Parts Export

Generated: 2026-06-10 10:25:46

Total Parts: 31

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	**EDA-00002-A**	Alligator Clip to Female Dupont Jumper 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 × 4 × 2 cm	Alligator Clip Wire • Dupont Jumper Wire • 10 Pin Jumper • Crocodile Clip Cable • 20cm Test Lead
No Image	**EDM-00009-A**	PCB board	ED - Electronic Device	Bud Industries, Twin Industries, BusBoard Prototype Systems, Keyestudio, Generic / OEM	High-quality 4×6 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 × 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 × 5 × 1 cm	Double-Sided PCB • 4x6 cm • FR4 • Prototype Board • 2.54mm Pitch • DIY Electronics
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
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 integrated I2C interface for simplified wiring. Blue backlight with white characters for clear and high-contrast visibility. Ideal for Arduino, Raspberry Pi, and embedded systems requiring compact data display.	Model: Other LCD Model No.: LCD1602 Display Type: 16 × 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 × W × H): 8 × 5 × 3 cm	LCD1602 • 16x2 LCD • I2C LCD Display • Arduino Display • Character LCD Module
No Image	**EMA-00004-A**	8x8 Single Colour LED Dot Matrix Display with MAX7219 driver	EM - Electronic-Electrical Modules	Analog Devices, Keyestudio, SparkFun	The 8x8 Single Colour LED Dot Matrix Display with MAX7219 Driver is an LED matrix module that combines a single-color 8×8 LED display with the MAX7219 LED driver IC for easy control and multiplexing.	Product Type: LED Matrix Display Module Matrix Size: 8 × 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

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	**EMA-00006-B**	Passive Buzzer Module	EM - Electronic-Electrical Modules	ED Series / Generic Compatible, KEYESTUDIO	Passive buzzer module designed to generate variable tones using PWM or frequency control. Operates from 1.5V to 15V DC and produces tones in the 1.5–2.5 kHz range. Ideal for alarms, alerts, Arduino projects, and microcontroller-based sound applications.	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 × W × H): 6 × 4 × 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, Keyestudio, 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
No Image	**EMA-00010-A**	L298N 2 Channel Motor Driver	EM - Electronic-Electrical Modules	STMicroelectronics, Keyestudio, 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-E**	L 298 Motor Driver Module	EM - Electronic-Electrical Modules	STMicroelectronics, STMicroelectronics, SparkFun, Keyestudio	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-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, Keyestudio, 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

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, Keyestudio, 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
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	**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. Features onboard pull-up resistor and LED status indicator for easy interfacing. Ideal for weather stations, environmental monitoring, and smart automation projects.	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
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**	Ultrasonic Distance Sensor	EM - Electronic-Electrical Modules	MWduino / Generic, Elecfreaks, KEYESTUDIO, SunFounder	Ultrasonic distance sensor module using 40kHz sound waves for accurate measurement. Operates on 3.3–5.5V DC with 4-pin interface (VCC, Trig, Echo, GND). Ideal for robotics, obstacle detection, automation, and distance sensing 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 × W × H): 9 × 6 × 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-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

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
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 × 14 × 8 Weight (g): 5 Shipping Weight: 0.01 kg Shipping Dimensions (cm): 5 × 4 × 1	IR Obstacle Sensor • Infrared Reflective Module • LM393 Comparator • Active Low Output • Proximity Sensor • Arduino Compatible • Robot Sensor
No Image	**EMS-00015-A**	Touch keyboard TTP229 16 keys capacitive	EM - Electronic-Electrical Modules	Tontek Design Technology, Robocraze, Keyestudio	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: 4×4 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, Keyestudio	The 3x4 12-Key Membrane Switch Keypad is a compact matrix-style input device commonly used in Arduino, ESP32, Raspberry Pi, PIC, AVR, and embedded electronics projects. It contains 12 push buttons arranged in a telephone-style 4-row × 3-column matrix layout.	Product Type: Membrane Matrix Keypad Key Layout: 3×4 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, Keyestudio, 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: 4×4 / 4×3 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-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 brightness level. It features an onboard potentiometer to adjust sensitivity and threshold detection. Ideal for automatic lighting systems, Arduino projects, and light-based automation 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 × W × H): 4 × 3 × 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-00020-A**	Joystick Module	EM - Electronic-Electrical Modules	EM Series / Generic Compatible, KEYESTUDIO, SunFounder, DFRobot	Dual-axis analog joystick module used to detect X and Y movement positions. Each axis uses a 10KΩ potentiometer providing 0–5V analog output. Includes built-in push-button switch, ideal for robotics, gaming, and motion control projects.	Model: PS2 Joystick Module Operating Voltage (VDC): 5 Potentiometer Resistance: 10K? (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

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
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	**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 × 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-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
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	**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	**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