

Parts Export

Generated: 2026-07-27 11:27:32

Total Parts: 109

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
	EDR-00001-220Z	Resistor - 220 Ohm	ED - Electronic Device	Yageo, Vishay, KOA Speer, TE Connectivity, Generic	The 220 Ohm 0.25W Metal Film Resistor is a passive component used to limit current and control voltage in electronic circuits. It provides stable, accurate resistance with low noise and high reliability. It is commonly used in LED circuits, Arduino projects, and embedded systems.	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 × 1 × 1 cm	
	EMA-00009-A	Audio Playback	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 ?, 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 × W × H cm): 8 × 6 × 3	Arduino Compatible • ISD1820 Module • Voice Recorder • 10s Audio • Playback Module • Onboard Mic • 8? Speaker • Sound Board
	MMD-00003-A	Micro gear motor	MM - Mechanical Module	Pololu, DFRobot, Adafruit, SparkFun	N20 micro gear motors are compact DC motors with integrated metal gearboxes that provide low-speed, high-torque performance in a small size. They are widely used in robotics, smart cars, line follower robots, automation systems, and DIY electronics projects. Their compact design makes them ideal for space-constrained and educational applications requiring precise and reliable motion control.	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
	MMM-00005-A	Wheels	MM - Mechanical Module	Pololu, DFRobot, Waveshare, SunFounder	N20 34mm rubber wheels are compact wheels designed for N20 micro gear motors with a 3mm D-shaft. Used in line follower robots, mini smart cars, obstacle avoidance robots, STEM kits, and DIY robotics projects, they offer easy press-fit mounting. The rubber surface provides good grip, stability, and smooth motion on different surfaces.	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	COC-00001-C	Masking Tape Roll	CO - Consumables	Avery Dennison, Advance Tapes, Shurtape, Intertape Polymer Group	The Masking Tape Roll (20mm x 20m) is a versatile adhesive tape used for painting, crafting, labeling, and general-purpose applications. It provides clean masking and removes easily without residue. It adheres well to surfaces like wood, metal, and glass and is widely used in DIY, workshop, and professional projects.	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
	COC-00001-D	Insulation Tape	CO - Consumables	3M, Generic / OEM	PVC Electrical Insulation Tape is used for insulating wires and protecting electrical connections. It is flexible, durable, and resistant to heat and moisture. It is commonly used in electrical wiring, repairs, and DIY electronics projects.	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 × 6 × 3 cm	PVC Tape • Electrical Tape • Black Insulation Tape • Flame Retardant • Wire Wrapping

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	COC-00003-A	Hot Glue Sticks 7 mm	CO - Consumables	Stanley, Surebonder	The Thermoplastic Adhesive Glue Sticks are used with hot glue guns for crafting, DIY projects, electronics assembly, and repairs. They melt quickly to form a strong bond on materials like plastic, wood, paper, and fabric. They are commonly used in workshops, prototyping, and educational projects for fast and durable adhesion.	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
	COC-00003-B	HotGlue Sticks 11mm	CO - Consumables	Generic / OEM, Pro'sKit, Stanley, Bosch	Hot melt glue sticks are versatile adhesives designed for DIY projects, electronics, crafts, packaging, and repair work. Compatible with standard temperature glue guns and 11mm glue stick slots, they deliver strong, fast-setting bonds on plastic, wood, fabric, paper, cardboard, and other lightweight materials. Easy to use and reliable, they are ideal for both hobby and professional applications.	Item Type: Hot Melt Glue Sticks Stick Diameter: 11 mm Pack Quantity: 5 Pieces Shipping Weight: 0.2 kg Shipping Dimensions: 4 × 4 × 4 cm	Glue Sticks • 11mm Glue Stick • Hot Melt Adhesive • Glue Gun Refill • DIY Adhesive
	COE-00001-C	Panasonic Battery	CO - Consumables	Panasonic	The Panasonic CR2025 is a 3V lithium coin cell battery designed for compact electronic devices. It offers long-lasting, stable power and is commonly used in key remotes, watches, calculators, medical devices, and small electronics.	Battery Type: Lithium Coin Cell Battery Size: CR2025 Chemistry: Lithium Manganese Dioxide (LiMnO ₂) 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 × 7.5 × 1 cm	CR2025 Battery • 3V Coin Cell • Lithium Battery • Panasonic Battery • Button Cell
	COE-00002-A	Hookup Wire Kit	CO - Consumables	Plusivo	The Assorted 30AWG Silicone Hookup Wire Kit is a flexible wiring set for electronics and prototyping. It includes multiple colored wires, heat shrink tubes, and accessories for easy circuit building. It is widely used in Arduino projects, robotics, and embedded system wiring.	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 × W × H): 15 × 7 × 7 cm	Hookup Wire • Silicone Wire • Stranded Wire • 30AWG • Prototyping • Electronics
	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
	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 • Spool
	COM-00001-C	3D Printing Filament	CO - Consumables	Creality, eSUN, Hatchbox	The 1.75mm Yellow 3D Printing Filament is a material used in FDM/FFF 3D printers for prototyping and model making. It provides smooth extrusion, strong layer adhesion, low warping, and consistent print quality. It is commonly used for robotics, enclosures, mechanical parts, DIY fabrication, and product development.	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 • Spool

