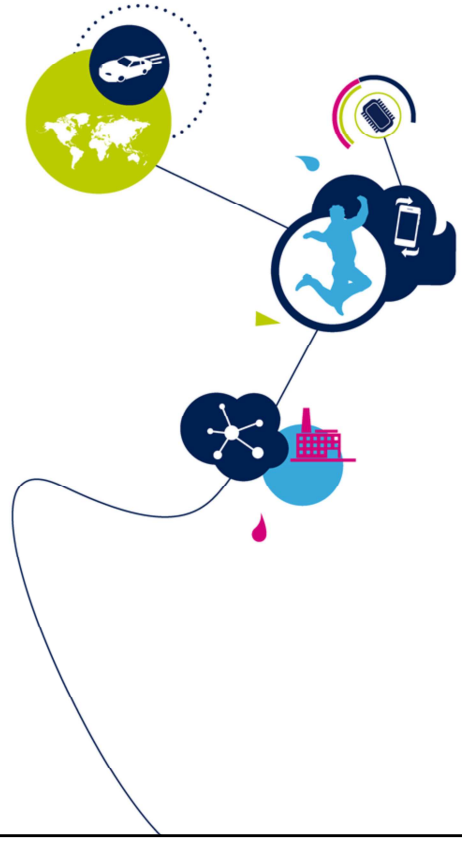
STM32L562 Discovery Kit

Discovery kit

Revision 1.0



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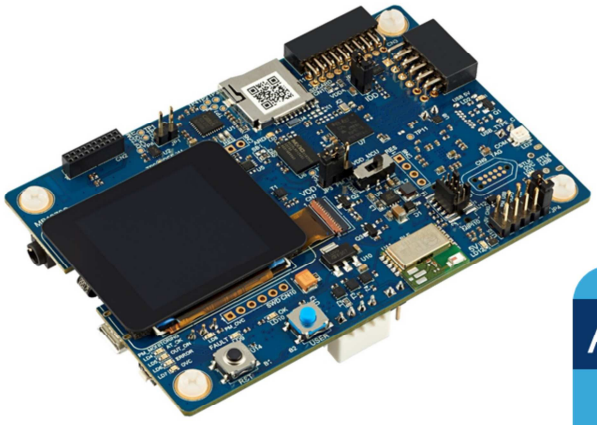
Hello, and welcome to the presentation of the STM32L562 Discovery kit. It covers the main features of this Discovery board dedicated to the STM32L5 series.

Overview



- Discover the power of the STM32L5 MCU
  - Enables development of secure applications thanks to a full set of security features
  - Benefits from audio, multi-sensor, security and high-speed connectivity features.
  - Comes with various packaged software examples and an embedded debugger

Application benefits

- Designed for low power and security
- Turnkey demonstration firmware
- Develop your own application

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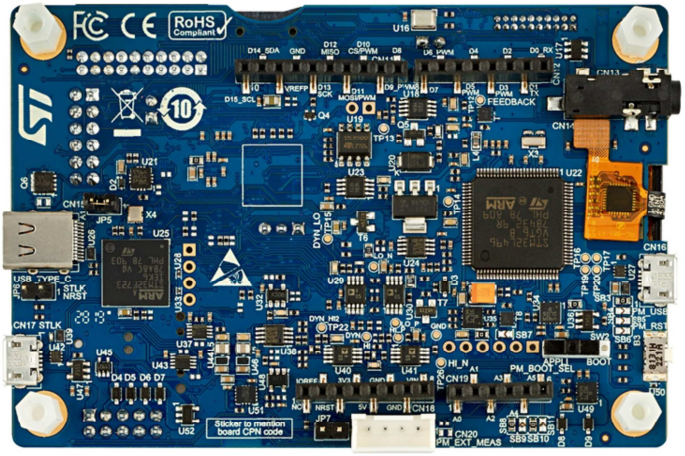
The STM32L562-DK board offers everything required for users to get started quickly and develop applications easily. This board enables a wide diversity of applications taking benefit from innovative ultra-low-power oriented features to enable prototyping for many wearable or sensor applications, with state-of-the-art energy efficiency, secure boot, and TrustZone-based software isolation.
For even more user-friendliness, the onboard STLINK-V3 debugger provides out-of-the-box loading and debugging capabilities, as well as USB Virtual COM port bridge.

Key features

- STM32L562 microcontroller in BGA132 package
  - ARM® Cortex® -M33 core @ 110 MHz / 165 DMIPS (442 CoreMark)
  - 512-Kbyte dual-bank Flash memory + 256-Kbyte SRAM, HW crypto/hash engine
- Board features
  - USB type C connector
  - MicroSD™ card socket
  - 512-Mbit OctoSPI Flash memory
  - 240 x 240 color pixel TFT
  - SAI Audio codec
  - MEMS digital microphones
  - iNEMO 3D accelerometer and gyroscope
  - Bluetooth low energy v4.1 module
  - On-board Energy Meter: 300 nA to 150 mA
  - On-board STLINK-V3 debugger/programmer



The STM32L562 microcontroller features a powerful architecture with an ARM® Cortex®-M33 core running at up to 110 MHz with TrustZone® and ARMv8-M mainline security extension, 512 Kbytes of Flash memory and 256 Kbytes of SRAM.

