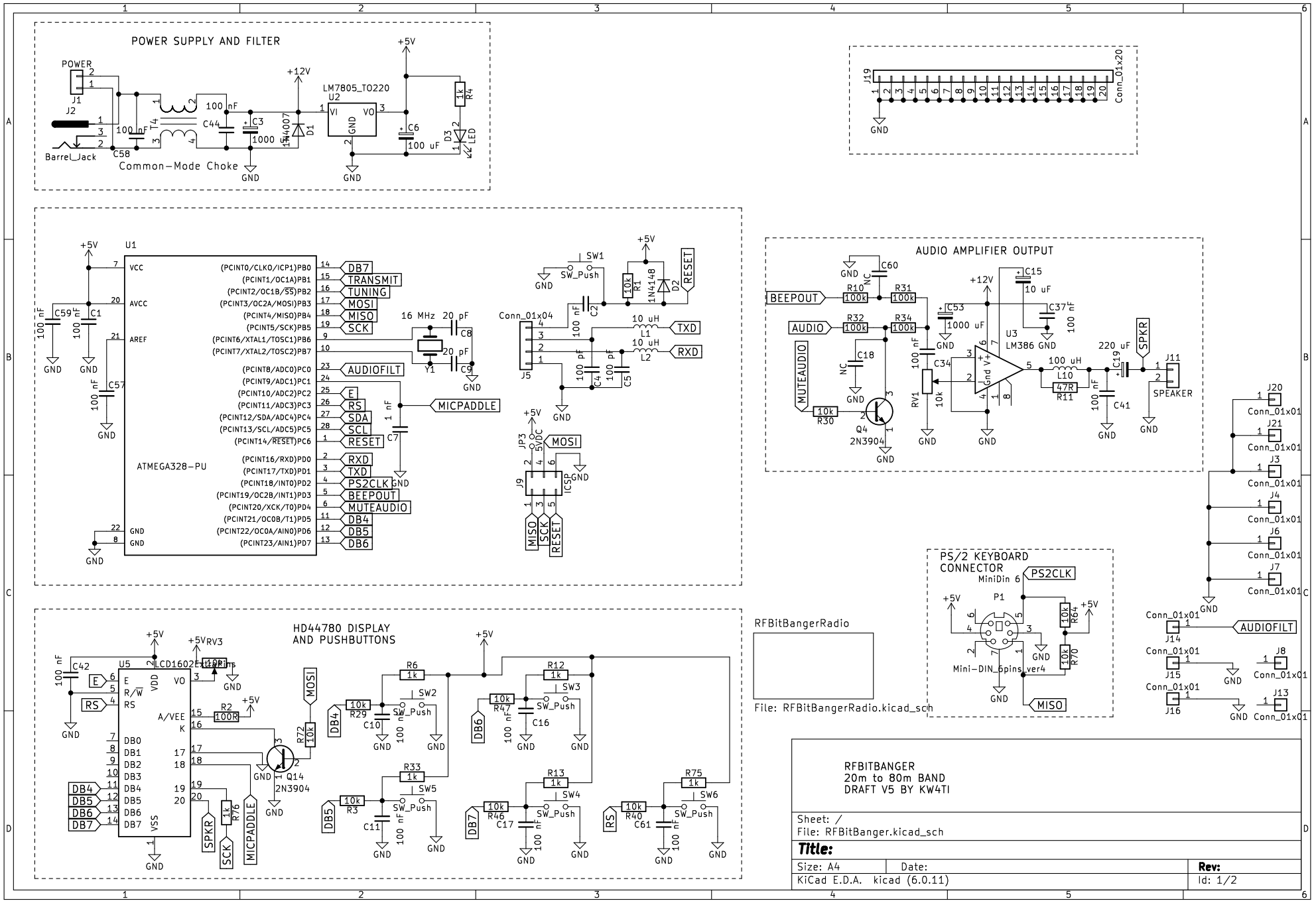
POWER SUPPLY AND FILTER
POWER
J1
J2
Barrel_Jack
C58
100 nF
T4
Common-Mode Choke
C44
100 nF
C3
1000 uF
1N4007
D1
+12V
LM7805_TO220
U2
VI
VO
GND
+5V
C6
100 uF
R4
1k
D3
LED
GND
J19
Conn_01x20
U1
ATMEGA328-PU
VCC
AVCC
AREF
GND
(PCINT0/CLKO/ICP1)PB0
(PCINT1/OC1A)PB1
(PCINT2/OC1B/SS)PB2
(PCINT3/OC2A/MOSI)PB3
(PCINT4/MISO)PB4
(PCINT5/SCK)PB5
(PCINT6/XTAL1/TOSC1)PB6
(PCINT7/XTAL2/TOSC2)PB7
(PCINT8/ADC0)PC0
(PCINT9/ADC1)PC1
(PCINT10/ADC2)PC2
(PCINT11/ADC3)PC3
(PCINT12/SDA/ADC4)PC4
(PCINT13/SCL/ADC5)PC5
(PCINT14/RESET)PC6
(PCINT16/RXD)PD0
(PCINT17/TXD)PD1
(PCINT18/INT0)PD2
(PCINT19/OC2B/INT1)PD3
(PCINT20/XCK/T0)PD4
(PCINT21/OC0B/T1)PD5
(PCINT22/OC0A/AIN0)PD6
(PCINT23/AIN1)PD7
DB7
TRANSMIT
TUNING
MOSI
MISO
SCK
