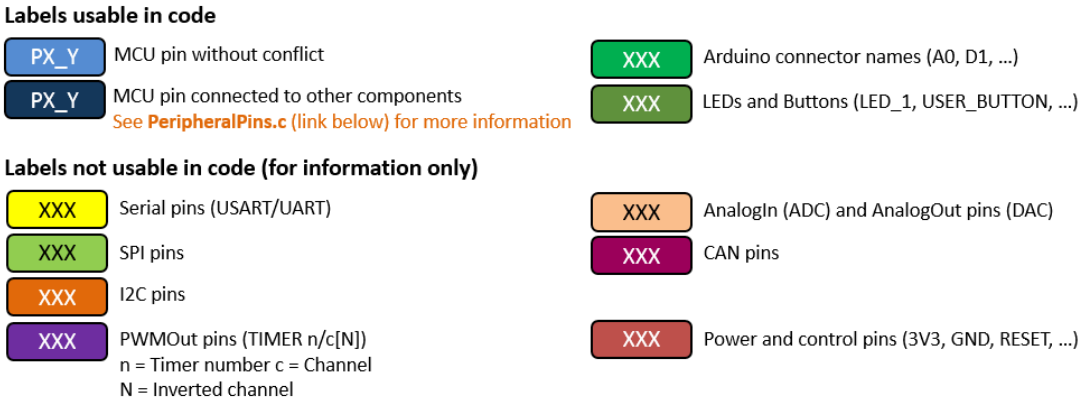
Nucleo board features

- Two types of extension resources
  - Arduino Uno Revision 3 connectivity
  - STMicroelectronics Morpho extension pin headers 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
- Flexible board power supply
  - USB VBUS or external source (3.3 V, 5 V, 7 - 12 V)
  - Power management access point
- Three User LEDs
- Two push buttons: USER and RESET
- USB re-enumeration capability: three different interfaces supported on USB
  - Virtual Com port
  - Mass storage (USB Disk drive) for drag'n'drop programming
  - Debug port
- Ethernet 10/100Mbps
- USART

Board pinout

Pins Legend



You can find more details on the available pins and labels in the **PeripheralPins.c** and **PinNames.h** files.

These files can be found in:

- ARMmbed/mbed-os repository on GitHub (**up-to-date** version, used with **mbed CLI commands**)

https://github.com/ARMmbed/mbed-os/blob/master/targets/TARGET_STM/TARGET_STM32F7/TARGET_STM32F767xI/TARGET_NUCLEO_F767ZI/ (https://github.com/ARMmbed/mbed-os/blob/master/targets/TARGET_STM/TARGET_STM32F7/TARGET_STM32F767xI/TARGET_NUCLEO_F767ZI/)

- mbed-dev library in developer.mbed.org (source files of the mbed library used on **mbed compiler IDE**)

https://developer.mbed.org/users/mbed_official/code/mbed-dev/file/default/targets/TARGET_STM/TARGET_STM32F7/TARGET_STM32F767xI/TARGET_NUCLEO_F767ZI/ (https://developer.mbed.org/users/mbed_official/code/mbed-dev/file/default/targets/TARGET_STM/TARGET_STM32F7/TARGET_STM32F767xI/TARGET_NUCLEO_F767ZI/)

- Mbed OS 6.6
- Mbed OS 6.7
- Mbed OS 6.8
- Mbed OS 6.9

Example programs

Mbed OS mbed-os-example-mbed5-blinky (/teams/mbed-os-examples/code/mbed-os-example-mbed5-blinky/)

Featured 107 (/teams/mbed-os-examples/code/mbed-os-example-mbed5-blinky/shortlog) 195500 (/teams/mbed-os-examples/code/mbed-os-example-mbed5-blinky/)

This is a very simple guide, reviewing the steps required to get Blinky working on an Mbed OS platform.