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	COM-00001-D	3D Printing Filament	CO - Consumables	Creality, eSUN, Hatchbox	The 1.75mm Blue 3D Printing Filament is a material used in FDM/FFF 3D printers for prototyping and model making. It offers smooth extrusion, strong layer adhesion, low warping, and consistent print quality. It is commonly used for robotics, enclosures, mechanical parts, DIY fabrication, and 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 • Spool
	COM-00002-A	3D Printing Filament	CO - Consumables	eSUN	The 2.85mm White 3D Printing Filament is a material used in FDM/FFF 3D printers for prototyping and model making. It provides smooth extrusion, strong layer adhesion, low warping, and consistent print quality. It is commonly used for robotics, enclosures, 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
	COM-00002-B	3D Printing Filament	CO - Consumables	eSUN	The 2.85mm Black 3D Printing Filament is a material used in FDM/FFF 3D printing for prototyping and model making. It offers smooth extrusion, strong layer adhesion, low warping, and consistent print quality. It is commonly used for robotics, enclosures, mechanical parts, DIY fabrication, and product development.	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
	COM-00002-C	3D Printing Filament	CO - Consumables	eSUN	The 2.85mm Yellow 3D Printing Filament is a material used in FDM/FFF 3D printers for prototyping and model making. It offers smooth extrusion, strong layer adhesion, low warping, and consistent print quality. It is commonly used for robotics, educational models, enclosures, DIY fabrication, and product development.	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
	COM-00002-D	3D Printing Filament	CO - Consumables	eSUN	The 2.85mm Blue 3D Printing Filament is a material used in FDM/FFF 3D printers for prototyping and model making. It offers smooth extrusion, strong layer adhesion, and consistent print quality. It is commonly used for robotics, engineering models, enclosures, DIY projects, and product development.	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
	EDA-00002-A	Alligator Cable	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 × 4 × 2 cm	Alligator Clip Wire • Dupont Jumper Wire • 10 Pin Jumper • Crocodile Clip Cable • 20cm Test Lead
	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

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
	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 × W × H): 1 × 1 × 1 cm	RGB LED • 5mm LED • Indicator LED • Through Hole LED • Common Anode LED
	EDD-00004-A	7 Segment Display	ED - Electronic Device	Lite-On Technology, Kingbright, Generic / OEM	The 0.56" 1-Digit 7-Segment LED Display is a single-digit numeric display (0–9) using seven LED segments. It has a common cathode configuration with bright visibility. It is widely used in counters, clocks, meters, Arduino projects, and embedded systems.	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 × W × H cm): 6 × 4 × 2	Arduino Compatible • 0.56" 7-Segment • 1 Digit Display • Red LED • Common Cathode • 5161AS • Through Hole • Numeric Display
	EDD-00005-A	Voltage Regulator	ED - Electronic Device	Texas Instruments, STMicroelectronics, ON Semiconductor, Fairchild Semiconductor	The LM7805 Voltage Regulator is a fixed-output regulator that provides a stable 5V DC supply from a higher input voltage. It includes built-in thermal overload and short-circuit protection for reliable operation. It is widely used in Arduino projects, IoT devices, sensor circuits, power supplies, and 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
	EDD-00005-C	Voltage Regulator	ED - Electronic Device	Texas Instruments, STMicroelectronics, ON Semiconductor, Fairchild Semiconductor	The LM7806 Voltage Regulator is a fixed-output regulator that provides a stable 6V DC supply from a higher input voltage. It includes built-in thermal and short-circuit protection. It is widely used in Arduino projects, robotics, sensor circuits, battery-powered devices, and embedded systems requiring regulated power.	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
	EDK-00001-A	Capacitor	ED - Electronic Device	Nichicon, Panasonic, Rubycon, Nippon Chemi-Con	The Electrolytic Capacitor is a polarized component used for energy storage, voltage filtering, smoothing, and power supply stabilization. Its high capacitance makes it ideal for power supplies, amplifiers, motor drivers, Arduino projects, industrial electronics, and embedded 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
	EDK-00004-A	Resistor Kit	ED - Electronic Device	Generic	This 600-piece metal film resistor kit includes 30 common values with 20 pieces each. It features 1/4W rating and 1% tolerance for accurate and reliable performance. It is commonly used in Arduino projects, prototyping, repairs, and DIY electronics.	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 × W × H): 1 × 1 × 1 cm	Ideal for prototyping • learning resistor color codes • testing • and circuit experiments.
	EDM-00001-A	Tactile Switch	ED - Electronic Device	OMRON, E-Switch	This tactile push button switch kit includes 12×12×7.3mm momentary ON-OFF switches for reliable circuit input. Rated for 12V DC and 120mA, they provide good tactile feedback. The kit includes 25 color-coded keycaps and a storage box, making it ideal for Arduino projects, prototyping, DIY electronics, and educational use.	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): 12×12×7.3 Operating Temperature (°C): -25 to +70 Lifespan: ~1000 Cycles Box Dimensions (mm): 127.1 × 68.3 × 21.9 Weight (g): 55 Shipping Weight: 0.06 kg Shipping Dimensions (L × W × H): 13 × 7 × 3 cm	Tactile Switch • Push Button • 12x12mm Switch • Momentary Switch • Arduino Button Kit