AUDIOFILT
E
RS
SDA
SCL
RESET
RXD
TXD
PS2CLK
BEEPOUT
MUTEAUDIO
DB4
DB5
DB6
16 MHz
Y1
20 pF
C8
C9
C59
C1
C57
C7
1 nF
MICPADDLE
Conn_01x04
J5
SW1
SW_Push
R1
10k
1N4148
D2
C2
100 nF
L1
10 uH
L2
C4
C5
100 pF
JP3
5VDC
ICSP
J9
AUDIO AMPLIFIER OUTPUT
BEEPOUT
AUDIO
MUTEAUDIO
R10
100k
R31
100k
R32
100k
R34
100k
C60
NC
C18
R30
10k
Q4
2N3904
C53
1000 uF
C34
100 nF
RV1
10k
U3
LM386
C15
10 uF
C37
100 nF
L10
100 uH
47R
R11
C19
220 uF
C41
100 nF
SPKR
J11
SPEAKER
J20
J21
J3
J4
J6
J7
Conn_01x01
J14
J15
J16
J8
J13
AUDIOFILT
PS/2 KEYBOARD CONNECTOR
MiniDin 6
P1
Mini-DIN_6pins_ver4
PS2CLK
MISO
R64
R70
10k
HD44780 DISPLAY AND PUSHBUTTONS
U5
LCD1602
RV3
10k
R2
100R
Q14
2N3904
R72
10k
R76
1k
SPKR
SCK
MICPADDLE
DB0
DB1
DB2
DB3
DB4
DB5
DB6
DB7
VDD
VSS
VO
A/VEE
K
R/W
R6
