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| **Image** | **Type** | **Name** | **Sold at** | **Specs / Reviews** |
|  | Current regulator | Voltage Regulator XL4015 Step Down Switching DC-DC Converter 36V/5A Arduino | <https://www.ebay.com/itm/Voltage-Regulator-XL4015-Step-Down-Switching-DC-DC-Converter-36V-5A-Arduino/132837996745?ssPageName=STRK%3AMEBIDX%3AIT&_trksid=p2057872.m2749.l2649> | Specifications:  Chip: XL4015  Input voltage range: 4-38V DC (Note: input voltage not exceeding 38V)  Output voltage range: 1.25-36V DC (adjustable)  Output current: 0-5A, recommended for use in 4.5A.  Output power: 75W  Working temperature: -40~+85℃  Operating frequency: 180KHz  Efficiency: 96% (max)  Short circuit protection: yes(limit current 8A).  Over temperature protection  Input reverse polarity protection: None (if required, high current diode in series with the input).  Size: 54x24mm/2.13x0.94"  <https://www.youtube.com/watch?v=8cRmGNmqRYc> |
|  | Current regulator | 5A DC- DC Constant Current Voltage Regulator Step Down Converter 5V 12V 24V | <https://www.ebay.com/itm/5A-DC-DC-Constant-Current-Voltage-Regulator-Step-Down-Converter-5V-12V-24V/192555939561?ssPageName=STRK%3AMEBIDX%3AIT&_trksid=p2057872.m2749.l2649> | Input Voltage Range: 5~32VDC  Input reverse polarity protection: None  Output Voltage Range: 0.8-30VDC adjustable Output Current: 0-5A adjustable  High Efficiency: up to 95% |
| A circuit board  Description automatically generated | Current regulator | 3A Mini DC-DC step down converter volt regulator 5V-23V to 3.3V 6V 9V 12V M.US | <https://www.ebay.com/itm/3A-Mini-DC-DC-step-down-converter-volt-regulator-5V-23V-to-3-3V-6V-9V-12V-M-US/362959165220?ssPageName=STRK%3AMEBIDX%3AIT&_trksid=p2057872.m2749.l2649> | Module nature: non-isolated buck  Rectification mode: synchronous rectification  Input voltage: 4.75V-23V  Output voltage: 1.0V-17V  Output current: peak 3A, long time 1.8A  Conversion efficiency: 96% (highest)  Switching frequency: 340KHz  Output ripple: 30mV (when no load)  Load adjustment rate: +-0.5%  Voltage regulation rate: +-2.5%  Working temperature: -40°C-+85°C |
|  | Current regulator | 1.2A DC-DC Buck Step-down Converter Volt Regulator 4.5V-24V to 3V 3.3V 5V 9V 12V | <https://www.ebay.com/itm/113706883072> | Chip: MPS MP2359  Input voltage: 4.5V-24V  Output voltage: 3V-15V (default 5V)  Buck efficiency: up to 92%  Output current: 1.2A max  Low standby current: <0.1uA  Overcurrent protection, over temperature protection  Procurement of advanced high current inductors, small Schottky fast diodes.  DS = low is on standby; empty / VIN is enabled; connectable switch control.  VIN: input Positive; GND common ground, VO: output positive, DS cannot connect.  Size: 13\*11\*3.8mm |
| MT3608 Step-Up Adjustable DC-DC Switching Boost Converter | Current regulator | DC-DC Step Up Converter MT3608 Booster Power Supply Step-up Module Boost P6W2 | https://www.ebay.com/itm/DC-DC-Step-Up-Converter-MT3608-Booster-Power-Supply-Step-up-Module-Boost-P6W2/264994769376?hash=item3db2eb49e0:g:nMIAAOSwla9fSpxt | Maximum output current: 2A  Input voltage: 2~24V  Maximum output voltage: 28V  Efficiency: 93%  Size: approx. 36mm\*17mm\*14mm  Color: as picture shows  Quantity: 1/5pcs  How to use: the module of the IN+ and - after 2~24v, IN adjusting the potentiometer can adjust output voltage, output voltage is greater than the input voltage |
