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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Component | Value | Package | Suppiler | Part Number | Qty | unit Price | total price | Ref Name | Description |
| ATMEGA328P-PU |  | DIP28 | RS | 131-0275 | 1 | $5.06 | $5.06 | IC1 | MICROCHIP - ATMEGA328P-PU. - MICROCONTROLLER MCU, 8 BIT, ATMEGA, 20MHZ, DIP-28 |
| battery cell |  | 1053 | RS | 175-6055 | 1 | $3.45 | $3.45 | U1 | Coin Cell Battery Holders BATTERY HOLDER FOR CR2450 |
| Capacitor | 100nF | DSC | jaycar | RG-5125 | 3 | $0.04 | $0.11 | C2, C8-9 | Capacitor |
| Capacitor | 22pf | DSC | element 14 | 169-4226 | 2 | $0.00 | $0.01 | C1, C6 | Capacitor |
| Capacritor\_Pol | 0.1uF | DSCV | jaycar | RG-5125 | 1 | $0.38 | $0.38 | C4 | Capacitor |
| Capacritor\_Pol | 0.33uF | DSCV | rs | 707-5650 | 1 | $0.04 | $0.04 | C3 | dc Aluminium Electrolytic Capacitor, Through Hole 5 (Dia.) |
| Capacritor\_Pol | 100nF | DSCV | rs | 711-1396 | 2 | $0.04 | $0.09 | C5, C7 | dc Aluminium Electrolytic Capacitor, Through Hole 5 (Dia.) |
| Diode | 1N4001 | DSC | rs | 628-8931 | 9 | $0.31 | $2.77 | D1-9 | Diode |
| DS1307 |  | DIP8 | rs | 540-2726 | 1 | $6.29 | $6.29 | RTC | Trickle charge timekeeping chip,DS1302 Maxim DS1302+ Real Time Clock, Alarm, Calendar, Clock, 31B RAM, Serial, 5.5 V, 8-Pin PDIP |
| hall effect sensor |  |  | jaycar | XC4434 | 1 | $6.20 | $6.20 |  |  |
| HC49US-16.000MABJ-UB |  | HC49 | digi key | 631-1108-ND | 1 | $0.35 | $0.35 | Y1 | Crystals 16MHz 18pF HC49S THROUGH HOLE |
| headers |  | DSC | rs | 701-9953 | 3 | $1.29 | $3.86 | EN\_KP, EN\_LCD, EN\_RTC,EN\_CH2, reed\_sw1-2,I2C, Programming,HES,ISP | 2 way male header, 2.54mm |
| IC |  | TO3 | rs | 398-697 | 1 | $0.43 | $0.43 | IC4 | 3-Term Fixed 5V Volt Reg 4% TS7805CZ C0 TS7805CZ C0, Voltage Regulator, 2.2A 5 V, +/-4%, 3-Pin TO-220 |
| IC | 24LC256-I\_P | DIP8 | RS | 454-179 | 1 | $3.48 | $3.48 | EEPROM | Microchip 24LC256-I/P Serial EEPROM Memory, 256kbit, 900ns, 2.5 5.5 V 8-Pin PDIP |
| L298N |  | MULTIWATT15V | rs | 636-384? | 1 | $10.43 | $10.43 | IC5 | L298N, Stepper Motor Controller, Dual Full Bridge Motor Driver, 4.8 46 V, 15-Pin MULTIWATT V |
| lcd keyped shield |  |  | jaycar | XC4454 | 1 | $22.40 | $22.40 | LCD |  |
| LED | LED 5MM GREEN | DSC | rs | 228-6004 | 1 | $0.04 | $0.04 | CLOSED | Light Em Di Green |
| LED | LED 5MM RED | DSC | rs | 228-5988 | 1 | $0.34 | $0.34 | POWER | Light Em Di RED |
| LM358N\_NOPB |  | DIP794W53P254L959H508Q8N | rs | 761-5860 | 1 | $1.38 | $1.38 | IC2 | Texas Instruments LM358N/NOPB, Dual Op Amp, 1MHz, 3 32 V, 8-Pin MDIP |
| motor |  |  | rs | 420-671 | 1 | $42.20 | $42.20 |  |  |
| PCF8574N |  | DIP254P762X508-16 | RS | 920-3393 | 2 | $2.02 | $4.04 | IC7, LCD\_IO | REMOTE 8-BIT I/O EXPANDER FOR I2C BUS |
| Photoresistor |  | DSC | rs | 466-1974 | 1 | $2.08 | $2.08 | Rp1 |  |
| PMOS |  | DSC | RS | 803-1093 | 1 | $0.13 | $0.13 | Q1 | MOSFET |
| Pushbutton |  | DISC | rs | 119-1955 | 17 | $0.31 | $5.27 | RESET, SW11-14, SW21-24, SW31-34, SW41-44 | 6mm tactile buttons |
| read switch |  |  | rs | 361-4983 | 2 | $2.66 | $5.32 |  |  |
| Resistor | 1K | DSC | element 14 | 1127904 | 6 | $0.03 | $0.18 | R3, R6, R8-10, R19 | Resistor |
| Resistor | 5K | DSC | element 14 | 1602150 | 1 | $0.39 | $0.39 | R1 | Resistor |
| Resistor | 0.2 | DSC | element 14 | 1684968 | 1 | $1.63 | $1.63 | Rshunt | shunt resistor |
| Resistor | 470 | DSC | rs | 707-7647 | 1 | $0.33 | $0.33 | R7 | Resistor |
| Resistor | 1.6K | DSC | rs | 739-7231 | 2 | $0.07 | $0.14 | R4-5 | Resistor |
| Resistor | 10K | DSC | rs | 707-7745 | 5 | $0.04 | $0.19 | R11-14, R16 | Resistor |
| Resistor | 12K | DSC | rs | 707-7757 | 2 | $0.04 | $0.07 | R2, R15 | Resistor |
| Resistor | 220K | DSC | rs | 707-8965 | 2 | $0.22 | $0.45 | R17-18 | Resistor |
| socket |  | 16DIP | element 14 | 1103846 | 2 | $0.69 | $1.38 |  |  |
| socket |  | 28DIP | element 14 | 1103850 | 1 | $1.21 | $1.21 |  |  |
| Resistor | 2K | DSC |  |  | 1 | $- | $- | R20 | Resistor |
| Resistor | 3K | DSC |  |  | 1 | $- | $- | R21 | Resistor |
| socket |  | 8DIP | element 14 | 110-3844 | 2 | $0.34 | $0.67 |  |  |
| Terminal blocks |  | 20020316G021B01LF | element 14 | 171-1026 | 3 | $1.54 | $4.62 | 12Vin, M1-2 | Fixed Terminal Blocks 2P 5.00MM TERM BLK FIXED HORIZONTAL |