1k
SW2
R29
10k
C10
R12
1k
SW3
R47
10k
C16
R33
1k
SW5
R3
10k
C11
R13
1k
SW4
R46
10k
C17
R75
1k
SW6
R40
10k
C61
RFBitBangerRadio
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RFBITBANGER
20m to 80m BAND
DRAFT V5 BY KW4TI
Sheet: /
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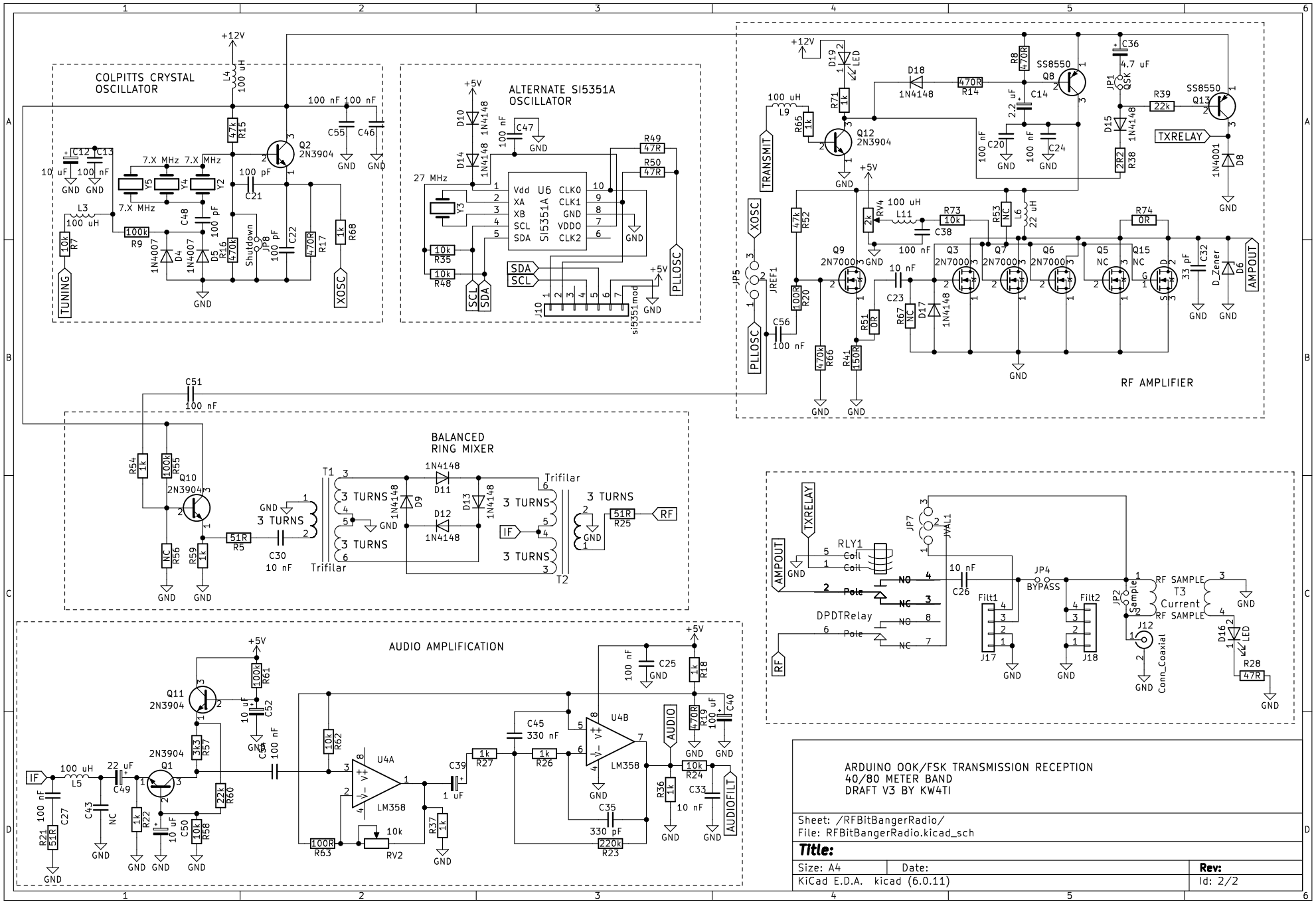
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. kicad (6.0.11)
Id: 1/2


COLPITTS CRYSTAL OSCILLATOR
ALTERNATE SI5351A OSCILLATOR
RF AMPLIFIER
BALANCED RING MIXER
AUDIO AMPLIFICATION
ARDUINO OOK/FSK TRANSMISSION RECEPTION
40/80 METER BAND
DRAFT V3 BY KW4TI
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File: RFBitBangerRadio.kicad_sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. kicad (6.0.11)
Id: 2/2