

10. Learning Resources

10.1 Must-Read Documents

The following link provides documents related to ESP32.

- [*ESP32 Datasheet*](#)
This document provides an introduction to the specifications of the ESP32 hardware, including overview, pin definitions, functional description, peripheral interface, electrical characteristics, etc.
- [*ESP-IDF Programming Guide*](#)
It hosts extensive documentation for ESP-IDF ranging from hardware guides to API reference.
- [*ESP32 Technical Reference Manual*](#)
The manual provides detailed information on how to use the ESP32 memory and peripherals.
- [*ESP32 Hardware Resources*](#)
The zip files include the schematics, PCB layout, Gerber and BOM list of ESP32 modules and development boards.
- [*ESP32 Hardware Design Guidelines*](#)
The guidelines outline recommended design practices when developing standalone or add-on systems based on the ESP32 series of products, including the ESP32 chip, the ESP32 modules and development boards.
- [*ESP32 AT Instruction Set and Examples*](#)
This document introduces the ESP32 AT commands, explains how to use them, and provides examples of several common AT commands.
- [*Espressif Products Ordering Information*](#)

10.2 Must-Have Resources

Here are the ESP32-related must-have resources.

- [*ESP32 BBS*](#)
This is an Engineer-to-Engineer (E2E) Community for ESP32 where you can post questions, share knowledge, explore ideas, and help solve problems with fellow engineers.
- [*ESP32 GitHub*](#)
ESP32 development projects are freely distributed under Espressif's MIT license on GitHub. It is established to help developers get started with ESP32 and foster innovation and the growth of general knowledge about the hardware and software surrounding ESP32 devices.
- [*ESP32 Tools*](#)
This is a webpage where users can download ESP32 Flash Download Tools and the zip file "ESP32 Certification and Test".
- [*ESP-IDF*](#)
This webpage links users to the official IoT development framework for ESP32.
- [*ESP32 Resources*](#)
This webpage provides the links to all available ESP32 documents, SDK and tools.