REMOTE

ESP-32

U3 — ESP32-WROOM-32
R1 R, R5 10K

SENSOR_VP, SENSOR_VN
SDO/SD0, SDI/SD1, SHD/SD2, SWP/SD3, SCK/CLK, SCS/CMD

POWER MANAGMENT CIRCUIT

POWER1A
R19 100K
Q4 AO3401A
U2
R21 1K
C12 10u
Battery 2S
R20 100K
SS34 D6
U4 AMS1117
+3.3V
R22 220

ESP-programming

R18 100K
Q3 AO3401A
U7 MIC5219-2.5YM5
D1 SS34
R10 100K
R17 470

SoC

U1 — RASPBERRY_PI_4B_4GB
+5V
GPIO2/SDA1, GPIO3/SCL1, GPIO4/GPIO_GCKL
GPIO14/TXD0, GPIO15/RXD0
R27 1K, R28 1K
GPIO17/GPIO_GEN0, GPIO27/GPIO_GEN2, GPIO18/GPIO_GEN1, GPIO22/GPIO_GEN3, GPIO23/GPIO_GEN4, GPIO24/GPIO_GEN5, GPIO25/GPIO_GEN6
GPIO5, GPIO6, GPIO12, GPIO13, GPIO16, GPIO19, GPIO20, GPIO21, GPIO26
GPIO8/SPI_CE0, GPIO7/SPI_CE1, GPIO11/SPI_SCLK, GPIO10/SPI_MOSI, GPIO9/SPI_MISO
Display_cable
ID_SD, ID_SC
USB_1, USB_2, USB_3, USB_4, HDMLA, HDMI_B
SHIELD, GND

USB-UART

U6 — CP2102N-Axx-xQFN28
C4 0.1u, C5, C6 10u
RST, VREGIN, VDD
TXD, RXD, RTS, CTS, DSR, DTR, DCD, RI/CLK
R13 1K, R14, R16 1K, R15 1K
VBUS, D-, D+
SUSPEND, SUSPEND
Q1 BC817, Q2 BC817
TXT/GPIO.0, RXT/GPIO.1, RS485/GPIO.2, WAKEUP/GPIO.3, GPIO.4, GPIO.5, GPIO.6
CHREN, CHR0, CHR1

USB C

J1 — USB C
VBUS A4, A5, CC1 B5, CC2, D- A7, D- B7, D+ A6, D+ B6, SBU1 A8, SBU2 B8
SHIELD, GND

Actuator

VB
Buzzer BZ1
Vibrating Motor
M1

ADC-rasp

U13 — MCP3008
CH0, CH1, CH2, CH3, CH4, CH5, CH6, CH7
Vref, Vdd
MUX, ADC, CNTRL
CLK, Dout, Din, CS/SHDN
AGND, DGND

Control switch

EN#A, EN#A, EN#A, EN7A
C1, C2, C3, C4

Potentiometers

100K RV2
100K RV3, 100K RV1
P3, P1, P2

Mode Select Switch

R23 1K, R24 1K, R25 1K, R26 1K
SW_DPDT_x2 SW1A
SW_DPDT_x2 SW3A

Prog.On/Off

R4 1K
SW_DPDT_x2 SW2A

LORA

U10 — LORA 433
M0, M1, Vcc, GnD, AUX, TXD, RXD

Joystick

U11, U12
Vcc, Gnd, VRx, VRy, SW

U5 VTX-RX

USB

U8 Touch panel

Cable — HDMI_Cable