Last updated: 22 Nov 2019 (22 Nov 2019)

Mbed OS example-Ethernet-mbed-Cloud-connect (/teams/ST/code/example-Ethernet-mbed-Cloud-connect/)

15 (/teams/ST/code/example-Ethernet-mbed-Cloud-connect/shortlog) 878 (/teams/ST/code/example-Ethernet-mbed-Cloud-connect/)

Superseded by https://os.mbed.com/teams/ST/c example-common/

cloud (/search/?q=cloud), ethernet (/search/?q=ethernet), stm32 (/search/?q=stm32)

Last updated: 15 Oct 2018 (15 Oct 2018)

Mbed OS pelion-example-common (/teams/ST/code/pelion-example-common/)

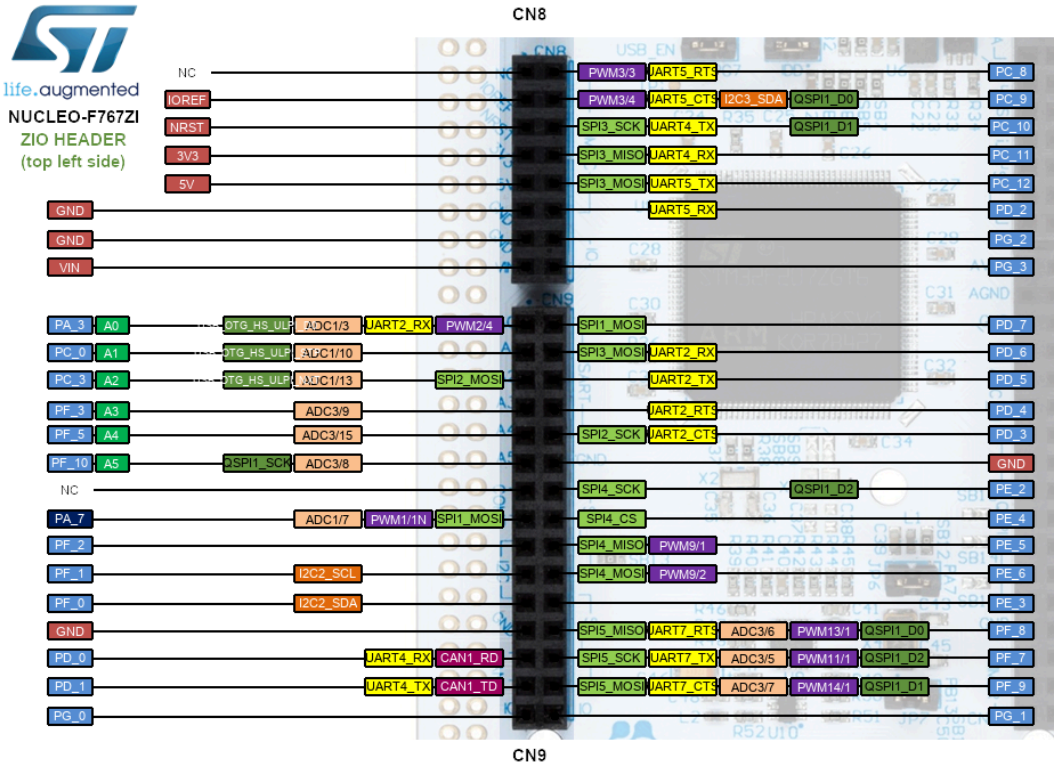
26 (/teams/ST/code/pelion-example-common/shortlog) 4698 (/teams/ST/code/pelion-example-common/)

