

Parts Export

Generated: 2026-06-13 12:19:13

Total Parts: 236

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|-------------|-----------------------------------|------------------|--|--|---|--|
| No Image | COC-00001-A | Binding Tape | CO - Consumables | Dowell, 3M, Advance Tapes, Deta Electrical | The Insulation Filament Tape (25mm x 50m) is a high-strength, durable tape designed for a variety of applications. Made with reinforced fiberglass filaments, it offers excellent tensile strength and resistance to tearing. This tape is ideal for bundling, reinforcing, and securing heavy packages. Its strong adhesive backing ensures reliable performance on a range of surfaces. Heat-resistant and non-conductive, it is suitable for electrical insulation tasks. Perfect for industrial, commercial, and DIY use, it combines strength and versatility in one compact roll. | Operating Temperature: -18°C to +105°C Voltage Rating: Up to 600V Thickness: 0.178mm Flame Retardant: Yes | PVC Tape • Electrical Tape • Binding Tape • Insulation Tape • Cable Tape • Wire Management • Electronics Tape |
| No Image | COC-00001-B | Foam Tape | CO - Consumables | 3M, Tesa, Nitto Denko, Avery Dennison, Hi-Bond | The EVA Foam Tape Roll (50mm x 6mm) is a durable and versatile adhesive solution designed for a wide range of applications. With its strong adhesion and soft cushioning, it effectively absorbs vibrations and reduces noise, making it ideal for sealing gaps, mounting, or insulating. The weather-resistant foam is perfect for both indoor and outdoor use, providing long-lasting performance in varying conditions. Its 50mm width and 6mm thickness offer optimal coverage and support for heavy-duty tasks. Easy to cut and apply, this tape ensures a secure and reliable bond on various surfaces. Perfect for DIY projects, automotive work, and professional installations. | Color: Black Thickness: 6mm Material: EVA Foam Length: 5 Meter Width: 50mm | Foam Tape • Double Sided Tape • EVA Foam Tape • PE Foam Tape • Acrylic Foam Tape |
| No Image | COC-00001-C | Masking Tape | CO - Consumables | Avery Dennison, Advance Tapes, Shurtape, Intertape Polymer Group | The Masking Tape Roll 20mm 20 mtr is a versatile adhesive tape designed for a wide range of applications. With a width of 20mm and a length of 20 meters, it provides ample coverage for precise and clean masking. Ideal for painting, crafting, and general-purpose tasks, it ensures easy application and residue-free removal. The tape offers reliable adhesion to various surfaces like wood, metal, and glass. Its tear-resistant design allows for smooth handling, while the durable material withstands light moisture and heat. A must-have tool for DIY projects and professional use alike! | Tape Type: Pressure Sensitive Masking Tape Material: Crepe Paper Width: 12mm – 48mm Length: 10m – 50m Temperature Resistance: Up to 80°C | Electronics Tape • Masking Tape • Paper Tape • Crepe Tape • Painting Tape • PCB Masking |
| No Image | COC-00001-D | Insulation Tape | CO - Consumables | 3M, Generic / OEM | Black PVC insulation tape designed for electrical insulation, wire repair, cable bundling, and protection of electrical connections. Made from flexible, stretchable vinyl material with strong adhesion and resistance to heat, moisture, abrasion, and weather conditions. Suitable for indoor and outdoor applications. Ideal for electricians, technicians, and DIY users requiring safe and reliable electrical insulation. | Item Type: Insulation Tape Material: PVC Color: Black Length (mm): 55 Width (mm): 55 Height (mm): 20 Weight: 35 g Shipping Weight: 0.04 kg Shipping Dimensions: 6 x 6 x 3 cm | PVC Tape • Electrical Tape • Black Insulation Tape • Flame Retardant • Wire Wrapping |
| No Image | COC-00002-A | Corrugated Plastic Sheet White | CO - Consumables | Coroplast, IntePro | Lightweight corrugated plastic sheet designed for signage, packaging, protection panels, DIY projects, robotics structures, and industrial applications. It provides excellent durability, water resistance, and impact resistance while remaining easy to cut and shape for custom designs. | Sheet Type: Corrugated Plastic Sheet Color: White Thickness: 2mm – 5mm | corrugated plastic sheet • polypropylene board • white plastic sheet • coroplast sheet • DIY material |
| No Image | COC-00002-B | Corrugated Plastic Sheet, Black | CO - Consumables | Coroplast, IntePro | Lightweight black corrugated plastic sheet designed for structural support, signage, robotics, packaging, DIY fabrication, and protective panel applications. It offers excellent durability, water resistance, flexibility, and impact resistance while remaining easy to cut and shape for custom project designs. | Sheet Type: Corrugated Plastic Sheet Color: Black Thickness: 2mm – 5mm | corrugated plastic sheet • coroplast sheet • black plastic board • polypropylene sheet • robotics material |
| No Image | COC-00002-C | Corrugated Plastic Sheet , Yellow | CO - Consumables | Coroplast, IntePro | Lightweight yellow corrugated plastic sheet designed for signage, robotics, DIY fabrication, packaging, and protective panel applications. It provides excellent durability, water resistance, flexibility, and impact resistance while being easy to cut and shape for custom engineering and creative projects. | Sheet Type: Corrugated Plastic Sheet Color: Yellow Thickness: 2mm – 5mm | corrugated plastic sheet • coroplast sheet • polypropylene sheet • yellow plastic board • DIY fabrication material |

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|----------|--------------------|-----------------------------------|------------------|---|--|---|---|
| No Image | COC-00002-D | Corrugated Plastic Sheet, Green | CO - Consumables | Coroplast, IntePro | Lightweight green corrugated plastic sheet designed for signage, robotics, fabrication, packaging, and structural support applications. It offers excellent durability, water resistance, flexibility, and impact resistance while remaining easy to cut and shape for custom engineering and DIY projects. | Sheet Type: Corrugated Plastic Sheet Color: Green Thickness: 2mm – 5mm | corrugated plastic sheet • coroplast sheet • polypropylene sheet • green plastic board |
| No Image | COC-00002-E | Corrugated Plastic Sheet 3mm, Red | CO - Consumables | Coroplast, IntePro | Lightweight 3mm red corrugated plastic sheet designed for signage, robotics, DIY fabrication, packaging, and structural support applications. It provides excellent durability, water resistance, flexibility, and impact resistance while being easy to cut and shape for custom engineering and creative projects. | Sheet Type: Corrugated Plastic Sheet Color: Red Thickness: 3mm | corrugated plastic sheet • polypropylene sheet • red plastic board • 3mm coroplast sheet |
| No Image | COC-00003-A | Hot Glue stickS | CO - Consumables | Stanley, Surebonder | Thermoplastic adhesive glue sticks designed for hot glue guns used in crafting, electronics assembly, packaging, DIY projects, and repair applications. These glue sticks provide strong bonding, fast melting, and reliable adhesion on plastic, paper, wood, fabric, and lightweight materials. | Glue Stick Diameter: 7mm Melting Temperature: 120°C – 180°C Compatibility: 7mm Mini Glue Guns Stick Length: 100mm – 300mm | Hot Melt Adhesive • hot glue stick • glue gun stick • adhesive stick • 7mm glue stick • craft glue |
| No Image | COC-00003-B | Hot Melt Glue Sticks | CO - Consumables | Generic / OEM, 3M, Pro'sKit, Stanley, Bosch | All-purpose hot melt glue sticks suitable for bonding applications in DIY, electronics, crafts, packaging, and general repairs. Designed for use with standard temperature glue guns operating around 200°C and compatible with 11mm diameter glue stick slots. Provides strong adhesion on plastic, wood, fabric, paper, and light materials. | Item Type: Hot Melt Glue Sticks Stick Diameter: 11 mm Pack Quantity: 5 Pieces Shipping Weight: 0.2 kg Shipping Dimensions: 4 x 4 x 4 cm | Glue Sticks • 11mm Glue Stick • Hot Melt Adhesive • Glue Gun Refill • DIY Adhesive |
| No Image | COC-00004-A | Desoldering Wick | CO - Consumables | Generic | Finely braided 100% copper wick for fast and clean solder removal from electronic joints. Works with a heated soldering iron; flux-assisted for efficient molten solder absorption. Essential for PCB repair, rework, and general electronics maintenance tasks. | Item Type: Desoldering Wick Material: Suitable for Comfortable Desoldering Length: 1.5 m Width: 1.85 mm Thickness: Suitable for Comfortable Desoldering Application: Faster & Cleaner Electronics Desoldering Shipping Weight: 0.008 kg Shipping Dimensions (L x W x H): 6 x 5 x 1 cm | Desoldering Wick • Solder Braid • PCB Repair • 100% Copper • Solder Removal • Flux-Assisted • Electronics Rework • 1.5m |
| No Image | COC-00005-A | Post-its BOOK | CO - Consumables | 3M, Hopax | Self-adhesive sticky note pad designed for quick notes, reminders, labeling, office work, study tasks, and organization purposes. These compact paper notes provide reliable adhesion, smooth writing surface, and easy repositioning without leaving residue. Commonly used in offices, schools, electronics labs, workshops, and project planning applications. | Product Type: Adhesive Sticky Notes Pad Note Size: 3x3 Inch Sheet Count: 50 Pages Color: Multi-color | sticky notes • post-it notes • memo pad • adhesive notes • office stationery • study notes |
| No Image | COC-00006-A | Sandpaper | CO - Consumables | 3M, Norton Abrasives | Abrasive sandpaper sheet designed for surface smoothing, polishing, finishing, paint removal, and material preparation applications. It provides efficient abrasion for wood, plastic, metal, fiberglass, and fabrication materials while ensuring smooth finishing and surface cleaning. | Product Type: Abrasive Sandpaper Sheet Abrasive Material: Aluminum Oxide / Silicon Carbide Grit Range: 60 – 3000 Grit Sheet Size: Standard 9x11 Inch | sandpaper • abrasive paper • sanding sheet • polishing paper • surface finishing |
| No Image | COC-00007-A | Soldering Flux | CO - Consumables | Generic / OEM, Noel, Welfix, Mechanic, Pro'sKit | This soldering flux paste is designed to improve solder flow and enhance joint quality during soldering and desoldering operations. It contains high-quality additives and activators for effective bonding. The paste is prepared using standardized formulations to ensure consistent performance. It reduces oxidation and ensures clean and reliable solder joints. Suitable for general-purpose soldering of electrical wires, PCB components, and cables. Ideal for DIY users, students, and professional technicians. | Item Type: Soldering Flux Paste Net Weight: 10 g Color: White / Yellow (as per brand batch) Usage: PCB, Wires, Electrical Components Packaging Type: Small Plastic Container | Flux Paste • 10g • Soldering Flux • PCB Repair • Low Smoke |
| No Image | COC-00008-A | Desoldering Wick | CO - Consumables | Noel Solder Wire, Hakko, Velleman, Pro'sKit | Solder wick is composed of fine copper threads braided together. Flux is added to help molten solder flow from unwanted areas (such as PCB pads or jumpers) into the wick. It is commonly used for removing excess solder during PCB repair, rework, and component replacement. Solder wick is also known as desolder braid. This version offers good performance at an affordable price. It efficiently absorbs solder and is suitable for DIY users, repair technicians, and lab use. | Material: Copper (Braided with Flux Coating) Width: 2.5 mm Usage: PCB Desoldering / Rework Shipping Weight: 0.008 kg Shipping Dimensions: 8 x 5 x 2 cm | Desoldering Wick • Solder Braid • 2.5mm • Copper • Flux Coated • PCB Rework • DIY • Repair • Lab Use |

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| No Image | COE-00001-A | 9V DC Battery | CO - Consumables | Duracell, Energizer, Panasonic | This is general 9V Battery for all your project and application needs. Whether you need a new battery for your applications like a Flashlight, Portable Phone Charger, Wireless doorbell, Wireless audio transmitter-receiver systems or your kid's toys, etc. or even if you are looking for a long-lasting, reliable option for your sensor devices like a smoke detector, everyone needs a good 9-volt battery every once in a while. It's also a great idea to keep extra 9 volt batteries around in case of an emergency. That's why we've found one of the best 9-volt battery available. | Nominal Capacity (mAh): 400-500 Nominal Voltage (V): 9 Compatibility: Toys, Smoke Alarms, Transistors Length (mm): 25 Width (mm): 15 Weight (g): 36 | 9V Battery • DC Battery • Alkaline Battery • NiMH Battery • Power Supply • Battery Pack |
| No Image | COE-00001-B | Battery | CO - Consumables | Duracell, Energizer, Panasonic, Sony | Standard AA battery used for powering electronic devices, embedded systems, toys, sensors, remote controls, robotics, and portable equipment. It provides reliable portable power with stable voltage output and is widely used in consumer electronics, educational kits, IoT devices, and DIY electronics projects. | Battery Type: AA Cylindrical Battery Output Voltage: 1.5V Chemistry: Alkaline / NiMH / Lithium Capacity: 1800mAh – 3000mAh Diameter: 14.5mm Length: 50.5mm | Alkaline Battery • AA battery • cylindrical battery • rechargeable battery • portable power • battery cell |
| No Image | COE-00001-C | CR2025 3V Lithium Coin Cell | CO - Consumables | Panasonic | .Panasonic CR2025 is a 3V lithium coin cell battery designed for long-lasting and reliable power in compact electronic devices. Built using Lithium Manganese Dioxide (LiMnO?) chemistry, it offers stable discharge characteristics and a shelf life of up to 10 years under proper storage conditions. Suitable for car key remotes, medical devices, digital watches, calculators, fitness devices, memory backup systems, and other small electronics. | Battery Type: Lithium Coin Cell Battery Size: CR2025 Chemistry: Lithium Manganese Dioxide (LiMnO?) Nominal Voltage: 3 V Nominal Capacity: 165 mAh Diameter: 20 mm Height: 2.5 mm Termination Style: Pressure Contacts Operating Temperature: –30°C to +60°C Weight (Unit): 2.3 g Shipping Weight: 0.008 kg Shipping Dimensions: 9.2 x 7.5 x 1 cm | CR2025 Battery • 3V Coin Cell • Lithium Battery • Panasonic Battery • Button Cell |
| No Image | COE-00002-A | Plusivo 30AWG Silicone Hookup Wire Kit | CO - Consumables | Plusivo | Assorted 30AWG silicone hookup wires, ultra-flexible and durable for electronics and DIY projects. Includes 6 colors × 20m each, totaling 120 meters, perfect for prototyping and wiring. Bonus items like heat shrink tubes, mini wire stripper, and colored wire ties included in a dispensing box. | Brand: Plusivo Item Type: Hookup Wire Kit Wire Gauge: 30 AWG Conductor Material: 0.08 mm Tinned Copper (Stranded) Insulation Material: Silicone Rated Voltage: 300 V Rated Temperature: 200°C Wire Length: 20 meters per color (6 colors) Total Wire Length: 120 meters Weight: 285 g Shipping Weight: 0.27 kg Shipping Dimensions (L x W x H): 15 x 7 x 7 cm | Hookup Wire • Silicone Wire • Stranded Wire • 30AWG • Prototyping • Electronics |
| No Image | COE-00003-A | Hook up wire | CO - Consumables | Alpha Wire, Belden, Adafruit | Single strand hook up wire designed for electrical connections, breadboard prototyping, PCB wiring, robotics, and embedded electronics applications. It provides reliable conductivity, flexible routing, and durable insulation for low-voltage electronic circuits and power distribution tasks. | Wire Type: Single Strand Hook Up Wire Conductor Material: Copper Wire Gauge: 22AWG – 26AWG Rated Voltage: 300V Temperature Rating: 80°C | Breadboard Wire • Jumper Wire • hook up wire • single core wire • copper wire • PCB wire |
| No Image | COM-00001-A | 3D Filament | CO - Consumables | Creality, eSUN, Hatchbox | High-quality 1.75mm white 3D printing filament designed for FDM/FFF 3D printers used in prototyping, educational models, robotics, product design, and engineering applications. It provides smooth extrusion, reliable layer adhesion, low warping, and consistent print quality for detailed prints and structural models. | Filament Type: PLA / ABS / PETG Filament Diameter: 1.75mm Color: White Spool Weight: 1kg Printing Temperature: 190°C – 220°C Heated Bed Temperature: 0°C – 60°C | 3D filament • PLA filament • white filament • 1.75mm filament • FDM filament • 3D printer material |
| No Image | COM-00001-B | 3D Filament | CO - Consumables | Creality, eSUN, Hatchbox | High-quality 1.75mm black 3D printing filament designed for FDM/FFF 3D printers used in prototyping, robotics, engineering models, product design, and fabrication applications. It provides smooth extrusion, strong layer adhesion, low warping, and consistent print quality for detailed and durable prints. | Filament Type: PLA / ABS / PETG Filament Diameter: 1.75mm Color: Black Printing Temperature: 190°C – 220°C Heated Bed Temperature: 0°C – 60°C | 3D filament • PLA filament • 1.75mm filament • FDM filament • 3D printer material • black filament |
| No Image | COM-00001-C | 3D Filament | CO - Consumables | Creality, eSUN, Hatchbox | High-quality 1.75mm yellow 3D printing filament designed for FDM/FFF 3D printers used in prototyping, educational models, robotics, engineering applications, and creative fabrication projects. It provides smooth extrusion, strong layer adhesion, low warping, and consistent print quality for accurate and durable printed parts. | Filament Type: PLA / ABS / PETG Filament Diameter: 1.75mm Color: Yellow Printing Temperature: 190°C – 220°C Heated Bed Temperature: 0°C – 60°C | 3D filament • PLA filament • 1.75mm filament • FDM filament • 3D printer material • yellow filament |

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|----------|-------------|-------------|------------------|--------------------------|--|---|---|
| No Image | COM-00001-D | 3D Filament | CO - Consumables | Creality, eSUN, Hatchbox | High-quality 1.75mm blue 3D printing filament designed for FDM/FFF 3D printers used in prototyping, robotics, engineering models, educational projects, and creative fabrication applications. It provides smooth extrusion, strong layer adhesion, low warping, and consistent print quality for durable and accurate printed parts. Commonly used in electronics enclosures, robotic components, mechanical prototypes, DIY fabrication, and industrial product development. | Filament Type: PLA / ABS / PETG Filament Diameter: 1.75mm Color: Blue Printing Temperature: 190°C – 220°C Heated Bed Temperature: 0°C – 60°C | 3D filament • PLA filament • 1.75mm filament • FDM filament • 3D printer material • blue filament |

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|----------|-------------|--------------------------------------|------------------------|---|---|--|---|
| No Image | COM-00002-A | 3D Filament | CO - Consumables | eSUN | High-quality 2.85mm white 3D printing filament designed for FDM/FFF 3D printers used in engineering prototypes, robotics, educational models, industrial fabrication, and product development applications. It provides smooth extrusion, strong layer adhesion, low warping, and consistent print quality for accurate and durable printed parts. Commonly used in electronics enclosures, robotic structures, mechanical models, DIY fabrication, and industrial design projects. | Filament Type: PLA / ABS / PETG Filament Diameter: 2.85mm Color: White Spool Weight: 750g – 1kg Printing Temperature: 190°C – 220°C Heated Bed Temperature: 0°C – 60°C | 3D filament • PLA filament • white filament • FDM filament • 3D printer material • 2.85mm filament |
| No Image | COM-00002-B | 3D Filament | CO - Consumables | eSUN | High-quality 2.85mm black 3D printing filament designed for FDM/FFF 3D printers used in prototyping, robotics, industrial fabrication, engineering models, and product development applications. It provides smooth extrusion, strong layer adhesion, low warping, and consistent print quality for durable and accurate printed components. Commonly used in electronics enclosures, robotic structures, mechanical prototypes, DIY fabrication, and industrial design projects. | Filament Type: PLA / ABS / PETG Filament Diameter: 2.85mm Color: Black Spool Weight: 750g – 1kg Printing Temperature: 190°C – 220°C Heated Bed Temperature: 0°C – 60°C | 3D filament • PLA filament • FDM filament • 3D printer material • black filament • 2.85mm filament |
| No Image | COM-00002-C | 3D Filament | CO - Consumables | eSUN | High-quality 2.85mm yellow 3D printing filament designed for FDM/FFF 3D printers used in prototyping, robotics, educational models, industrial fabrication, and product development applications. It provides smooth extrusion, strong layer adhesion, low warping, and consistent print quality for accurate and durable printed parts. Commonly used in electronics enclosures, robotic structures, engineering prototypes, DIY fabrication, and industrial design projects. | Filament Type: PLA / ABS / PETG Filament Diameter: 2.85mm Color: Yellow Spool Weight: 750g – 1kg Printing Temperature: 190°C – 220°C Heated Bed Temperature: 0°C – 60°C | 3D filament • PLA filament • FDM filament • 3D printer material • yellow filament • 2.85mm filament |
| No Image | COM-00002-D | 3D Filament | CO - Consumables | eSUN | High-quality 2.85mm blue 3D printing filament designed for FDM/FFF 3D printers used in prototyping, robotics, engineering models, educational projects, and industrial fabrication applications. It provides smooth extrusion, strong layer adhesion, low warping, and consistent print quality for durable and accurate printed parts. Commonly used in electronics enclosures, robotic components, mechanical prototypes, DIY fabrication, and product development projects. | Filament Type: PLA / ABS / PETG Filament Diameter: 2.85mm Color: Blue Spool Weight: 750g – 1kg Printing Temperature: 190°C – 220°C | 3D filament • PLA filament • FDM filament • 3D printer material • blue filament • 2.85mm filament |
| No Image | EDA-00002-A | Alligator Clip to Female Dupont Wire | MM - Mechanical Module | Generic / OEM, KEYESTUDIO | 10-pin jumper wire set featuring insulated alligator (crocodile) clips on one end and female Dupont connectors on the other. Designed for quick and secure temporary electrical connections in DIY projects, prototyping, and laboratory testing. Widely used in school physics labs, breadboard testing, circuit assembly, and component holding during soldering. | Item Type: Electronics Accessory Jumper Type: Female Clip Length: 22.6 mm Cable Length: 20 cm Material: Copper with Plastic Insulation Shipping Weight: 0.04 kg Shipping Dimensions: 7 x 4 x 2 cm | Alligator Clip Wire • Dupont Jumper Wire • 10 Pin Jumper • Crocodile Clip Cable • 20cm Test Lead |
| No Image | EDD-00001-A | Laser Diode | ED - Electronic Device | OSRAM, Sharp, Rohm, Mitsubishi, Generic | Mini 650nm 6mm 5mW Laser Dot Diode Module which is made of copper plastic. Can be driven from 3V to 5V DC so they're great for your embedded electronics project, robot, or other application. You require a 3 to 5VDC power supply which you'd get from two standard AAA or AA batteries. These diodes are 5mW output and have a safety label marked on them. It is suitable for 3V 5mW standard, with 6mm outside diameter, can be used to connect diode tubes for multiple uses. | Item Type: Laser Module Voltage Rating (V): 5 Weight (g): 2 Operating Temperature (°C): -10 to 50 Rated Power (mW): 5mW Wavelength (nm): 650 | laser diode • laser • light emitter • optical • semiconductor • electronic device |
