U1
Pico
Raspberry Pi Pico

$$vo/vs = Rmax5395/R9$$
Gain: 1x -> 10x

end-to-end resistance values of 10kΩ

U3 MD0100N8-G
U4 LTC6228xSB
IC1 MAX5395LATA+T
U2 ADC08100CIMTCX/NOPB(TSSOP-24)

J1 Conn_Coaxial
J2 Conn_02x20_Odd_Even
Raspberry Pi B+ J8 Header
http://www.element14.com

D1 BAV99-7-F