Schematic — Raspberry Pi Pico based control board

I2C1 Conn_01x04_Female — I2C_SDA, I2C_SCL, GND, +3.3V
I2C2 Conn_01x04_Female — I2C_SDA, I2C_SCL, GND, +3.3V
I2C3 Conn_01x04_Female — I2C_SDA, I2C_SCL, GND, +3.3V
OLED1 Conn_01x04_Female — I2C_SDA, I2C_SCL, GND, +3.3V

H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole

M1 Pico Raspberry Pi Pico
GPIO0, GPIO1, GND, GPIO2, GPIO3, GPIO4, GPIO5, GND, GPIO6, GPIO7, GPIO8, GPIO9, GND, GPIO10, GPIO11, GPIO12, GPIO13, GND, GPIO14, GPIO15, SWCLK, GND, SWDIO
VBUS, VSYS, GND, 3V3_EN, 3V3, ADC_VREF, GPIO28_ADC2, AGND, GPIO27_ADC1, GPIO26_ADC0, RUN, GPIO22, GPIO21, GPIO20, GPIO19, GPIO18, GND, GPIO17, GPIO16

M2 Pico Raspberry Pi Pico
RX, TX, GPIO0, GPIO1, VBUS, VSYS, GND, 3V3_EN, 3V3, ADC_VREF, GPIO28_ADC2, AGND, GPIO27_ADC1, GPIO26_ADC0, RUN, GPIO22, GPIO21, GPIO20, GPIO19, GPIO18, GPIO17, GPIO16, SWCLK, GND, SWDIO

R39 3.3k — U4 PC817 — KEY_A
R29 10k D12 LED Q2 BC857 R34 10k
R15 10k D11 LED Q1 BC857 R33 10k
R32 10k D15 LED Q5 BC857 R37 10k
R31 10k D14 LED Q4 BC857 R36 10k
R30 10k D13 LED Q3 BC857 R35 10k

PD1 Conn_01x06_Female
R21 1k, C2 1uF, U3 CH224k_10_PIN, D6 PD_SIGNAL, R27 10K, R24 10K, PD_VIN
GND, VDD, CFG2, CFG3, CFG1, VBUS, DP, DM, CC1, CC2, PG

DC_VIN1 Conn_01x02_Female — D7 POWER_IN, R25 1M, R28 10K, R26 33K, C4
PD_VIN D16 POWER_IN, R22 1M, R38 10k, R23 33K, C3

SW2 SW_Push, Q6 BC847, R19 MCU 2 EN 33K
R17 1M, R18 33K, C1
ldr_adc R40 10k — LDR1 Conn_01x03_Female +3.3VA

U5 PC817, R43 1k, R41 10k D17 LED — J3 Conn_01x04_Female
U6 PC817, R44 1k, R42 10k D18 LED

RELAY1 Conn_01x06_Female
R1 3K3 D1 relay_led — RELAY_4
R2 3K3 D2 relay_led — RELAY_3
R3 3K3 D3 relay_led — RELAY_2
R4 3K3 D4 relay_led — RELAY_1

BAT_CON1 Conn_01x04_Female +12V
BUCK_1 MP4560_SMD_8PIN — VOUT−, VOUT+, VIN−, VIN+, EN
U7 PC817 R 3.3k KEY_A
U1 PC817 R12 3.3K, R10 33k, R11 33k, R13 3.3K
D8 B140−E3, D9 B140−E3, D10 B140−E3
VIN_CON1 Conn_01x02_Female

BUCK_2 MP4560_SMD_8PIN
D5 buck_led, R16 10K, +5VD
FAN_1 Conn_01x04_Male — R9 1K
FAN_2 Conn_01x04_Male — R14 1K
U2 PC817 R13 3.3K buck_2_switch

J1 Conn_01x08_Female
J2 Conn_01x18_Female
LCD_CON1 Conn_01x13_Female
NEOPIXEL1 Conn_01x04_Female