| No Image | EDD-00002-A | Red LED | ED - Electronic Device | Generic | Red Light Emitting Diode (LED) used as a visual indicator in electronic circuits and projects. Features a 10mm DIP package that emits bright red light with low power consumption and long operating life. Ideal for TVs, monitors, telephones, computers, status indicators, prototyping, educational experiments, DIY electronics, and general-purpose electronic applications. | Case/Package: DIP Diameter (mm): 10 Mounting Type: Through Hole Lens Appearance: Transparent Color: Red Forward Voltage (V): 2 Forward Current (mA): 30 Shipping Weight: 0.001 kg Shipping Dimensions (L x W x H): 1 x 1 x 1 cm | Red LED • Indicator LED • Through Hole LED • DIP LED • 10mm LED |
| No Image | EDD-00002-B | Green LED | ED - Electronic Device | Generic | Green Light Emitting Diode (LED) used as a visual indicator in electronic circuits and projects. Features a 3mm round transparent package that emits bright green light with low power consumption and long service life. Ideal for TVs, monitors, telephones, status indicators, DIY electronics, prototyping, educational experiments, and general-purpose electronic applications. | Case/Package: DIP Diameter (mm): 8 Mounting Type: Through Hole Lens Appearance: Transparent Color: Green Forward Voltage (V): 3.5 Forward Current (mA): 30 Shipping Weight: 0.001 kg Shipping Dimensions (L x W x H): 1 x 1 x 1 cm | Indicator LED • Through Hole LED • DIP LED • Green LED • 8mm LED |

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|----------|--------------------|-------------------------------|------------------------|---|---|--|---|
| No Image | EDD-00002-C | Yellow LED | ED - Electronic Device | Generic | Yellow Light Emitting Diode (LED) used as a visual indicator in electronic circuits and projects. Features a 10mm DIP package with a transparent body that emits bright yellow light. Ideal for TVs, monitors, telephones, computers, status indicators, control panels, prototyping, educational experiments, DIY electronics, and general-purpose electronic applications. | Case/Package: DIP Diameter (mm): 10 Mounting Type: Through Hole Lens Appearance: Transparent Color: Yellow Forward Voltage (V): 3.2 Forward Current (mA): 30 Shipping Weight: 0.001 kg Shipping Dimensions (L x W x H): 1 x 1 x 1 cm | Indicator LED • Through Hole LED • DIP LED • 10mm LED • Yellow LED |
| No Image | EDD-00002-D | Blue LED | ED - Electronic Device | Generic | Blue Light Emitting Diode (LED) used as a visual indicator in electronic circuits and projects. Features a 3mm round transparent package that emits bright blue light with low power consumption and long operating life. Ideal for TVs, monitors, telephones, computers, DIY electronics, prototyping, educational experiments, and professional applications. | Mounting Type: Through Hole Through Hole LED Size (mm): 3 No. of Pins: 2 Color: Blue Head Shape: Round Shipping Weight: 0.001 kg Shipping Dimensions (L x W x H): 1 x 1 x 1 cm | Indicator LED • Through Hole LED • 3mm LED • DIP LED • Blue LED • Round LED |
| No Image | EDD-00002-E | White LED | ED - Electronic Device | ED Series / Generic | White Light Emitting Diode (LED) used as an indicator or illumination source in electronic circuits and projects. Features a 3mm DIP package with a transparent housing that emits bright white light. Ideal for display panels, electronic devices, status indicators, DIY electronics, prototyping, educational experiments, and professional electronic applications. | Manufacturer: ED Series / Generic Compatible – White LED (3mm, DIP Type) Case/Package: DIP Mounting Type: Through Hole Lens Appearance: Transparent Color: White Forward Voltage (V): 2.8 Forward Current (mA): 30 Shipping Weight: 0.001 kg Shipping Weight: 1 x 1 x 1 cm | Indicator LED • Through Hole LED • White LED • 3mm LED • DIP LED |
| No Image | EDD-00003-A | RGB LED Module | ED - Electronic Device | ED Series / XINGLIGHT, XINGLIGHT | 5mm RGB LED module with a common cathode configuration and transparent lens for vibrant multi-color illumination. Combines red, green, and blue LEDs in a single through-hole package, enabling a wide range of colors through color mixing. Ideal for indicator panels, Arduino projects, DIY electronics, decorative lighting, visual feedback systems, and educational applications. | Manufacturer: XINGLIGHT Model No.: XL-A524SURSYGC Package: Plugin, D = 5mm Forward Current (mA): 20 Color Temperature: - Peak Wavelength (nm): 640 (Red) 572 (Green: Yellow) Luminous Intensity (mcd): 600 (Red) 550 (Green: Yellow) Lens Color: Colorless Transparent Diode Configuration: Common Cathode Wavelength – Dominant (nm): 635–640 (Red) 565–575 (Green: Yellow) Operating Temperature (°C): -20 – +85 Illumination Color: Red, Green-Yellow Viewing Angle: 30° Lamp Holder Type: 5mm Round Head Power (mW): 50 Forward Voltage (Vf): 2.3V (Red) 2.4V (Green: Yellow) Mounting Type: Through Hole Compliance: RoHS | RGB LED • 5mm LED • Common Cathode LED • Indicator LED • Through Hole LED |
| No Image | EDD-00003-B | RGB LED Module | ED - Electronic Device | Jameco ValuePro, Jameco ValuePro, Adafruit Industries | 5mm high-brightness RGB LED module with a common anode configuration. Emits red, green, and blue light, allowing a wide range of colors through color mixing. Suitable for status indicators, Arduino projects, decorative lighting, educational experiments, displays, and DIY electronics. Easy to interface with microcontrollers for dynamic lighting and visual effects. | Manufacturer: Generic Model Type: Common Anode RGB LED Package: 5mm Round (Clear Lens) Color: Red, Green, Blue Configuration: Common Anode Brightness: High Current Consumption: Low Operating Voltage: 2.0–3.2V (per color) Forward Current (mA): 20 (per channel) Power Efficiency: High Luminous Output, Low Heat Material: Epoxy Resin, Gold Wire Leads Mounting Type: Through Hole Item Size: 5mm Shipping Weight: 0.001 kg Shipping Dimensions (L x W x H): 1 x 1 x 1 cm | RGB LED • 5mm LED • Indicator LED • Through Hole LED • Common Anode LED |
| No Image | EDD-00004-A | 1 Digit 7-Segment LED Display | ED - Electronic Device | Lite-On Technology, Kingbright, Generic / OEM | The 0.56" and 1-Digit 7-Segment LED Display is designed to display decimal numbers (0–9) using seven LED segments. It features a common cathode configuration with bright red LEDs for clear and efficient numeric indication. Ideal for digital clocks, counters, meters, and microcontroller-based display applications. | Model: 7 Segment LED Display Digit Count: 1 Digit Display Size: 0.56 Inch Configuration Type: Common Cathode Emitting Color: Red Face Color: Black Number of Pins: 10 Forward Voltage (V): 1.8 – 2.2 (Typical for Red LED) Forward Current (mA): 20 (Typical) Mounting Type: PCB Through Hole Characteristics: High Brightness, Low Current Consumption, Easy to Use Length (Inch): 0.56 Shipping Weight: 0.02 kg Shipping Dimensions (L x W x H cm): 6 x 4 x 2 | Arduino Compatible • 0.56" 7-Segment • 1 Digit Display • Red LED • Common Cathode • 5161AS • Through Hole • Numeric Display |

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| No Image | EDD-00004-B | 7 Segment Display, 1 digit device | ED - Electronic Device | Kingbright, Lite-On, Everlight, Broadcom | Single digit common anode 7 segment LED display device designed for numeric indication in embedded systems, counters, timers, clocks, measurement instruments, and electronics projects. It provides bright numeric visualization with low power consumption and simple interfacing using microcontrollers and digital logic circuits. Commonly used in Arduino projects, digital counters, calculators, industrial control panels, and educational electronics applications. | Display Type: 1 Digit 7 Segment LED Display Configuration: Common Anode Operating Voltage: 1.8V – 2.2V per Segment Number of Pins: 10 Pins Digit Height: 0.36 Inch – 0.56 Inch | Numeric Display • 7 segment display • common anode display • single digit display • LED display |
| No Image | EDD-00005-A | 5Volt regulator | ED - Electronic Device | Texas Instruments, STMicroelectronics, ON Semiconductor, Fairchild Semiconductor | LM7805 TO-92 voltage regulator device designed to provide stable 5V DC output for electronic circuits, embedded systems, sensors, and microcontroller applications. It regulates higher input voltage into a constant 5V output with built-in thermal overload and short-circuit protection for reliable operation. Commonly used in Arduino projects, power supply circuits, IoT devices, educational electronics kits, and low-power embedded systems. | Device Type: Linear Voltage Regulator Output Voltage: 5V DC Package Type: TO-92 Input Voltage Range: 7V – 20V Output Current: Up to 100mA | LM7805 • voltage regulator • 5V regulator • TO-92 regulator • linear regulator • power supply IC |
| No Image | EDD-00005-B | 12Volt regulator | ED - Electronic Device | Texas Instruments, STMicroelectronics, ON Semiconductor, Fairchild Semiconductor | LM7812 TO-92 voltage regulator device designed to provide stable 12V DC output for electronic circuits, embedded systems, communication modules, and power supply applications. It regulates higher input voltage into a constant 12V output with built-in thermal overload and short-circuit protection for reliable operation. Commonly used in power management circuits, robotics systems, Arduino projects, industrial electronics, and educational embedded applications. | Device Type: Linear Voltage Regulator Output Voltage: 12V DC Package Type: TO-92 Input Voltage Range: 14V – 30V Output Current: Up to 100mA | voltage regulator • TO-92 regulator • linear regulator • power supply IC • LM7812 • 12V regulator |
| No Image | EDD-00005-C | 6Volt regulator | ED - Electronic Device | Texas Instruments, STMicroelectronics, ON Semiconductor, Fairchild Semiconductor | LM7806 TO-92 voltage regulator device designed to provide stable 6V DC output for electronic circuits, embedded systems, sensors, and low-power applications. It regulates higher input voltage into a constant 6V output with built-in thermal overload and short-circuit protection for reliable and safe operation. Commonly used in Arduino projects, battery-powered systems, robotics circuits, educational electronics kits, and embedded development applications. | Device Type: Linear Voltage Regulator Output Voltage: 6V DC Package Type: TO-92 Input Voltage Range: 8V – 20V Output Current: Up to 100mA | voltage regulator • TO-92 regulator • linear regulator • power supply IC • LM7806 • 6V regulator |
| No Image | EDK-00001-A | Electrolytic capacitor | ED - Electronic Device | Nichicon, Panasonic, Rubycon, Nippon Chemi-Con | Electrolytic capacitor designed for energy storage, filtering, voltage smoothing, signal coupling, and power supply stabilization in electronic circuits and embedded systems. It provides high capacitance values with polarized construction for efficient performance in DC power applications and low-frequency filtering circuits. Commonly used in power supplies, amplifiers, Arduino projects, motor drivers, industrial electronics, and embedded development systems. | Capacitor Type: Aluminum Electrolytic Capacitor Capacitance Range: 1µF – 10000µF Voltage Rating: 6.3V – 450V Operating Temperature: -40°C to +105°C | electrolytic capacitor • aluminum capacitor • polarized capacitor • filtering capacitor |
| No Image | EDK-00002-A | Ceramic capacitor | ED - Electronic Device | Generic, Murata, TDK, KEMET | A capacitor is a passive two-terminal electrical component used to store energy electrostatically in an electric field. It includes 20 capacitor values, 5 pieces of each type with a total of 100 capacitors. | Quantity: 100pcs (5 each per Value) Voltage: 50V | Electronics • passive • capacitor • ceramic • capacitor set |
| No Image | EDK-00003-A | transistors | ED - Electronic Device | ON Semiconductor, Fairchild Semiconductor, Toshiba, NXP Semiconductors | TO-92 transistor kit containing multiple commonly used NPN and PNP transistors for switching, amplification, signal processing, and embedded electronics applications. It provides a compact assortment of semiconductor devices suitable for prototyping, Arduino projects, educational electronics, robotics systems, and circuit development work. Commonly used in amplifier circuits, sensor interfacing, motor control, switching applications, and DIY electronics projects. | Package Type: TO-92 Transistor Types: NPN and PNP Operating Voltage: Up to 60V Current Rating: Up to 800mA Current Rating: Up to 800mA | transistor kit • TO-92 transistor • NPN transistor • PNP transistor • semiconductor kit • switching transistor |
| No Image | EDK-00004-A | Metal Film Resistor Assorted Kit | ED - Electronic Device | Generic | Assorted kit of 600 metal film resistors with 30 different values, 20 pcs each. 1/4W, 1% tolerance resistors suitable for precise electronic, DIY, and educational projects. | Manufacturer: Generic Model Name: 600 pcs. Metal Film Resistor Assorted kit – 30 Kinds Power Rating: 1/4W Tolerance (%): 1 Material Type: Metal Film Package Type: Axial Lead Temperature Stability: High (Better than Carbon Film) Noise Level: Low Frequency Suitability: Suitable for RF and High-Frequency Applications Number of Values: 30 Total Quantity: 600 pcs Quantity per Value: 20 pcs Shipping Weight: 0.001 kg Shipping Dimensions (L x W x H): 1 x 1 x 1 cm | Ideal for prototyping • learning resistor color codes • testing • and circuit experiments. |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|----------------------------|------------------------|---|--|---|---|
| No Image | EDK-00005-A | Switch Kit | ED - Electronic Device | Omron, C&K, E-Switch | Electronic switch kit containing assorted push buttons, tactile switches, toggle switches, slide switches, and rocker switches for circuit control and user input applications. It provides reliable switching solutions for prototyping, embedded systems, Arduino projects, robotics, and educational electronics development. Commonly used in control panels, DIY electronics, power switching circuits, IoT devices, and breadboard prototyping applications. | Product Type: Electronic Switch Assortment Kit Switch Types: Push Button, Toggle, Slide, Rocker, Tactile Operating Voltage: 3V – 250V Current Rating: Up to 5A | Tactile Switch • switch kit • push button switch • toggle switch • slide switch • rocker switch |
| No Image | EDK-00006-A | Diode and Transistor Kit | ED - Electronic Device | ON Semiconductor, Vishay, STMicroelectronics, Fairchild Semiconductor | Diode and transistor kit containing a selection of commonly used semiconductor components including rectifier diodes, signal diodes, Zener diodes, NPN and PNP transistors for electronics prototyping and circuit development. It provides essential components for switching, signal control, rectification, voltage regulation, and amplification in embedded systems. | Kit Type: Semiconductor Assortment Kit Components Included: Diodes (Rectifier, Signal, Zener), NPN & PNP Transistors Max Voltage: Up to 1000V (depending on component) Max Current: Up to 3A (depending on component) | transistor kit • NPN transistor • semiconductor kit • diode kit • rectifier diode • Zener diode |
| No Image | EDM-00001-A | Tactile Push Button Switch | ED - Electronic Device | OMRON, E-Switch | 12x12x7.3mm tactile push button switches with momentary ON-OFF operation. Rated for 12V DC and 120mA with responsive tactile feedback. Includes 25 color-coded round keycaps and storage box for prototyping and DIY projects. | Item Type: Micro Switch Model: Tactile Push Button Switch Operation Mode: ON-OFF Contact Type: Momentary Current Rating: 120mA Operating Voltage: 12V DC Switch Type: Push Button Material: Metal and Plastic Mounting Type: Surface Mount Button Size (mm): 12x12x7.3 Operating Temperature (°C): -25 to +70 Lifespan: ~1000 Cycles Box Dimensions (mm): 127.1 x 68.3 x 21.9 Weight (g): 55 Shipping Weight: 0.06 kg Shipping Dimensions (L x W x H): 13 x 7 x 3 cm | Tactile Switch • Push Button • 12x12mm Switch • Momentary Switch • Arduino Button Kit |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|-------------|-----------------------------------|------------------------|--|--|---|--|
| No Image | EDM-00002-A | Power switch | ED - Electronic Device | C&K, Omron | On/Off power switch designed for controlling electrical power in electronic devices, embedded systems, power supplies, and DIY projects. It provides reliable switching action for safely turning circuits ON and OFF with stable electrical contact and long operational life. | Switch Type: SPST (Single Pole Single Throw) Rated Voltage: 125V – 250V AC / 12–24V DC Rated Current: 3A – 10A | toggle switch • rocker switch • power switch • on off switch • SPST switch • electrical switch |
| No Image | EDM-00002-B | Power switch | ED - Electronic Device | C&K, Omron | On/Off power switch designed for controlling electrical power flow in electronic devices, power supplies, embedded systems, and DIY electronics projects. It provides a simple and reliable way to turn circuits ON and OFF with stable contact performance and long operational life. | Switch Type: SPST (Single Pole Single Throw) Rated Voltage: 125V – 250V AC / 12–24V DC Rated Current: 3A – 10A | toggle switch • rocker switch • power switch • SPST switch • electrical switch • on/off switch |
| No Image | EDM-00003-A | (DPDT) Toggle Switch | ED - Electronic Device | C&K, E-Switch, Omron | DPDT (Double Pole Double Throw) toggle switch designed for reversing polarity, signal routing, and multi-circuit control in electronic systems. It allows two separate circuits to be switched between two different output paths, making it ideal for motor direction control, signal switching, and embedded system applications. | Switch Type: DPDT (Double Pole Double Throw) Number of Pins: 6 Pins Rated Voltage: 125V – 250V AC / 12–30V DC Rated Current: 3A – 6A | toggle switch • DPDT switch • 6 pin switch • polarity reversing switch • control switch |
| No Image | EDM-00004-A | Alligator clips | ED - Electronic Device | Pomona Electronics, Mueller Electric, E-Z-Hook, Klein Tools | Alligator clips without test leads designed for temporary electrical connections, prototyping, testing, and laboratory electronics work. These clips provide quick and secure contact with wires, batteries, sensors, and circuit terminals without soldering. Commonly used in Arduino projects, robotics testing, DIY electronics, educational kits, and troubleshooting circuits. | Clip Type: Alligator / Crocodile Clip Material: Nickel Plated Steel Opening Width: 5mm – 15mm Electrical Rating: Low Voltage (| alligator clip • crocodile clip • test clip • battery clip • jumper clip • electronics clip • prototyping clip |
| No Image | EDM-00005-A | Solderless Prototyping Breadboard | ED - Electronic Device | MWduino / Generic | Complete prototyping kit with 400-point solderless breadboard and T-type GPIO breakout module. Includes 40-pin flat ribbon cable for clean and organized Raspberry Pi GPIO access. Ideal for Raspberry Pi projects, circuit prototyping, and educational experimentation. | Item Type: Cable Model: GPIO Compatibility: Raspberry Pi 3 Model B/B+ T: Connector Dimensions (mm): 72 x 59 x 12 T: Connector Weight (g): 13 Pitch (mm): 2.54 Cable Length (cm): 20 (Flat Ribbon) No. of Pins: 40 Width of Cable (cm): 5.5 Additional Specs (mm): 84 x 55 x 8.5 (L x W x H) No. of Tie Points: 400 Weight (g): 40 Material: ABS Plastic Shipping Weight: 0.06 kg Shipping Dimensions (L x W x H): 10 x 7 x 7 cm | Breadboard 400 Point • GPIO Breakout Board • Raspberry Pi GPIO • T-Type Adapter • 40 Pin Ribbon Cable |
| No Image | EDM-00005-B | Breadboard Mini | ED - Electronic Device | BusBoard Prototype, Twin Industries, Elegoo, SunFounder, Generic | Material: ABS Mini Solderless Breadboard Tie-point: 170 Completely reusable Colored coordinates for easy component placement Size: 45x34x9mm (1.771.34x0.35 inch) Color: Red, Black, White, Blue, Green | Item Type: Breadboard No. of Points: 170 Tie Points: 170 Material: ABS Mounting holes: M2 Length (mm): 48 Width (mm): 35 Height (mm): 9 Weight (g): 14 | testing • Prototyping • Electronics • breadboard • mini breadboard • pcb • solderless |
| No Image | EDM-00005-C | Full-size breadboard | ED - Electronic Device | BusBoard Prototype, Twin Industries, Elegoo, SunFounder, Generic | An MB102 830 Points Solderless Prototype PCB Breadboard High Quality is an invaluable tool for experimenting with circuit designs whether in the R&D or university lab. A MB102 830 Points Solderless Prototype PCB Breadboard High Quality is used to make up temporary circuits for testing or to try out an idea. No soldering is required so it is easy to change connections and replace components. | Item Type: Breadboard, Solderless Type No. of Points: 830 Material: ABS | testing • Prototyping • Electronics • breadboard • pcb • solderless • full size breadboard |
| No Image | EDM-00005-D | PROTOTYPING SHIELD | ED - Electronic Device | Arduino, Keyes, DFRobot, Seeed Studio, Generic | Arduino Uno Protoshield directly fits into an Arduino UNO board and breaks out the I/O pins and makes it an expansion board. It makes it very easy to design any customer circuit. You can directly solder components on the board or connect the circuit using 170 point mini breadboard (included). The board is designed to solder both through-hole and SMD components to test them with your Arduino board. Although the SMD area is designed for 24 Pins SOIC integrated circuit and has a lot of space for TH components. | Breadboard Points: 170 Breadboard Size: 4.8x3.4 cm Shield Size: 7x5.4 cm | DIY • Electronics • pcb • arduino shield • prototyping shield • uno shield • development |
| No Image | EDM-00006-A | Male Headers | ED - Electronic Device | Samtec, Amphenol, Harwin, TE Connectivity, Molex | This break-away header can be snapped between any pair of pins to created any length header. | Pitch Size: 2.54mm (0.1 Inch) Connector Type: Male Pin Header Number of Pins: 40 Pins Mounting Type: Through Hole Current Rating: 3A Typical | Male Header • Pin Header • PCB Connector • Arduino Header • Breakaway Header • 2.54mm Header |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|----------------|--------------------------------------|------------------------|--|---|--|---|
| No Image | EDM-00006-B | Headers | ED - Electronic Device | Molex, Harwin | 90 degree (right angle) header pins designed for PCB mounting and board-to-wire or board-to-board connections in electronic circuits. These connectors allow horizontal cable attachment, making them ideal for compact PCB layouts, Arduino shields, embedded systems, and robotics applications. | Connector Type: Right Angle Pin Header (90°) Pin Pitch: 2.54mm (Standard) Pin Count: 1x1 to multi-pin strips | Pin Header • PCB Connector • 90 degree header • right angle header • Arduino header pins |