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	EDM-00005-A	Prototype Board	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 × 59 × 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 × 55 × 8.5 (L × W × H) No. of Tie Points: 400 Weight (g): 40 Material: ABS Plastic Shipping Weight: 0.06 kg Shipping Dimensions (L × W × H): 10 × 7 × 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	The Mini Solderless Breadboard (170 Tie Points) is a compact prototyping board used for building circuits without soldering. It allows easy component placement and quick circuit testing. It is commonly used in Arduino projects, electronics experiments, and educational kits.	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
	EDM-00005-C	Full-size breadboard	ED - Electronic Device	BusBoard Prototype, Twin Industries, Elegoo, SunFounder, Generic	The MB102 830 Points Solderless Prototype Breadboard is a solderless board used for building and testing electronic circuits. It allows quick circuit assembly and modification without soldering. It is widely used in Arduino projects, educational labs, R&D, and electronics prototyping.	Item Type: Breadboard, Solderless Type No. of Points: 830 Material: ABS	testing • Prototyping • Electronics • breadboard • pcb • solderless • full size breadboard
	EDM-00006-A	Header Pin Strip	ED - Electronic Device	Samtec, Amphenol, Harwin, TE Connectivity, Molex	The Break-Away Header Pin Strip is a customizable PCB connector that can be cut to any length. It is used for through-hole mounting and provides flexible pin configurations for electronic circuits. It is commonly used in Arduino projects, embedded systems, shields, and prototyping applications.	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
	EDM-00006-B	Right Angle Header	ED - Electronic Device	Molex, Harwin	The Right Angle Header Pins are 90-degree PCB connectors used for board-to-wire and board-to-board connections. Their angled design allows horizontal cable attachment, making them ideal for compact and space-saving PCB layouts. They are widely used in Arduino shields, embedded systems, robotics, prototyping, and electronic projects.	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
	EDM-00007-A	Female Header Strip	ED - Electronic Device	Samtec, Amphenol, Harwin, TE Connectivity, Molex	The 2×40 Pin Female Double Row Header Strip is a PCB connector with two rows of 40 pins used for board-to-board and module connections. It provides reliable and organized electrical connectivity and is commonly used in Arduino shields, Raspberry Pi interfaces, embedded systems, and prototyping projects.	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
	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 × W × H): 1 × 1 × 1 cm	10K Potentiometer • Rotary Pot • Variable Resistor • WH148 Potentiometer • 3-Pin Pot
	EDR-00002-20K0	Potentiometer	ED - Electronic Device	Bourns, Panasonic, Alps Alpine	The 20K? Linear Potentiometer is a variable resistor used for adjustable resistance and voltage control in electronic circuits. It provides smooth analog output for voltage tuning, sensor calibration, audio control, and microcontroller inputs. It is widely used in embedded systems, control panels, test equipment, and educational electronics projects.	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

