



# Moddable Two

MOD2-0001.0

[moddable.com](http://moddable.com)

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JavaScript-powered HMI and communication module with ESP32 and touch screen

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## Features

- ESP32 microcontroller
  - Dual core, 240 MHz processor
  - Wi-Fi and BLE
  - 520 KB RAM
  - 4 MB flash
- 2.4" LCD display
  - IPS – high brightness, no bad viewing angle
  - 240 x 320 QVGA
  - 16-bit color
  - ILI9341 display controller
  - Backlight brightness control
  - FT6206 capacitive-touch controller
- 20 External pins for external components
  - I<sup>2</sup>C, SPI, 15 GPIO
- Fits into your project design
  - Thin form factor with mounting holes
- Power
  - 3.3 V and 5 V outputs
  - 5 V inputs
- Moddable USB programmer adapter (included)
  - Flash firmware
  - Connect to JavaScript debugger
- Software powered by Moddable SDK
  - Modern, industry standard JavaScript for rapid development of robust, secure firmware
  - Native C code for performance and integrating existing libraries
  - XS JavaScript engine, Piu UI framework, Poco graphics renderer
  - BLE, Wi-Fi, TLS, HTTP, WebSockets, MQTT, mDNS, telnet
  - Multi-core programming with WebWorkers
  - Open source – available on GitHub
  - Hundreds of example apps
  - [IoT Development for ESP32 and ESP8266 with JavaScript](#) book to get started with embedded JavaScript development.



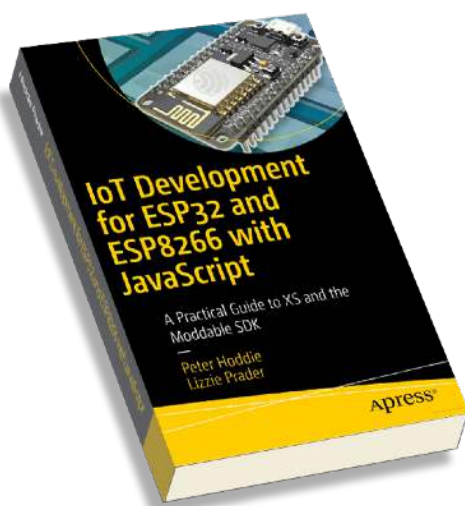
## More Information

To get the most out of Moddable Two, use it together with the open source Moddable SDK. The Moddable SDK is a suite of software libraries and tools for creating IoT products for consumers and industrial users. Built around XS, the only modern JavaScript engine for resource constrained embedded devices, the Moddable SDK brings the power and speed JavaScript development to embedded systems. Proven and hardened by over 20 years of use on the web, JavaScript is well suited for building UI, communication, and product logic code.



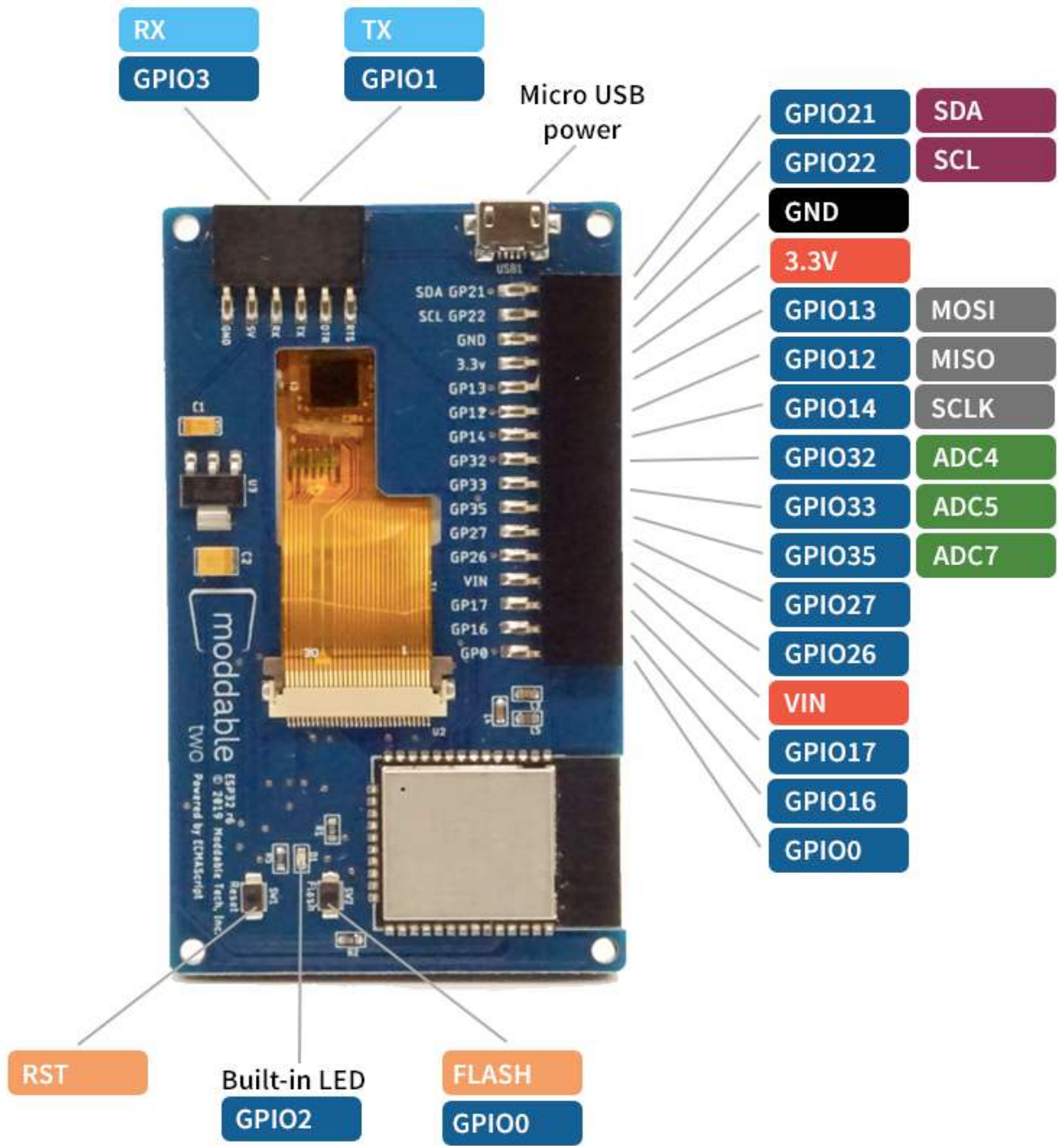
To get started with the Moddable SDK, check out the repository on GitHub: <https://github.com/Moddable-OpenSource/moddable>. You'll find over 150 examples, hundreds of pages of detailed API documentation, and, of course, the source code for the runtime and tools. There's also a simulator that can run many of the examples on macOS, Windows, and Linux computers.