| No Image | EDM-00007-A | Female Headers | ED - Electronic Device | Samtec, Amphenol, Harwin, TE Connectivity, Molex | It is a 2x40 Pin Female Double Row Header Strip. It has two rows of 40 pins each. Ideal for through-hole mounting. | Pitch Size: 2.54mm (0.1 Inch) Connector Type: Female Header Socket Number of Pins: 40 Pins Mounting Type: Through Hole Current Rating: 3A Typical | PCB Connector • 2.54mm Header • Female Header • Socket Header • Arduino Connector • Female Pin Header |
| No Image | EDM-00008-A | Telephone Connector Adapter (Female) | ED - Electronic Device | Amphenol, TE Connectivity, Molex | RJ-11 4P4C female connector adapter designed for telephone communication interfaces, modular wiring systems, and embedded electronics applications. It allows easy plug-in connection for telephone cables, modem lines, and low-speed communication signals. Commonly used in landline telephone systems, DSL modems, intercom setups, IoT communication experiments, and electronics prototyping. | Connector Type: RJ-11 4P4C Female Jack Number of Contacts: 4 Pin (4P4C) Material: Thermoplastic Housing with Metal Contacts Rated Voltage: Low Voltage Signal (| RJ11 connector • 4P4C female jack • telephone adapter • modular connector • communication jack |
| No Image | EDM-00009-A | PCB board | ED - Electronic Device | Bud Industries, Twin Industries, BusBoard Prototype Systems, Keyestudio, Generic / OEM | High-quality 4x6 cm universal PCB prototype board designed for circuit prototyping and DIY electronics development. Manufactured using HASL surface finish and CNC-drilled through holes for reliable soldering and durability. | Item Type: PCB Prototype Board Dimensions: 4 x 6 cm Length: 60 mm Width: 40 mm Board Thickness: 1.6 mm Copper Thickness: 1-4 oz Minimum Hole Size: 0.3 mm Weight (Unit): 6 g Pack Quantity: 2 Pieces Shipping Weight: 0.01 kg Shipping Dimensions: 7 x 5 x 1 cm | Double-Sided PCB • 4x6 cm • FR4 • Prototype Board • 2.54mm Pitch • DIY Electronics |
| No Image | EDR-00001-100Z | Resistor - 100 Ohm | ED - Electronic Device | Yageo, Vishay, KOA Speer, TE Connectivity, Generic | 1. 100 ohm Carbon Film Resistors are typical axial-lead resistors, which have much better temperature stability and provide lower noise, and are generally better for high frequency or radiofrequency applications. 2. We made it available in the form of a bunch of different values as required for the project to provide convenience, so you need not find a differently required value resistor at different places while working on your project. | Series: – Resistance (Ohm): 100 Tolerance (%): 1 Power Rating: 250mW Composition: Metal Film Temperature Coefficient: +/-50ppm/°C Operating Temperature (°C): -40 ~ 150 Case/Package: Axial Length (mm): 6 Mounting Type: Through Hole Shipping Weight: 0.001 kg Shipping Dimensions: 1 x 1 x 1 cm | resistor • 100ohm • carbon film • passive component |
| No Image | EDR-00001-10K0 | Resistor - 10K Ohm | ED - Electronic Device | Yageo, Vishay, KOA Speer, TE Connectivity, Generic | 1.10K/100? Carbon Film Resistors are typical axial-lead resistors that offer good temperature stability and low noise performance. They are suitable for general-purpose electronic circuits, including high-frequency and RF applications. 2.These resistors are available in multiple values for project flexibility, eliminating the need to source different resistor values separately. | Power: 1/4 W Resistance: 100 ? Resistance Tolerance: 5% Type: Carbon Film Resistors | Through Hole • carbon film • 10k resistor • 0.25w • passive • axial |
| No Image | EDR-00001-1K00 | Resistor - 1K Ohm | ED - Electronic Device | Yageo, Vishay, KOA Speer, TE Connectivity, Generic | 1K ohm Carbon Film Resistors are typical axial-lead resistors, which have much better temperature stability and provide lower noise, and are generally better for high frequency or radiofrequency applications. | Series: – Resistance (Ohm): 1k Tolerance (%): 1 Power Rating: 250mW Composition: Metal Film Temperature Coefficient: +/-50ppm/°C Operating Temperature (°C): -40 ~ 150 Case/Package: Axial Length (mm): 6 Mounting Type: Through Hole Shipping Weight: 0.001 kg Shipping Dimensions: 1 x 1 x 1 cm | carbon film • 0.25w • passive • 1k resistor |
| No Image | EDR-00001-1M00 | Resistor - 1M Ohm | ED - Electronic Device | Yageo, Vishay, KOA Speer, TE Connectivity, Generic | It is a 1M Ohm 0.25W Metal Film Resistor. This resistor is for through-hole applications. | Series: - Resistance (Ohm): 1M Tolerance (%): 1 Power Rating: 250mW Composition: Metal Film Temperature Coefficient: +/-50ppm/°C Operating Temperature (°C): -40 ~ 150 Case/Package: Axial Length (mm): 6 Mounting Type: Through Hole Shipping Weight: 0.001 kg Shipping Dimensions: 1 x 1 x 1 cm | 0.25w • passive • 1m resistor • metal film |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|-----------------------|---------------------------|------------------------|---|--|---|--|
| No Image | EDR-00001-220Z | Resistor - 220 Ohm | ED - Electronic Device | Yageo, Vishay, KOA Speer, TE Connectivity, Generic | It is a 220 Ohm 0.25W Metal Film Resistor. This resistor is for through-hole applications. | Series: – Resistance (Ohm): 220 Tolerance (%): 1 Power Rating: 250mW Composition: Metal Film Temperature Coefficient: +/-50ppm/°C Operating Temperature (°C): -40 ~ 150 Case/Package: Axial Length (mm): 6 Mounting Type: Through Hole Shipping Weight: 0.001 kg Shipping Dimensions: 1 x 1 x 1 cm | |
| No Image | EDR-00001-330Z | Resistor - 330 Ohm | ED - Electronic Device | Yageo, Vishay, KOA Speer, TE Connectivity, Generic | It is a 330 Ohm 0.25W Metal Film Resistor. This resistor is for through-hole applications. | Series: – Resistance (Ohm): 330 Tolerance (%): 1 Power Rating: 250mW Composition: Metal Film Temperature Coefficient: +/-50ppm/°C Operating Temperature (°C): -40 ~ 150 Case/Package: Axial Length (mm): 6 Mounting Type: Through Hole Shipping Weight: 0.001 kg Shipping Dimensions: 1 x 1 x 1 cm | |
| No Image | EDR-00001-470Z | Resistor - 470 Ohm | ED - Electronic Device | Yageo, Vishay, KOA Speer, TE Connectivity, Generic | It is a 470 Ohm 0.25W Metal Film Resistor. This resistor is for through-hole applications. | Power: 1/4 W Resistance: 47k ? Resistance Tolerance: 5% Type: Carbon Film Resistors | resistor • carbon film • 0.25w • passive • axial • 470ohm |
| No Image | EDR-00001-680Z | Resistor - 680 Ohm | ED - Electronic Device | Yageo, Vishay, KOA Speer, TE Connectivity, Generic | It is a 680 Ohm 0.25W Metal Film Resistor. This resistor is for through-hole applications. | Series: – Resistance (Ohm): 680 Tolerance (%): 1 Power Rating: 250mW Composition: Metal Film Temperature Coefficient: +/-50ppm/°C Operating Temperature (°C): -40 ~ 150 Case/Package: Axial Length (mm): 6 Mounting Type: Through Hole Shipping Weight: 0.001 kg Shipping Dimensions: 1 x 1 x 1 cm | resistor • carbon film • 0.25w • passive • axial • 680ohm |
| No Image | EDR-00002-10K0 | Potentiometer | ED - Electronic Device | ED Series / Generic Compatible, Bourns, Alpha, Omega | 10K? rotary potentiometer used for adjusting voltage, current, and signal levels in electronic circuits. Features smooth single-turn rotation, a durable 15mm shaft, and through-hole mounting for easy installation. Ideal for audio volume control, Arduino analog inputs, sensor calibration, circuit tuning, embedded systems, prototyping, and educational electronics projects. | Manufacturer: Generic Resistance (Ohm): 10K Tolerance (%): 20 Temperature Coefficient: ±100ppm/°C Operating Temperature (°C): -40 to 80 Mounting Type: Through Hole Shaft Type: 15mm Rotary Shaft Adjustment Type: Single Turn Length (mm): 20 Width (mm): 17 (Body Diameter) Height (mm): 24 Weight (g): 6 Shipping Weight: 0.001 kg Shipping Dimensions (L x W x H): 1 x 1 x 1 cm | 10K Potentiometer • Rotary Pot • Variable Resistor • WH148 Potentiometer • 3-Pin Pot |
| No Image | EDR-00002-20K0 | Potentiometer | ED - Electronic Device | Bourns, Panasonic, Alps Alpine | 20K? linear potentiometer designed for adjustable resistance control in electronic circuits, embedded systems, and analog signal applications. It provides smooth variable resistance output for controlling voltage levels, sensor calibration, audio control, and microcontroller analog input tuning. | Resistance Value: 20K? Type: Linear Potentiometer Tolerance: ±10% (typical) Power Rating: 0.1W – 0.5W Rotation Angle: ~270° | Rotary Pot • Variable Resistor • potentiometer • 20K ohm pot • linear potentiometer • analog control |
| No Image | EDS-00003-A | Temperature sensor Device | ED - Electronic Device | Maxim Integrated, Dallas Semiconductor, Adafruit, SparkFun | DS18B20 digital temperature sensor device designed for accurate temperature measurement in embedded systems, IoT applications, and electronics projects. It uses a One-Wire communication protocol, allowing multiple sensors to operate on a single data line for simplified wiring. | Sensor Type: Digital Temperature Sensor Communication: One-Wire Interface Operating Voltage: 3.0V – 5.5V Temperature Range: -55°C to +125°C | Temperature Sensor • digital sensor • DS18B20 • one wire sensor • Arduino temperature sensor |
| No Image | EDS-00004-A | Temperature sensor Module | ED - Electronic Device | Texas Instruments, National Semiconductor, STMicroelectronics | LM35 temperature sensor module designed for accurate analog temperature measurement in electronic circuits, embedded systems, and IoT applications. It provides a linear voltage output proportional to temperature in Celsius, making it easy to interface with microcontrollers like Arduino. Commonly used in weather monitoring systems, robotics, industrial temperature control, and educational electronics projects. | Sensor Type: Analog Temperature Sensor Output: Linear Analog Voltage (10mV/°C) Operating Voltage: 4V – 30V Temperature Range: 0°C to 100°C (typical) | Arduino Sensor • Temperature Sensor • analog sensor • LM35 • thermal sensor • IoT sensor |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|-------------------------------|------------------------|---|--|--|---|
| No Image | EDS-00005-A | IR (INFRARED) RECEIVER SENSOR | ED - Electronic Device | Vishay, Everlight, Sharp, Panasonic | Infrared (IR) receiver sensor module designed to detect and decode IR signals from remote controls in electronic systems. It receives modulated infrared light signals (typically 38kHz) and converts them into digital output for microcontroller processing. Commonly used in Arduino projects, robotics, home automation systems, TV remote decoding, and embedded electronics applications. | Sensor Type: Infrared Receiver Module Operating Voltage: 3.3V – 5V Carrier Frequency: 38kHz (typical) Detection Range: 5m – 10m (approx.) Wavelength: ~940nm Infrared | IR Receiver • Infrared Sensor • IR Decoder • IR remote sensor • TSOP sensor • Arduino IR module |
| No Image | EDS-00006-A | IC NE 555 | ED - Electronic Device | Texas Instruments, STMicroelectronics, ON Semiconductor, NXP, Generic | The NE 555 P timer IC is a precision timing circuit capable of producing accurate time delays or oscillation. In the time-delay or monostable mode of operation, the timed interval is controlled by a single external resistor and capacitor network. In the astable mode of operation, the frequency and duty cycle can be controlled independently with two external resistors and a single external capacitor. The threshold and trigger levels normally are two-thirds and one-third, respectively, of VCC. These levels can be altered by the use of the control voltage terminal. When the trigger input falls below the trigger level, the flip-flop is set, and the output goes high. If the trigger input is above the trigger level and the threshold input is above the threshold level, the flip-flop is reset and the output is low. | Case/Package: PDIP 8 Min Supply Voltage: 4.5 Max. Supply Voltage (V): 16 Product Type: Timers & Support Products Processor Series: NE555 No. of Timers/Counters: 1 Operating Temperature (°C): 0 to 70 Dimensions (L x W x H) mm: 9.81 x 4.57 x 6.35 Mounting Type: Through Hole | Electronics • ne555 • timer ic • oscillator • pulse generator • ic • astable |
| No Image | EDT-00001-A | Gas Sensor Device | ED - Electronic Device | N/A | | | |
| No Image | EDT-00001-B | Gas Sensor Device | ED - Electronic Device | Hanwei Electronics, Winsen | Gas sensor device designed for detecting alcohol vapors and ethanol concentration in the air. It is commonly used for breath alcohol detection systems, safety monitoring, and embedded IoT applications. The sensor provides analog output based on gas concentration, making it suitable for microcontroller-based systems like Arduino and Raspberry Pi. | Sensor Type: Alcohol / Ethanol Gas Sensor Target Gas: Ethanol (C ₂ H ₅ OH), Alcohol Vapors Operating Voltage: 5V DC Warm-up Time: 20–48 hours (initial), few minutes per use | alcohol sensor • Gas Detector • ethanol sensor • MQ-3 sensor • breath alcohol sensor |
| No Image | EDT-00001-C | Gas Sensor Device | ED - Electronic Device | Hanwei Electronics, Winsen, Figaro Engineering | Gas sensor device designed for detecting methane (CH ₄), CNG, and natural gas leaks in the environment. It is widely used in safety monitoring systems, industrial gas leak detection, smart home safety devices, and IoT-based gas monitoring applications. The sensor provides analog output proportional to gas concentration, making it suitable for microcontroller-based systems like Arduino and embedded controllers. | Sensor Type: Methane / CNG Gas Sensor Target Gas: CH ₄ (Methane), CNG, Natural Gas Operating Voltage: 5V DC Warm-up Time: 20–60 seconds Detection Range: ~200–10000 ppm (typical) | methane sensor • CNG sensor • MQ-4 sensor • gas leak detector • natural gas sensor |
| No Image | EDT-00001-D | Gas Sensor Device | ED - Electronic Device | Hanwei Electronics, Winsen, Figaro Engineering | Gas sensor device designed for detecting LPG, propane, butane, smoke, and natural gas leaks in air safety and monitoring applications. It is widely used in gas leakage detection systems, smart home safety devices, industrial safety alarms, and IoT-based environmental monitoring systems. | Sensor Type: LPG / Natural Gas Sensor Target Gas: LPG (Propane, Butane), Natural Gas, Smoke Operating Voltage: 5V DC Warm-up Time: 20–60 seconds Detection Range: ~200–10000 ppm (typical) | MQ-2 Sensor • LPG Sensor • Propane Sensor • gas leak detector • natural gas sensor |
| No Image | EDT-00001-E | Gas Sensor Device | ED - Electronic Device | Hanwei Electronics, Winsen, Figaro Engineering | Gas sensor device designed for detecting LPG (liquefied petroleum gas), butane, and propane gas leaks in safety and monitoring applications. It is commonly used in gas leakage alarm systems, smart home safety devices, industrial safety monitoring, and IoT-based gas detection projects. The sensor provides analog output proportional to gas concentration, allowing easy interfacing with microcontrollers such as Arduino and embedded systems. | Sensor Type: LPG / Butane Gas Sensor Target Gas: LPG, Butane, Propane Operating Voltage: 5V DC Warm-up Time: 20–60 seconds Detection Range: ~200–10000 ppm (typical) | LPG Sensor • Propane Sensor • Butane Sensor • gas leak detector • MQ-6 sensor |
| No Image | EDT-00001-F | Gas Sensor Device | ED - Electronic Device | Hanwei Electronics, Winsen, Figaro Engineering | Gas sensor device designed for detecting carbon monoxide (CO), a highly toxic and odorless gas commonly produced by incomplete combustion. It is widely used in safety monitoring systems, industrial environments, smart home safety devices, and IoT-based air quality applications. | Sensor Type: Carbon Monoxide (CO) Gas Sensor Target Gas: CO (Carbon Monoxide) Operating Voltage: 5V DC Warm-up Time: 20–48 hours initial, few minutes per cycle Detection Range: ~20–2000 ppm (typical) | Carbon Monoxide Sensor • CO Sensor • Gas Detector • MQ-7 sensor • toxic gas sensor |
| No Image | EDT-00001-G | Gas Sensor Device | ED - Electronic Device | Winsen, Hanwei Electronics | Air quality device designed for detecting and monitoring harmful gases and air pollution levels in the environment. It measures gases such as CO, CO ₂ , smoke, LPG, methane, and other volatile compounds depending on the sensor type used. Commonly used in environmental monitoring systems, smart home automation, industrial safety systems, IoT air monitoring stations, and educational electronics projects. | Sensor Type: Multi-Gas Air Quality Sensor Device Detected Gases: CO, CO ₂ , Smoke, LPG, Methane, VOCs Operating Voltage: 5V DC Warm-up Time: 20–60 seconds | gas sensor • air quality device • pollution detector • MQ sensor • air monitoring system |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|---|------------------------------------|--|---|---|---|
| No Image | EDT-00002-A | Light Detecting Resistor Device | ED - Electronic Device | Advanced Photonix, Token Electronics, Excelitas Technologies, Luna Optoelectronics | Light sensitive resistor device used to detect light intensity by changing resistance according to surrounding light conditions. | Operating Voltage: 3.3V – 5V Sensor Type: Light Dependent Resistor Output Type: Analog Resistance Output Resistance Range: 200? – 1M? Response Time: | Light Sensor • analog sensor • LDR sensor • photoresistor • light dependent resistor |
| No Image | EDT-00003-A | Analog Piezoelectric Ceramic Device | ED - Electronic Device | Murata Manufacturing, SparkFun Electronics, Measurement Specialties, TE Connectivity | Analog piezoelectric ceramic device used for detecting vibration, knock, touch, pressure, and impact signals in embedded electronics and sensing applications. | Operating Voltage: 3.3V – 5V Output Type: Analog Voltage Output Sensor Type: Piezoelectric Ceramic Frequency Range: 1Hz – 10KHz | Knock Sensor • piezoelectric sensor • vibration sensor • analog sensor • ceramic sensor |
| No Image | EDT-00004-A | SpeaKers | ED - Electronic Device | CUI Devices, PUI Audio, Soberton, Visaton | Electronic audio output device used to convert electrical audio signals into sound in embedded systems, multimedia devices, alarms, robotics, and IoT projects. | Operating Voltage: 3V – 12V Speaker Type: Dynamic Speaker Impedance: 4? / 8? Power Rating: 0.5W – 3W Frequency Range: 300Hz – 20KHz | Sound Module • speaker • audio output • buzzer speaker • multimedia speaker • embedded audio device |
| No Image | EDT-00005-A | Humidity Device | ED - Electronic Device | Aosong Electronics, Aosong Electronics, Bosch, Sensirion | Digital humidity sensor device used for measuring relative humidity and environmental moisture levels in air for IoT, automation, weather monitoring, and embedded electronics projects. | Operating Voltage: 3.3V – 5V Humidity Range: 0% – 100% RH Humidity Accuracy: ±2% RH to ±5% RH Operating Temperature: -40°C to +125°C | Humidity Sensor • RH sensor • environmental sensor • digital sensor • air moisture sensor |
| No Image | EDT-00006-A | Force Sensor - ROUND | EM - Electronic-Electrical Modules | Interlink Electronics, SparkFun Electronics, DFRobot, Adafruit Industries, Ohmite, Tekscan | This is a force sensitive resistor with a round, 0.5? diameter, sensing area. This FSR will vary its resistance depending on how much pressure is being applied to the sensing area. The harder the force, the lower the resistance. When no pressure is being applied to the FSR its resistance will be larger than 1M?. This FSR can sense applied force anywhere in the range of 100g-10kg. Two pins extend from the bottom of the sensor with a 0.1? pitch making it bread friendly. There is a peel-and-stick rubber backing on the other side of the sensing area to mount the FSR. Just Connect a resistor to form a voltage divider and measure the voltage at the junction to find the force applied. This sensor can be easily interfaced with Microcontrollers, Arduino Boards, Raspberry Pi, etc. using an Analog to Digital Converter (ADC). | Diameter: 1.8 cm Max Pressure: 10 Kg Min Pressure: 100 gm Sensing area: 1.4 cm (Dia.) Shape: Circular Length: 6 cm | FSR Sensor • Force Sensor • Pressure Sensor • Round Force Sensor • Force Sensitive Resistor |
| No Image | EDT-00006-B | Force Sensor - SQUARE | EM - Electronic-Electrical Modules | Interlink Electronics, SparkFun Electronics, DFRobot, Adafruit Industries, Ohmite | This is a force sensitive resistor with a square, 1.75 x 1.5?, sensing area. This FSR will vary its resistance depending on how much pressure is being applied to the sensing area. The harder the force, the lower the resistance. When no pressure is being applied to the FSR its resistance will be larger than 1M?. This FSR can sense applied force anywhere in the range of 100g-10kg. Just Connect a resistor to form a voltage divider and measure the voltage at the junction to find the force applied. These sensors are simple to set up and great for sensing pressure, but they aren't incredibly accurate. This sensor can be easily interfaced with Microcontrollers, Arduino Boards, Raspberry Pi, etc. using an Analog to Digital Converter (ADC). | Actuation Force: 0.1 N Clock Speed: 16MHz | FSR Sensor • Pressure Sensor • Force Sensitive Resistor • Square Force Sensor • Touch Sensor |
| No Image | EDT-00007-A | Flex Sensor | ED - Electronic Device | Spectra Symbol, SparkFun, Adafruit, Interlink Electronics, Generic | A simple Flex Sensor 2.2? – Bend Sensor with a length of 2.2? which bends and flexes with a physical device. As the sensor is flex, the resistance across the sensor increases. A connector is 0.1? spaced and breadboard friendly. The flex sensor is a bend detecting sensor that has got numerous applications in Robotics, Gaming (Virtual Motion), Medical Devices, Computer Peripherals, Musical Instruments, Physical Therapy... The resistance of these sensors changes in accordance with the bend, which can be measured using any microcontroller. | Bend Resistance: minimum 20K Ohms ±30% (@ 180° pinch bend) Flat Resistance: 10K Ohms ±30% Flex length: 2.2 inch (5.6 cm) Power: 0.5 Watts continuous Length: 7 cm | Electronics • flex sensor • bend sensor • sensor • analog • resistance • wearable |
| No Image | EDT-00008-A | Passive buzzer module without internal oscillator | ED - Electronic Device | CUI Devices, Keyestudio, Generic Electronics | The Passive Buzzer Module without Internal Oscillator is an electronic sound module that requires an external frequency or PWM signal to generate sound. Unlike active buzzers, passive buzzers do not produce sound automatically when power is applied. A microcontroller such as Arduino, ESP32, Raspberry Pi, or STM32 generates square wave signals of different frequencies to create tones, melodies, alarms, and music effects. | Product Type: Passive Buzzer Module Operating Voltage: 3.3V – 5V DC | Piezo Buzzer Module • Passive Buzzer Module • KY-006 Buzzer • Arduino Passive Buzzer |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|---|------------------------------------|--|--|--|---|
| No Image | EDT-00009-A | Active buzzer module with internal oscillator | ED - Electronic Device | CUI Devices, Keyestudio, Generic Electronics | The Active Buzzer Module with Internal Oscillator is an electronic sound module that generates a fixed beep sound when power is applied. Unlike passive buzzers, active buzzers contain an internal oscillator circuit, so they do not require PWM or external frequency generation from a microcontroller. | Product Type: Active Buzzer Module Oscillator: Internal Operating Voltage: 3.3V – 5V DC Frequency: Approx. 2kHz – 4kHz | Arduino Buzzer • Active Buzzer Module • Self Oscillating Buzzer • 5V Buzzer Module • Piezo Buzzer Module |