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No Image	EDS-00003-A	Temperature Sensor	ED - Electronic Device	Maxim Integrated, Dallas Semiconductor, Adafruit, SparkFun	The DS18B20 Temperature Sensor is a digital temperature sensor that provides accurate temperature measurements using the One-Wire communication protocol. It allows multiple sensors to share a single data line and delivers calibrated digital readings. The sensor is widely used in weather stations, automation systems, industrial monitoring, IoT devices, and Arduino projects.	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
	EDT-00001-B	Alcohol Gas Sensor	ED - Electronic Device	Hanwei Electronics, Winsen	The Alcohol Gas Sensor is a gas detection device used to detect alcohol vapors and ethanol concentration in the air. It provides an analog output proportional to gas levels and can be easily interfaced with Arduino, Raspberry Pi, and other microcontrollers. It is commonly used in breath analyzers, safety systems, industrial monitoring, and IoT projects.	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
	EDT-00001-C	Methane Gas Sensor	ED - Electronic Device	Hanwei Electronics, Winsen, Figaro Engineering	The Methane Gas Sensor is a gas detection device used to detect methane (CH ₄), CNG, and natural gas leaks. It provides an analog output proportional to gas concentration and can be easily interfaced with Arduino and other microcontrollers. It is widely used in gas leak detection, industrial safety, smart homes, and IoT monitoring systems.	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
	EDT-00001-D	Gas Leakage Sensor	ED - Electronic Device	Hanwei Electronics, Winsen, Figaro Engineering	The Gas Leakage Sensor is a gas detection device used to identify LPG, propane, butane, smoke, and natural gas leaks in the environment. It monitors gas concentration levels and helps provide early warning of hazardous conditions. The sensor is widely used in gas leakage alarm systems, smart home safety devices, industrial safety monitoring, and IoT-based environmental monitoring applications.	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
	EDT-00001-E	LPG Gas Sensor	ED - Electronic Device	Hanwei Electronics, Winsen, Figaro Engineering	The LPG Gas Sensor is a gas detection device used to detect LPG, butane, and propane gas leaks. It provides an analog output based on gas concentration and can be easily interfaced with Arduino and other microcontrollers. It is widely used in gas leak alarms, smart home safety systems, industrial monitoring, and IoT projects.	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	CO Gas Sensor	ED - Electronic Device	Hanwei Electronics, Winsen, Figaro Engineering	The Carbon Monoxide Sensor is a gas detection device used to detect and monitor carbon monoxide (CO) levels in the air. It helps identify hazardous CO concentrations and improve safety. It is widely used in gas alarm systems, air quality monitoring, smart homes, industrial safety, and IoT 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
	EDT-00001-G	Air Quality Sensor	ED - Electronic Device	Winsen, Hanwei Electronics	The Air Quality Sensor is an electronic device used to detect harmful gases and monitor pollution levels in the environment. It can sense gases such as CO, CO ₂ , smoke, LPG, methane, and volatile compounds depending on the sensor type. It is widely used in environmental monitoring, smart homes, industrial safety, IoT systems, and Arduino 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
	EDT-00002-A	LDR Module	ED - Electronic Device	Advanced Photonix, Token Electronics, Excelitas Technologies, Luna Optoelectronics	The LDR (Light Dependent Resistor) is a light-sensitive component whose resistance varies with light intensity. Its resistance decreases in bright light and increases in darkness. It is widely used in automatic lighting systems, light meters, solar trackers, security devices, and electronics projects for light detection and control.	Operating Voltage: 3.3V – 5V Sensor Type: Light Dependent Resistor Output Type: Analog Resistance Output Resistance Range: 200? – 1M?	Light Sensor • analog sensor • LDR sensor • photoresistor • light dependent resistor
	EDT-00003-A	Piezo Sensor	ED - Electronic Device	Murata Manufacturing, SparkFun Electronics, Measurement Specialties, TE Connectivity	The Piezoelectric Ceramic Vibration Sensor is an analog sensor used to detect vibration, knocks, impacts, touch, and pressure. It generates a voltage through the piezoelectric effect when mechanical force is applied. The sensor is widely used in vibration monitoring, touch sensing, security systems, musical instruments, and Arduino-based projects.	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
	EDT-00004-A	Speaker	ED - Electronic Device	CUI Devices, PUI Audio, Soberton, Visaton	The Speaker is an electronic audio output device used to convert electrical audio signals into audible sound. It is commonly used in embedded systems, multimedia devices, alarms, robotics, IoT applications, and educational projects. The module can reproduce tones, voice, music, and alert sounds, making it suitable for audio feedback, notifications, and sound generation in electronic systems.	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
	EDT-00006-A	FSR Round Module	EM - Electronic-Electrical Modules	Interlink Electronics, SparkFun Electronics, DFRobot, Adafruit Industries, Ohmite, Tekscan	The Round Force Sensitive Resistor (FSR) is a pressure sensor with a 0.5-inch sensing area that changes resistance based on applied force. It detects pressure in the 100g to 10kg range and can be easily interfaced with microcontrollers using a voltage divider circuit. It is widely used in touch sensing, load detection, robotics, and Arduino projects.	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
	EDT-00006-B	Force Sensor	EM - Electronic-Electrical Modules	Interlink Electronics, SparkFun Electronics, DFRobot, Adafruit Industries, Ohmite	The Force Sensitive Resistor (FSR) is a pressure sensor that changes resistance based on applied force. It detects pressure in the range of 100g to 10kg and is commonly used with voltage divider circuits. It is widely used in touch sensing, load detection, robotics, and Arduino-based projects.	Actuation Force: 0.1 N Clock Speed: 16MHz	FSR Sensor • Pressure Sensor • Force Sensitive Resistor • Square Force Sensor • Touch Sensor
	EDT-00007-A	Flex Sensor	ED - Electronic Device	Spectra Symbol, SparkFun, Adafruit, Interlink Electronics, Generic	The 2.2? Flex Sensor is a bend-detecting resistor that changes resistance when flexed. It is used to measure bending or motion and is commonly used in robotics, wearables, gaming controllers, and motion-sensing applications.	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
	EDT-00008-A	Passive Buzzer	ED - Electronic Device	CUI Devices, Keyestudio, Generic Electronics	The Passive Buzzer Module is a sound-producing device that requires an external PWM or frequency signal to generate audio. Unlike active buzzers, it can produce different tones, melodies, and alarms when controlled by microcontrollers such as Arduino, ESP32, Raspberry Pi, and STM32. It is widely used in notification, audio, and educational electronics projects.	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
	EDT-00009-A	Active Buzzer Module	ED - Electronic Device	CUI Devices, Keyestudio, Generic Electronics	The Active Buzzer Module with Internal Oscillator is an electronic sound device that produces a fixed beep when power is applied. Unlike passive buzzers, it contains a built-in oscillator circuit and does not require PWM signals or external frequency generation from a microcontroller. It is widely used in alarms, notifications, warning systems, timers, and Arduino-based electronics projects.	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
	EMA-00003-E	Coin Battery	EM - Electronic-Electrical Modules	Panasonic, Maxell, Energizer, Sony	The CR2032 3V Lithium Coin Battery is a compact, long-lasting power source used in small electronic devices like watches, calculators, remotes, toys, and embedded systems. It provides a stable 3V output and is widely used in low-power applications due to its long shelf life and reliability.	Battery Type: Lithium Coin Cell Battery Size: CR2025 Chemistry: Lithium Manganese Dioxide (LiMnO ₂) 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 × 7.5 × 1 cm	CR2025 Battery • 3V Coin Cell • Lithium Battery • Panasonic Battery • Button Cell
	EMA-00008-A	1 Channel Relay	EM - Electronic-Electrical Modules	Single Relay, Generic / OEM	The Single Channel 12V Relay Module is used to control high-voltage AC/DC devices using low-voltage microcontrollers. It supports high/low-level triggering and includes LED indicators. It is commonly used in home automation, IoT, and motor control 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 × W × H cm): 7 × 4 × 3	Arduino Compatible • 12V Relay Module • Single Channel Relay • High/Low Trigger • SONGLE SRD-12VDC-SL-C • SPDT Relay • 10A 250VAC • IoT Switching Module
	EMA-00008-B	2 Channel Relay	EM - Electronic-Electrical Modules	SONGLE, Keyes, SunFounder, Elegoo, Generic	The 5V 2 Channel Relay Module is used to control high-power AC and DC devices using low-power microcontrollers like Arduino. It supports up to 10A switching per channel and includes LED indicators for status. It is commonly used in home automation, IoT systems, and industrial control applications.	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
	EMC-00001-A	RF 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 using radio frequency signals. It operates at 433 MHz or 315 MHz and is commonly used in remote controls, home automation, wireless sensors, and Arduino projects.	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-00005-A	RFID READER MODULE	EM - Electronic-Electrical Modules	NXP Semiconductors, Ai-Thinker, SunFounder, Keyestudio, Waveshare	The RC522 RFID Reader/Writer Kit is a 13.56MHz RFID module based on the MFRC522 IC with cards and tags. It uses SPI communication and supports ISO 14443A/MIFARE contactless data exchange. It is widely used in access control, attendance systems, IoT projects, and embedded RFID applications.	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-00006-B	GSM Module	EM - Electronic-Electrical Modules	SIMCom, DFRobot, Itead Studio	The SIM900A GSM Module is a wireless communication module used for SMS, voice, and data applications over GSM networks. It supports UART communication and SIM card integration for microcontrollers like Arduino. It is widely used in IoT systems, remote monitoring, automation, and embedded communication projects.	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
	EMS-00001-A	MQ-2 Gas Sensor	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 × 20 × 21 Weight (g): 8 Shipping Weight: 0.012 kg Shipping Dimensions (cm): 4 × 4 × 4	Arduino Compatible • MQ-2 Sensor • LPG Gas Sensor • Smoke Detector • SnO ₂ Sensor • Combustible Gas Module • 5V Gas Sensor • Gas Leakage Detector
	EMS-00002-A	Temp 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 × W × H mm): 31 × 14 × 7.5 Weight (g): 5 Shipping Weight: 0.01 kg Shipping Dimensions (L × W × H cm): 5 × 5 × 2	DHT11 • Temperature Sensor • Humidity Sensor • Digital Temp Sensor • Arduino Climate Sensor
	EMS-00006-A	PIR Sensor	EM - Electronic-Electrical Modules	HC, DFRobot, SparkFun, Keyestudio	The PIR Motion Sensor is a passive infrared detection module used to detect human movement and body heat by sensing changes in infrared radiation. The commonly used HC-SR501 PIR sensor combines a pyroelectric infrared sensor with a Fresnel lens to detect motion within its sensing range. It is widely used in security systems, automatic lighting, smart homes, robotics, and Arduino projects.	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	EM - Electronic-Electrical Modules	Maxim Integrated, DFRobot, SparkFun	The DS18B20 Temperature Sensor Module is a digital temperature sensor that uses the 1-Wire communication protocol for accurate readings. Developed by Dallas Semiconductor, it provides calibrated digital output with high precision and supports multiple sensors on a single data line. It is widely used in weather stations, automation systems, industrial monitoring, and Arduino projects.	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
	EMS-00009-A	Heart Pulse Sensor	EM - Electronic-Electrical Modules	Maxim Integrated, Generic Electronics, SparkFun, DFRobot	The Heart Pulse Rate Sensor is a biometric sensor used to detect heartbeats and measure pulse rate in BPM. It works using Photoplethysmography (PPG), where light is emitted into the skin and changes in reflected light due to blood flow are detected. It is used in health monitoring, fitness devices, and Arduino projects.	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
	EMS-00010-A	Smoke Gas Sensor	EM - Electronic-Electrical Modules	Hanwei Electronics, Winsen Electronics, SparkFun Electronics, DFRobot	The MQ-2 Gas Sensor Module is used to detect combustible gases like LPG, methane, propane, hydrogen, alcohol, and smoke. It works using an SnO ₂ sensing layer that changes resistance when gas is present. It provides analog and digital outputs and is commonly used in gas leak detection, safety systems, air quality monitoring, and Arduino projects.	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
	EMS-00010-C	MQ-4 Gas Sensor	EM - Electronic-Electrical Modules	Hanwei Electronics, Winsen Electronics, Waveshare	The MQ-4 Gas Sensor Module is used to detect methane (CH ₄), CNG, and natural gas leaks. It provides analog and adjustable digital outputs for gas detection. It is widely used in gas leakage alarms, safety systems, and IoT monitoring applications.	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

