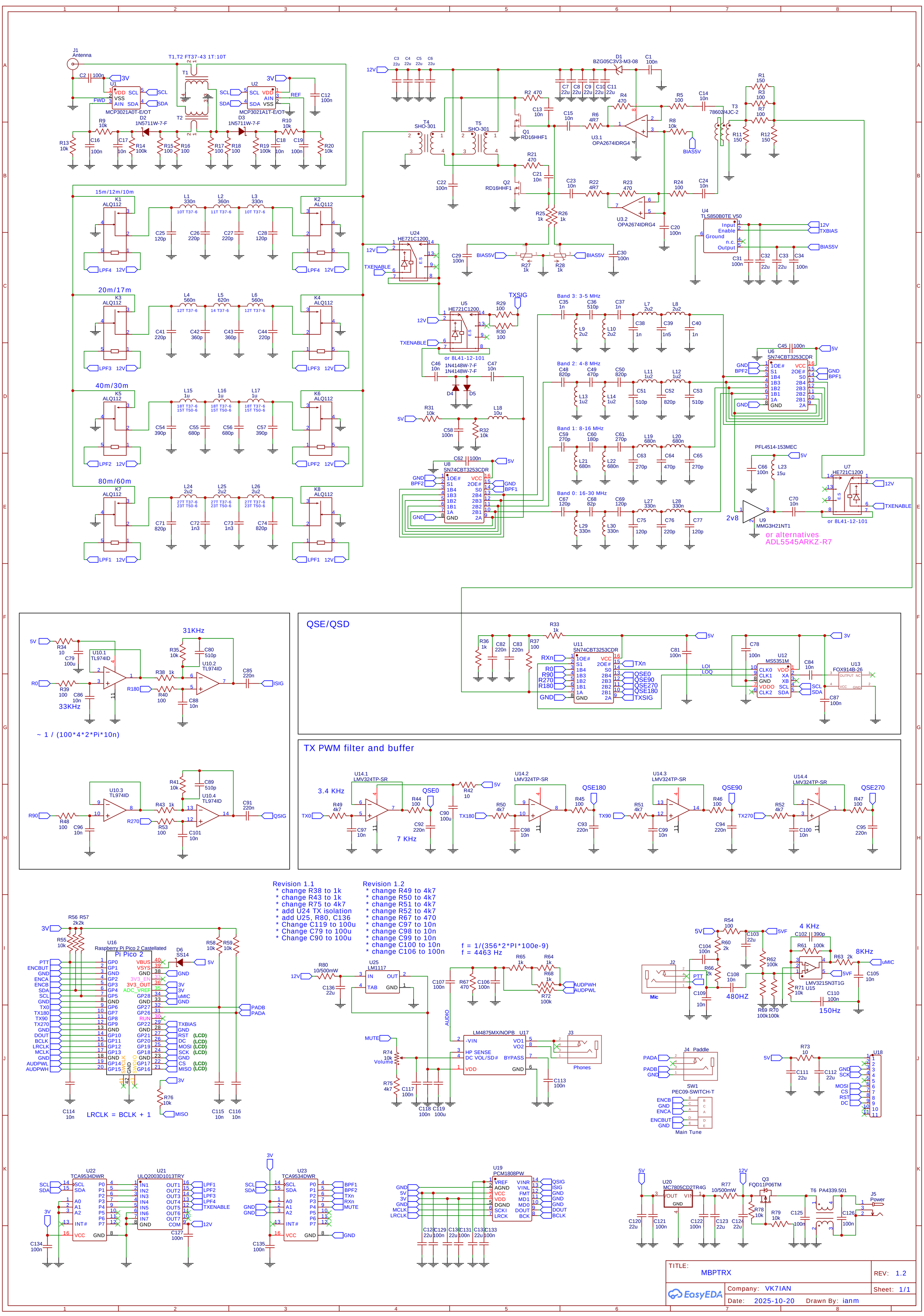
J1 Antenna
T1,T2 FT37-43 1T:10T
U1 MCP3021A0T-E/OT
U2 MCP3021A1T-E/OT
D2 1N5711W-7-F
D3 1N5711W-7-F
T4 SHO-301
T5 SHO-301
Q1 RD16HHF1
Q2 RD16HHF1
U3.1 OPA2674IDRG4
U3.2 OPA2674IDRG4
D1 BZG05C3V3-M3-08
T3 78602/4JC-2
U4 TLS850B0TE V50
U24 HE721C1200
U5 HE721C1200
or 8L41-12-101
U6 SN74CBT3253CDR
U8 SN74CBT3253CDR
U7 HE721C1200
U9 MMG3H21NT1
or alternatives ADL5545ARKZ-R7
PFL4514-153MEC
Band 3: 3-5 MHz
Band 2: 4-8 MHz
Band 1: 8-16 MHz
Band 0: 16-30 MHz
15m/12m/10m
20m/17m
40m/30m
80m/60m
K1 ALQ112
K2 ALQ112
K3 ALQ112
K4 ALQ112
K5 ALQ112
K6 ALQ112
K7 ALQ112
K8 ALQ112
31KHz
33KHz
~ 1 / (100*4*2*Pi*10n)
QSE/QSD
U11 SN74CBT3253CDR
U12 MS5351M
U13 FOX914B-26
TX PWM filter and buffer
U14.1 LMV324TP-SR
U14.2 LMV324TP-SR
U14.3 LMV324TP-SR
U14.4 LMV324TP-SR
3.4 KHz
7 KHz
Revision 1.1
* change R38 to 1k
* change R43 to 1k
* change R75 to 4k7
* add U24 TX isolation
* add U25, R80, C136
* Change C119 to 100u
* Change C79 to 100u
* Change C90 to 100u
Revision 1.2
* change R49 to 4k7
* change R50 to 4k7
* change R51 to 4k7
* change R52 to 4k7
* change R67 to 470
* change C97 to 10n
* change C98 to 10n
* change C99 to 10n
* change C100 to 10n
* change C106 to 100n
f = 1/(356*2*PI*100e-9)
f = 4463 Hz
U16 Raspberry Pi Pico 2 Castellated
LRCLK = BCLK + 1
U25 LM1117
U17 LM4875MX/NOPB
Phones
4 KHz
8KHz
480HZ
150Hz
LMV321SN3T1G
J4 Paddle
SW1 PEC09-SWITCH-T
Main Tune
U22 TCA9534DWR
U21 ULQ2003D1013TRY
U23 TCA9534DWR
U19 PCM1808PW
U20 MC7805CD2TR4G
Q3 FQD11P06TM
T6 PA4339.501
J5 Power
TITLE: MBPTRX
REV: 1.2
Company: VK7IAN
Sheet: 1/1
Date: 2025-10-20
Drawn By: ianm
EasyEDA