

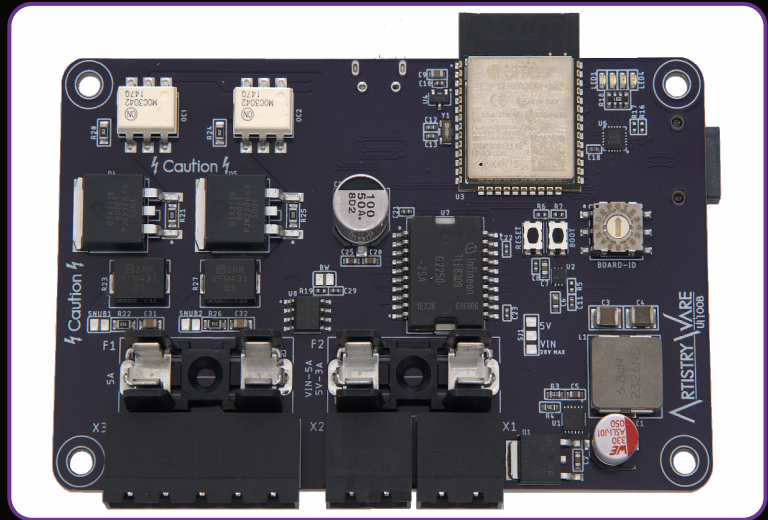
Universal Interface UI100B

Simplifying Automation for Interactive Designs

Product Sheet

Key Features

- Espressif ESP32-32(U)E-N16
 - Dual processor with 16MB flash
 - 2.4GHz ~ 2.5GHz
 - WiFi / Bluetooth / BLE Connectivity
 - u.FL or on-board Antenna
 - On-board USB programming interface
 - Real Time Clock
- DC Input voltage range of 9V to 32V
- Rotary DIP switch for addressability
- Individual AC and DC output fuses
- SX1508 8 Channel IO Expander
 - 4 on-board LEDs
 - Rotary DIP input
- AC Load Control BTA-12
 - Dual opto-isolated triacs
 - Selectable snubber circuits
 - Maximum total output current of 5A
 - On-board current sensing with ACS722
- DC Load Control TLE8209
 - Automotive grade motor bridge
 - Single Full Bridge or Dual Half Bridge
 - Selectable Full Input Voltage or 5VDC
 - Maximum total output current of 5A
- Board Dimensions: 3.75" x 2.4"
- Expansion Boards Available:
 - Expansion Signal Breakout
 - 12 Ch 5-24VDC Sourcing Input
 - 12 Ch 5-24VDC Sinking Output
 - 8 Ch RC Servo Controller
 - Audio Player w/ Micro SD card



Product Overview

The UI100B is an Internet of Things (IoT) control board that provides multiple functions not normally found on typical IoT controllers. Utilizing the ESP32 System on Chip (SoC) as the main processor, easily connect wirelessly via WiFi or Bluetooth.

It can control two separate AC loads (or a reversible AC motor) with isolated triac switches and can use the on-board automotive grade DC H-Bridge to drive a reversible DC motor up to 28V. An 8-channel GPIO expander drives four on-board LEDs for indication with the remaining four IO used for board identification. Use the on-board selector switch to uniquely identify the controller so up to 16 boards can operate together.

Plug in our UE series expansion modules to employ additional functions, such as higher voltage inputs and outputs, hobby servo control, and even an audio player.

Product Application

The UI100B can be used to directly interface AC and DC loads for any IoT project. With a full Bluetooth stack, it can interface with mobile and tablet applications or act as a beacon. It can function as a web server, client, or even an access point with its WiFi function.

With a range of UE100 expansion modules, it can provide additional functionality and control options. Mix and match individual IO and servo expansion modules connecting directly to the UI100B control board. Add on an audio player module and you can have up to eight expansion modules connected!

About ArtistryWare

ArtistryWare Inc. brings together decades of expertise in various entertainment venues from cinemas and television to theme parks and interactive experiences. We are highly committed to providing feature rich interactive experiences from hardware to software and for all types of venues and platforms.