

# Parts Export

Generated: 2026-06-13 13:18:14

Total Parts: 13

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	<b>EDT-00008-A</b>	Passive buzzer module without internal oscillator	ED - Electronic Device	CUI Devices, Keystudio, 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	<b>EDT-00009-A</b>	Active buzzer module with internal oscillator	ED - Electronic Device	CUI Devices, Keystudio, 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	<b>EMS-00003-A</b>	Accelerometer module GY 521	EM - Electronic-Electrical Modules	InvenSense, Generic Electronics, DFRobot, SparkFun Electronics	The GY-521 Accelerometer Module is a 6-axis motion tracking sensor board based on the MPU6050 MEMS sensor IC. It combines a 3-axis accelerometer and a 3-axis gyroscope in a single compact module, allowing accurate measurement of acceleration, tilt, rotation, vibration, and motion.	Product Type: Accelerometer + Gyroscope Module Model: GY-521 Main IC: MPU6050 Communication: I2C Operating Voltage: 3V – 5V DC	GY-521 Accelerometer Module • MPU6050 Sensor Module • 6DOF Motion Sensor • Gyroscope Accelerometer Module
No Image	<b>EMS-00008-A</b>	Metal touch sensor	EM - Electronic-Electrical Modules	Keyes Electronics, Generic Electronics, Keystudio	The KY-036 Metal Touch Sensor Module is a human body and metal touch detection sensor designed to detect changes in electrical conductivity when touched by a finger or conductive object. The module uses an LM393 comparator and transistor-based sensing circuit to generate analog and digital output signals.	Product Type: Metal Touch Sensor Module Model: KY-036 Main IC: LM393 Comparator Operating Voltage: 3.3V – 5V DC	KY-036 Metal Touch Sensor • Human Body Touch Sensor • Metal Touch Module • Touch Detection Sensor
No Image	<b>EMS-00009-A</b>	Heart Pulse Rate Sensor	EM - Electronic-Electrical Modules	Maxim Integrated, Generic Electronics, SparkFun, DFRobot	The Heart Pulse Rate Sensor is a biometric sensor module used to detect heartbeats and measure pulse rate (BPM - Beats Per Minute). It works using photoplethysmography (PPG), where an LED emits light into the skin and a photodetector measures changes in blood flow caused by heartbeats.	Product Type: Heart Pulse Rate Sensor Sensor Type: Photoplethysmography (PPG) Operating Voltage: 3.3V – 5V DC Output Type: Analog / I2C Measured Parameter: Pulse Rate (BPM)	Heart Pulse Sensor • Pulse Rate Sensor • Heartbeat Sensor Module • Pulse Detection Sensor • Arduino Pulse Sensor • BPM Sensor • Heart Rate Monitor Sensor • Pulse Sensor Amped
No Image	<b>EMS-00012-A</b>	Color Sensor	EM - Electronic-Electrical Modules	ams-OSRAM, ams-OSRAM, Generic Electronics	The TCS3200 Color Sensor Module is an RGB color detection sensor designed to identify and measure colors using red, green, and blue filtered photodiodes. The module uses the TCS3200/TCS230 light-to-frequency converter IC to convert light intensity into frequency signals readable by microcontrollers.	Product Type: RGB Color Sensor Model: TCS3200 / TCS230 Sensor Type: Light-to-Frequency Converter Operating Voltage: 2.7V – 5.5V DC	Arduino Color Sensor • Color Detection Module • TCS3200 Color Sensor • RGB Color Sensor • TCS230 Sensor • RGB Recognition Module • ESP32 Color Sensor • Light Frequency Sensor
No Image	<b>EMS-00012-B</b>	Color Sensor	EM - Electronic-Electrical Modules	ams-OSRAM, ams-OSRAM, Generic Electronics	The TCS3200 Color Sensor Module is an RGB color recognition sensor used to detect and measure colors based on reflected light intensity. It uses the TCS3200/TCS230 light-to-frequency converter IC along with photodiodes and onboard white LEDs for accurate color detection.	Product Type: RGB Color Sensor Model: TCS3200 / TCS34725 Sensor Type: Light-to-Frequency Converter Operating Voltage: 2.7V – 5.5V DC	TCS3200 Sensor • RGB Sensor • Color Sensor • TCS230 Module • Arduino Color Sensor • ESP32 RGB Sensor • Color Detection Module
No Image	<b>EMS-00018-A</b>	Water Level Sensor	EM - Electronic-Electrical Modules	Generic Electronics, Generic Electronics, DFRobot, SparkFun	The Water Level Sensor Module is used to detect and measure water levels in tanks, containers, reservoirs, automation systems, irrigation projects, and Arduino applications. It works using exposed parallel conductive traces that change resistance depending on the amount of water touching the sensor surface. Most modules provide both analog output (water level amount) and digital output (threshold detection using LM393 comparator). These sensors are widely used in smart irrigation systems, automatic water tank monitoring, rainwater harvesting, leak detection, and robotics projects.	Product Type: Water Level Sensor Module Sensor Type: Conductive Water Sensor Operating Voltage: 3.3V – 5V DC Comparator IC: LM393	Water Detection Sensor • Water Level Sensor • Liquid Level Sensor • Analog Water Sensor • Arduino Water Sensor • Level Detection Module • Tank Level Sensor

