

Bill of Materials

*DO NOT ORDER IN
RED

| ITEM # | QTY | MANUFACTURER | PRODUCT NUMBER | DESCRIPTION | VENDOR | PRICE PER UNIT | Designation | DATE |
|--------|-----|-------------------------|---------------------|--|---------------|----------------|----------------------------------|-----------|
| 1 | 1 | Raspberry Pi Ltd | RASPBERRY-PI-4-B-2G | Model 4B Single-board Computer | RS Components | ZAR 1,860.07 | RPI | 5/22/2025 |
| 2 | 2 | Vero Technologies | 01-0021 | Single-Sided Stripboard 121.92 x 101.6mm | RS Components | ZAR 27.05 | ---- | 5/22/2025 |
| 3 | 1 | STMicroelectronics | NUCLEO-H723ZG | STM32 Nucleo-144 development board | RS Components | ZAR 673.77 | MCU | 5/22/2025 |
| 4 | 1 | DFRobot | DFRo678 | Raspberry Pi LCD Touchscreen | RS Components | ZAR 1,316.16 | LCD | 5/22/2025 |
| 5 | 1 | Texas Instruments | NE555P | 555 Timer | RS Components | ZAR 3.70 | U1 | 5/22/2025 |
| 6 | 1 | Onsemi | 2N3906BU | PNP BJT Transistor | RS Components | ZAR 0.93 | U2 | 5/22/2025 |
| 7 | 3 | Bourns | 3362P-1-502LF | Trimmer 5K Potentiometer | RS Components | ZAR 21.87 | R1, R2, R3 | 5/22/2025 |
| 8 | 1 | Kemet | C322C104K5R5TA | 100 nF Ceramic Capacitor | RS Components | ZAR 5.37 | C1 | 5/22/2025 |
| 9 | 1 | Kemet | C315C109B5G5TA | 1 pF Ceramic Capacitor | RS Components | ZAR 0.26 | C2 | 5/22/2025 |
| 10 | 1 | TDK | FG28CoG2A220JNT0 | 22 nF Ceramic Capacitor | RS Components | ZAR 15.26 | C3 | 3/24/2025 |
| 11 | 1 | TE Connectivity | CFR25J470R | 470R Carbon Film Resistor | RS Components | ZAR 1.00 | R4 | 3/24/2025 |
| 12 | 1 | RS Pro | 707-7704 | 2.7k Carbon Film Resistor | RS Components | ZAR 2.50 | R5 | 3/25/2025 |
| 13 | 4 | RS Pro | 707-8300 | 10k Carbon Film Resistor | RS Components | ZAR 3.30 | R6, R7, R8, R9 | 3/24/2025 |
| 14 | 3 | RS Pro | 739-7569 | 20k Carbon Film Resistor | RS Components | ZAR 0.23 | R10, R11, R12 | 3/24/2025 |
| 15 | 1 | RS Pro | 707-8943 | 68k Carbon Film Resistor | RS Components | ZAR 4.42 | R13 | 3/24/2025 |
| 16 | 4 | RS Pro | 707-8940P | 100k Carbon Film Resistor | RS Components | ZAR 26.23 | R14, R15, R16, R17, THT | 3/24/2025 |
| 17 | 1 | Yageo | HHV1WSJT-52-200K | 200k Metal Film Resistor | RS Components | ZAR 2.23 | R18, THT | 3/24/2025 |
| 18 | 2 | Texas Instruments | LM358AP | Op Amp, 700kHz | RS Components | ZAR 7.03 | U3, U4, PDIP THT | 3/24/2025 |
| 19 | 3 | Amphenol | B6252H5-NPP3G-50 | Straight Coaxial BNC Adapter | RS Components | ZAR 80.89 | J1, J2, J3, ---- | 5/22/2025 |
| 20 | 1 | Raspberry Pi Ltd | T6716DV-RS | Raspberry Pi Power Supply 1.5 m EU Plug | RS Components | ZAR 199.74 | ---- | 3/24/2025 |
| 21 | 1 | RS Pro | 254-3504 | 100MHz Handheld Oscilloscope | RS Components | ZAR 26,162.78 | ---- | 3/24/2025 |
| 22 | 3 | Fairchild Semiconductor | 1N4148 | Diode | RS Components | ZAR 0.26 | D1, D2, D3, THT | 3/24/2025 |
| 23 | 1 | Kingbright | L-34QBC-D | Blue LED | RS Components | ZAR 5.77 | D4, D5, THT | 3/24/2025 |
| 24 | 1 | Energizer | 7638900410297 | 9V Battery Cell | RS Components | ZAR 226.40 | BT1, THT | 5/22/2025 |
| 25 | 1 | RS Pro | 185-4728 | 9V Battery Holder | RS Components | ZAR 39.43 | BTH1, THT | 5/22/2025 |
| 26 | 1 | Chemi-Con | KTD500B476M90AoBoo | 47 uF Multilayer Ceramic Capacitor | RS Components | ZAR 442.06 | C1, THT | 5/22/2025 |
| 27 | 4 | Nichicon | USR1C100MDD | 10 uF Polar Capacitor | RS Components | ZAR 3.34 | C4, C8, THT | 5/22/2025 |
| 28 | 2 | Nichicon | ULD2G010MED | 1 uF Polar Capacitor | RS Components | ZAR 8.82 | C2, C6, THT | 5/22/2025 |
| 29 | 2 | Kemet | C340C105K1R5TA | 1 uF Capacitor (Non-polarized) | Digikey SA | ZAR 14.88 | C3, C7, THT | 5/22/2025 |
| 30 | 2 | RS Pro | 711-0977 | 1000 uF Electrolytic Capacitor | RS Components | ZAR 5.00 | C9, C10, THT | 5/22/2025 |
| 31 | 1 | Kemet | C320C223K1R5TA | 22 nF Ceramic Capacitor | RS Components | ZAR 6.71 | C5, THT | 5/22/2025 |
| 32 | 2 | Kemet | C322C104K5R5TA | 0.1 uF Ceramic Capacitor | RS Components | ZAR 4.24 | C9, C10, THT | 5/22/2025 |
| 33 | 1 | Myrra | 44202 | 230V AC -> 15V AC Transformer | RS Components | ZAR 177.54 | T1, THT | 5/22/2025 |
| 34 | 4 | DiodesZetex | 1N4007-T | Rectifier Diode 2-Pin DO-41 1000V | RS Components | ZAR 0.89 | D1, D2, D3, D4, THT | 5/22/2025 |
| 35 | 1 | Kingbright | L-53GD | Green LED | RS Components | ZAR 0.79 | D5, THT | 5/22/2025 |
| 36 | 3 | Amphenol | B6252H5-NPP3G-50 | Straight Coaxial BNC Adapter | RS Components | ZAR 80.89 | J1, J2, J3, THT | 5/22/2025 |
| 37 | 1 | Wurth Elektronik | 691213710003 | Terminal Block Wall Plug | RS Components | ZAR 32.32 | P2, THT | 5/22/2025 |
| 38 | 1 | Onsemi | PN2222ATA | PNP BJT Transistor | RS Components | ZAR 5.02 | Q1, THT | 5/22/2025 |
| 39 | 3 | RS Pro | 707-7666 | 1k Resistor | RS Components | ZAR 2.53 | R1, R2, R25, THT | 5/22/2025 |
| 40 | 1 | TE Connectivity | LR1F1K1 | 1.1k Resistor | RS Components | ZAR 1.47 | R4, THT | 5/22/2025 |
| 41 | 1 | RS Pro | 707-7678 | 1.2k Resistor | RS Components | ZAR 3.81 | R3, THT | 5/22/2025 |
| 42 | 5 | RS Pro | 739-8806 | 5.1k Resistor | RS Components | ZAR 0.25 | R6, R8, R10, R17, R18, THT | 5/22/2025 |
| 43 | 10 | RS Pro | 707-8300 | 10k Resistor | RS Components | ZAR 0.33 | R9, R11, R14, R20, R21, R22, THT | 5/22/2025 |
| 44 | 1 | Vishay | PR02000201802JA100 | 18k Resistor | RS Components | ZAR 0.34 | R5, THT | 5/22/2025 |
| 45 | 1 | RS Pro | 739-8809 | 4.3k Resistor | RS Components | ZAR 0.22 | R15, THT | 5/22/2025 |
| 46 | 2 | TE Connectivity | CFR50J220R | 220R Resistor | RS Components | ZAR 0.78 | R16, THT | 5/22/2025 |

