NUCLEO-L496ZG

STM32 Nucleo-144 board

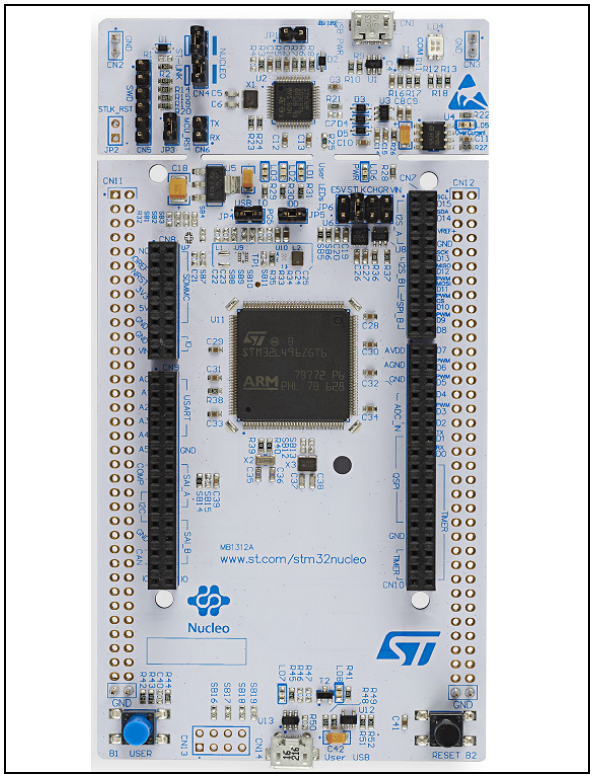
Data brief

Features

- STM32 microcontroller in LQFP144 package
- Two types of extension resources:
  - ST Zio connector including: support for Arduino™ Uno V3 connectivity (A0 to A5, D0 to D15) and additional signals exposing a wide range of peripherals
  - ST morpho extension pin header footprints for full access to all STM32 I/Os
- On-board ST-LINK/V2-1 debugger/programmer with SWD connector:
  - Selection-mode switch to use the kit as a standalone ST-LINK/V2-1
  - USB re-enumeration capability. Three different interfaces supported on USB: virtual COM port, mass storage, debug port
- Flexible board power supply:
  - 5 V from ST-LINK/V2-1 USB VBUS
  - External power sources: 3.3 V and 7 - 12 V on ST Zio or ST morpho connectors, 5 V on ST morpho connector
- USB OTG or full-speed device with Micro-AB connector (depending on STM32 support)
- Three user LEDs
- Two push-buttons: USER and RESET
- LSE crystal:
  - 32.768 kHz crystal oscillator
- Comprehensive free software HAL library including a variety of software examples
- Support of wide choice of Integrated Development Environments (IDEs) including IAR™, Keil®, GCC-based IDEs.

Description

The STM32 Nucleo-144 board (NUCLEO-L496ZG) provides an affordable and flexible way for users to try out new concepts and build prototypes with the STM32 microcontroller, choosing from the various combinations of performance, power consumption and features.



1. Picture is not contractual.

The ST Zio connector, which extends the Arduino™ Uno V3 connectivity, and the ST morpho headers provide an easy means of expanding the functionality of the Nucleo open development platform with a wide choice of specialized shields. The STM32 Nucleo-144 board does not require any separate probe as it integrates the ST-LINK/V2-1 debugger/programmer. The STM32 Nucleo-144 board comes with the STM32 comprehensive software HAL library and various packaged software examples.

System requirements

- Windows® OS (XP, 7, 8, 10), Linux or MacOS™
- USB Type-A to Micro-B cable

Development toolchains

- Keil® MDK-ARM(a)
- IAR™ EWARM(a)
- GCC-based IDEs including free SW4STM32 from AC6

Demonstration software

Demonstration software is preloaded in the board-mounted Flash memory for easy demonstration of the device peripherals in standalone mode. For more information and to download the latest version, refer to the demonstration software for the STM32 Nucleo boards at the www.st.com/stm32nucleo website.

Ordering information

To order the Nucleo-144 board corresponding to the targeted STM32, use the order code given below in *Table 1*.

Table 1. Ordering information

Order code	Target STM32
NUCLEO-L496ZG	STM32L496ZGT6

a. On Windows® only.

The meaning of the codification is explained in *Table 2*.

Table 2. Codification explanation

NUCLEO-L496ZG	Description
STM32L496	STM32 product line
Z = 144 pins	STM32 package pin count
G = 1 Mbyte	STM32 Flash memory size

This order code is mentioned on a sticker placed on the top side of the board.

Revision history

Table 3. Document revision history

Date	Revision	Changes
15-Feb-2017	1	Initial version.