| No Image | EMA-00001-A | I2C LCD | EM - Electronic-Electrical Modules | MWduino / Generic, KEYESTUDIO, SunFounder | 16x2 character LCD module with an integrated I2C interface for simplified wiring and reduced pin usage. Features a blue backlight with white characters for clear, high-contrast visibility. Ideal for Arduino, Raspberry Pi, microcontroller projects, embedded systems, sensor monitoring, and applications requiring a compact and easy-to-read data display. | Model: Other LCD Model No.: LCD1602 Display Type: 16 x 2 Character LCD Backlight Color: Blue Character Color: White I2C Address: 0x27 Input Voltage (V): 5 Length (mm): 36 Width (mm): 80 Height (mm): 18 Weight (g): 35 Shipping Weight: 0.037 kg Shipping Dimensions (L x W x H): 8 x 5 x 3 cm | LCD1602 • 16x2 LCD • I2C LCD Display • Arduino Display • Character LCD Module |
| No Image | EMA-00002-A | SSD1306 0.96 inch I2C OLED display | EM - Electronic-Electrical Modules | Solomon Systech, SparkFun, DFRobot | The SSD1306 0.96 inch I2C OLED Display is a compact monochrome graphical display module commonly used with Arduino, ESP32, Raspberry Pi, and other microcontrollers. It typically features a 128x64 pixel resolution and uses the SSD1306 OLED driver IC with an I2C communication interface. | Product Type: OLED Display Module Display Size: 0.96 inch Driver IC: SSD1306 Resolution: 128 x 64 Pixels Operating Voltage: 3.3V – 5V DC | SSD1306 OLED Display • 0.96 OLED Module • I2C OLED Display • OLED Screen Module |
| No Image | EMA-00003-A | Programmable RGB 60 LED strip | EM - Electronic-Electrical Modules | Worldsemi, APA Electronics, Pololu | The Programmable RGB 60 LED Strip is an addressable LED strip containing 60 individually controllable RGB LEDs per meter, commonly based on WS2812B, WS2811, or SK6812 driver ICs. Each LED can display different colors and brightness levels independently, allowing dynamic lighting effects, animations, scrolling patterns, and smart visual displays. | Product Type: Programmable RGB LED Strip LED Type: WS2812B / WS2811 LEDs Per Meter: 60 LED Colors: RGB Full Color Operating Voltage: 5V DC (WS2812B) / 12V (WS2811) | Programmable RGB LED Strip • WS2812B LED Strip • NeoPixel LED Strip • Addressable RGB Strip |
| No Image | EMA-00003-B | 8-Bit RGB NeoPixel LED Module | EM - Electronic-Electrical Modules | Worldsemi Co., Ltd., Generic / OEM | The WS2812B 8-Bit RGB LED Module features 8 individually addressable 5050 RGB LEDs with integrated driver ICs. It operates on 5V and uses a single-wire communication protocol for precise color and brightness control. Ideal for programmable lighting, animations, IoT devices, and Arduino-based creative projects. | LED Model: WS2812B Package Type: 5050 SMD Number of LEDs: 8 Color Type: Full-Color RGB Bit Depth: 8-bit per channel (24-bit RGB total) Operating Voltage: DC 5V Control Interface: Single Data Line (Serial) Communication Protocol: One-Wire Timing Protocol PCB Color: White Mounting Type: Solderless / Plug-and-Play Length (mm): 105 Width (mm): 10 Height (mm): 6 Weight (g): 8 Shipping Weight: 0.01 kg Shipping Dimensions (L x W x H cm): 12 x 8 x 1 | Arduino Compatible • WS2812B • NeoPixel Module • 8 LED RGB • 5050 SMD • Addressable LED • 5V RGB Strip • Programmable LED |
| No Image | EMA-00003-C | CJMCU WS2812 RGB LED Breakout Module (Black) | EM - Electronic-Electrical Modules | Worldsemi, CJMCU, SparkFun Electronics | The CJMCU WS2812 RGB LED Breakout Module (Black) is a compact addressable RGB LED board based on the WS2812B intelligent LED driver IC mounted on a black PCB. Each module contains a full-color RGB LED with an integrated controller, allowing independent control of color and brightness using only a single data pin. | Product Type: Addressable RGB LED Breakout Module LED Type: WS2812B PCB Color: Black LED Colors: Red, Green, Blue (RGB) Operating Voltage: 5V DC | Addressable RGB LED • CJMCU WS2812 Black Module • WS2812 RGB LED Black • NeoPixel Black PCB |
| No Image | EMA-00003-D | RGB LED Ring 12x | EM - Electronic-Electrical Modules | Worldsemi, CJMCU, SparkFun | The RGB LED Ring 12x is a circular addressable RGB LED module containing 12 individually controllable WS2812B (NeoPixel-type) LEDs arranged in a ring shape. Each LED includes an integrated driver IC, allowing independent color and brightness control through a single data line. | Product Type: RGB LED Ring Module Number of LEDs: 12 LED Type: WS2812B LED Colors: RGB Full Color Operating Voltage: 5V DC | RGB LED Ring 12x • WS2812 LED Ring • NeoPixel Ring 12 LED • Addressable RGB Ring • 12 Pixel LED Ring |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|-----------|------------------------------------|------------------------------------|---|--|---|
| No Image | EMA-00003-E | Coin Cell | EM - Electronic-Electrical Modules | Panasonic, Maxell, Energizer, Sony | The CR2032 3V Lithium Coin Battery is the most commonly used coin battery that provides long-lasting and reliable power for various devices. They are used to power small electronic devices such as a calculator, Wrist Watches, remote controls, Various medical Devices, fitness Gadgets, & Machines, toys, etc. The CR2032 is a 3V coin-type Lithium Battery that comes with a 225 mAh capacity. It has flat top terminals. It is ideally suited for use in all kinds of products where the trend is to achieve increasing miniaturization. Since the manganese dioxide that is chemically very stable is used for the plus terminal as an active material, if preservation conditions are proper, 90% of capacity remains even after ten years of storage. It employs organic electrolytes with minimum creeping so they are vastly superior in terms of leakage resistance under environmental changes. | Battery Type: Lithium Coin Cell Battery Size: CR2025 Chemistry: Lithium Manganese Dioxide (LiMnO?) Nominal Voltage: 3 V Nominal Capacity: 165 mAh Diameter: 20 mm Height: 2.5 mm Termination Style: Pressure Contacts Operating Temperature: -30°C to +60°C Weight (Unit): 2.3 g Shipping Weight: 0.008 kg Shipping Dimensions: 9.2 x 7.5 x 1 cm | CR2025 Battery • 3V Coin Cell • Lithium Battery • Panasonic Battery • Button Cell |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|--|------------------------------------|---|---|---|--|
| No Image | EMA-00003-F | CJMCU WS2812 RGB LED BreakOut Module (Red) | EM - Electronic-Electrical Modules | Worldsemi, CJMCU, SparkFun | The CJMCU WS2812 RGB LED Breakout Module is a compact addressable RGB LED board based on the WS2812 intelligent LED driver IC. Each module contains a full-color RGB LED with an integrated controller, allowing independent color and brightness control using a single data line. | Product Type: Addressable RGB LED Module LED Type: WS2812B LED Colors: Red, Green, Blue (RGB) Operating Voltage: 5V DC | CJMCU WS2812 Module • WS2812 RGB LED • NeoPixel LED Module • Addressable RGB LED • WS2812 Breakout Board |
| No Image | EMA-00004-A | 8x8 Single Colour LED Dot Matrix Display with MAX7219 driver | EM - Electronic-Electrical Modules | Analog Devices, Keystudio, SparkFun | The 8x8 Single Colour LED Dot Matrix Display with MAX7219 Driver is an LED matrix module that combines a single-color 8x8 LED display with the MAX7219 LED driver IC for easy control and multiplexing. | Product Type: LED Matrix Display Module Matrix Size: 8 x 8 Driver IC: MAX7219 Number of LEDs: 64 LEDs Operating Voltage: 5V DC | MAX7219 LED Matrix Module • 8x8 LED Matrix Display • MAX7219 Dot Matrix • Arduino LED Matrix |
| No Image | EMA-00004-B | 8x8 Single Colour LED Dot Matrix Display without driver | EM - Electronic-Electrical Modules | Kingbright, Everlight Electronics, Luckylight, SparkFun | The 8x8 Single Colour LED Dot Matrix Display is an LED display module containing 64 LEDs arranged in 8 rows and 8 columns. It is used to display characters, symbols, patterns, scrolling text, and simple animations in electronic and embedded projects. | Product Type: LED Dot Matrix Display Matrix Size: 8 x 8 Number of LEDs: 64 LEDs Display Color: Red / Green / Yellow (varies) Operating Voltage: 2V – 5V | 8x8 LED Matrix • LED Dot Matrix Display • Single Color LED Matrix • 8x8 Dot Matrix Module |
| No Image | EMA-00005-A | 2x3W Mini digital amplifier board | EM - Electronic-Electrical Modules | Diodes Incorporated, SparkFun | The 2x3W Mini Digital Amplifier Board is a compact stereo Class-D audio amplifier module commonly based on the PAM8403 amplifier IC. It can deliver up to 3W + 3W stereo output using a 5V power supply, making it ideal for portable speakers, DIY audio systems, Bluetooth speakers, and Arduino sound projects. | Product Type: Stereo Audio Amplifier Module Amplifier IC: PAM8403 Amplifier Type: Class-D Output Power: 2 x 3W Operating Voltage: 2.5V – 5.5V DC Recommended Voltage: 5V | PAM8403 Amplifier Board • 2x3W Stereo Amplifier • Mini Digital Amplifier • Class-D Audio Amplifier |
| No Image | EMA-00006-A | Buzzer module | EM - Electronic-Electrical Modules | Generic, Keyes, Elegoo, SunFounder, DFRobot | This is Small PCB Mountable 5V . It is great to add Audio Alert to your electronic designs. It operates on 5V supply, uses a coil element to generate an audible tone. | Voltage Rating: 5VDC Operating Voltage (VDC): 5 Pin Spacing (mm): 6 Material: Plastic Color: Black Width (mm): 12 (Body Diameter) Height (mm): 8 Weight (g): 1 (approx) (each) Shipping Weight: 0.001 kg Shipping Dimensions: 1 x 1 x 1 cm | buzzer • buzzer module • sound • alarm • electronic • module • 5v |
| No Image | EMA-00006-B | Passive Buzzer | EM - Electronic-Electrical Modules | ED Series / Generic Compatible, KEYESTUDIO | Passive buzzer module for generating variable tones using PWM or frequency control. Operates on 1.5V–15V DC and produces sound in the 1.5–2.5 kHz range. Ideal for alarms, alerts, educational projects, Arduino applications, and microcontroller-based sound generation. Compact, reliable, and easy to interface with electronic circuits and development boards. | Model: Passive Buzzer Module Operating Voltage (VDC): 1.5 – 15 Max Operating Current (mA): 25 Tone Generator Frequency Range (kHz): 1.5 – 2.5 Mounting Type: PCB Mount Pin Pitch: 2.54 mm Compatibility: Arduino / Microcontrollers Length (mm): 15 Width (mm): 19.7 Height (mm): 10 Weight (g): 1 (approx.) Shipping Weight: 0.01 kg Shipping Dimensions (L x W x H): 6 x 4 x 2 cm | Passive Buzzer • KY-006 Module • Arduino Buzzer • PWM Buzzer • Sound Module |
| No Image | EMA-00007-A | 7 Segment Display, 4 digit module | EM - Electronic-Electrical Modules | Titan Micro Electronics, Keystudio, DFRobot, SparkFun | The 4 Digit 7 Segment Display Module is an LED-based numeric display used to show numbers, timers, counters, clocks, sensor values, and measurement data. Most common Arduino-compatible modules use the TM1637 driver IC, which simplifies control using only two signal pins. The module contains four 7-segment digits with decimal points that can display numbers and limited characters. It communicates serially with microcontrollers like Arduino, ESP32, Raspberry Pi, and STM32. | Product Type: 4 Digit LED Display Module Display Type: 7 Segment LED Driver IC: TM1637 Digits: 4 Operating Voltage: 3.3V – 5V DC | 4 Digit 7 Segment Display • TM1637 Display Module • 7 Segment LED Module • Digital Display Module |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|-------------|---|------------------------------------|--|---|--|--|
| No Image | EMA-00008-A | Single Channel Relay Module | EM - Electronic-Electrical Modules | Single Relay, Generic / OEM | The Single Channel 12V Relay Module allows low-voltage microcontrollers to safely control high-voltage AC or DC loads. It supports both high-level and low-level trigger modes and includes status LEDs for operation indication. Ideal for home automation, motor control, IoT systems, and industrial switching applications. | Model: Relay Module Number of Channels: 1 Operating Voltage (VDC): 12 Trigger Type: High-Level / Low-Level Trigger Relay Contact Rating (AC): 10A @ 250V AC Relay Contact Rating (AC Alternate): 15A @ 125V AC Contact Type: COM, NO (Normally Open), NC (Normally Closed) Interface: 2.54 mm Header Pins Output Connection: 3-Pin Screw Terminal Indicators: Power LED + Relay Status LED Length (mm): 50 Width (mm): 25 Height (mm): 20 Weight (g): 16 Shipping Weight: 0.025 kg Shipping Dimensions (L x W x H cm): 7 x 4 x 3 | Arduino Compatible • 12V Relay Module • Single Channel Relay • High/Low Trigger • Single SRD-12VDC-SL-C • SPDT Relay • 10A 250VAC • IoT Switching Module |
| No Image | EMA-00008-B | 2 Channel Relay module | EM - Electronic-Electrical Modules | Single, Keyes, SunFounder, Elegoo, Generic | This is a 5V 2 Channel Relay Module, be able to control various appliances, and other equipment with large current. It can be controlled directly by Microcontroller (8051, AVR, PIC, DSP, ARM, ARM, MSP430, TTL logic). 5V 2-Channel Relay interface board and each one needs 15-20mA Driver Current Equipped with high-current relay, AC250V 10A; DC30V 10A Standard interface that can be controlled directly by microcontroller (8051, AVR, PIC, DSP, ARM, ARM, MSP430, TTL logic) Indication LED's for Relay output status. | No. of Channels: 2 Operating Temperature Range: -40 to 85 °C Operating Voltage: 2.5 ~ 5.5 V (DC) Switching Voltage(AC): 240V@10A Switching Voltage(DC): 30V@10A Trigger Current: 20 mA Trigger Voltage: 5V (DC) Length: 4.3 cm Height: 1.7 cm Width: 4.3 cm | arduino • module • 5v • relay module • 2 channel • switching • control |
| No Image | EMA-00009-A | ISD1820 Voice Recording & Playback Module | EM - Electronic-Electrical Modules | Nuvoton Technology Corporation, Generic / OEM | The ISD1820 Voice Recording & Playback Module supports up to 10 seconds of audio recording stored in non-volatile memory. It features an onboard electret microphone, push-button recording and playback controls, and support for external triggering through a microcontroller. Ideal for Arduino projects, voice prompts, alarms, interactive electronics, educational kits, and sound playback applications. | IC Chip: ISD1820 Operating Voltage (VDC): 3 ~ 5 Recording Duration: Up to 10 seconds Memory Type: Non-Volatile Analog Flash Microphone: Onboard Electret Microphone Speaker: 8 Ω, 0.5W Speaker Cable Length (cm): 20 Speaker Diameter (mm): 40 Control Options: Push Buttons or Microcontroller Digital Pin Interface: 2.54 mm Header Pins Length (mm): 42 Width (mm): 33.5 Height (mm): 11.5 Weight (g): 20 Shipping Weight: 0.022 kg Shipping Dimensions (L x W x H cm): 8 x 6 x 3 | Arduino Compatible • ISD1820 Module • Voice Recorder • 10s Audio • Playback Module • Onboard Mic • 8Ω Speaker • Sound Board |
| No Image | EMA-00010-A | L298N 2 Channel Motor Driver | EM - Electronic-Electrical Modules | STMicroelectronics, Keystudio, SparkFun, HiLetgo | The L298N 2 Channel Motor Driver Module is a dual H-Bridge motor control board used to control the speed and direction of two DC motors independently or one stepper motor. It is based on the STMicroelectronics L298N motor driver IC and is commonly used with Arduino, ESP32, Raspberry Pi, and other microcontrollers. The module can handle higher voltage and current compared to direct microcontroller outputs, making it suitable for robotics and automation applications. It includes onboard flyback diodes, a heat sink, and a 5V voltage regulator for stable operation. | Product Type: Dual Motor Driver Module Driver IC: L298N Motor Channels: 2 DC Motors Motor Voltage: 5V ~ 35V DC Logic Voltage: 5V | DC Motor Driver Board • L298N Motor Driver • L298N 2 Channel Driver • Dual H-Bridge Module |
| No Image | EMA-00010-B | Motor Driver Module | EM - Electronic-Electrical Modules | Texas Instruments, STMicroelectronics, NXP Semiconductors, ON Semiconductor, Toshiba | The L293D Motor Driver Module is a dual H-bridge driver used to control DC and stepper motors. It allows direction and speed control using PWM signals from microcontrollers like Arduino. Ideal for robotics and automation projects with support up to 12V and 600mA current. | Driver IC: L293D Motor Type: DC & Stepper Motor Operating Voltage: 4.5V ~ 12V Current Rating: 600mA per channel Peak Current: 600mA Control Method: Direction + PWM Speed Control Number of Channels: 2 (H-Bridge) Arduino Compatible: Yes (via wires) Polarity Protection: NO Cooling Fan: NO Dimensions: 48 x 34 x 14 mm Weight: 15g | motor • L293d • motor driver • dc motor • stepper motor • robotics • arduino • h-bridge • pwm |
| No Image | EMA-00010-C | L293D Motor Driver | EM - Electronic-Electrical Modules | Texas Instruments, STMicroelectronics, SparkFun | The L293D Motor Driver is a dual H-Bridge motor driver IC designed to control the direction and speed of DC motors and stepper motors using microcontrollers like Arduino, ESP32, Raspberry Pi, and PIC controllers. It acts as an interface between low-power control circuits and higher-current motors. | Product Type: Motor Driver IC Driver Type: Dual H-Bridge Motor Channels: 2 DC Motors / 1 Stepper Motor Logic Voltage: 4.5V ~ 7V Motor Supply Voltage: 4.5V ~ 36V | Arduino Motor Driver • Stepper Motor Driver • Robot Motor Controller • L293D Motor Driver • L293D IC • Dual H-Bridge Driver • DC Motor Driver IC • L293D Driver Module |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|--|------------------------------------|---|---|--|--|
| No Image | EMA-00010-D | L293D Motor Driver | EM - Electronic-Electrical Modules | Texas Instruments, STMicroelectronics, SparkFun | The L293D Motor Driver is a dual H-Bridge motor driver IC used to control DC motors and stepper motors using microcontrollers like Arduino, ESP32, Raspberry Pi, and PIC controllers. It allows low-power digital circuits to safely control higher-current motors. The IC contains two H-Bridge circuits, enabling independent bidirectional control of two DC motors or one stepper motor. The built-in flyback protection diodes help protect the circuit from voltage spikes generated by motors. | Product Type: Motor Driver IC IC Type: Dual H-Bridge Motor Channels: 2 DC Motors or 1 Stepper Motor Logic Voltage: 4.5V – 7V Motor Voltage: 4.5V – 36V Output Current: 600mA per channel | Arduino Motor Driver • Stepper Motor Driver • Robot Motor Controller • L293D Motor Driver • L293D IC • Dual H-Bridge Driver • DC Motor Driver IC • L293D Driver Module |
| No Image | EMA-00010-E | L 298 Motor Driver Module | EM - Electronic-Electrical Modules | STMicroelectronics, STMicroelectronics, SparkFun, Keystudio | The L298 Motor Driver Module (L298N) is a dual H-Bridge motor driver used to control the speed and direction of DC motors and stepper motors. It allows microcontrollers like Arduino, ESP32, and Raspberry Pi to drive motors that require higher current and voltage than the controller can provide directly. | Product Type: Motor Driver Module IC Used: L298N Dual H-Bridge Motor Channels: 2 DC motors or 1 stepper motor Operating Voltage (Logic): 5V Motor Voltage: 5V – 35V DC | L298 Motor Driver • L298N Module • Dual H-Bridge Motor Driver • DC Motor Driver Board • Arduino Motor Driver • Stepper Motor Driver • Robot Motor Controller • L298N H-Bridge Module |
| No Image | EMC-00001-A | RF 433/315 MHz Transmitter and Receiver Module Kit | EM - Electronic-Electrical Modules | HopeRF, Wireless Tag | The RF 433/315 MHz Transmitter and Receiver Module Kit is a wireless communication system used to send and receive data over radio frequency. It typically includes an RF transmitter module and an RF receiver module that operate at 433 MHz (or 315 MHz in some variants). The transmitter sends digital signals by modulating radio waves, and the receiver decodes these signals back into data. It is commonly used for short-range wireless communication between microcontrollers like Arduino, ESP8266, ESP32, and other embedded systems. | Product Type: RF Wireless Communication Module Frequency: 433 MHz / 315 MHz Operating Voltage: 3V – 5V DC Data Rate: Up to ~10 kbps (typical) Range: 20m – 100m (depends on antenna & environment) | RF 433MHz Module • 315MHz RF Module • Wireless Transmitter Receiver Kit • RF Communication Module • Arduino RF Module • ASK RF Module • Wireless Remote Module • 433MHz RF Pair Kit |
| No Image | EMC-00002-A | ESP8266 wifi module | EM - Electronic-Electrical Modules | Espressif Systems, Ai-Thinker, SparkFun | The ESP8266 WiFi Module is a low-cost microcontroller with built-in WiFi capability used for IoT (Internet of Things) applications. It allows devices to connect to WiFi networks and communicate with servers, cloud platforms, or mobile apps. | Product Type: WiFi Microcontroller Module Core Chip: ESP8266EX CPU: 32-bit Tensilica L106 Operating Voltage: 3.3V | ESP8266 WiFi Module • ESP8266 NodeMCU • ESP8266 ESP-01 • WiFi IoT Module • Arduino WiFi Module • ESP8266 Wireless Module • ESP8266 ESP-12E • ESP8266 IoT Board |
| No Image | EMC-00003-A | NodeMcu | EM - Electronic-Electrical Modules | Espressif Systems, Ai-Thinker, NodeMCU | The ESP8266 NodeMCU CH340 board has ESP8266 which is a highly integrated chip designed for the needs of a new connected world. It offers a complete and self-contained Wi-Fi networking solution, allowing it to either host the application or to offload all Wi-Fi networking functions from another application processor. ESP8266 has powerful on-board processing and storage capabilities that allow it to be integrated with the sensors and other application-specific devices through its GPIOs with minimal development up-front and minimal loading during runtime. Its high degree of on-chip integration allows for minimal external circuitry, and the entire solution, including the front-end module, is designed to occupy minimal PCB area. The ESP-12 Lua NodeMCU WIFI Dev Board Internet Of Things with ESP8266 is an all-in-one microcontroller + WiFi platform that is very easy to use to create projects with WiFi and IoT (Internet of Things) applications. | Processor: L106 32 bit Processor speed: 80MHz to 160MHz Flash memory: 4MB Analog to digital: 1 input with 1024 resolution Maximum concurrent TCP connection: 5 GPIOs: 17 Transfer rate: 110 Kbps to 460800 Kbps Input voltage supply: 4.5V to 9V Communication interface voltage: 3.3V Current consumption: 10uA-170mA | NodeMCU • ESP8266 • WiFi Module • IoT Development Board • ESP8266EX • Wireless Module |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|---------------------------|------------------------------------|---|---|--|--|
| No Image | EMC-00004-A | Bluetooth Module | EM - Electronic-Electrical Modules | HC Series / Generic Compatible, Waveshare, KEYESTUDIO, SunFounder | The HC-05 Bluetooth Module is a 6-pin wireless serial communication device designed for UART-based data transfer between microcontrollers and Bluetooth-enabled devices. Operates in the 2.4GHz ISM band using GFSK modulation and supports both Master and Slave modes. Supports AT command configuration and includes an onboard push button for AT mode entry. | Operating Voltage: 3.6V – 6V DC Input Current: 50 mA Operating Frequency: 2.4 GHz ISM Band Modulation Type: GFSK (Gaussian Frequency Shift Keying) Emission Power: 4 dBm (Class 2) Receiver Sensitivity: -84 dBm at 0.1% BER Maximum Range: 10 meters (typical) Interface Pins: EN/KEY, VCC, GND, TXD, RXD, STATE AT Command Support: Yes Onboard Button: Yes (AT Mode Selection) Length (mm): 43 Width (mm): 16.5 Height (mm): 7 Weight (g): 5 Shipping Weight: 0.01 kg Shipping Dimensions (cm): 5 × 3 × 1 | HC-05 • Bluetooth Module • UART Bluetooth • 6-Pin Bluetooth • Master Slave Module • Arduino Bluetooth |