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	EMS-00010-D	MQ-5 Gas Sensor	EM - Electronic-Electrical Modules	Hanwei Electronics, Winsen Electronics, Waveshare	The MQ-5 Gas Sensor Module is used to detect combustible gases like LPG, methane, and natural gas. It changes conductivity based on gas presence and provides an analog output signal. It is widely used in gas leakage detection, safety systems, and IoT projects.	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
	EMS-00010-E	MQ-6 LPG Gas Sensor	EM - Electronic-Electrical Modules	Hanwei Electronics, Zhengzhou Winsen Electronics, DFRobot	The MQ-6 Gas Sensor Module is used to detect LPG, propane, and butane gas leaks in the air. It changes conductivity based on gas concentration and provides an analog output signal. It is widely used in gas leakage detection, safety systems, and IoT projects.	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
	EMS-00010-F	MQ-7 Sensor	EM - Electronic-Electrical Modules	Hanwei Electronics, Zhengzhou Winsen Electronics, DFRobot	The MQ-7 Carbon Monoxide Sensor Module is a gas sensor used to detect carbon monoxide (CO) in the air. It measures changes in conductivity to provide analog and digital outputs. It is widely used in safety systems, air quality monitoring, and IoT projects.	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
	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 used to identify and measure colors based on reflected light intensity. It uses a light-to-frequency converter IC and photodiodes with onboard LEDs for accurate sensing. It is commonly used in robotics, color sorting, automation, and Arduino projects.	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
	EMS-00012-B	Color Sensor Module	EM - Electronic-Electrical Modules	ams-OSRAM, ams-OSRAM, ams-OSRAM, Generic Electronics	The TCS3200 Color Sensor Module is an RGB color detection sensor used to identify and measure colors based on reflected light intensity. It uses a light-to-frequency converter IC and photodiodes with onboard LEDs for accurate sensing. It is commonly used in robotics, color sorting, automation, and Arduino projects.	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-00014-A	Touch Sensor	EM - Electronic-Electrical Modules	Tontek Design Technology, Shenzhen Tontek (Tontek IC), Generic Module Manufacturer, Waveshare (Module Vendor), Keystudio (Arduino Vendor)	The TTP223B Capacitive Touch Key Sensor Module is a touch switch that replaces mechanical buttons. It outputs a HIGH signal when touched and works in low-power mode. It is commonly used in Arduino projects, smart switches, hidden controls, and automation systems.	Item Type: Electronic Switch Model: Touch Switch IC Chip: TTP223B Operating Voltage: 2V – 5.5V Output High (VOH): 0.8 × VCC Output Low (VOL): 0.3 × 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 × 3 × 1 cm	arduino • touch • TTP223B • capacitive sensor
	EMS-00018-A	Water Level Sensor	EM - Electronic-Electrical Modules	Generic Electronics, Generic Electronics, DFRobot, SparkFun	Water Level Sensor Module is used to detect water levels in tanks, containers, and irrigation systems. It works using conductive tracks that change resistance when in contact with water. It provides analog output for level measurement and digital output for threshold-based detection. It is commonly used in smart irrigation, tank monitoring, and leak detection systems.	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