|  | Power Supply | AC-DC Power Supply Module Buck Converter Step Down Module Replace/Repair ATF | <https://www.ebay.com/itm/AC-DC-Power-Supply-Module-Buck-Converter-Step-Down-Module-Replace-Repair-ATF/192628636860?ssPageName=STRK%3AMEBIDX%3AIT&var=492768621735&_trksid=p2057872.m2749.l2649> | 5V / 0.7A |
|  | Power Supply | AC-DC 5V 700mA 3.5W Power Supply Buck Converter Step Down Module for Arduino | <https://www.ebay.com/itm/1pc-AC-DC-5V-700mA-3-5W-Power-Supply-Buck-Converter-Step-Down-Module-for-Arduino/183413473551?ssPageName=STRK%3AMEBIDX%3AIT&_trksid=p2057872.m2749.l2649> | 5V / 0.7A |
|  | Power Supply | AC-DC Power Supply Module Buck Converter Step Down Module Replace/Repair ATF | <https://www.ebay.com/itm/AC-DC-Power-Supply-Module-Buck-Converter-Step-Down-Module-Replace-Repair-ATF/192628636860?ssPageName=STRK%3AMEBIDX%3AIT&var=492768621736&_trksid=p2057872.m2749.l2648> | 5V / 2.5A |
|  | Power Supply | AC-DC 12V 5V 24V 9V Power Supply Buck Converter Step Down Module for Arduino | <https://www.ebay.com/itm/AC-DC-12V-5V-24V-9V-Power-Supply-Buck-Converter-Step-Down-Module-for-Arduino/253176674644?ssPageName=STRK%3AMEBIDX%3AIT&var=552271234263&_trksid=p2057872.m2749.l2649> | 5V / 1.5A |
|  | Power Supply | AC-DC 12V 1.5A 5V 2A Switching Power Supply Module Bare Circuit 100-265V to 12V 5V Board TL431 regulator for Replace/Repair | <https://www.aliexpress.com/item/4000992241059.html?spm=a2g0s.9042311.0.0.46594c4d2A3fRM> | 12V / 1.5A |
|  | Micro controller | D1 Mini NodeMcu 4M bytes Lua WIFI Development Board ESP8266 by WeMos TEUS | <https://www.ebay.com/itm/D1-Mini-NodeMcu-4M-bytes-Lua-WIFI-Development-Board-ESP8266-by-WeMos-TEUS/312715205793?ssPageName=STRK%3AMEBIDX%3AIT&_trksid=p2057872.m2749.l2649> |  |
|  | Micro controller | NodeMcu Lua WIFI Internet Things development board based ESP8266 CP2102 module | <https://www.ebay.com/itm/NodeMcu-Lua-WIFI-Internet-Things-development-board-based-ESP8266-CP2102-module/311721893268?ssPageName=STRK%3AMEBIDX%3AIT&_trksid=p2057872.m2749.l2649> |  |
|  | Micro controller | ESP8266 Serial WIFI Wireless Transceiver Module Send Receive AP+STA ESP-01 US | <https://www.ebay.com/itm/ESP8266-Serial-WIFI-Wireless-Transceiver-Module-Send-Receive-AP-STA-ESP-01-US/152149532770?ssPageName=STRK%3AMEBIDX%3AIT&_trksid=p2057872.m2749.l2649> |  |
|  | Sensor - Microphone | GY-MAX4466 electret microphone amplifier MAX4466 adjustable amplifier module | <https://www.ebay.com/itm/1pc-GY-MAX4466-electret-microphone-amplifier-MAX4466-adjustable-amplifier-module/183696382813?ssPageName=STRK%3AMEBIDX%3AIT&_trksid=p2057872.m2749.l2649> |  |
