Motherboard PCB for ESP32 Breakout Board with 12V Input, 5V & 3.3V DC Outputs, and UART Connectivity

OLUS Motherboard PCB for standard ESP32 breakout boards is designed to streamline connectivity, power management, and flexibility for IoT and embedded applications. It provides an efficient 12V DC input, along with 5V and 3.3V DC regulated outputs, ensuring reliable power for ESP32 and connected modules. With a built-in UART interface for serial communication, this board makes it easy to integrate sensors, communication devices, and peripherals.

Key Features

- **Power Management**: Accepts 12V DC input with onboard regulators providing stable 5V and 3.3V DC outputs to power ESP32 and attached modules.
- **UART Connectivity**: Integrated UART interface for seamless serial communication with other devices, making it suitable for IoT gateways, data logging, and control applications.
- **Compact and Durable Design**: Industrial-grade build with all essential connectivity options in a compact layout.
- **Easy Integration**: Designed to work as a motherboard for ESP32 breakout boards, simplifying prototyping and development for IoT projects.

Technical Specifications

- **Input Voltage**: 12V DC
- **Output Voltage**:
  - 5V DC
  - 3.3V DC
- **Connectivity**:
  - UART interface for serial communication
  - Compatible with standard ESP32 breakout boards
- **Temperature Range**: Suitable for -40°C to +85°C, enabling use in industrial applications

Dimensions: Compact and lightweight for easy installation and portability in various setups (**112 mm x 84 mm**)