Rev3 board schematic. MBR120VLSFT1G R1 10K 63mW 1% M1005 RT6150B-33GQW PS=0: PFM mode (default, best efficiency) PS=1: PWM mode (improved ripple but much worse efficiency at light loads) BOOTSEL ADC current = ~150uA 470R For best performance use external 3.0V shunt ref (e.g. LM4040) LED M1005 C10 100n M0603 6.3V X5R 10% C13 2u2 M1005 6.3V X5R 20% TP-1221U-K9K5325 C12 2u2 M100 6.3V X5R 20% C14 2u2 M1009 6.3V X5R 20% R11 1K 63mW 1% M1005 R4 NO-FIT power tolerance M1005 For lower offset (at expense of noise) connect VREF to 3V3 with lower resistance Disable Flash boot (forces USB boot) DEBUG CON_PICO_3W C18 2u2 M1005 6.3V X5R 20% C15 100n M0603 6.3V X5R 10% HOLD_IO3 M060 6.3V X5R 10% R15 W25016JVUXIO NO-FIT R14 1K 63mW 1% M1005 tolerance M1005 C5 G 100n G M0603 G 6.3V X5R 10% C6 100n M0603 6.3V X5R 10% power GPI029_ADC3 C3 1n M0603 25V X7R 10% R6 100K 63mW 1% M1005 ADC GPIO pins have diode to VDDIO (other GPIO do not) FET stops leakage through ADC3 pin diode into 3V3 net when 3V3 supply is off (VSYS present but 3V3_EN low) 3V3 © Raspberry Pi 2020 C8 100n M0603 6.3V X5R 10% Raspberry Pi www.raspberrypi.org Raspberry Pi Pico James Adams RPI-PICO

Figure 18. The Raspberry Pi Pico

Raspberry Pi Pico Datasheet