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
	EMS-00019-A	Soil Moisture Sensor	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 × 3 cm Cable Length: 20 cm Interface Pins: VCC, GND, DO, AO Shipping Weight: 0.02 kg Shipping Dimensions (cm): 8 × 6 × 3	Arduino Compatible • Soil Moisture Sensor • YL-69 • FC-28 • LM393 • Resistive Soil Sensor • Irrigation Sensor
	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 × 32 Compatibility: Arduino / Raspberry Pi / Microcontrollers Lifespan: Long-Life, High-Stability Potentiometers Shipping Weight: 0.015 kg Shipping Dimensions (L × W × H): 6 × 5 × 4 cm	PS2 Joystick • Analog Joystick Module • Dual Axis Sensor • 10K Potentiometer Joystick • Arduino Joystick
	EMS-00021-A	Tilt Sensor	EM - Electronic-Electrical Modules	Generic Electronics, DFRobot, SparkFun, Keyestudio	SW-520D Tilt Sensor Module is a simple digital sensor that detects tilt, orientation change, vibration, or motion using a rolling metal ball inside a cylindrical switch. When tilted beyond a threshold (~10–15 $^\circ$), contacts connect/disconnect and produce a digital HIGH/LOW output. Used in alarms, robotics, and Arduino 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
	EMS-00023-A	Vibration Sensor	EM - Electronic-Electrical Modules	Generic Electronics, DFRobot, SparkFun, FlyRobo	SW-420 Vibration Sensor Module is used to detect vibration, shock, and movement in security systems, robotics, and Arduino projects. It uses an SW-420 sensor with an LM393 comparator to give a digital output when vibration is detected. The sensitivity can be adjusted using an onboard potentiometer.	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
	EMX-00001-A	Arduino Uno R3	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 electronics projects. It features 14 digital I/O pins, 6 analog inputs, a 16 MHz clock, USB interface, and operates at 5V. It is widely used in education, prototyping, robotics, 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 × 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 × W × H): 75 × 54 × 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-00003-A	Arduino Mega	EM - Electronic-Electrical Modules	Arduino, Elegoo, RobotDyn, Keyestudio, DFRobot, Waveshare	The Arduino Mega 2560 is a microcontroller board based on the ATmega2560. It offers 54 digital I/O pins, 16 analog inputs, multiple serial ports, and is designed for complex projects requiring high I/O and memory. It is widely used in robotics, automation, IoT systems, and large-scale embedded applications.	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
	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 × 8 × 3.5 cm	DT830D • Digital Multimeter • AC/DC Tester • LCD Display • VOM

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
	MMB-00002-A	Compartment Box	MM - Mechanical Module	Stanley, Pro'sKit, Tactix, Deli	The 8-compartment storage box is a durable organizer for storing electronic components, motors, sensors, screws, wires, connectors, Arduino accessories, tools, and DIY hardware. It features a sturdy plastic body with a transparent lid and removable dividers for flexible storage. Ideal for workshops, labs, and DIY projects, it keeps items neatly organized and easily accessible.	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
	MMB-00002-B	Compartment Box	MM - Mechanical Module	Stanley, Pro'sKit, Tactix, Deli	The 6-compartment storage box is a compact organizer for storing electronic components like resistors, LEDs, ICs, screws, nuts, and connectors. It is lightweight, portable, and helps keep small parts neatly organized and easy to access. Ideal for electronics labs, workshops, DIY projects, and hobby use.	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
	MMB-00002-C	Compartment Box	MM - Mechanical Module	Stanley, Pro'sKit, Tactix, Deli	The 20-compartment storage box is a compact organizer for storing small items like electronic components, screws, nuts, resistors, ICs, and connectors. It features multiple sections with a transparent lid for easy visibility and access. Ideal for workshops, electronics labs, DIY projects, and hobby storage.	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
	MMC-00001-A	M-F 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 × W × H): 10 × 7.5 × 2 cm	Breadboard Wire • Arduino Wire • Prototyping Cable • Jumper Wire • Male to Female
	MMC-00001-B	M-M 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 × W × H): 10.5 × 7.5 × 2 cm	Breadboard Wire • Arduino Wire • Prototyping Cable • Jumper Wire • Male to Male
	MMC-00001-C	F-F 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 × W × H): 10 × 7.5 × 2 cm	Female-to-Female Jumper • Breadboard Wire • Arduino Wire • Prototyping Cable • 20cm • Multi-color
No Image	MMC-00006-A	DC Jack Connector	MM - Mechanical Module	CUI Devices, Kycon, SparkFun, Adafruit	The 9V DC Jack Connector is a power connector used to supply DC power to electronic circuits and devices. It provides a secure connection between power adapters and systems. It is commonly used in Arduino projects, robotics, embedded systems, and DIY electronics for stable power delivery.	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

