ESP-IDF Command Line Interface (CLI) - Full Command List

idf.py build

Build the project using CMake and Ninja.

idf.py menuconfig

Open the configuration menu for the project.

idf.py flash

Flash the compiled project to the connected device.

idf.py monitor

Start a serial monitor to view logs from the ESP32.

idf.py -p PORT flash

Flash to a specific serial port.

idf.py clean

Clean the build files.

idf.py fullclean

Clean the entire build and CMake cache.

idf.py erase-flash

Erase the entire flash memory of the device.

idf.py reconfigure

Re-run the CMake configuration step.

idf.py size

Display the size of the final binary.

idf.py size-components

Show size breakdown per component.

idf.py size-files

Show size breakdown per file.

idf.py app

Build only the application (no bootloader or partition table).

idf.py bootloader

Build only the bootloader.

idf.py partition_table

Build only the partition table.

idf.py gdb

Start GDB for debugging.

idf.py openocd

Start OpenOCD for JTAG debugging.

idf.py set-target esp32

Set the target chip (e.g., esp32, esp32s2, esp32c3).

idf.py list-targets

List all supported targets.

idf.py show-components

Show the components detected in the project.

idf.py help

Show help for idf.py tool.