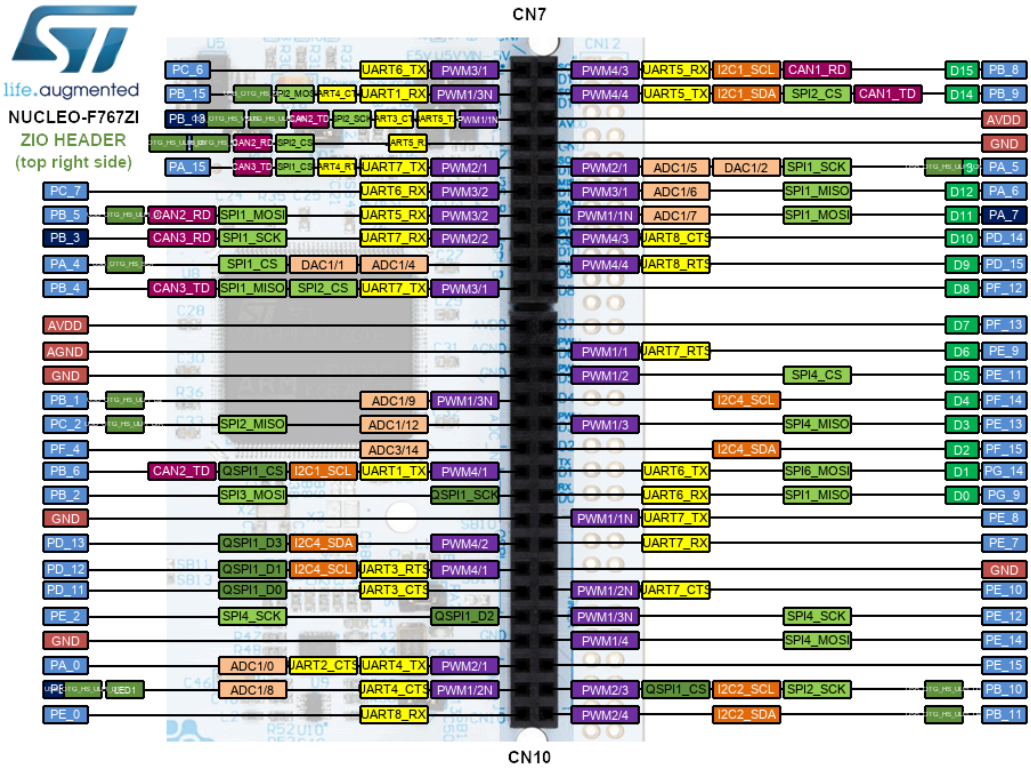
Mbed OS Device Management example for various ST boards.

device management (/search/?q=device management), Pelion (/search/?q=Pelion), ST (/search/?q=ST), ST Discovery (/search/?q=ST Discovery), ST Nucleo (/search/?q=ST Nucleo)

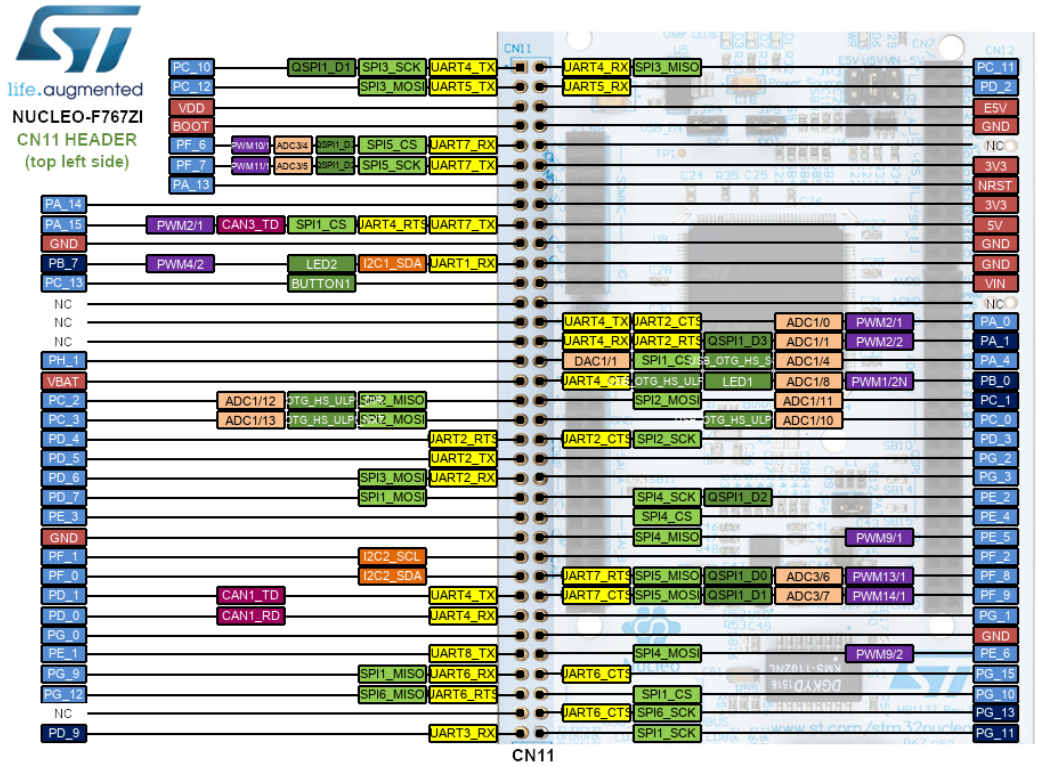
Last updated: 27 Mar 2019 (27 Mar 2019)