| No Image | EMC-00005-A | RFID READER MODULE | EM - Electronic-Electrical Modules | NXP Semiconductors, Ai-Thinker, SunFounder, Keystudio, Waveshare | RC522 - RFID Reader /Writer with Cards Kit includes a 13.56MHz RF reader and writer module that uses an RC522 IC and two S50 RFID cards tag. The MF RC522 is an integrated transmission module for contactless communication at 13.56 MHz. RC522 supports ISO 14443A/MIFARE mode. RC522 - RFID Reader features an outstanding modulation and demodulation algorithm to serve effortless RF communication at 13.56 MHz. The S50 RFID Cards will ease up the process helping you to learn and add the 13.56 MHz RF transition to your project. The module uses SPI to communicate with microcontrollers. The open-hardware community already has a lot of projects exploiting the RC522 – RFID Communication, using Arduino. | Operating Frequency (MHz): 13.56 Reading Distance (m): 2 cm to 5 cm Supply Voltage (V): 3.3V Operating Current (mA): 13 ~ 26 SPI data rate (Mbit/s): 10 Length (mm): 60 Width (mm): 39.5 Weight (g): 20 | RC522 • RFID Reader • NFC Module • MFRC522 • 13.56MHz RFID • Arduino RFID |
| No Image | EMC-00005-B | RFID KEY FOB | EM - Electronic-Electrical Modules | NXP Semiconductors, ACS (Advanced Card Systems) | An RFID Key Fob is a small, portable contactless tag used for wireless identification and access control. It contains an embedded RFID chip and antenna that communicates with RFID readers using radio frequency signals (commonly 13.56 MHz for Arduino RC522 systems). | Product Type: RFID Key Fob Frequency: 13.56 MHz Standard: ISO/IEC 14443A Memory: 1KB / 4KB (varies by chip) | 13.56MHz RFID Tag • RFID Key Fob • MIFARE Key Fob • NFC Key Tag • Access Control Key Fob • Arduino RFID Tag • Smart Key Fob • Contactless RFID Token |
| No Image | EMC-00005-C | RFID KEY CARD | EM - Electronic-Electrical Modules | NXP Semiconductors, HID Global | An RFID Card is a contactless smart card used for wireless identification using radio frequency signals. Most Arduino-compatible RFID systems use 13.56 MHz HF RFID cards based on ISO/IEC 14443 standard, commonly paired with RC522 readers. | Product Type: RFID Smart Card Frequency: 13.56 MHz Standard: ISO/IEC 14443A Memory: 1KB / 4KB (varies) | RFID Card • 13.56MHz RFID Tag • MFRC522 Card • Smart Card RFID • Access Control Card • Contactless ID Card • Arduino RFID Card • NFC RFID Tag |
| No Image | EMC-00006-A | GSM-GPRS Module (SIM800L) | EM - Electronic-Electrical Modules | SIMCom, DFRobot, Waveshare | SIM800L GSM/GPRS module is a miniature GSM modem, which can be integrated into a great number of IoT projects. You can use this module to accomplish almost anything a normal cell phone can; SMS text messages, make or receive phone calls, connecting to the internet through GPRS, TCP/IP, and more! To top it off, the module supports quad-band GSM/GPRS network, meaning it works pretty much anywhere in the world. An antenna is made of wire – very useful in narrow places. | IC Chip: SIM800L Input Voltage: 3.4V ~ 4.4V Peak Current: 2 A | SIM800L • GSM Module • GPRS Module • SMS Module • IoT Module • Arduino GSM • ESP8266 GSM |
| No Image | EMC-00006-B | GSM-GPRS Module (SIM900A) | EM - Electronic-Electrical Modules | SIMCom, DFRobot, Itead Studio | The onboard two set power supply interface VCC5 5V power supply, VCC4 interface, 3.5–4.5V power supply, optional power on self-starting (default), and control start. The onboard SMA (default) and IPXmini antenna interface, SIM900A interface reserved reset. The size of the module is 49*50, all the new and original device. The computer can give early computer debugging USB module power supply, a very large amount of data under the condition of the recommended current more than 1A. Standby dozens of MA data can be set to provide dormancy, dormancy of 10MA low power. Support 2, mobile phone 3,4G card. The serial port circuit: support for 3.3V single-chip microcomputer. TTL serial port support 3.3 and 5V single-chip microcomputer. The SIM card circuit to increase the SMF05C ESD chip. Antenna circuit: guarantee short and straight, so as to ensure the signal strength. PCB display screen printing mark: each interface, convenient development two times, the SIM900/A hardware completely follows the design when the design manual. | Frequency bands: Dual-band GPRS connectivity: GPRS multi-slot class 10 (default) , GPRS multi-slot class 8 (option) Operating Temperature Range: -30 to 80 °C Supply Voltage: 3.4 – 4.5 V Dimensions (LxWxH): 8.5x5.7x2cm (approx) | GSM Module • GPRS Module • SMS Module • IoT Module • Arduino GSM • SIM900A |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|--------------------|------------------------------------|--|---|---|---|
| No Image | EMC-00008-A | IR Receiver module | EM - Electronic-Electrical Modules | Vishay Semiconductors, Sharp Corporation, Keystudio, DFRobot, SparkFun Electronics | The KY-022 is equipped with three pins. It responds to a frequency of 38kHz at 940nm. This signal is sent via the digital output. If an IR signal is detected, the LED module on board will light up. This sensor module can be used to decode remote controls for home theaters and other remote controls that use IR. | Current consumption: 1.5mA peak Frequency: 38kHz Operating Voltage: 3.3V to 5V Pulse Duration: 400µs to 800µs Range: 17m Wavelength: 940 nm | IR Receiver • Infrared Sensor • TSOP1838 • Remote Receiver • Arduino IR Sensor • 38kHz IR Module • IR Decoder |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|---------------------------------------|------------------------------------|---|---|---|--|
| No Image | EMC-00008-B | IR Remote Keypad Transmitter module | EM - Electronic-Electrical Modules | Keyes Electronics, DFRobot | The IR Remote Transmitter Module is an infrared signal emitter used to send encoded IR commands to devices like TVs, ACs, and IR receivers. Most Arduino-compatible versions (such as the KY-005 module) use a 5mm IR LED along with a transistor driver circuit to generate a modulated 38kHz infrared signal, which is the standard frequency used in consumer remote controls. | Product Type: IR Transmitter Module Operating Voltage: 3.3V – 5V DC Carrier Frequency: 38 kHz (typical) Range: ~1–5 meters (depends on setup) | IR Remote Transmitter Module • IR LED Transmitter • KY-005 IR Transmitter • Infrared Remote Control Module |
| No Image | EMK-00001-A | RFID Kit | EM - Electronic-Electrical Modules | NXP Semiconductors, Keyestudio, SparkFun, HiLetgo | The RFID Kit is a wireless identification system used to read and write data from RFID tags/cards using radio frequency communication. Most common Arduino-compatible kits use the RC522 RFID module, which operates at 13.56 MHz and communicates via SPI interface. It includes an RFID reader, key fob tags, and cards. | Product Type: RFID Reader Kit Operating Frequency: 13.56 MHz Operating Voltage: 3.3V Read Range: ~2–5 cm | RFID Kit • RFID Reader Module • RC522 RFID Kit • RFID Card Reader • Arduino RFID Module • NFC Reader Module • RFID Tag System • Access Control Kit |
| No Image | EMP-00001-A | 9V wall power supply | EM - Electronic-Electrical Modules | Mean Well, Hi-Link, Delta Electronics | The 9V Wall Power Supply Adapter is an AC-to-DC switching power supply designed to provide regulated 9V DC output for electronic circuits, Arduino boards, routers, DIY electronics, audio devices, sensors, and embedded systems. It converts high-voltage AC mains power into stable low-voltage DC suitable for powering electronic devices safely and efficiently. | Product Type: AC to DC Power Adapter Output Voltage: 9V DC Input Voltage: 100V – 240V AC Output Current: 500mA / 1A / 2A Frequency: 50/60 Hz | Wall Power Supply • Arduino Power Adapter • 9V Power Adapter • 9V DC Adapter • 9V SMPS Adapter |
| No Image | EMP-00001-B | 5V wall power supply Adapter | EM - Electronic-Electrical Modules | Mean Well, Hi-Link, Delta Electronics | The 5V Wall Power Supply Adapter is an AC-to-DC switching power supply used to provide regulated 5V DC output for electronic circuits, development boards, IoT devices, LED systems, routers, sensors, and embedded projects. These adapters convert high-voltage AC mains power into stable low-voltage DC suitable for electronics applications. | Product Type: AC to DC Power Adapter Output Voltage: 5V DC Input Voltage: 100V – 240V AC Output Current: 1A / 2A / 3A Power Supply Type: SMPS | SMPS Adapter • 5V Power Adapter • 5V DC Adapter • Wall Power Supply • Arduino Power Adapter |
| No Image | EMP-00001-C | Power Adapter | EM - Electronic-Electrical Modules | Generic / OEM, Mean Well, Delta Electronics, LEICKE | 12V 2A Switched Mode Power Supply (SMPS) adapter designed to provide stable and regulated DC output. Converts AC 100–240V input to 12V DC output with low losses and high efficiency compared to conventional linear power supplies. Suitable for powering Arduino boards, routers, LCD displays, DC motors, audio equipment, TV boxes, mini electronics, and other devices requiring up to 2A current. | Input Voltage: 100–240V AC Output Voltage: 12V DC Maximum Output Current: 2A Output Connector Size: 5.5 x 2.5 mm Polarity: Center Positive Operating Temperature: -25°C to +60°C Shipping Weight: 0.02 kg Shipping Dimensions: 10 x 6 x 6 cm | 12V Adapter • 12V 2A Power Supply • SMPS Adapter • AC-DC Adapter • 5.5x2.5mm Power Adapter |
| No Image | EMS-00001-A | MQ-2 Gas Sensor Module | EM - Electronic-Electrical Modules | Hanwei Electronics Group Corporation, Zhengzhou Winsen Electronics Technology Co., Ltd. | The MQ-2 Gas Sensor Module detects combustible gases such as LPG, methane, hydrogen, alcohol vapor, and smoke. It uses a SnO ₂ sensing element and provides both analog and digital outputs with adjustable sensitivity. Ideal for gas leakage detection, safety systems, fire alarms, environmental monitoring, smart home applications, and Arduino-based electronics projects. | Sensor Model: MQ-2 Detection Range: 300 – 10,000 ppm Detectable Gases: LPG, Butane, Propane, Methane (CH ₄), Hydrogen (H ₂), Alcohol, Smoke, CO Sensing Material: Tin Dioxide (SnO ₂) Operating Voltage: 5V DC Digital Output Voltage: 0V or 5V (TTL Logic) Analog Output: Yes Sensitivity Adjustment: Onboard Potentiometer Preheat Time: 20 seconds (minimum) Dimensions (mm): 36 x 20 x 21 Weight (g): 8 Shipping Weight: 0.012 kg Shipping Dimensions (cm): 4 x 4 x 4 | Arduino Compatible • MQ-2 Sensor • LPG Gas Sensor • Smoke Detector • SnO ₂ Sensor • Combustible Gas Module • 5V Gas Sensor • Gas Leakage Detector |
| No Image | EMS-00002-A | DHT11 Temperature and Humidity Sensor | EM - Electronic-Electrical Modules | EM Series / Generic Compatible, KEYESTUDIO, SunFounder, DFRobot | Digital temperature and humidity sensor module with calibrated single-wire serial output for easy interfacing. Features an onboard pull-up resistor and LED status indicator for reliable operation. Suitable for weather stations, environmental monitoring, smart home systems, Arduino projects, and IoT applications requiring accurate temperature and humidity measurements. | Item Type: Sensor Model: DHT11 Temperature and Humidity Sensor Measuring Temperature Range (°C): 0 – 50 Temperature Accuracy: ± 2 °C Humidity Range: 20 – 95 % RH Humidity Accuracy: ± 5 % RH Resolution: 16 bit Output Form: Digital Output (Single Wire Serial) Operating Voltage (VDC): 3 – 5 Operating Current (mA): ? 2.5 Dimensions (L x W x H mm): 31 x 14 x 7.5 Weight (g): 5 Shipping Weight: 0.01 kg Shipping Dimensions (L x W x H cm): 5 x 5 x 2 | DHT11 • Temperature Sensor • Humidity Sensor • Digital Temp Sensor • Arduino Climate Sensor |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|--------------------------------------|------------------------------------|--|---|--|---|
| No Image | EMS-00003-A | Accelerometer module GY 521 | EM - Electronic-Electrical Modules | InvenSense, Generic Electronics, DFRobot, SparkFun Electronics | The GY-521 Accelerometer Module is a 6-axis motion tracking sensor board based on the MPU6050 MEMS sensor IC. It combines a 3-axis accelerometer and a 3-axis gyroscope in a single compact module, allowing accurate measurement of acceleration, tilt, rotation, vibration, and motion. | Product Type: Accelerometer + Gyroscope Module Model: GY-521 Main IC: MPU6050 Communication: I2C Operating Voltage: 3V – 5V DC | GY-521 Accelerometer Module • MPU6050 Sensor Module • 6DOF Motion Sensor • Gyroscope Accelerometer Module |
| No Image | EMS-00003-B | Accelerometer module GY-61 (ADXL335) | EM - Electronic-Electrical Modules | N/A | | | |
| No Image | EMS-00003-C | Accelerometer module MMA7361 | EM - Electronic-Electrical Modules | Freescale Semiconductor, DFRobot, Elecrow | The MMA7361 Accelerometer Module is a low-power 3-axis analog accelerometer sensor designed to measure acceleration, tilt, vibration, orientation, and motion along X, Y, and Z axes. It is based on the Freescale/NXP MMA7361L MEMS accelerometer IC and provides analog voltage outputs proportional to acceleration values. | Product Type: 3-Axis Accelerometer Module Model: MMA7361L Sensor Type: MEMS Accelerometer Axes: X, Y, Z Operating Voltage: 3.3V – 5V DC | Tilt Sensor Module • MMA7361 Accelerometer • Triple Axis Accelerometer • 3-Axis Accelerometer Module |
| No Image | EMS-00004-A | Sound Level Sensor Module | EM - Electronic-Electrical Modules | Keyes, Keyes, DFRobot, SparkFun Electronics | Sound Detection Module Sensor for Intelligent Vehicle Compatible With Arduino is a Single channel signal output Sensor. The output is effective to the low-level sound signal with good fidelity, When there is sound, outputs low level and signal light. | IC Chip: LM393 Induction Distance: 500 cm Operating Voltage: 3.3 – 5 V Length: 4.3 cm Height: 0.8 cm Width: 1.7 cm | Sound Sensor • Microphone Module • Audio Sensor • Noise Sensor |
| No Image | EMS-00004-B | Sound Detector Module (Blue) | EM - Electronic-Electrical Modules | Keyes Electronics, DFRobot, AZDelivery | The Sound Detector Module (Blue) is a microphone-based sound sensing module designed to detect surrounding audio signals and convert them into electrical outputs. Most blue sound sensor modules use an electret microphone together with the LM393 comparator IC to provide analog and digital sound detection outputs. | Product Type: Sound Detection Sensor Model: KY-038 / KY-037 Main IC: LM393 Comparator Operating Voltage: 3.3V – 5V DC | Sound Detector Module • KY-038 Sound Sensor • LM393 Sound Sensor • Microphone Sensor Module |
| No Image | EMS-00004-C | MAX4466 Electret Microphone | EM - Electronic-Electrical Modules | Analog Devices / Maxim Integrated, SparkFun, DFRobot, Keyestudio | The MAX4466 Electret Microphone Module is a low-noise audio amplifier module designed for sound detection and audio signal monitoring applications. It uses an electret condenser microphone along with the MAX4466 operational amplifier IC to provide amplified analog audio output suitable for microcontrollers and embedded systems. | Product Type: Electret Microphone Module Main IC: MAX4466 Output Type: Analog Operating Voltage: 2.4V – 5.5V DC | MAX4466 Microphone Module • Electret Microphone Amplifier • Sound Sensor Module • Audio Detection Sensor |
| No Image | EMS-00005-A | HC-SR04 Ultrasonic Sensor Module | EM - Electronic-Electrical Modules | MWduino / Generic, ElecFreaks, KEYESTUDIO, SunFounder | Ultrasonic distance sensor module that uses 40kHz sound waves for accurate, non-contact distance measurement. Operates on 3.3–5.5V DC and features a simple 4-pin interface (VCC, Trig, Echo, GND) for easy integration. Ideal for robotics, obstacle avoidance, automation systems, parking sensors, distance measurement, and Arduino-based projects. | Power Supply (V): +5V DC Working Current (mA): 15 mA Output Signal: Electrical frequency signal Ranging Distance: 2 cm – 400 cm Distance Resolution: 0.3 cm Measuring Angle: 30° Operating Voltage Range (V): 3.3V – 5.5V Interface Type: 4-pin (VCC, Trig, Echo, GND) Shipping Weight: 0.007 kg Shipping Dimensions (L x W x H): 9 x 6 x 2 cm | Ultrasonic Sensor • HC-SR04+ • Distance Sensor • Arduino Sensor • Obstacle Detection Module |
| No Image | EMS-00006-A | PIR Motion Sensor | EM - Electronic-Electrical Modules | HC, DFRobot, SparkFun, Keyestudio | The PIR Motion Sensor is a passive infrared (PIR) detection module used to detect human movement and body heat based on infrared radiation changes. The most common version is the HC-SR501 PIR sensor module, which uses a pyroelectric infrared sensor and Fresnel lens to detect motion within its sensing range. (components101.com) | Product Type: PIR Motion Sensor Model: HC-SR501 Sensor Type: Passive Infrared Operating Voltage: 5V – 20V DC Detection Distance: 3 – 7 meters | Motion Detection Sensor • PIR Motion Sensor • HC-SR501 PIR Sensor • Human Motion Sensor |
| No Image | EMS-00007-A | Temperature sensor Module - DS18B20 | EM - Electronic-Electrical Modules | Maxim Integrated, DFRobot, SparkFun | The DS18B20 Temperature Sensor Module is a digital temperature sensing device designed for accurate temperature measurement using the 1-Wire communication protocol. Developed by Dallas Semiconductor (now Maxim Integrated), the DS18B20 provides calibrated digital temperature readings with high accuracy and supports multiple sensors on a single data line. | Product Type: Digital Temperature Sensor Model: DS18B20 Communication Protocol: 1-Wire Operating Voltage: 3V – 5.5V DC Temperature Range: -55°C to +125°C Accuracy: ±0.5°C | DS18B20 Temperature Sensor • Waterproof Temperature Sensor • Digital Temperature Sensor • One Wire Temperature Sensor |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|---|------------------------------------|---|---|--|--|
| No Image | EMS-00008-A | Metal touch sensor | EM - Electronic-Electrical Modules | Keyes Electronics, Generic Electronics, Keyestudio | The KY-036 Metal Touch Sensor Module is a human body and metal touch detection sensor designed to detect changes in electrical conductivity when touched by a finger or conductive object. The module uses an LM393 comparator and transistor-based sensing circuit to generate analog and digital output signals. | Product Type: Metal Touch Sensor Module Model: KY-036 Main IC: LM393 Comparator Operating Voltage: 3.3V – 5V DC | KY-036 Metal Touch Sensor • Human Body Touch Sensor • Metal Touch Module • Touch Detection Sensor |
| No Image | EMS-00009-A | Heart Pulse Rate Sensor | EM - Electronic-Electrical Modules | Maxim Integrated, Generic Electronics, SparkFun, DFRobot | The Heart Pulse Rate Sensor is a biometric sensor module used to detect heartbeats and measure pulse rate (BPM - Beats Per Minute). It works using photoplethysmography (PPG), where an LED emits light into the skin and a photodetector measures changes in blood flow caused by heartbeats. | Product Type: Heart Pulse Rate Sensor Sensor Type: Photoplethysmography (PPG) Operating Voltage: 3.3V – 5V DC Output Type: Analog / I2C Measured Parameter: Pulse Rate (BPM) | Heart Pulse Sensor • Pulse Rate Sensor • Heartbeat Sensor Module • Pulse Detection Sensor • Arduino Pulse Sensor • BPM Sensor • Heart Rate Monitor Sensor • Pulse Sensor Amped |
| No Image | EMS-00010-A | MQ-2 Gas Sensor Module- Methane, Butane, LPG, SmoKe | EM - Electronic-Electrical Modules | Hanwei Electronics, Winsen Electronics, SparkFun Electronics, DFRobot | The MQ-2 Gas Sensor Module is a semiconductor-based gas detection sensor designed to detect combustible and flammable gases such as Methane, Butane, LPG, Propane, Hydrogen, Alcohol, and Smoke. It uses a tin dioxide (SnO ₂) sensing layer whose resistance changes when exposed to combustible gases. | Product Type: Gas & Smoke Sensor Model: MQ-2 Detectable Gases: LPG, Methane, Butane, Smoke Detection Range: 200 – 10000 ppm Operating Voltage: 5V DC | LPG Gas Sensor • methane sensor • Arduino Gas Sensor • MQ-2 Gas Sensor • Smoke Sensor Module • Butane Gas Detector • MQ2 Smoke Detector • Flammable Gas Sensor |
| No Image | EMS-00010-B | Alcohol Gas Sensor Module | EM - Electronic-Electrical Modules | Hanwei Electronics, Winsen Electronics, Waveshare | MQ-3 Alcohol Gas Sensor Module is used to detect alcohol concentration in the air and provides both analog and digital outputs. The module is based on the MQ-3 gas sensor which uses SnO ₂ (Tin Dioxide) sensing material. The sensor operates from 2.5V to 5V and includes an onboard potentiometer to adjust the digital output threshold level. | Operating Voltage (V): 2.5 to 5 Additional Specs: Output Pin: Analog and digital, Gold pin connectors, 2.54 mm pitch, Boost Converter Chip: PT1301 Board Size (mm): 40 x 21 mm Mounting Hole Diameter (mm): 2 mm Interface: Digital Output, Analog output, VCC Positive power supply (2.5V-5.0V), Power ground | arduino • alcohol sensor • MQ-3 • gas sensor • ethanol detector |
| No Image | EMS-00010-C | Methane and Natural Gas sensor | EM - Electronic-Electrical Modules | Hanwei Electronics, Winsen Electronics, Waveshare | MQ-4 Gas Sensor Module is a high sensitivity gas detection module used for sensing Methane (CH ₄), CNG, and natural gas leakage in the environment. An onboard potentiometer allows adjustment of the gas detection threshold level for digital output triggering. MQ-4 sensor is widely used in gas leakage alarms, industrial safety systems, and smart monitoring projects. | Model: MQ-4 Detecting range: 200 to 10000 ppm. Operating Voltage: 3 ~ 5 V Length: 3.1 cm Height: 2.1 cm Width: 1.9 cm | Arduino Compatible • gas sensor • MQ-4 • methane sensor • CNG detector |
| No Image | EMS-00010-D | Natural Gas and LPG Analog Sensor | EM - Electronic-Electrical Modules | Hanwei Electronics, Winsen Electronics, Waveshare | The MQ-5 is used in gas leakage detecting equipment in consumer and industry applications, this sensor is suitable for detecting LPG, natural gas, coal gas. Avoid the noise of alcohol, cooking fumes, and cigarette smoke. The sensitivity can be adjusted by the potentiometer. The sensitive material of the MQ-5 gas sensor is SnO ₂ , which with lower conductivity in clean air. When the target combustible gas exists, The sensor's conductivity is higher along with the gas concentration rising. Please use a simple electro circuit, Convert change of conductivity to the corresponding output signal of gas concentration. The sensor could be used to detect different combustible gas especially Methane, it is with low cost and suitable for different application | Model: MQ-5 Operating Temperature Range: -20 to 40 °C Operating Voltage: 5 V Length: 3.2 cm Height: 2.2 cm Width: 2 cm | Arduino Compatible • gas sensor • methane sensor • CNG detector • CH4 sensor |
