Raspberry Pi Pico Foxoring Transmitter

Either 3xAA batteries or a single LiPo cell can be used.

Optional power bank keep-alive circuit

Optional LCD
Not necessary for operation.

"NM" means normally Not Mounted.

Optional configuration button

Optional configuration DIP switches

Adjust R3 and/or R9 to get desired output power.

To 30 cm vertical antenna

Low-Pass Filter

Antenna Matching

Revision history

Date	Revision	Description
2024-12-01	01A	First revision.
2024-12-30	02A	- Added LCD VO resistors. - Removed decoupling capacitor. - Modifed antenna matching. Todo: - Eliminate TR2? - Attenuate at processor pins. - Filter with leading inductor to reduce power.

Suggested DIP Switch Functions

SW7:SW4	Frequency
0000	Use EEPROM
0001	3 510 000 MHz
0010	3 520 000 MHz
0011	3 530 000 MHz
0100	3 540 000 MHz
0101	3 550 000 MHz
0110	3 560 000 MHz
0111	3 570 000 MHz
1000	3 580 000 MHz
1001	3 590 000 MHz
1010	3 600 000 MHz
1011	3 500 000 MHz
1100	3 579 545 MHz
1101	reserved
1110	reserved
1111	reserved

SW3:1	Mode
000	Beacon "MO"
001	Fox 1 "MOE"
010	Fox 2 "MOI"
011	Fox 3 "MOS"
100	Fox 4 "MOH"
101	Fox 5 "MO5"
110	Fox 6 "MON"
111	Fox 7 "MOD"

SW0	Mode
0	Slow morse
1	Fast morse

The swith ON position is regarded as a '1' in the tables above. It does however ground the pin, so it will be read as a '0' by the software.

Project: *Pi Pico Transmitter*			
Title: *Front Page*			
Size: A4	Number: PCB2024-12	Revision: 02A	Engineer: PM
Date: 2025-01-01	Time: 19:46:57	Sheet 1 of 1	

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