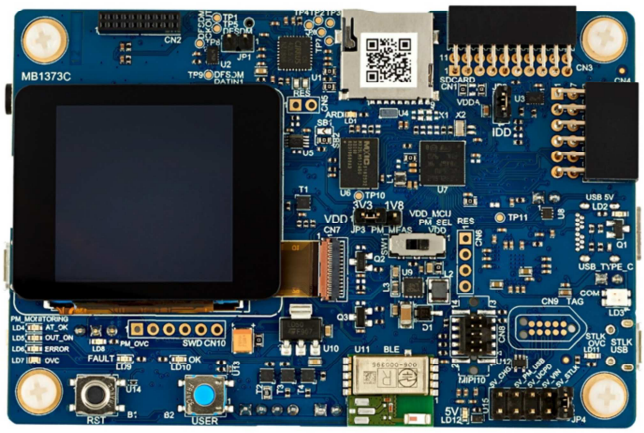
The boards also includes a rich set of peripherals including:

- 1.54" 240 x 240 pixel-262K color TFT LCD module with parallel interface and touch-control panel
- USB Type-C™ connector
- MicroSD™ card socket
- On-board Energy Meter: 300 nA to 150 mA measurement range with dedicated USB interface
- SAI Audio CODEC
- MEMS digital microphones
- 512-Mbit Octal-SPI Flash memory
- Bluetooth® V4.1 low energy module
- iNEMO 3D accelerometer and 3D gyroscope

- On-board STLINK-V3 debugger/programmer

Demonstration SW

- An preloaded demonstration is available on a the STM32L562-DK board
- Latest versions of the demonstration source code available at www.st.com/stm32l5-discovery
- Comprehensive free software libraries and examples available with the STM32Cube package
- Support of a wide choice of Integrated Development Environments (IDES) including IAR™, Keil and GCC-based IDEs like STM32CubeIDE®



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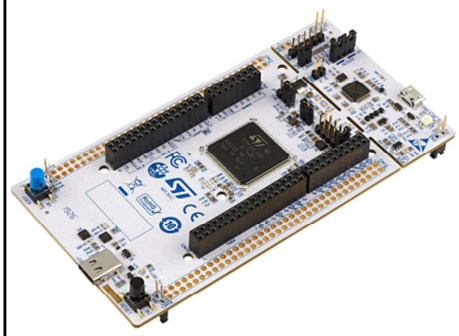
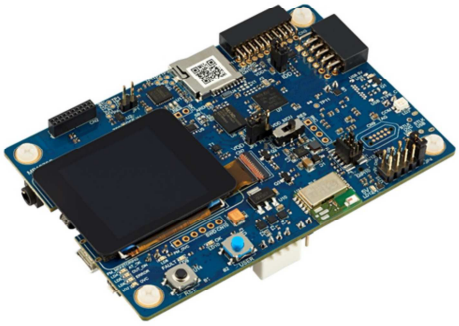
STM32 CubeIDE

The STM32L562 Discovery kit runs a demo at start-up. The demonstration software, included in the STM32Cube MCU Package corresponding to the on-board microcontroller, is preloaded in the STM32 Flash memory for easy demonstration of the device peripherals in standalone mode. The latest versions of the demonstration source code and associated documentation can be downloaded from www.st.com.

Board family

- Complete family of boards targeting various use cases

STM32 NUCLEO board	STM32 DISCOVERY board	STM32 EVAL board
		
NUCLEO-L552ZE-Q	STM32L562-DK	STM32L552-EV

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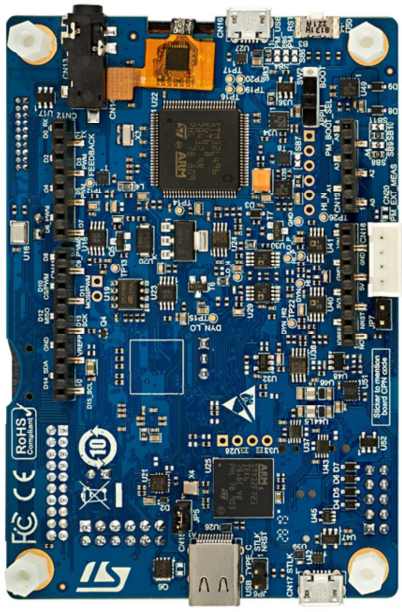
Note that additional boards are available for different uses depending on the targeted applications.
STM32 Nucleo boards enable quick and flexible prototyping.
Discovery kits target more creative demos thanks to a large LCD display.
Evaluation boards are intended for a complete development platform for full featured application.

References

- Refer to www.st.com
  - Ordering information
  - Getting started manual, user's manual and application notes
  - Board schematics
  - Application development environment support
  - Demonstration firmware sources
- Video available on st.com
  - "Getting started with STM32L562 discovery kit"



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For more information on the STM32L562 Discovery kit, go to www.st.com. You can also watch our videos on our YouTube channel.

Thank you.