| No Image | EMS-00010-E | Flammable Gas Sensor | EM - Electronic-Electrical Modules | Hanwei Electronics, Zhengzhou Winsen Electronics, DFRobot | This is a simple-to-use MQ-6 Liquefied Petroleum Isobutane Propane Gas Sensor module, suitable for sensing LPG (composed of mostly propane and butane) concentrations in the air. The MQ-6 can detect gas concentrations anywhere from 200 to 10000ppm. This sensor has high sensitivity and fast response time. The sensor's output is an analog resistance. The drive circuit is very simple; all you need to do is power the heater coil with 5V, add a load resistance, and connect the output to an ADC. The sensitive material of the MQ-6 gas sensor is SnO ₂ , which with lower conductivity in clean air. When the target combustible gas exists, The sensor's conductivity is higher along with the gas concentration rising. Please use a simple electro circuit, Convert change of conductivity to the corresponding output signal of gas concentration. | Model: MQ-6 Operating Temperature Range: -20 to 40 °C Operating Voltage: 5 V Length: 3.2 cm Height: 2.2 cm Width: 2 cm | arduino • gas sensor • methane sensor • MQ6 • LPG Sensor • Propane Sensor • Butane Sensor |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|--------------------|------------------------------------|--|---|---|--|
| No Image | EMS-00010-F | MQ-7 sensor module | EM - Electronic-Electrical Modules | Hanwei Electronics, Zhengzhou Winsen Electronics, DFRobot | This MQ7 Carbon Monoxide Gas Sensor Module is a semiconductor gas sensor tuned to detect carbon monoxide. It is in the same family of devices as the smoke detector sensor, measuring the change in surface conductivity of tin dioxide in the presence of carbon monoxide. This sensor has high sensitivity and fast response time. The sensor can measure concentrations of 10 to 10,000 ppm. The sensor can operate at temperatures from -10 to 50°C and consumes less than 150 mA at 5 V. This module provides both digital and analog outputs. The threshold level for digital output can be easily adjusted using the preset on the board. The MQ-7 sensor module can be easily interfaced with Micro-controllers, Arduino and etc. | Model: MQ-7 Ambient temperature: -20 ~ + 50 °C Characteristic gas: 100 ppm CO Heating current: ? 180 mA Heating power: approx. 350 mW Heating resistance: ± 31 ? Heating voltage: 5.0V ± 2V / 1.5 ± 1V Humidity: ? 95% RH Operating Voltage: 5 V Oxygen content: 21%. Range: 10 ~ 1000 ppm Return time: ? 30 s Sensitivity: ? 3%. Length: 3.5 cm Height: 1.1 cm Width: 2 cm | arduino • MQ7 • Carbon Monoxide Sensor • CO Sensor • Gas Detector • Air Quality Sensor |
| No Image | EMS-00010-G | MQ135 gas sensor | EM - Electronic-Electrical Modules | Hanwei Electronics, Zhengzhou Winsen Electronics, Futurlec | The MQ 135 Air Quality Detector Sensor Module For Arduino has lower conductivity in clean air. When the target combustible gas exists, the conductivity of the sensor is higher along with the gas concentration rising. Convert change of conductivity to the corresponding output signal of gas concentration. The MQ135 gas sensor has a high sensitivity to Ammonia, Sulphide, and Benzene steam, also sensitive to smoke and other harmful gases. It is at low cost and suitable for different applications such as harmful gases/smoke detection. | Model: MQ-135 Detecting range: 100ppm to 1000ppm Operating current: 150 mA Operating Voltage: 5 V Length: 3.2 cm Height: 2.7 cm Width: 2 cm | Air Quality Sensor • MQ135 • Ammonia Sensor • NOx Sensor • CO2 Sensor • Smoke Sensor |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|-------------|--|------------------------------------|--|---|--|--|
| No Image | EMS-00010-H | Hydrogen Gas Sensor - MQ-8 - SEN-10916 | EM - Electronic-Electrical Modules | SparkFun Electronics, Hanwei Electronics, Winsen Electronics, SparkFun | The MQ-8 Hydrogen Gas Sensor is a semiconductor-based gas detection sensor designed to detect hydrogen (H?) gas concentration in air. It is highly sensitive to hydrogen and can detect gas concentrations ranging from 100 ppm to 10,000 ppm. The sensor uses a tin dioxide (SnO?) sensing layer whose resistance changes when exposed to hydrogen gas. The module provides both analog and digital outputs, making it easy to interface with Arduino, ESP32, Raspberry Pi, STM32, and other microcontrollers. | Product Type: Hydrogen Gas Sensor Model: MQ-8 SparkFun SKU: SEN-10916 Detectable Gas: Hydrogen (H?) Detection Range: 100 – 10,000 ppm Operating Voltage: 5V DC | MQ-8 Gas Sensor • Hydrogen Gas Sensor • H2 Gas Detector • MQ8 Sensor Module • Hydrogen Detection Sensor • Arduino Gas Sensor • ESP32 Hydrogen Sensor • Gas Leakage Sensor |
| No Image | EMS-00011-A | GPS module | EM - Electronic-Electrical Modules | u-blox, Quectel, DFRobot, SparkFun | The GPS Module is a satellite-based positioning and navigation device used to determine real-time location, speed, altitude, and time information. Most hobby and embedded systems commonly use the Neo-6M GPS module, which communicates through UART serial interface and receives signals from GPS satellites. | Product Type: GPS Navigation Module Model: Neo-6M Operating Voltage: 3V – 5V DC Baud Rate: 9600 bps | GPS Module • Neo-6M GPS • GNSS Receiver • Arduino GPS Module • ESP32 GPS Module • Satellite Navigation Module • UART GPS Sensor • Location Tracking Module |
| No Image | EMS-00012-A | Color Sensor | EM - Electronic-Electrical Modules | ams-OSRAM, ams-OSRAM, ams-OSRAM, Generic Electronics | The TCS3200 Color Sensor Module is an RGB color detection sensor designed to identify and measure colors using red, green, and blue filtered photodiodes. The module uses the TCS3200/TCS230 light-to-frequency converter IC to convert light intensity into frequency signals readable by microcontrollers. | Product Type: RGB Color Sensor Model: TCS3200 / TCS230 Sensor Type: Light-to-Frequency Converter Operating Voltage: 2.7V – 5.5V DC | Arduino Color Sensor • Color Detection Module • TCS3200 Color Sensor • RGB Color Sensor • TCS230 Sensor • RGB Recognition Module • ESP32 Color Sensor • Light Frequency Sensor |
| No Image | EMS-00012-B | Color Sensor | EM - Electronic-Electrical Modules | ams-OSRAM, ams-OSRAM, ams-OSRAM, Generic Electronics | The TCS3200 Color Sensor Module is an RGB color recognition sensor used to detect and measure colors based on reflected light intensity. It uses the TCS3200/TCS230 light-to-frequency converter IC along with photodiodes and onboard white LEDs for accurate color detection. | Product Type: RGB Color Sensor Model: TCS3200 / TCS34725 Sensor Type: Light-to-Frequency Converter Operating Voltage: 2.7V – 5.5V DC | TCS3200 Sensor • RGB Sensor • Color Sensor • TCS230 Module • Arduino Color Sensor • ESP32 RGB Sensor • Color Detection Module |
| No Image | EMS-00013-A | Infrared Obstacle Avoidance IR Sensor Module | EM - Electronic-Electrical Modules | Generic OEM Manufacturer, Keyestudio, HiLetgo, Elegoo, SunFounder | The Infrared Obstacle Avoidance Sensor Module detects nearby objects using reflected infrared light. It uses an IR transmitter–receiver pair with an LM393 comparator to provide a digital active LOW output when an obstacle is detected. Ideal for robotics, smart cars, automation systems, and Arduino-based proximity detection projects. | Sensor Type: Infrared Reflective Obstacle Sensor Operating Voltage: 3.6V - 5V DC Output Type: Digital (Active Low) Main IC: LM393 Comparator Average Current Consumption: 0.06 mA Detection Angle: 35° Detection Distance: 2 cm – 30 cm (adjustable) Interface Pins: VCC, GND, OUT Indicator LED: Yes (Obstacle Detection Indicator) Sensitivity Adjustment: Onboard Potentiometer Dimensions (mm): 48 x 14 x 8 Weight (g): 5 Shipping Weight: 0.01 kg Shipping Dimensions (cm): 5 x 4 x 1 | IR Obstacle Sensor • Infrared Reflective Module • LM393 Comparator • Active Low Output • Proximity Sensor • Arduino Compatible • Robot Sensor |
| No Image | EMS-00014-A | Touch Detector | EM - Electronic-Electrical Modules | Tontek Design Technology, Shenzhen Tontek (Tontek IC), Generic Module Manufacturer, Waveshare (Module Vendor), Keyestudio (Arduino Vendor) | TTP223B Capacitive Touch Key Sensor Module is based on a touch-sensing IC capacitive touch switch module. It allows you to remove the worry of conventional push-type keys. Digital Capacitive Touch Switch Module is based on TTP223B. Normally, it outputs low and keeps at a low power state. When a touch is sensed on the circular marked region, it outputs high and switches to the quick response state. When not being touched for 12 seconds, it switches to a low power state again. In addition to the thin paper (non-metallic) covering the surface of the module, as long as the correct location of the touch, you can make it hidden in the walls, desktops, and other parts of buttons. | Item Type: Electronic Switch Model: Touch Switch IC Chip: TTP223B Operating Voltage: 2V – 5.5V Output High (VOH): 0.8 x VCC Output Low (VOL): 0.3 x VCC Response Time (Low Power Mode): 220 ms Response Time (Touch Mode): 60 ms Length: 24 mm Width: 24 mm Height: 2 mm Weight: 0.6 g Shipping Weight: 0.085 kg Shipping Dimensions: 3 x 3 x 1 cm | arduino • touch • TTP223B • capacitive sensor |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|--|------------------------------------|--|---|---|--|
| No Image | EMS-00015-A | Touch keyboard TTP229 16 keys capacitive | EM - Electronic-Electrical Modules | Tontek Design Technology, Robocraze, Keystudio | The TTP229 16-Key Capacitive Touch Keyboard is a touch-sensitive input module based on the TTP229 capacitive sensing IC. Unlike traditional membrane or mechanical keypads, this module detects finger touch using capacitive sensing technology, providing silent, durable, and highly responsive operation. | Product Type: Capacitive Touch Keypad IC Used: TTP229 Number of Keys: 16 Key Layout: 4x4 Operating Voltage: 2.4V – 5.5V DC | TTP229 Touch Keypad • 16-Key Capacitive Keyboard • 4x4 Touch Sensor Module • Arduino/ESP32 Touch Input Module |
| No Image | EMS-00015-B | 3x4 Membrane switch keypad | EM - Electronic-Electrical Modules | Adafruit, DFRobot, SparkFun, Keystudio | The 3x4 12-Key Membrane Switch Keypad is a compact matrix-style input device commonly used with microcontrollers like Arduino, ESP32, Raspberry Pi, PIC, AVR, and embedded electronics projects. It contains 12 push buttons arranged in a telephone-style 4-row x 3-column matrix layout. | Product Type: Membrane Matrix Keypad Key Layout: 3x4 Matrix Number of Keys: 12 Operating Voltage: 3V – 35V DC Connector Type: 7-pin Header | 12 Key Matrix Keypad • Membrane Switch Keypad • Arduino Keypad • 3x4 Membrane Keypad • Numeric Keypad Module • 4x3 Matrix Keyboard • Telephone Style Keypad • Matrix Input Module |
| No Image | EMS-00015-C | 4x4 Membrane switch keypad | EM - Electronic-Electrical Modules | Adafruit, Keystudio, DFRobot, SparkFun | The 4x4 / 4x3 Membrane Switch Keypad is a thin and flexible matrix-style input device commonly used with microcontrollers like Arduino, ESP32, Raspberry Pi, PIC, and AVR boards. It contains multiple push buttons arranged in matrix rows and columns, allowing easy user input while using fewer GPIO pins. | Product Type: Membrane Matrix Keypad Key Layout: 4x4 / 4x3 Number of Keys: 12 or 16 Operating Voltage: 3V – 35V DC Connector Type: 7-pin / 8-pin Header | 4x4 Membrane Keypad • 12 Key Matrix Keypad • Membrane Switch Keypad • Matrix Keyboard Module • Arduino Keypad • Numeric Input Module • 4x3 Matrix Keypad • Keypad Module |
| No Image | EMS-00016-A | Water Flow Sensor YF-G1 | EM - Electronic-Electrical Modules | YF Electronics, DFRobot, FlyRobo, Robocraze | The YF-G1 Water Flow Sensor is a hall-effect liquid flow meter designed for measuring the flow rate of water and other non-corrosive liquids in pipelines. It contains an internal rotor with a magnet that spins when liquid flows through the sensor. The built-in hall-effect sensor detects the magnetic rotation and generates pulse signals proportional to the flow rate. | Product Type: Water Flow Sensor Model: YF-G1 Sensor Type: Hall Effect Flow Meter Operating Voltage: 5V – 18V DC Working Current: ? 15 mA Flow Range: 1 – 30 L/min | Water Flow Sensor • Hall Effect Flow Sensor • Liquid Flow Meter • Flow Rate Sensor • YF-G1 Sensor • Industrial Water Flow Sensor • Arduino Water Sensor • Pipe Flow Detection Module |
| No Image | EMS-00016-B | Water Flow Sensor YF-S401 | EM - Electronic-Electrical Modules | YF Electronics, DFRobot, FlyRobo, Robocraze | The YF-S401 Water Flow Sensor is a compact hall-effect liquid flow meter used to measure water flow rate in pipes and tubing systems. Inside the sensor, a rotor with magnets spins as water passes through it. The hall-effect sensor generates pulse signals proportional to the flow rate. It is widely used in water dispensers, smart irrigation systems, liquid monitoring systems, coffee machines, industrial automation, and Arduino/ESP32 projects. | Product Type: Water Flow Sensor Model: YF-S401 Sensor Type: Hall Effect Flow Meter Operating Voltage: 5V – 18V DC Working Current: ? 15 mA Flow Range: 0.3 – 6 L/min | YF-S401 Sensor • Water Flow Sensor • Hall Effect Flow Sensor • Liquid Flow Meter • Flow Rate Sensor • Arduino Water Flow Sensor • Flow Detection Module |
| No Image | EMS-00017-A | LDR Module | EM - Electronic-Electrical Modules | EM Series / Generic Compatible, KEYESTUDIO | The LDR Module detects ambient light intensity and provides a digital output based on the surrounding brightness level. It features an onboard potentiometer for adjusting sensitivity and threshold settings. Ideal for automatic lighting systems, day/night detection, Arduino projects, smart automation, security systems, and other light-controlled electronic applications. | Model: Light Dependent Resistor Module Operating Voltage (V): 3.3 – 5 Operating Current (mA): 15 Output Type: Digital (DO) Adjustable Threshold: Yes (via Potentiometer) Sensor Type: Photoresistor (LDR) Mounting Hole: M3 Indicator LEDs: Power LED, Status LED Pin Configuration: VCC, GND, DO Length (mm): 36 Width (mm): 14 Height (mm): 8 Weight (g): 3 Shipping Weight: 0.005 kg Shipping Dimensions (L x W x H): 4 x 3 x 2 cm | LDR Module • Light Sensor • Photoresistor Module • LM393 Sensor • Arduino Light Sensor |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|-------------|---|------------------------------------|--|---|--|---|
| No Image | EMS-00018-A | Water Level Sensor | EM - Electronic-Electrical Modules | Generic Electronics, Generic Electronics, DFRobot, SparkFun | The Water Level Sensor Module is used to detect and measure water levels in tanks, containers, reservoirs, automation systems, irrigation projects, and Arduino applications. It works using exposed parallel conductive traces that change resistance depending on the amount of water touching the sensor surface. Most modules provide both analog output (water level amount) and digital output (threshold detection using LM393 comparator). These sensors are widely used in smart irrigation systems, automatic water tank monitoring, rainwater harvesting, leak detection, and robotics projects. | Product Type: Water Level Sensor Module Sensor Type: Conductive Water Sensor Operating Voltage: 3.3V – 5V DC Comparator IC: LM393 | Water Detection Sensor • Water Level Sensor • Liquid Level Sensor • Analog Water Sensor • Arduino Water Sensor • Level Detection Module • Tank Level Sensor |
| No Image | EMS-00019-A | Soil Moisture Sensor Module | EM - Electronic-Electrical Modules | Sensor Probe Manufacturer, Comparator Module Manufacturer, IC Manufacturer | The Soil Moisture Sensor Module (YL-69 + FC-28) measures water content in soil using resistive sensing technology. It provides both analog (AO) and digital (DO) outputs, with adjustable sensitivity through an onboard LM393 comparator. Ideal for smart irrigation systems, plant monitoring, Arduino projects, greenhouse automation, and IoT-based environmental monitoring applications. | Sensor Type: Resistive Soil Moisture Sensor Operating Voltage: 3.3V – 5V DC Output Type: Analog (AO) and Digital (DO) Digital Output: 0 or 1 (TTL Logic) Measurement Principle: Resistance-based conductivity measurement Sensitivity Adjustment: Onboard Potentiometer (for digital threshold) Probe Dimension: Approx. 6 cm x 3 cm Cable Length: 20 cm Interface Pins: VCC, GND, DO, AO Shipping Weight: 0.02 kg Shipping Dimensions (cm): 8 x 6 x 3 | Arduino Compatible • Soil Moisture Sensor • YL-69 • FC-28 • LM393 • Resistive Soil Sensor • Irrigation Sensor |
| No Image | EMS-00020-A | Joystick Module | EM - Electronic-Electrical Modules | EM Series / Generic Compatible, KEYESTUDIO, SunFounder, DFRobot | Dual-axis analog joystick module for detecting X and Y movement positions. Each axis uses a 10K Ω potentiometer to provide a 0–5V analog output proportional to joystick position. Includes a built-in push-button switch for additional input functionality. Ideal for robotics, gaming controllers, Arduino projects, remote control systems, and motion control applications. | Model: PS2 Joystick Module Operating Voltage (VDC): 5 Potentiometer Resistance: 10K Ω (per axis) X/Y Output: Analog (0–5V) Button: Digital (Press-Down) Interface Type: 2.54 mm Pin Header PCB Size (mm): 34 x 32 Compatibility: Arduino / Raspberry Pi / Microcontrollers Lifespan: Long-Life, High-Stability Potentiometers Shipping Weight: 0.015 kg Shipping Dimensions (L x W x H): 6 x 5 x 4 cm | PS2 Joystick • Analog Joystick Module • Dual Axis Sensor • 10K Potentiometer Joystick • Arduino Joystick |
| No Image | EMS-00021-A | SW-520D Tilt Sensor | EM - Electronic-Electrical Modules | Generic Electronics, DFRobot, SparkFun, Keyestudio | The SW-520D Tilt Sensor Module is a simple digital angle detection sensor used to detect tilt, orientation change, vibration, or motion. It works using a metal ball inside a cylindrical switch that moves when the angle changes. When tilted beyond a certain threshold (around ~10°–15° depending on mounting), the internal contacts connect/disconnect and the module outputs a digital HIGH/LOW signal. It is widely used in security alarms, anti-theft systems, robotics balance detection, and Arduino/ESP32 projects. | Product Type: Tilt / Angle Sensor Module Sensor Type: Ball Switch (SW-520D) Output Type: Digital (0 / 1) Operating Voltage: 3.3V – 5V DC Comparator IC: LM393 | SW-520D Sensor • Tilt Sensor Module • Angle Sensor • Ball Switch Sensor • Orientation Sensor • Digital Tilt Switch • Arduino Tilt Sensor |
| No Image | EMS-00022-A | Analog Piezoelectric Ceramic Vibration Module | EM - Electronic-Electrical Modules | Generic Electronics, DFRobot, SparkFun, Adafruit | The Analog Piezoelectric Ceramic Vibration Module uses a piezoelectric ceramic disc to detect vibrations, knocks, and mechanical stress. When the surface is bent, tapped, or vibrated, the ceramic element generates a proportional voltage (piezoelectric effect). Unlike digital vibration modules (like SW-420), this module provides analog output, meaning it can measure the strength of vibration, not just ON/OFF detection. It is widely used in Arduino projects, touch sensing, drum pads, impact detection, and condition monitoring systems. | Product Type: Analog Vibration Sensor Module Sensing Element: Piezoelectric Ceramic Disc Output Type: Analog Voltage Output Operating Voltage: 3.3V – 5V DC Operating Current: < 1 mA | Shock Sensor • Piezo Vibration Sensor • Analog Piezo Module • Ceramic Vibration Sensor • Knock Sensor • Arduino Piezo Sensor • Vibration Detection Module |
| No Image | EMS-00023-A | SW-420 Alarm Vibration Sensor Module | EM - Electronic-Electrical Modules | Generic Electronics, DFRobot, SparkFun, FlyRobo | SW-420 Alarm Vibration Sensor Module is a vibration and shock detection module used in security alarms, anti-theft systems, motion sensing, robotics, earthquake detection, and Arduino projects. It uses the SW-420 vibration switch along with an LM393 comparator to provide digital output when vibration or movement is detected. Sensitivity can be adjusted using the onboard potentiometer. (components101.com) | Product Type: Vibration Sensor Module Sensor Model: SW-420 Comparator IC: LM393 Operating Voltage: 3.3V – 5V DC Output Type: Digital Output | LM393 Sensor • SW-420 Sensor • Vibration Sensor Module • Shock Sensor • Alarm Sensor • Motion Detection Sensor • Arduino Vibration Sensor |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|---|------------------------------------|--|---|---|--|
| No Image | EMS-00024-A | Rain Sensor Module | EM - Electronic-Electrical Modules | Generic Electronics, DFRobot, SparkFun | Rain Sensor Modules are used to detect rain, water droplets, moisture, and rainfall intensity in weather monitoring systems, smart irrigation, automatic wiper systems, robotics, and Arduino projects. Most modules use a rain-sensitive conductive plate with an LM393 comparator module and provide both analog and digital outputs. | Product Type: Rain Detection Sensor Module Operating Voltage: 3.3V – 5V DC Comparator IC: LM393 Sensitivity Adjustment: Potentiometer Compatible Boards: Arduino, ESP32, Raspberry Pi | Rain Sensor Module • Rain Drop Sensor • FC-37 Sensor • YL-83 Rain Module • Water Detection Sensor • Arduino Rain Sensor • Weather Sensor |
| No Image | EMS-00025-A | Encoder Sensor Module | EM - Electronic-Electrical Modules | Broadcom, Generic Electronics, Omron, AMS | Encoder Sensor Modules are used to detect rotation, speed, direction, and position in robotics, automation, motor control, CNC machines, smart vehicles, and Arduino projects. Common encoder modules include rotary encoders (KY-040), optical encoder sensors (MOC7811), and magnetic encoder modules. These modules provide digital pulse outputs for precise motion tracking. | Product Type: Encoder Sensor Module Encoder Type: Rotary / Optical / Magnetic Operating Voltage: 3.3V – 5V DC Output Type: Digital Pulse | Encoder Sensor Module • Rotary Encoder Module • Optical Encoder Sensor • Speed Sensor • Position Sensor • KY-040 Encoder • Arduino Encoder |
| No Image | EMS-00026-A | HMC5883L Triple Axis Compass Magnetometer Sensor Module | EM - Electronic-Electrical Modules | Honeywell, ITEAD Studio, DFRobot, Adafruit, SparkFun | HMC5883L Triple Axis Compass Magnetometer Sensor Module is a 3-axis digital compass sensor used for navigation, heading detection, robotics, drones, GPS systems, and Arduino projects. The module communicates through the I2C interface and measures magnetic field strength across X, Y, and Z axes for accurate compass heading and orientation detection. | Product Type: Triple Axis Magnetometer Sensor Model: HMC5883L Number of Axes: 3 Axis Communication Interface: I2C Operating Voltage: 3.3V – 5V ADC Resolution: 12-bit | HMC5883L Sensor • Magnetometer Module • Compass Sensor • Triple Axis Compass • GY-271 Sensor • GY-273 Module • Arduino Compass Sensor |
| No Image | EMX-00001-A | Arduino Uno | EM - Electronic-Electrical Modules | Arduino, Elegoo, HiLetgo, Keyestudio | The Arduino Uno R3 is a microcontroller development board based on the ATmega328P, designed for building interactive electronic projects. It features 14 digital I/O pins, 6 analog inputs, a 16 MHz clock, USB connectivity, and operates at 5 V. Compatible with the Arduino IDE and a wide range of shields, it is widely used in education, prototyping, and embedded system development. | Board Type: Uno With Cable: Yes Operating Voltage: 5 V Input Voltage Range: 6 – 20 V Analog I/O Pins: 6 Digital I/O Pins: 14 (6 x PWM) DC Current per I/O Pin: 40 mA Clock Speed: 16 MHz SRAM: 2 KB EEPROM: 1 KB Flash Memory: 32 KB Dimensions (L x W x H): 75 x 54 x 12 mm Weight: 28 g (without cable), 54 g (with cable) | ATmega328P • 5 V Board • 16 MHz Crystal • USB Interface • Microcontroller • Educational Kit • Open-Source Hardware • Breadboard Compatible |
