

1. PRODUCT DESCRIPTION

The **DIYables Screw Terminal Adapter for 38-Pin ESP32** is an expansion breakout board designed to simplify wiring and secure connections for DIY and industrial prototyping. It breaks out all 38 pins of standard ESP32 development boards (such as ESP-WROOM-32 38-pin version) into robust, easy-to-use screw terminals and parallel header sockets.

2. TECHNICAL SPECIFICATIONS

Parameter	Specification Details
Compatibility	ESP32 38-Pin NodeMCU / DevKit Boards
Terminal Type	Pluggable / Fixed Screw Terminals (3.81mm Pitch)
Total Terminals	38 Screw Terminals (19 Pins x 2 Rows)
Headers	Female Header Sockets for direct ESP32 insertion
Wire Gauge Range	26 AWG to 16 AWG (Screw Terminals)
PCB Material	High-quality FR-4 Double-Sided Glass Fiber PCB
Mounting Holes	4x M3 Mechanical Mounting Holes
Dimensions	~ 77 mm x 63 mm x 12 mm
Operating Voltage	3.3V / 5V Logic Pass-Through

5. TERMINAL & PIN HEADER BREAKDOWN

Side	Pins Included (Left Header)	Side	Pins Included (Right Header)
Left Row	3V3, EN, VP(36), VN(39), 34, 35, 32, 33, 25, 26, 27, 14, 12, GND, 13, D2, D3, CMD, 5V	Right Row	GND, 23, 22, TX0(1), RX0(3), 21, GND, 19, 18, 5, 17, 16, 4, 0, 2, 15, SD1, SD0, CLK

3. KEY FEATURES

- **Secure Connections:** Eliminates loose Dupont jumper wires for reliable long-term installations.
- **Clear Pin Labeling:** Silk-screened pin names matching standard 38-pin ESP32 pinouts directly next to each screw block.
- **Plug & Play:** ESP32 board inserts directly into female header sockets.
- **Versatile Prototyping:** Ideal for home automation, robotics, sensor node deployments, and control panels.

4. APPLICATIONS

- Industrial Automation & Control Systems
- Smart Home & IoT Sensor Interfacing
- Robotics & Motor Driver Wiring
- Permanent Cabinet & Enclosure Mounting