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	MMD-00001-A	Mini DC Motor	MM - Mechanical Module	Roboman, Rytronics, Singh Varieties, Ercoms Robotics, Robiz (OEM)	The Compact 3–6V DC Mini Motor is a small low-voltage motor used in robotics and DIY electronics projects. It provides smooth rotation for lightweight applications. It is commonly used in mini robots, Arduino cars, and educational kits for driving wheels and simple mechanisms.	Motor Size: 38 × 20 × 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
	MMD-00002-A	Metal Gear Servo	MM - Mechanical Module	TowerPro, DFRobot, Adafruit, SparkFun, Robocraze	The MG995 360° High Torque Servo Motor is a continuous rotation servo used in robotics, RC vehicles, robotic arms, automation systems, smart wheel drives, and Arduino projects. It features metal gears, PWM control, and high torque for strong and reliable performance. Its continuous rotation makes it ideal for motion control and automation 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
	MMD-00002-D	Digital Servo Motor	MM - Mechanical Module	TowerPro, Probots, DFRobot, Adafruit, SparkFun	The MG996R 360° Digital Servo Motor is a high-torque continuous rotation servo used in robotics, robotic arms, RC vehicles, automation systems, pan-tilt platforms, and Arduino projects. It features strong metal gears and PWM control for smooth and reliable operation. Its full 360° continuous rotation makes it ideal for applications requiring controlled motion and high torque.	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
	MMD-00003-B	150 RPM Geared Motor	MM - Mechanical Module	Johnson Motor, DFRobot, Robu.in, FlyRobo	The 150 RPM 12V geared DC motor is a high-torque motor with an integrated gearbox for efficient and controlled motion. It reduces speed while increasing torque, making it suitable for robotics, smart vehicles, automation systems, conveyor mechanisms, and DIY projects. It is ideal for Arduino-based applications requiring precise and reliable 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
	MMD-00004-A	Vibrating Motor	MM - Mechanical Module	Precision Microdrives, Adafruit, Jinlong Machinery, Generic Motors, DFRobot	DC vibrating motors are compact motors with an off-center weight that creates vibration when the motor rotates. They are widely used in mobile phones, wearables, robotics, alert systems, haptic feedback devices, and Arduino projects. Lightweight and easy to use, they are ideal for DIY electronics and interactive 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
	MMD-00005-A	Mini Water Pump	MM - Mechanical Module	Adafruit, SunFounder, DFRobot, Generic Pump Manufacturer	Mini submersible water pumps are compact DC-powered pumps used for water circulation in fountains, aquariums, hydroponics, cooling systems, and automatic watering projects. They operate fully submerged and provide smooth, low-noise, continuous water flow. Lightweight and easy to install, they are ideal for Arduino, DIY, and educational applications.	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
	MMD-00006-A	Gear Stepper Motor	MM - Mechanical Module	Adafruit, Songle Motor, Generic Stepper Motors, SunFounder	The compact 5V unipolar stepper motor with a built-in gearbox for high torque and precise low-speed control. It offers 32 steps per revolution with a 1/16 gear reduction. Widely used in Arduino projects, robotics, automation systems, camera sliders, and smart devices, it is ideal for accurate and controlled motion applications.	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

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
	MMM-00003-A	Plywood Car Chassis	MM - Mechanical Module	Robu.in, FlyRobo, DFRobot, Keyestudio	The RJ12 plywood car chassis is a lightweight base for robotics and Arduino projects like line follower and obstacle avoidance robots. Made from laser-cut plywood or MDF, it includes mounting holes for motors, sensors, wheels, and controllers. It is durable, easy to assemble, and ideal for STEM learning and prototyping.	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-B	Rubber wheels	MM - Mechanical Module	DFRobot, Pololu, SparkFun, Waveshare	Rubber wheels for DC motors are used in robotics, Arduino car kits, line follower robots, obstacle avoidance robots, and DIY projects. They fit BO and TT geared motors and provide good grip, stability, and smooth movement on different surfaces. Made from durable rubber, they are ideal for educational and prototyping applications.	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
	MMM-00006-A	Castor wheel	MM - Mechanical Module	Blickle, TENTE, Shepherd Hardware, Caster Concepts	1-inch castor wheels are small wheels used for robotics, DIY platforms, trolleys, furniture, and movable enclosures. Available in swivel and fixed types, they provide smooth and easy movement. Made from plastic, rubber, or nylon, they are durable and suitable for lightweight mobility and prototyping applications.	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
	MMP-00004-A	Standoffs set	MM - Mechanical Module	Adafruit, Keystone Electronics, DFRobot, Pro'sKit	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
	TLC-00002-A	Knife	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 × 7.6 × 2.2 cm Material: Acrylonitrile Butadiene Styrene (ABS) Blade Material: Stainless Steel Shipping Weight: 0.04 kg Shipping Dimensions (L × W × H): 21 × 8 × 2 cm	Stanley Knife • Retractable Knife • Paper Cutter • DIY Tool • Packaging Tool
	TLC-00006-A	Tip Cleaner	TL - Tools	Pro'sKit, Hakko, YIHUA, Bakon	Solder tip cleaners are used to clean soldering iron tips without reducing temperature. Made from fine brass shavings, they remove oxidation, burnt flux, and excess solder easily. They help extend tip life and maintain good performance. Ideal for electronics repair, PCB soldering, and DIY work, they ensure clean and consistent soldering results.	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
	TLK-00001-A	Tool Kit	TL - Tools	Pro'sKit, Pro'sKit, Pro'sKit, Pro'sKit	Professional Tool Kits are complete sets for electronics repair, PCB assembly, networking, electrical work, mobile servicing, robotics, and DIY projects. They include screwdrivers, pliers, cutters, tweezers, soldering tools, and precision instruments. Durable, accurate, and ideal for professionals, students, and hobbyists for all repair and assembly tasks.	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