| No Image | EMX-00002-A | Arduino nano | EM - Electronic-Electrical Modules | Arduino, Gravitech, RobotDyn, Keyestudio, DFRobot | The Arduino Nano is a small, complete, and breadboard-friendly board based on the ATmega328 (Arduino Nano 3.x) or ATmega168 (Arduino Nano 2.x). It has more or less the same functionality as the Arduino Duemilanove but in a different package. It lacks only a DC power jack and works with a Mini-B USB cable instead of a standard one. | Microcontroller: ATmega328 Flash Memory: 32 KB (ATmega328) of which 2 KB used by bootloader SRAM: 1 KB or 2KB EEPROM: 512 bytes (ATmega168) or 1 KB (ATmega328) Clock Speed: 16 MHz Digital I/O Pins: 14 (of which 6 provide PWM output) Analog Input Pins: 8 DC Current per I/O Pin: 40 mA Operating Voltage: 5V Input Voltage: 7 - 12 V (5V model) | ATmega328P • Arduino Nano • Microcontroller Board • Development Board • IoT |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|-------------|-------------------------|------------------------------------|---|--|--|---|
| No Image | EMX-00003-A | Arduino Mega | EM - Electronic-Electrical Modules | Arduino, Elegoo, RobotDyn, Keyestudio, DFRobot, Waveshare | The Arduino Mega is a microcontroller board based on the ATmega2560. It has 54 digital input/output pins (of which 14 can be used as PWM outputs), 16 analog inputs, 4 UARTs (hardware serial ports), a 16 MHz crystal oscillator, a USB connection, a power jack, an ICSP header, and a reset button. It contains everything needed to support the microcontroller; simply connect it to a computer with a USB cable or power it with an AC-to-DC adapter or battery to get started. The Mega is compatible with most shields designed for the Arduino Duemilanove or Diecimila. The Mega 2560 R3 also adds SDA and SCL pins next to the AREF. In addition, there are two new pins placed near the RESET pin. One is the IOREF that allow the shields to adapt to the voltage provided by the board. The other is not connected and is reserved for future purposes. The Mega 2560 R3 works with all existing shields but can adapt to new shields that use these additional pins. Arduino is an open-source physical computing platform based on a simple i/o board and a development environment that implements the Processing/Wiring language. Arduino can be used to develop stand-alone interactive objects or can be connected to software on your computer (e.g. Flash, Processing, MaxMSP). The open-source IDE can be downloaded for free (currently for Mac OS X, Windows, and Linux). | Microcontroller Chip: ATmega2560 Analog I/O Pins: 16 Digital I/O Pins: 54 (of which 14 provide PWM output) Flash Memory: 256 KB of which 8 KB used by bootloader SRAM: 8 KB EEPROM: 4 KB DC Current per I/O Pin: 40 mA DC Current for 3.3V Pin: DC Current for 3.3V Pin Operating Voltage: 5V Input Voltage: 7V to 12V Input Voltage (limit): 6V-20V | Development Board • Arduino Mega • ATmega2560 • Embedded Systems • IoT Board |
| No Image | EQE-00001-A | Digital vernier caliper | EQ - Equipment/Instrument | Mitutoyo, INSIZE, Baker Gauges, iGaging | Digital vernier calipers are precision measuring instruments used for measuring internal dimensions, external dimensions, depth, and step measurements. They feature an LCD display for accurate digital readings and are widely used in engineering, electronics, machining, woodworking, laboratories, robotics, and DIY projects. | Product Type: Digital Vernier Caliper Measuring Range: 0 – 150 mm Resolution: 0.01 mm Accuracy: ±0.02 mm Display Type: LCD Digital Display | DIY Measuring Tool • Digital Vernier Caliper • Electronic Caliper • LCD Caliper • Precision Measuring Tool • Digital Measuring Tool • Stainless Steel Caliper |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|--------------------|---------------------------|--|--|--|--|
| No Image | EQE-00002-A | Digital Multimeter | EQ - Equipment/Instrument | Generic / OEM, YX-360, Mastech, Victor, Pro'sKit | Compact Digital Multimeter for everyday electrical testing. Measures AC/DC voltage, DC current, resistance, diode, continuity, transistor hFE, battery condition, and square wave output. Features an easy-to-read LCD display for accurate readings. Ideal for students, hobbyists, laboratories, DIY projects, and technicians for troubleshooting, testing, and educational applications. | Item Type: Multimeter Model Type: Digital Multimeter (DT830D Type) Probe Length: 60 cm Length: 120 mm Width: 70 mm Height: 27 mm Weight: 160 g Shipping Weight: 0.18 kg Shipping Dimensions: 15 x 8 x 3.5 cm | DT830D • Digital Multimeter • AC/DC Tester • LCD Display • VOM |
| No Image | EQM-00001-A | 3D Printer | EQ - Equipment/Instrument | Tiertime Official Website, Cetus 3D Official Website, UP3D / Tiertime, Tiertime Europe | The Cetus MK3 is a compact FDM/FFF 3D printer developed by Tiertime for education, prototyping, STEM labs, hobby projects, and desktop manufacturing. It supports multiple nozzle sizes, Wi-Fi connectivity, touchscreen operation, and modular upgrades. The printer is known for compact size, reliable print quality, and support for PLA, PETG, TPU, and other materials. | Product Type: FDM / FFF 3D Printer Model: Cetus MK3 Printing Technology: MEM / FDM Build Volume: 180 x 180 x 180 mm Layer Resolution: 50 – 350 Micron Nozzle Sizes: 0.2 / 0.4 / 0.6 mm Filament Diameter: 1.75 mm | FDM Printer • Educational 3D Printer • Cetus MK3 • Cetus 3D Printer • DIY 3D Printer • Compact 3D Printer • Tiertime Printer |
| No Image | EQM-00001-B | 3D Printer | EQ - Equipment/Instrument | FlashForge USA, Inventor Technologies, Robotbanao | The FlashForge Adventurer 3C is a compact FDM 3D printer designed for educational use, prototyping, STEM labs, hobby projects, and home manufacturing. It features automatic bed leveling support, a removable heated build plate, enclosed printing chamber, Wi-Fi connectivity, touchscreen control, and easy nozzle replacement. It is suitable for PLA, ABS, and PETG filament printing. | Product Type: FDM 3D Printer Model: Adventurer 3C Printing Technology: FDM (Fused Deposition Modeling) Build Volume: 150 x 150 x 150 mm Nozzle Diameter: 0.4 mm Max Nozzle Temperature: 240°C Filament Diameter: 1.75 mm | 3D Printer • FlashForge Printer • Adventurer 3C • FDM Printer • DIY Printer • STEM Printer • Educational 3D Printer |
| No Image | MMB-00001-A | Big cardboard box | MM - Mechanical Module | Packman Packaging, Corrugated Box India, Uline, Pragati Pack | Big cardboard boxes are heavy-duty corrugated storage and packaging boxes used for shipping, storage, moving, organizing tools, electronics kits, robotics components, workshop materials, and DIY projects. These boxes are lightweight, recyclable, and available in multiple sizes and thickness grades. | Product Type: Corrugated Cardboard Box Box Size: Large Material: Corrugated Cardboard Ply Type: 3 Ply / 5 Ply | Cardboard Box • Corrugated Box • Packaging Box • Storage Carton • Shipping Box • Moving Box • DIY Storage Box |
| No Image | MMB-00002-A | Storage box, big | MM - Mechanical Module | Stanley, Pro'sKit, Tactix, Deli | Large 8-compartment storage boxes are used for organizing electronic components, motors, sensors, screws, tools, wires, connectors, Arduino accessories, and DIY hardware. These organizer boxes typically feature durable plastic construction with transparent lids and removable dividers for flexible storage. | Product Type: Compartment Storage Box Number of Compartments: 8 Material: Plastic / Polypropylene Box Type: Large Organizer Box Storage Items: Sensors, Screws, Components | Storage Box • Component Storage Box • Parts Organizer • DIY Storage • 8 Compartment Box • Large Organizer Box • Hardware Organizer |
| No Image | MMB-00002-B | Storage box | MM - Mechanical Module | Stanley, Pro'sKit, Tactix, Deli | Small 6-compartment storage boxes are compact organizers used for storing electronic components, resistors, LEDs, screws, nuts, jumpers, ICs, connectors, beads, and DIY hardware. These boxes are lightweight, portable, and commonly used in electronics labs, workshops, and hobby projects. | Product Type: Compartment Storage Box Number of Compartments: 6 Material: Plastic / Polypropylene Box Type: Small Organizer Box Storage Items: Screws, LEDs, ICs | Storage Box • Organizer Box • 6 Compartment Box • Small Parts Box • Component Storage • Electronics Organizer • DIY Storage |
| No Image | MMB-00002-C | Storage box | MM - Mechanical Module | Stanley, Pro'sKit, Tactix, Deli | Thin 20-compartment storage boxes are used for organizing electronic components, screws, nuts, resistors, ICs, beads, connectors, small tools, and DIY hardware. These lightweight organizers usually feature transparent lids and removable dividers for easy sorting and visibility. | Product Type: Compartment Storage Box Number of Compartments: 20 Material: Transparent Plastic / PP Box Type: Thin Organizer Box Storage Items: Screws, ICs, Components | Storage Box • 20 Compartment Box • Organizer Box • Component Storage Box • Parts Organizer • Electronics Storage • DIY Organizer |
| No Image | MMC-00004-A | USB A to B Cable | MM - Mechanical Module | MWduino | USB Type-A to Type-B data cable designed for Arduino UNO and other compatible development boards. Provides reliable data transfer and stable 5V power for programming, debugging, and communication. Features a compact 30cm length and durable construction, making it ideal for students, hobbyists, prototyping, embedded systems development, and educational electronics projects. | Item Type: Data Cable Color: Blue Cable Length: 30 cm USB Type: Type-A to Type-B Weight: 19 g Shipping Weight: 0.025 kg Shipping Dimensions (L x W x H): 9 x 7 x 2 cm | USB Cable • USB A to B • Arduino Cable • Printer Cable • UNO Programming Cable |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|--|------------------------|---|---|--|--|
| No Image | MMC-00005-A | Telephone extension cable (Male to Male) | MM - Mechanical Module | Belkin, UGREEN, CableCreation, StarTech | RJ-11 4P4C male to male telephone extension cable designed for telephone systems, communication devices, modems, intercom systems, and embedded communication applications. It provides reliable signal transmission, secure connectivity, and flexible cable routing for voice and low-speed data communication systems. Commonly used in landline telephones, fax machines, DSL modems, networking experiments, and electronics communication projects. | Connector Type: RJ-11 4P4C Male to Male Cable Type: Telephone Extension Cable Number of Conductors: 4P4C Cable Length: 1m – 10m | RJ11 cable • 4P4C cable • telephone extension cable • male to male cable • communication cable |
| No Image | MMC-00006-A | DC Jack | MM - Mechanical Module | CUI Devices, Kycon, SparkFun, Adafruit | 9V DC jack connector designed for power supply connections in electronic circuits, Arduino systems, embedded devices, robotics, and DIY electronics projects. It provides secure and stable DC power connectivity for adapters, batteries, and external power sources in low-voltage electronic applications. | Connector Type: DC Barrel Jack Input Voltage: 9V DC Connector Size: 5.5mm x 2.1mm | DC jack • 9V connector • barrel jack • power connector • DC socket • Arduino power jack |
| No Image | MMC-0000X-B | Male-to-Male Jumper Wire | MM - Mechanical Module | Male-to-Male Jumper Wire (20 cm, Pack of 20) | 20cm male-to-male jumper wires designed for quick and reliable circuit connections. Includes 20 multi-color flexible wires with standard 2.54mm male header pins for easy interfacing. Ideal for breadboards, Arduino, Raspberry Pi, sensors, modules, prototyping, circuit testing, and educational electronics projects. | Item Type: Jumper Wire Cable Type: Male to Male Cable Length (cm): 20 Quantity (pcs): 20 Connector Type: Male Header Pins Color Coding: Multi-color (10–20 assorted colors) Compatibility: Breadboards, Arduino, Raspberry Pi, Sensors Weight (g): 16 Shipping Weight: 0.016 kg Shipping Dimensions (L x W x H): 10.5 x 7.5 x 2 cm | Breadboard Wire • Arduino Wire • Prototyping Cable • Jumper Wire • Male to Male |
| No Image | MMC-0000Y-A | Male-to-Female Jumper Wire | MM - Mechanical Module | MWduino / Generic | 20cm male-to-female jumper wires designed for flexible and reliable circuit connections. Includes 20 multi-color wires with 2.54mm male pins and female header connectors for easy interfacing. Ideal for Arduino, Raspberry Pi, sensors, modules, breadboards, prototyping, testing, and educational electronics projects. | Item Type: Jumper Wire Cable Type: Male to Female Cable Length (cm): 20 Quantity (pcs): 20 Connector Type: Male Pin ? Female Header Color Coding: Multi-color (10–20 assorted colors) Compatibility: Breadboards, Arduino, Raspberry Pi, Sensors Weight (g): 16 Shipping Weight: 0.016 kg Shipping Dimensions (L x W x H): 10 x 7.5 x 2 cm | Breadboard Wire • Arduino Wire • Prototyping Cable • Jumper Wire • Male to Female |
| No Image | MMC-0000Z-C | Female-to-Female Jumper Wire | MM - Mechanical Module | TWIN INDUSTRIES | 20 cm Female-to-Female jumper wires for reliable connections between pins or headers. Pack of 20 flexible, color-coded wires compatible with breadboards and Arduino projects. Ideal for prototyping, testing, educational use, and sensor connections. | Cable Type: Female to Female Cable Length (cm): 20 Quantity (pcs): 20 Connector Type: Female Header ? Female Header Color Coding: Multi-color (10–20 assorted colors) Compatibility: Breadboards, Arduino, Raspberry Pi, Sensors Weight (g): 17 Shipping Weight: 0.017 kg Shipping Dimensions (L x W x H): 10 x 7.5 x 2 cm | Female-to-Female Jumper • Breadboard Wire • Arduino Wire • Prototyping Cable • 20cm • Multi-color |
| No Image | MMD-00001-A | DC motor | MM - Mechanical Module | Roboman, Rytronics, Singh Varieties, Ercoms Robotics, Robiz (OEM) | Compact 3–6V DC mini motor ideal for Arduino smart cars and small DIY robotics projects. | Motor Size: 38 x 20 x 15 mm Shaft Diameter: 2 mm Shaft Length (Axial): 9 mm Operating Voltage: 3V – 6V Motor Type: DC Motor | dc motor • Mini Motor • 3V Motor • Arduino Motor • DIY Robotics • Smart Car Motor |
| No Image | MMD-00001-B | BO2 Side Shaft Plastic Gear Motor | MM - Mechanical Module | Generic Robotics, Robu.in, FlyRobo, DFRobot, Keyestudio | BO2 Side Shaft Plastic Gear Motor is a lightweight DC geared motor commonly used in robotics, smart car projects, line follower robots, obstacle avoidance robots, STEM kits, and Arduino DIY projects. It features a plastic gearbox with dual side shafts for easy wheel mounting and provides low-speed high-torque operation. | Product Type: Plastic Geared DC Motor Motor Type: BO2 Side Shaft Motor Operating Voltage: 3V – 12V DC Rated Voltage: 6V DC Speed Range: 60RPM – 300RPM | Arduino Motor • BO Motor • DC Gear Motor • BO2 Gear Motor • Plastic Gear Motor • Side Shaft Motor • Robot Motor |
| No Image | MMD-00002-A | Metal Gear Servo Motor | MM - Mechanical Module | TowerPro, DFRobot, Adafruit, SparkFun, Robocraze | MG995 360° High Speed Torque Metal Gear Servo is a continuous rotation high-torque servo motor widely used in robotics, RC vehicles, robotic arms, automation systems, smart wheels, and Arduino projects. It features metal gears, PWM control, high holding torque, and durable construction for demanding applications. | Product Type: Digital Servo Motor Model: MG995 Rotation Type: 360° Continuous Rotation Operating Voltage: 4.8V – 7.2V DC Stall Torque: 9kg-cm – 13kg-cm | Arduino Servo • Digital Servo Motor • Metal Gear Servo • High Torque Servo • Robotics Servo • MG995 Servo • 360° Servo Motor |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|--------------------------------|------------------------|---|--|---|---|
| No Image | MMD-00002-B | Servo Motor | MM - Mechanical Module | TowerPro, MWduino Compatible, Generic | Compact 9g micro servo motor with 180° rotation for precise position control. Provides 1.2–1.6 kg-cm torque and fast response, making it ideal for robotics, RC models, automation, and educational projects. Compatible with Arduino and other microcontrollers using standard PWM signals. Lightweight, reliable, and easy to integrate into DIY and prototyping applications. | Item Type: TowerPro Servo Motor Model Series: SG Series Model No.: SG90 Rotation (Degree): 180° Torque Rating (kg-cm): 1.2 to 1.6 Operating Voltage (VDC): 3.0 – 7.2 Operating Speed @ 4.8V: 0.10 sec/60° Stall Torque @ 4.8V (kg-cm): 1.2 Stall Torque @ 6.6V (kg-cm): 1.6 Operating Temperature (°C): -30 to 60 Gear Type: Glass Fiber Servo Plug Type: JR Cable Length (cm): 25 Length (mm): 22.8 Width (mm): 12.6 Height (mm): 34.5 Weight (g): 9 Shipping Weight: 0.014 kg Shipping Dimensions (L x W x H): 8 x 6 x 4 cm | SG90 Servo • 9g Servo Motor • Micro Servo • RC Servo • Arduino Servo |
| No Image | MMD-00002-C | Metal Gear Micro Servo | MM - Mechanical Module | TowerPro, DFRobot, Adafruit, SparkFun, Waveshare | MG90S Metal Gear Micro Servo is a compact high-torque micro servo motor designed for robotics, RC cars, robotic arms, pan-tilt systems, drones, and Arduino projects. It uses metal gears for improved durability and better torque compared to SG90 plastic gear servos. Typical operating voltage is 4.8V–6V with around 180° rotation. | Product Type: Metal Gear Micro Servo Model: MG90S Operating Voltage: 4.8V – 6V DC Rotation Angle: 180° Stall Torque: 1.8kg-cm – 2.2kg-cm | Arduino Servo • Metal Gear Servo • High Torque Servo • Robotics Servo • MG90S Servo • Micro Servo Motor • PWM Servo |
| No Image | MMD-00002-D | Digital Servo Motor 360 Degree | MM - Mechanical Module | TowerPro, Probots, DFRobot, Adafruit, SparkFun | MG996R Digital Servo Motor 360 Degree is a high-torque continuous rotation servo motor widely used in robotics, robotic arms, RC vehicles, automation systems, pan-tilt mechanisms, and Arduino projects. It features metal gears, PWM control, and continuous 360° rotation capability. | Product Type: Digital Servo Motor Model: MG996R Rotation Type: 360° Continuous Rotation Operating Voltage: 4.8V – 7.2V DC Rated Voltage: 6V DC Stall Torque: 10kg-cm – 13kg-cm | Arduino Servo • MG996R Servo • 360 Degree Servo • Digital Servo Motor • Metal Gear Servo • High Torque Servo • Robotics Servo |
| No Image | MMD-00003-A | Micro gear motor | MM - Mechanical Module | Pololu, DFRobot, Adafruit, SparkFun | N20 micro gear motors are compact DC geared motors widely used in robotics, smart cars, line follower robots, automation systems, mini conveyor mechanisms, and DIY electronics projects. These motors combine a small DC motor with a metal gearbox to provide low speed and high torque in a compact form factor. | Product Type: Micro Gear Motor Operating Voltage: 3V – 12V DC Rated Voltage: 6V DC Speed Range: 15RPM – 1000RPM Shaft Diameter: 3 mm | Mini Motor • Arduino Motor • Robotics Motor • Metal Gear Motor • N20 Motor • Micro Gear Motor • DC Gear Motor |
| No Image | MMD-00003-B | 150 RPM Geared Motor | MM - Mechanical Module | Johnson Motor, DFRobot, Robu.in, FlyRobo | 150 RPM 12V geared motors are high-torque DC motors with integrated reduction gearboxes designed for robotics, smart vehicles, automation systems, conveyor mechanisms, DIY mechanical projects, and Arduino-based applications. The gearbox reduces speed while increasing torque for controlled movement. | Product Type: DC Geared Motor Rated Voltage: 12V DC Speed: 150 RPM Gearbox Type: Metal Gearbox Shaft Diameter: 6 mm Current Consumption: 100mA – 500mA | 150RPM Motor • Geared DC Motor • 12V Gear Motor • High Torque Motor • Robotics Motor • DIY Motor • Metal Gear Motor |
| No Image | MMD-00004-A | Vibrating Motor | MM - Mechanical Module | Precision Microdrives, Adafruit, Jinlong Machinery, Generic Motors, DFRobot | Vibrating motors are compact DC motors with an off-center weight that generates vibration during rotation. These motors are widely used in mobile phones, wearable devices, robotics, DIY electronics, alert systems, haptic feedback projects, and Arduino-based applications. | Product Type: Vibrating DC Motor Operating Voltage: 1.5V – 5V DC Speed: 8000 – 12000 RPM Current Consumption: 60mA – 100mA | Mini Motor • Arduino Motor • Vibration Motor • Vibrating Motor • Coin Motor • DC Vibration Motor • Haptic Motor |
| No Image | MMD-00005-A | MINI SUBMERSIBLE WATER PUMP | MM - Mechanical Module | Adafruit, SunFounder, DFRobot, Generic Pump Manufacturer | Mini submersible water pumps are compact DC-powered pumps designed for water circulation, mini fountains, hydroponics, aquarium systems, cooling projects, automatic watering systems, and DIY Arduino automation projects. These pumps operate while fully submerged in water and provide low-noise continuous flow. | Product Type: Mini Submersible Water Pump Operating Voltage: 3V – 6V DC Rated Voltage: 5V DC Current Consumption: 100mA – 220mA Flow Rate: 80 – 120 L/H Outlet Diameter: 7mm – 8mm | Mini Water Pump • Submersible Pump • DC Water Pump • Aquarium Pump • DIY Pump • Arduino Water Pump • Micro Pump |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|---|------------------------|--|--|---|--|
| No Image | MMD-00006-A | Small Reduction Stepper Motor - 5VDC 32-Step 1/16 Gearing | MM - Mechanical Module | Adafruit, Songle Motor, Generic Stepper Motors, SunFounder | The Small Reduction Stepper Motor – 5VDC 32-Step 1/16 Gearing is commonly known as the 28BYJ-48 stepper motor. It is a compact geared unipolar stepper motor widely used in Arduino projects, robotics, automation systems, camera sliders, smart locks, and educational electronics. The internal reduction gearbox provides higher torque and precise low-speed rotation. | Product Type: Geared Stepper Motor Model: 28BYJ-48 Operating Voltage: 5V DC Gear Reduction Ratio: 1/64 Steps Per Revolution: 2048 Steps | Arduino Motor • 5V Stepper Motor • Reduction Stepper Motor • 28BYJ-48 • Geared Stepper Motor • Mini Stepper Motor • DIY Robotics Motor |
| No Image | MMK-00001-A | CABLES | MM - Mechanical Module | SparkFun, Adafruit, Pololu, Generic | Jumper wire cable set containing male-female, male-male, and female-female connection wires designed for breadboard prototyping, Arduino circuits, embedded systems, robotics, and electronics development applications. These cables provide reliable electrical connectivity, flexible routing, and easy plug-and-play interfacing between sensors, modules, microcontrollers, and development boards. Commonly used in DIY electronics, educational kits, IoT systems, PCB testing, and prototyping projects. | Cable Types: Male-Female, Male-Male, Female-Female Quantity: 80 MF, 80 MM, 80 FF Wire Length: 10cm – 30cm Conductor Material: Copper | Breadboard Wire • jumper wires • Dupont cable • MF cable • MM cable • FF cable |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|-----------------------|------------------------|--|--|---|--|