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No Image	<b>EMS-00021-A</b>	SW-520D Tilt Sensor	EM - Electronic-Electrical Modules	Generic Electronics, DFRobot, SparkFun, Keystudio	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	<b>EMS-00022-A</b>	Analog Piezoelectric Ceramic Vibration Module	EM - Electronic-Electrical Modules	Generic Electronics, DFRobot, SparkFun, Adafruit	The Analog Piezoelectric Ceramic Vibration Module uses a piezoelectric ceramic disc to detect vibrations, knocks, and mechanical stress. When the surface is bent, tapped, or vibrated, the ceramic element generates a proportional voltage (piezoelectric effect). Unlike digital vibration modules (like SW-420), this module provides analog output, meaning it can measure the strength of vibration, not just ON/OFF detection. It is widely used in Arduino projects, touch sensing, drum pads, impact detection, and condition monitoring systems.	Product Type: Analog Vibration Sensor Module Sensing Element: Piezoelectric Ceramic Disc Output Type: Analog Voltage Output Operating Voltage: 3.3V – 5V DC Operating Current: < 1 mA	Shock Sensor • Piezo Vibration Sensor • Analog Piezo Module • Ceramic Vibration Sensor • Knock Sensor • Arduino Piezo Sensor • Vibration Detection Module
No Image	<b>EMS-00023-A</b>	SW-420 Alarm Vibration Sensor Module	EM - Electronic-Electrical Modules	Generic Electronics, DFRobot, SparkFun, FlyRobo	SW-420 Alarm Vibration Sensor Module is a vibration and shock detection module used in security alarms, anti-theft systems, motion sensing, robotics, earthquake detection, and Arduino projects. It uses the SW-420 vibration switch along with an LM393 comparator to provide digital output when vibration or movement is detected. Sensitivity can be adjusted using the onboard potentiometer. (components101.com	Product Type: Vibration Sensor Module Sensor Model: SW-420 Comparator IC: LM393 Operating Voltage: 3.3V – 5V DC Output Type: Digital Output	LM393 Sensor • SW-420 Sensor • Vibration Sensor Module • Shock Sensor • Alarm Sensor • Motion Detection Sensor • Arduino Vibration Sensor
No Image	<b>EMS-00024-A</b>	Rain Sensor Module	EM - Electronic-Electrical Modules	Generic Electronics, DFRobot, SparkFun	Rain Sensor Modules are used to detect rain, water droplets, moisture, and rainfall intensity in weather monitoring systems, smart irrigation, automatic wiper systems, robotics, and Arduino projects. Most modules use a rain-sensitive conductive plate with an LM393 comparator module and provide both analog and digital outputs.	Product Type: Rain Detection Sensor Module Operating Voltage: 3.3V – 5V DC Comparator IC: LM393 Sensitivity Adjustment: Potentiometer Compatible Boards: Arduino, ESP32, Raspberry Pi	Rain Sensor Module • Rain Drop Sensor • FC-37 Sensor • YL-83 Rain Module • Water Detection Sensor • Arduino Rain Sensor • Weather Sensor
No Image	<b>EMS-00025-A</b>	Encoder Sensor Module	EM - Electronic-Electrical Modules	Broadcom, Generic Electronics, Omron, AMS	Encoder Sensor Modules are used to detect rotation, speed, direction, and position in robotics, automation, motor control, CNC machines, smart vehicles, and Arduino projects. Common encoder modules include rotary encoders (KY-040), optical encoder sensors (MOC7811), and magnetic encoder modules. These modules provide digital pulse outputs for precise motion tracking.	Product Type: Encoder Sensor Module Encoder Type: Rotary / Optical / Magnetic Operating Voltage: 3.3V – 5V DC Output Type: Digital Pulse	Encoder Sensor Module • Rotary Encoder Module • Optical Encoder Sensor • Speed Sensor • Position Sensor • KY-040 Encoder • Arduino Encoder