|  | Cooling Fan | 4cm Mini DC Brushless Chassis Graphics Card CPU Cooling Fan 40mmx40mmx10mm | <https://www.ebay.com/itm/2Pcs-4cm-Mini-DC-Brushless-Chassis-Graphics-Card-CPU-Cooling-Fan-40mmx40mmx10mm/193290749390?ssPageName=STRK%3AMEBIDX%3AIT&_trksid=p2057872.m2749.l2649> | Voltage: 12dvc Bearing Type: Sleeve      Connector: 2pin(2.0) Applicable for: CPU Fan, SB/NB Fan Dimension: Approx.40\*40\*10mm/1.57"\*1.57"\*0.39" |
|  | RTC | DS3231 ZS042 AT24C32 IIC Module Precision RTC Real time Clock Memory | <https://www.ebay.com/itm/Arduino-DS3231-ZS042-AT24C32-IIC-Module-Precision-RTC-Real-time-Clock-Memory/382715203141?ssPageName=STRK%3AMEBIDX%3AIT&_trksid=p2057872.m2749.l2649> | 3.3 – 5.5 V, I2C (SDA+SCL) |
|  | Sensor - Motion | HC-SR501 Infrared PIR Motion Sensor Module for Arduino Raspberry pi | <https://www.ebay.com/itm/HC-SR501-Infrared-PIR-Motion-Sensor-Module-for-Arduino-Raspberry-pi/401598066562?ssPageName=STRK%3AMEBIDX%3AIT&var=671340309473&_trksid=p2057872.m2749.l2649> | <https://components101.com/sensors/hc-sr501-pir-sensor> |
|  | Sound amplifier | TDA2030A Audio Amplifier Module Power Amplifier Board AMP 6～12V 1\*18W | <https://www.ebay.com/itm/TDA2030A-Audio-Amplifier-Module-Power-Amplifier-Board-AMP-6-12V-1-18W/322634016547?hash=item4b1e7c6723:g:CqcAAOSwi1BZeyan> |  |
|  | Digital multiplexer | 74HC595 shift register | <https://www.instructables.com/id/Add-More-Digital-Inputs-and-Outputs-to-Your-Arduin/>  <https://www.alldatasheet.com/datasheet-pdf/pdf/12198/ONSEMI/74HC595.html>  <https://www.arduino.cc/en/tutorial/ShiftOut> |  |
|  | Proximity & Attitude Sensor | APDS-9930 Proximity & Attitude Sensor GY-9930-LLC I2C ALS RGB For Arduino | <https://www.ebay.ca/itm/172997132960> | ALS, IR LED and Proximity Detector in an Optical Module Ambient Light Sensing (ALS) Approximates Human Eye Response Programmable Interrupt Function with Upper and Lower Threshold Up to 16-Bit Resolution High Sensitivity Operates Behind Darkened Glass Low Lux Performance at 0.01 lux Proximity Detection Fully Calibrated to 100 mm Detection Integrated IR LED and Synchronous LED Driver Eliminates ?Factory Calibration? of Prox Programmable Wait Timer Wait State Power ? 90 ?A Typical Programmable from 2.7 ms to > 8 sec I2C Interface Compatible Up to 400 kHz (I2C Fast-Mode) Dedicated Interrupt Pin Sleep Mode Power - 2.2 ?A Typical |
|  | Expansion Board | PCF8574 PCF8574T I/O For I2C IIC Port Interface Support Cascading Extended Module For Arduino Expansion Board High Low Level | <https://www.aliexpress.com/item/32353277284.html?spm=a2g0s.9042311.0.0.27424c4dpT4iag> | This is the I/O extended module, which use for I2C interface, you can use two of the module to extend 8 I/O.  Support cascading, and you can use at most 8 modules to extend 64 I/O at the same time.  Can be changed the address by set toggle switch  PCB Size: 36 x 16mm/1.41\*0.62"  Every 2 seconds, make P0-P7 port output High level, Low level, and put 3 toggle switches to ON, the address of module is 0x27 |
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|  | Ultrasonic speaker | Max 10V  Max 30 mA  Audio range: 2,5-60 kHz  Sound pressure level: min 90 dB | <https://www.aliexpress.com/item/32857915240.html?spm=a2g0s.9042311.0.0.27424c4dDyEpFy> | 5 |
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