To get an idea of the power and flexibility of the Moddable SDK, check out the blog at <https://blog.moddable.com> to see articles about soft keyboards, QR codes, Christmas lights, sensors, TypeScript, security, robot hands, and more.

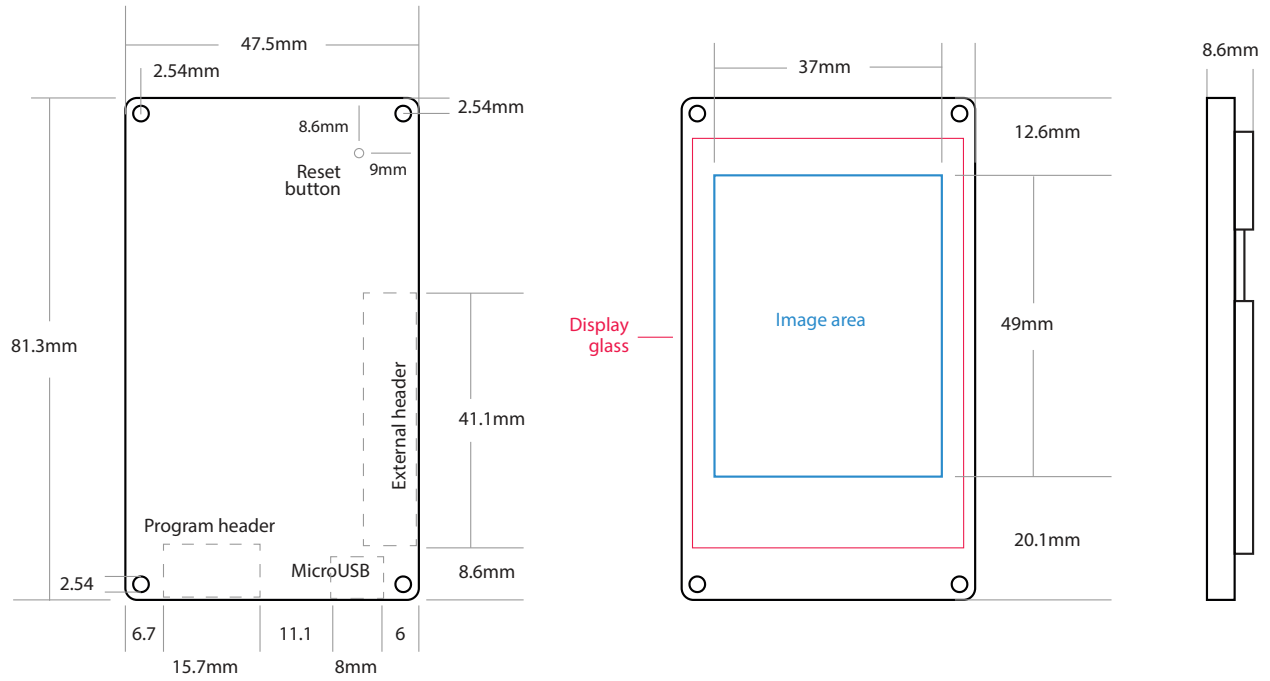


For embedded C programmers not yet working in JavaScript, the book [IoT Development for ESP32 and ESP8266 with JavaScript](#) contains a thorough introduction to JavaScript written for experienced embedded C developers.

# Moddable Two Pinout



# Moddable Two Dimensions



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