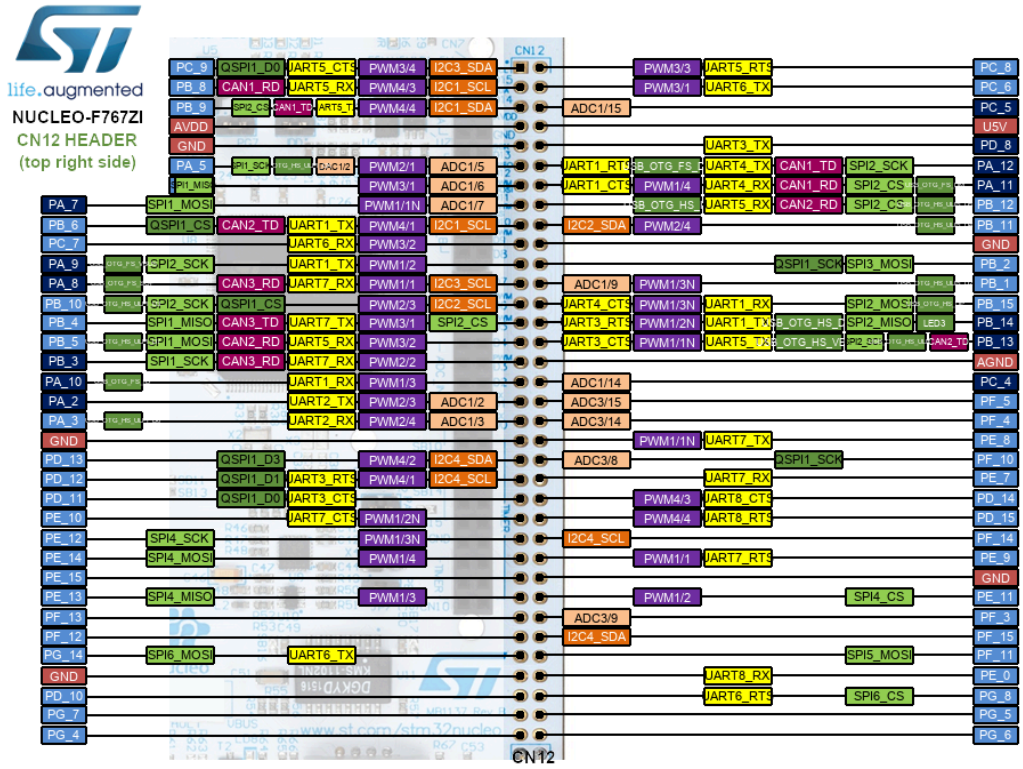
Zio and Arduino-compatible headers





CN11 CN12 headers





Getting started

This video shows how to get started with ARM mbed Integrated Development Environment using STM32 Nucleo platform:

https://www.youtube.com/watch?v=BrMw5TNQROo&list=PLnMKNibPkDnF97QnUOFGirl1q0G_4VdDc&index=22 (https://www.youtube.com/watch?v=BrMw5TNQROo&list=PLnMKNibPkDnF97QnUOFGirl1q0G_4VdDc&index=22)