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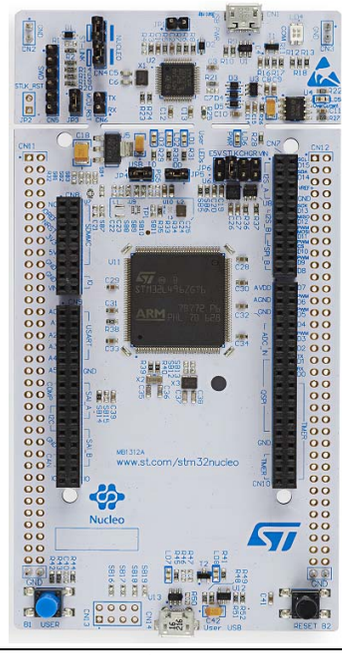
NUCLEO-L496ZG
NUCLEO-L496ZG-P

STM32 Nucleo-144 boards

Data brief

Features

- STM32 microcontroller in LQFP144 package
- SMPS: significantly reduces power consumption in Run mode, by generating Vcore logic supply from an external DC/DC converter. This function is only available on '-P' suffixed boards
- 3 user LEDs
- 2 push-buttons: USER and RESET
- LSE crystal:
  - 32.768 kHz crystal oscillator
- 2 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
- USB OTG or full-speed device with Micro-AB connector
- 4 source options for power supply:
  - E5V from ST morpho connectors
  - ST-LINK/V2-1 USB connector
  - USB charger
  - V_{IN} (7 - 12 V) from ST Zio connector
- On-board ST-LINK/V2-1 debugger/programmer with SWD connector:
  - ST-LINK/V2-1 standalone kit capability
  - USB re-enumeration capability: virtual COM port, mass storage, debug port
- Comprehensive free software HAL and LL libraries including a variety of software examples
- Support of a wide choice of Integrated Development Environments (IDEs) including IAR™, Keil®, GCC-based IDEs



1. Picture is not contractual.

Description

The STM32 Nucleo-144 boards (NUCLEO-L496ZG and NUCLEO-L496ZG-P) provide an affordable and flexible way for users to try out new concepts and build prototypes using the various combinations of performance, power consumption and features provided by the STM32 microcontroller.

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 and LL libraries, and various packaged software examples.

For further information contact your local STMicroelectronics sales office. www.st.com

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System requirements

- Windows® OS (XP, 7, 8 and 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

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
NUCLEO-L496ZG-P	STM32L496ZGT6P

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

Table 2. Codification explanation

NUCLEO-L496ZG/NUCLEO-L496ZG-P	Description
STM32L496	STM32 product line
Z = 144 pins	STM32 package pin count
G = 1 Mbyte	STM32 Flash memory size
P = SMPS	MCU has SMPS function

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

a. On Windows® only.

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Revision history

Table 3. Document revision history

Date	Revision	Changes
15-Feb-2017	1	Initial version.
16-Mar-2017	2	Document now scopes NUCLEO-L496ZG and NUCLEO-L496ZG-P products. Updated: – cover page features (to cover LL APIs) – cover page description – *Table 1: Ordering information* – *Table 2: Codification explanation*.

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