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| 47 | 1 | RS Pro | 707-7701 | 3.3k Resistor | RS Components | ZAR 0.25 | R12 | THT | 5/22/2025 |
| 48 | 1 | Vishay | MBB02070C1103FCT00 | 110k Resistor | RS Components | ZAR 0.47 | R13 | THT | 5/22/2025 |
| 49 | 1 | RS Pro | 707-8940P | 100k Resistor | RS Components | ZAR 0.27 | R27 | THT | 5/22/2025 |
| 50 | 2 | Bourns | 3362P-1-253LF | 25k Trimmer Potentiometer Top Adjust | RS Components | ZAR 17.60 | RV1, RV2 | THT | 4/9/2025 |
| 51 | 2 | RS Pro | 734-7334 | Slide Switch 5A 28V | RS Components | ZAR 28.67 | S1, S1 | THT | 5/22/2025 |
| 52 | 2 | EXAR / SIPEX | XR2206CP | Function Generator IC | Mantech | ZAR 56.53 | U1, U3 | PDIP THT | 5/22/2025 |
| 53 | 1 | Mean Well | GP25A13D-R1B | OEP Power Brick AC/DC Adapter 5V DC Out | RS Components | ZAR 1,531.56 | P1 | ---- | 5/22/2025 |
| 54 | 1 | Lumberg | 105-05 | 5 Pole Right Angle DIN41524 Socket | RS Components | ZAR 40.00 | P2 | PDIP THT | 5/22/2025 |
| 55 | 3 | RS Pro | 122-2148 | Male BNC RG59 Coaxial | RS Components | ZAR 129.87 | J11-C1M | ---- | 5/22/2025 |
| 56 | 1 | RS Pro | 744-0935 | RS Pro IEC C13 Socket | RS Components | ZAR 192.79 | J21-P2M | ---- | 5/22/2025 |

Statement Date: 5/22/2025

Date Due: 6/21/2025

Total Cost: ZAR 31,725.71