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
	TLK-00002-A	Screwdriver Set	TL - Tools	Pro'sKit, Jakemy, Stanley, Bosch	The precision screwdriver set used for electronics repair, PCB work, mobile servicing, laptops, watches, and other fine mechanical tasks. It includes cross and slotted screwdrivers with hardened steel tips for durability and accuracy. Ergonomic anti-slip handles provide better grip and control, making it ideal for precise DIY and professional repair work.	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
	TLK-00003-A	Screwdriver Set	TL - Tools	Stanley, STANLEY Tools, Stanley Black & Decker	The Screwdriver Set includes six screwdrivers for electronics repair, home maintenance, workshop tasks, and DIY projects. It features cushion grip handles, chrome vanadium steel shafts, and precision tips for good control and torque. Built for durability and long life, it is suitable for both professionals and hobby users in repair and assembly work.	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
	TLM-00003-A	Micro Spring Clamp	TL - Tools	Microfix Tools, Stanley Tools, Ingco Tools, Taparia Tools	Microfix spring clamps are small tools used for gripping and holding objects during electronics, craft work, soldering, and DIY projects. Their spring-loaded design provides quick and firm temporary holding. Lightweight and durable, they are easy to use and help improve stability and precision while working on small components and materials.	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
	TLM-00004-A	Metal Hacksaw Blade	TL - Tools	Taparia Tools Ltd, Stanley Tools, Bosch, DeWalt, JK Files & Tools, Ultra Tools	Metal cutting hacksaw blades are used for cutting steel, iron, aluminum, copper, pipes, rods, and metal sheets. Made from bi-metal or HSS, they offer good strength, sharpness, and durability. Higher TPI gives smoother and more precise cuts. These blades are widely used in workshops, fabrication, maintenance, and DIY metalworking projects for reliable cutting performance.	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
	TLM-00004-B	Wood Saw Blade	TL - Tools	Taparia Tools Ltd, Stanley Tools, Ingco Tools, DeWalt	Wood cutting hacksaw blades are designed for cutting soft wood, plywood, PVC, and plastic materials. With a lower TPI design, they allow faster cutting and efficient material removal. These blades provide smooth performance and good durability, making them suitable for woodworking, craft projects, repairs, and DIY applications where quick and reliable cutting is required.	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
	TLM-00004-C	Mini hacksaw	TL - Tools	Stanley, Taparia, Lenox	A mini hacksaw is a compact hand tool used for cutting metal rods, PVC pipes, plastic sheets, bolts, and small materials with precision. Its lightweight and ergonomic design makes it easy to use in tight spaces. Commonly used in electronics labs, robotics projects, plumbing, maintenance work, and DIY applications, it provides reliable and controlled cutting performance for everyday tasks.	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
	TLM-00004-D	Hacksaw Blade	TL - Tools	Taparia, Taparia	Hacksaw blades are used for cutting metal, plastic, PVC pipes, and rods. Made from carbon steel or bi-metal HSS, they provide good strength, sharpness, and durability. The precision teeth design ensures smooth and accurate cutting. These blades are commonly used in workshops, maintenance work, DIY projects, and industrial applications for reliable and efficient 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

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
	TLP-00001-A	Hot Melt Glue Gun	TL - Tools	Generic / OEM, Stanley, Bosch, Pro'sKit	A 40W hot melt glue gun is a versatile tool designed for bonding, crafting, repairs, and DIY projects. It features a standard operating temperature, ergonomic trigger mechanism for precise glue flow control, and an integrated ON/OFF switch for added safety and convenience. Compatible with standard glue sticks, it delivers strong adhesion and reliable performance for various materials.	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: 7 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.
	TLP-00002-A	Soldering Iron Kit	TL - Tools	TLP Series / Generic Compatible, Noel, Pro'sKit, Velleman	A soldering iron kit is a complete toolset used for electronics assembly and repair. It includes essential tools for general-purpose soldering and is ideal for beginners, hobbyists, and professionals working on DIY electronics, college projects, and repair work.	Item Type: Kit Soldering Iron Power: 25 Watt Suitable For: Beginner to Professional Shipping Weight: 0.4 kg Shipping Dimensions: 20 × 7 × 6 cm	Soldering Kit • 25W Soldering Iron • 3-in-1 Kit • DIY Soldering Set • Electronics Repair Kit
	TLP-00003-A	Soldering Iron Stand	TL - Tools	Generic / OEM, Pro'sKit, Velleman, Goot, Noel	The 25W Soldering Iron Stand is used to safely hold soldering irons during work. It has a stable metal base and a spring holder for secure placement. It is commonly used in electronics labs, DIY projects, and repair workstations.	Suitable Wattage: 25 Watt (Max) Material: Metal Base with Steel Spring Holder Shipping Weight: 0.3 kg Shipping Dimensions: 20 × 6 × 3 cm	Soldering Stand • 25W • Iron Holder • Metal Base • Spring Holder
	TLP-00004-A	Cordless Power Drill	TL - Tools	Bosch, Robert Bosch GmbH	The Professional is a compact 12V cordless impact drill designed for drilling and screwdriving in wood, metal, and masonry. It features variable speed control, reverse rotation, and impact drilling for versatile use. Lightweight and durable, it is easy to handle and ideal for professional work, home repairs, and DIY projects requiring reliable and portable power tool performance.	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