| No Image | MMM-00001-A | BO Motor | MM - Mechanical Module | FlyRobo, RoboticsDNA, RoboElements | The 100 RPM Duel Shaft BO Motor motor gives good torque and rpm at lower operating voltages, which is the biggest advantage of these motors. It is an alternative to our metal gear DC motors. It comes with an operating voltage of 3-6V and is perfect for building small and medium robots. A small shaft with matching wheels gives an optimized design for your application or robot. Mounting holes on the body & lightweight makes it suitable for in-circuit placement. The motor is ideal for DIY enthusiasts. This motor set is inexpensive, small, easy to install, and ideally suited for use in a mobile robot car. | Gearbox Shape: Straight Operating Voltage: 3 – 6 V Rated Speed After Reduction: 100 RPM Shaft Diameter: 0.55 cm (Double) Shaft Length: 0.85 cm Dimensions (LxWxH): 7 x 2.3 x 1.9 cm | robotics • arduino • BO Motor • Gear Motor • Smart Car |
| No Image | MMM-00003-A | Car Chassis (Plywood) | MM - Mechanical Module | Robu.in, FlyRobo, DFRobot, Keyestudio | RJ12 plywood car chassis is a lightweight robot platform designed for DIY robotics, STEM learning, line follower robots, obstacle avoidance robots, and Arduino-based smart car projects. These chassis are laser-cut from plywood or MDF sheets and provide mounting holes for motors, wheels, sensors, and controllers. | Product Type: Robot Car Chassis Chassis Material: Plywood / MDF Thickness: 3mm – 5mm Compatible Motors: BO Motor / TT Motor / N20 | RJ12 Chassis • Robot Car Chassis • Plywood Chassis • DIY Robot Base • Smart Car Platform • Robotics Chassis • Wooden Chassis |
| No Image | MMM-00005-A | Wheels | MM - Mechanical Module | Pololu, DFRobot, Waveshare, SunFounder | N20 34mm wheels are compact rubber wheels specially designed for N20 micro gear motors with a 3mm D-shaped shaft. These wheels are widely used in line follower robots, mini smart cars, obstacle avoidance robots, STEM kits, and DIY robotics projects. Most models use a press-fit D-hole design for secure mounting and better traction. | Product Type: N20 Motor Rubber Wheel Wheel Diameter: 34 mm Wheel Width: 6.5 mm – 7 mm Shaft Type: 3 mm D Shaft | Rubber Wheel • Smart Car Wheel • DIY Robot Wheel • N20 Wheel • 34mm Robot Wheel • N20 Motor Wheel • Mini Robot Wheel |
| No Image | MMM-00005-B | Rubber wheels | MM - Mechanical Module | DFRobot, Pololu, SparkFun, Waveshare | Rubber wheels for DC motors are commonly used in robotics, smart car projects, Arduino robots, line follower robots, obstacle avoidance robots, and DIY mechanical projects. These wheels usually fit BO motors, TT motors, and geared DC motors, providing better grip and smooth movement. | Product Type: Rubber Wheel for DC Motor Wheel Diameter: 65mm / 70mm Compatible Motors: BO Motor / TT Motor Wheel Width: 25mm – 30mm | Robot Wheel • Rubber Wheel • DC Motor Wheel • Smart Car Wheel • Tyre Wheel • DIY Robot Wheel • Motor Wheel |
| No Image | MMM-00006-A | Castor wheel | MM - Mechanical Module | Blickle, TENTE, Shepherd Hardware, Caster Concepts | 1-inch castor wheels are compact rolling wheels used for robotics, small trolleys, DIY platforms, movable enclosures, furniture, carts, and electronic project bases. These wheels are available in swivel and fixed types with plastic, rubber, or nylon wheel materials. | Product Type: Castor Wheel Wheel Size: 1 inch Load Capacity: 5kg – 20kg Rotation: 360° Swivel | DIY Hardware • Castor Wheel • 1 Inch Wheel • Mini Castor • Swivel Wheel • Furniture Wheel • Robot Wheel |
| No Image | MMP-00001-A | Spacers | MM - Mechanical Module | Keystone Electronics, Adafruit, DFRobot, Pro'sKit | Spacers are mechanical components used to create distance between PCBs, panels, enclosures, and mounted hardware in electronics, robotics, Arduino projects, and DIY assemblies. Common spacer materials include nylon, brass, aluminum, and stainless steel. | Product Type: Spacer / Standoff Thread Size: M3 Length Options: 5mm – 50mm | PCB Spacer • Mounting Spacer • DIY Hardware • Spacer • Nylon Spacer • Brass Spacer • Standoff Spacer |
| No Image | MMP-00002-A | Nuts | MM - Mechanical Module | Unbrako, TVS Fasteners, Bossard, RS PRO | Nuts are threaded fastening components used with bolts and screws for securing mechanical assemblies, PCB mounting, robotics, enclosures, 3D printing, and DIY electronics projects. Common types include hex nuts, lock nuts, nylon nuts, and flange nuts. | Product Type: Hex Nut Nut Size: M3 Compatible With: M3 Screws & Bolts | DIY Hardware • Hex Nut • M3 Nut • Lock Nut • Machine Nut • Fastener Nut • Mounting Hardware |
| No Image | MMP-00003-A | EFT Arm Screw Pack | MM - Mechanical Module | EFT EPOWER, EFT EPOWER, EFT EPOWER, Generic / OEM | M6×60 screw pack designed for assembling and securing drone arms in compatible EFT drone models. Provides structural support and stability to drone frames, helping secure motors, propeller mounts, and arm assemblies. Manufactured for compatibility with E416P, E616P, and E410P drone models. | Outer Diameter: 6 mm Length: 60 mm Standard: M6 x 60 Weight: 100 g Shipping Weight: 0.11 kg Shipping Dimensions: 10 x 8 x 3 cm | M6x60 Screw • Drone Arm Screw • EFT Spare Part |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|--------------------------|------------------------|---|--|---|--|
| No Image | MMP-00003-B | Screws | MM - Mechanical Module | Unbrako, TVS Fasteners, Bossard, RS PRO | M3 x 12mm screws are metric machine screws commonly used for PCB mounting, electronics enclosures, robotics, Arduino projects, 3D printers, and mechanical fastening applications. They are available in stainless steel and alloy steel with Phillips, Allen, and hex head types. | Product Type: Machine Screw Screw Size: M3 x 12mm Thread Type: Metric Thread Application: PCB Mounting, DIY, Robotics | DIY Hardware • M3 Screw • Machine Screw • Hex Screw • Mounting Screw • PCB Screw • M3x12mm Screw |
| No Image | MMP-00003-C | Screws | MM - Mechanical Module | Unbrako, TVS Fasteners, Bossard, RS PRO | M3 x 30mm screws are metric machine screws used for PCB mounting, robotics, Arduino assemblies, 3D printers, enclosures, mechanical fastening, and DIY electronics projects. They are commonly available in stainless steel and alloy steel with Phillips, Allen, and hex head types. | Product Type: Machine Screw Screw Size: M3 x 30mm Thread Type: Metric Thread Application: PCB Mounting, Robotics, DIY | DIY Hardware • M3 Screw • Machine Screw • Hex Screw • Mounting Screw • PCB Screw • M3x30mm Screw |
| No Image | MMP-00003-D | Screws | MM - Mechanical Module | Unbrako, TVS Fasteners, Bossard, RS PRO | M3 x 8mm screws are metric machine screws commonly used for PCB mounting, electronics enclosures, Arduino assemblies, robotics, 3D printing, and mechanical fastening applications. These screws are available in stainless steel, carbon steel, and alloy steel variants with different head types. | Product Type: Machine Screw Screw Size: M3 x 8mm Application: PCB Mounting, DIY, Robotics | DIY Hardware • M3 Screw • Machine Screw • Hex Screw • Phillips Screw • Mounting Screw • PCB Screw |
| No Image | MMP-00004-A | Brass standoffs set | MM - Mechanical Module | Adafruit, Keystone Electronics, DFRobot, Pro'sKit | Brass standoff sets are threaded spacers used for mounting and separating PCBs, Arduino boards, Raspberry Pi boards, electronic enclosures, and DIY projects. They provide mechanical support, insulation spacing, and secure assembly for electronics hardware. | Product Type: Brass Standoff Set Thread Type: M2 / M2.5 / M3 Length Options: 5mm – 50mm Shape: Hexagonal | Brass Standoff • PCB Spacer • Hex Standoff • Mounting Spacer • PCB Mount Kit • Threaded Spacer • DIY Hardware |
| No Image | TLC-00001-A | Cutting mat | TL - Tools | OLFA, Deli, Fiskars, Pro'sKit | An A2 cutting mat is a self-healing protective work surface used for cutting paper, vinyl, fabric, PCB sheets, foam, leather, and craft materials. It protects tables and blades while providing printed measurement grids for accurate cutting in DIY, electronics, art, and workshop applications. | Product Type: Self Healing Cutting Mat Size: A2 Dimensions: Approx. 600 x 450 mm Material: PVC Multi-layer Thickness: 2 mm – 3 mm | Cutting Mat • A2 Cutting Mat • Self Healing Mat • Craft Mat • DIY Cutting Board • Precision Cutting Mat • Workshop Mat |
| No Image | TLC-00002-A | Knife (Paper Cutter) | TL - Tools | Stanley | Stanley Retractable Knife is a versatile and durable cutting tool for paper, cardboard, plastic, and general DIY tasks. Features a retractable blade mechanism for safe storage, controlled cutting, and easy handling. Ideal for home, office, workshop, crafting, packaging, and maintenance applications, offering reliability, safety, and precision for everyday use. | Manufacturer: Stanley Item Type: Retractable Knife Color: Silver/Yellow Overall Dimensions: 20.5 x 7.6 x 2.2 cm Material: Acrylonitrile Butadiene Styrene (ABS) Blade Material: Stainless Steel Shipping Weight: 0.04 kg Shipping Dimensions (L x W x H): 21 x 8 x 2 cm | Stanley Knife • Retractable Knife • Paper Cutter • DIY Tool • Packaging Tool |
| No Image | TLC-00003-A | Steel ruler | TL - Tools | Stanley, Freemans, Taparia, Groz | A 60cm steel ruler is a precision measuring tool used for measuring, marking, drawing straight lines, fabrication work, engineering, woodworking, electronics projects, and DIY applications. Stainless steel construction provides durability, rust resistance, and accurate measurement markings. | Product Type: Steel Ruler / Steel Scale Length: 60 cm / 24 inch Measurement Units: cm & inch Thickness: 0.8 mm – 1.2 mm | Steel Ruler • Stainless Steel Scale • Measuring Ruler • Metal Scale • Precision Ruler • Workshop Tool • DIY Measuring Tool |
| No Image | TLC-00004-A | General Purpose Scissors | TL - Tools | Stanley, Scotch, Taparia, Fiskars | General purpose scissors are multipurpose cutting tools used for cutting paper, cardboard, plastic, cloth, wires, tape, packaging materials, and light DIY materials. They are commonly used in offices, schools, workshops, craft work, and electronics labs. | Product Type: General Purpose Scissors Blade Material: Stainless Steel Blade Length: 5 inch – 8 inch Application: Paper, Plastic, Cloth | DIY Tool • General Purpose Scissors • Utility Scissors • Cutting Scissors • Office Scissors • Multipurpose Scissors |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|--|------------|---|--|---|--|
| No Image | TLC-00005-A | Tweezer | TL - Tools | Pro'sKit, Jakemy, Vetus, Hakko | Tweezers are precision hand tools used for holding, picking, placing, and handling small electronic components during PCB assembly, soldering, mobile repair, laboratory work, and DIY electronics projects. ESD-safe tweezers help prevent static damage to sensitive components. | Product Type: Precision Tweezer Material: Stainless Steel Application: PCB Repair, Electronics | DIY Tool • Tweezers • Precision Tweezers • ESD Tweezers • Anti-static Tweezers • Electronics Tweezer • PCB Repair Tool |
| No Image | TLC-00006-A | Brass Wool Solder Tip | TL - Tools | Pro'sKit, Hakko, YIHUA, Bakon | Brass wool solder tip cleaners are used to clean soldering iron tips without reducing tip temperature. Made from brass shavings or brass wool, they effectively remove oxidation, burnt flux, and solder residue while extending soldering tip life. Commonly used in electronics repair, PCB soldering, and DIY workshops. | Product Type: Brass Wool Tip Cleaner Usage: Soldering Tip Cleaning Compatible With: Soldering Stations & Irons | Brass Wool Cleaner • Solder Tip Cleaner • Soldering Cleaner • Brass Sponge • Tip Cleaning Ball • Soldering Accessory |
| No Image | TLC-00007-A | Manual Desoldering Pump | TL - Tools | Generic / OEM, Noel, Pro'sKit, Velleman, Engineer | A desoldering pump is an essential tool for electronics repair and PCB rework, designed to quickly and efficiently remove molten solder from circuit boards during repairs or component replacement. It features a spring-loaded plunger mechanism and a heat-resistant nozzle that creates a strong vacuum to suck up melted solder in one motion. Suitable for beginners and professionals alike. Lightweight, portable, and easy to operate, it ensures clean solder removal while minimizing damage to delicate electronic components. | Item Type: Desoldering Pump Body Material: Aluminum or Plastic Tip Material: Heat-resistant Teflon Color: Blue / Silver Length: 190 mm Width: 30 mm Height: 30 mm Weight: 29 g Shipping Weight: 0.03 kg Shipping Dimensions: 17 x 12 x 3 cm | PCB Rework • Desoldering Pump • Solder Sucker • Manual Vacuum • Teflon Tip |
| No Image | TLK-00001-A | Professional Tool Kit | TL - Tools | Pro'sKit, Pro'sKit, Pro'sKit, Pro'sKit | Pro'sKit Professional Tool Kits are complete electronics and maintenance tool sets designed for PCB repair, electronics assembly, networking, electrical work, mobile repair, robotics, and DIY applications. These kits usually include screwdrivers, pliers, cutters, soldering tools, tweezers, and precision repair tools. | Product Type: Professional Tool Kit Tool Count: 25 pcs – 100 pcs Included Tools: Screwdrivers, Pliers, Cutters | Professional Tool Kit • Electronics Tool Kit • Repair Tool Kit • DIY Tool Kit • Maintenance Kit • Technician Tool Set |
| No Image | TLK-00002-A | Hot Pro'sKit 8PK-2061 6PCS Precision Screwdriver Set Cross Screwdriver | TL - Tools | Pro'sKit, Jakemy, Stanley, Bosch | Pro'sKit 8PK-2061 is a 6-piece precision screwdriver set designed for electronics repair, PCB work, mobile repair, watches, laptops, and precision DIY applications. It includes cross and slotted precision screwdrivers with ergonomic anti-slip handles and hardened steel tips. | Product Type: Precision Screwdriver Set Number of Pieces: 6 pcs Screwdriver Type: Cross & Slotted Usage: Mobile, Laptop, DIY Repair | DIY Tool • Electronics Repair Tool • Precision Screwdriver Set • Cross Screwdriver • Phillips Screwdriver • Mini Screwdriver Set |
| No Image | TLK-00003-A | Screwdriver Set 6pcs | TL - Tools | Stanley, STANLEY Tools, Stanley Black & Decker | Stanley 92-002-2 Cushion Grip is a 6-piece screwdriver set designed for electronics repair, household maintenance, workshop applications, and DIY use. It features ergonomic cushion grip handles, chrome vanadium steel shafts, and durable precision tips for better torque and comfort. | Product Type: Cushion Grip Screwdriver Set Number of Pieces: 6 pcs Tip Types: Phillips & Slotted Usage: Tightening & Loosening Screws | DIY Tool • Cushion Grip Screwdriver • Stanley Screwdriver Set • 6pcs Screwdriver Kit • Hand Tool Kit • Repair Tool |
| No Image | TLK-00005-A | Metal file set | TL - Tools | N/A | | | |
| No Image | TLM-00001-A | PCB Helping Hand | TL - Tools | Proskit, Jakemy, YIHUA, HandsKit | PCB Helping Hand is a support tool used during soldering, PCB assembly, electronics repair, and DIY projects. It typically includes adjustable alligator clips, a weighted base, and sometimes a magnifying glass to hold circuit boards and components securely while working. | Clip Type: Alligator Clips Base Material: Cast Iron / Steel Usage: PCB Holding, Soldering | DIY Tool • PCB Helping Hand • Soldering Helper • Third Hand Tool • PCB Holder • Magnifier Stand • Electronics Repair Tool |
| No Image | TLM-00002-A | Wire Cutter | TL - Tools | Generic / OEM, Pro'sKit, Stanley, Taparia, Knipex | Diagonal wire cutter designed for clean and precise cutting of electrical wires and soft metals. Features ergonomic non-slip grip handles and a spring-loaded mechanism to reduce hand fatigue during extended use. Features ergonomic non-slip grip handles and a spring-loaded mechanism to reduce hand fatigue during extended use. | Item Type: Diagonal Wire Cutter Material: High-Carbon Steel Blade with ABS Handle Color: Blue Length (mm): 185 Width (mm): 95 Height (mm): 15 Weight: 60 g Shipping Weight: 0.062 kg Shipping Dimensions: 19 x 10 x 2 cm | Diagonal Cutter • Wire Cutter • Cutting Pliers • Side Cutter • Electrical Tool |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|-----------------------|------------|--|--|--|---|
| No Image | TLM-00003-A | Microfix Spring Clamp | TL - Tools | Microfix Tools, Stanley Tools, Ingco Tools, Taparia Tools | Microfix spring clamps are compact holding tools used for gripping, fixing, and securing small objects during electronics work, woodworking, craft projects, gluing, soldering, and DIY applications. They provide quick temporary holding with spring-loaded jaws. | Tool Type: Spring Clamp Clamp Size: 2 inch / 3 inch / 4 inch Material: Plastic / Nylon / Steel Spring Usage: Holding, Gluing, Fixing | Spring Clamp • Micro Clamp • Plastic Clamp • DIY Clamp • Mini Grip Clamp • Holding Tool • Workshop Clamp |
| No Image | TLM-00004-A | Hacksaw blades | TL - Tools | Taparia Tools Ltd, Stanley Tools, Bosch, DeWalt, JK Files & Tools, Ultra Tools | Hacksaw blades for metal are specially designed cutting blades used for cutting steel, iron, aluminum, copper, pipes, rods, and metal sheets. Bi-metal and HSS blades provide better durability, smoother cutting, and longer life for metalworking applications. Higher TPI blades are mainly used for fine and smooth metal cutting. | Blade Length: 150 mm / 300 mm Material: Bi-Metal / HSS / Carbon Steel Application: Metal Cutting, Workshop, DIY | Hacksaw Blade • Metal Cutting Blade • Bi-Metal Blade • DIY Tool Blade • HSS Blade • Steel Cutting Blade • Hand Saw Blade |
| No Image | TLM-00004-B | Hacksaw blades | TL - Tools | Taparia Tools Ltd, Stanley Tools, Ingco Tools, DeWalt | Hacksaw blades for wood are specially designed cutting blades used for cutting soft wood, plywood, PVC, plastic, and light materials. These blades generally have lower TPI for faster cutting and smoother operation in woodworking and DIY projects. | Blade Length: 150 mm / 300 mm Material: Carbon Steel / Bi-Metal Suitable Material: Wood, PVC, Plastic Application: DIY, Carpentry, School Projects | Hacksaw Blade • Carbon Steel Blade • Wood Cutting Blade • Mini Hacksaw Blade • Junior Blade • DIY Tool Blade |
| No Image | TLM-00004-C | Mini hacksaw | TL - Tools | Stanley, Taparia, Lenox | Mini hacksaws are compact hand cutting tools designed for cutting metal rods, PVC pipes, plastic sheets, bolts, and small materials in tight spaces. They are widely used in electronics labs, robotics projects, plumbing, and DIY work. | Blade Length: 150 mm / 6 inch / 10 inch Handle Type: Ergonomic Grip / ABS Handle Weight: Approx. 70g – 250g Usage: DIY, Electronics, Plumbing, Workshop Cutting Material: Metal, PVC, Plastic, Aluminum | DIY Tool • Mini Hacksaw • Junior Hacksaw • Hand Saw • Metal Cutter • Compact Saw • Precision Cutting Tool |
| No Image | TLM-00004-D | Taparia Hacksaw | TL - Tools | Taparia, Taparia | Taparia hacksaw blades are designed for cutting metal, plastic, PVC pipes, rods, and other materials. They are made from high-grade carbon steel or bi-metal HSS construction with precision teeth for smooth and durable cutting performance. | Blade Length: 12 inch / 300 mm Material: Carbon Steel / Bi-Metal HSS Standard: IS 2594-2003 Application: Metal, PVC, Plastic Cutting | Hacksaw Blade • Metal Cutting Blade • Hand Tool Blade • Carbon Steel Blade • Bi-Metal Blade • 18TPI Blade • 24TPI Blade |
| No Image | TLM-00005-A | Plier | TL - Tools | Proskit, Taparia, Jakemy, tanley | Micro long nose pliers are compact precision tools designed for electronics repair, PCB work, wire bending, gripping small components, and working in tight spaces. Commonly used in robotics, DIY electronics, and jewelry applications. | Size: 4.5 inch – 5 inch Handle Type: Soft Grip / Anti-slip Usage: Precision Gripping & Wire Bending | DIY Tool • Needle Nose Plier • Mini Plier • Micro Long Nose Plier • Precision Plier • Electronics Tool • Jewelry Plier |
| No Image | TLM-00005-B | Plier | TL - Tools | Taparia, Stanley, Bosch, Proskit | Long nose pliers are precision hand tools used for gripping, bending, holding, and cutting wires in electronics, electrical work, jewelry making, and DIY projects. Their narrow pointed jaws help access tight spaces easily. | Handle Type: Insulated Grip Length: 5 inch – 8 inch Usage: Wire Bending, Gripping, Cutting | DIY Tool • Long Nose Plier • Needle Nose Plier • Electronics Plier • Mini Plier • Precision Tool • Wire Handling Tool |
| No Image | TLP-00001-A | Hot Melt Glue Gun | TL - Tools | Generic / OEM, Stanley, Bosch, Pro'sKit | Standard temperature 40W hot melt glue gun designed for multipurpose bonding and repair applications. Features an ergonomic trigger mechanism for controlled glue dispensing and an integrated ON/OFF switch for safe operation. | Item Type: Hot Melt Glue Gun Color: Black Operating Voltage: 110–220 V AC Power Consumption: 40 W Melting Point: 190°C (±10°C) Compatible Glue Stick Diameter: 11 mm Weight: 180 g Shipping Weight: 0.2 kg Shipping Dimensions: 27 × 16 × 5 cm | Compatible with 11mm diameter glue sticks and suitable for DIY projects • electronics work • furniture repair • decoration • packaging • and household fixes. |

| Image | Part Number | Name | Category | Manufacturer | Description | Specification | Tags |
|----------|--------------------|---|------------|---|--|--|--|
| No Image | TLP-00002-A | Soldering Iron Kit | TL - Tools | TLP Series / Generic Compatible, Noel, Pro'sKit, Velleman | Be it beginner, hobbyist, or professional, soldering iron kits are essential tools for building circuit boards, repairing electronics, jewelry making, welding, and other precision tasks. This kit combines the basic tools used in general-purpose soldering work and includes necessary components required for soldering at your work desk. Best suited for DIY beginners, college project teams, and professional electronics hobbyists. | Item Type: Kit Soldering Iron Power: 25 Watt Suitable For: Beginner to Professional Shipping Weight: 0.4 kg Shipping Dimensions: 20 x 7 x 6 cm | Soldering Kit • 25W Soldering Iron • 3-in-1 Kit • DIY Soldering Set • Electronics Repair Kit |
| No Image | TLP-00003-A | Soldering Iron Stand | TL - Tools | Generic / OEM, Pro'sKit, Velleman, Goot, Noel | The soldering iron stand 25W is a standardized support tool designed for safely holding soldering irons during operation. It is compatible with 25W or lower wattage soldering irons. The stand features a heavy-duty metal base for stability and a nickel-plated spring holder that securely holds the soldering iron while not in use. Ideal for electronics workbenches, college labs, DIY projects, and professional repair environments. | Suitable Wattage: 25 Watt (Max) Material: Metal Base with Steel Spring Holder Shipping Weight: 0.3 kg Shipping Dimensions: 20 x 6 x 3 cm | Soldering Stand • 25W • Iron Holder • Metal Base • Spring Holder |
| No Image | TLP-00004-A | Bosch GSB 120-LI Professional Cordless Impact Drill | TL - Tools | Bosch, Robert Bosch GmbH | The Bosch GSB 120-LI Professional is a compact cordless impact drill designed for drilling and screwdriving applications in wood, metal, and masonry. It features a 12V lithium-ion battery system, variable speed control, reverse rotation, and impact drilling capability suitable for professional and DIY use. | Voltage: 12V Battery Type: Lithium-Ion No Load Speed: 0-400 / 0-1500 RPM Chuck Capacity: 10 mm Max Torque: 30 Nm Impact Rate: Up to 22,500 BPM | DIY Tool • Cordless Drill • Impact Drill • 12V Drill • Power Tool • Electric Drill • Professional Drill • Bosch Tool |