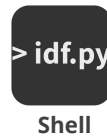


IoT Development Framework: ESP-IDF

Espressif Official IoT Development Framework

ESP-IDF is Espressif's official IoT Development Framework for the **ESP32**, **ESP32-S**, **ESP32-C**, **ESP32-H**, and **ESP32-P** series, powering millions of connected devices with a reliable and flexible SDK for C/C++ development.

Kickstart your development with powerful tools:



Free and **open-source**
Stable releases
Documentation
400+ examples
Community support

Find the most exciting ESP-IDF components



Discover, download and publish components and examples for ESP-IDF.

600+ components, including:

MDNS

HMI

BSP

modbus

Sensors

Protocols

Find them now at



components.espressif.com

Release Support Schedule

ESP-IDF follows a structured release process with long-term support, ensuring **stability** and critical **updates**.



Each ESP-IDF release is supported for 30 months from its stable release date.

Accelerate Time to Market

Unlock powerful resources for **faster** ESP-IDF **development** with integrated features.

RTOS

Drivers

Network Protocols

Provisioning

Security

Build Tools

Explore our Developer Resources

Documentation

Explore our documentation!
Find detailed API references, and the programming guide to help you get started with **ESP-IDF**.



idf.espressif.com

Developer Portal

Visit our Developer Portal!
Explore a wealth of resources, including technical **articles**, and **workshops** to help you level up your skills.



developer.espressif.com

GitHub

Explore our projects on GitHub!
Dive into our **open-source** repositories, contribute to the community, and stay up to date with our latest developments.



github.com/espressif

ESP32 Forum

Join us on our Forum!
Ask **questions**, share knowledge, and connect with other developers to get help and **discuss** our projects.



esp32.com

YouTube

Follow us on YouTube!
Watch hundreds of hours of **content**, including all **DevCon** talks, new product introductions, and more.



youtube.com/@EspressifSystems

Community

Join our community on Reddit!
Connect with over **100,000 developers**, share insights, ask questions, and stay updated on the latest discussions.



reddit.com/r/esp32

ESP-Registry

Find the most exciting ESP-IDF components!
Discover, download and publish **components** and examples for ESP-IDF.



components.espressif.com

ESP-RainMaker

A complete IoT solution!
An **IoT** cloud platform on AWS, offering control, scalability, and customization with its open-source SDK for your devices.



rainmaker.espressif.com

ESP-Insights

Identify issues faster!
A cloud **remote diagnostics** platform helps monitor, debug, and optimize IoT devices with real-time data and analytics.



insights.espressif.com

Matter SDK

Espressif's solution for Matter!
A **simplified** API and the required tools help **build** Matter-enabled smart-home devices with ease.



github.com/espressif/esp-matter