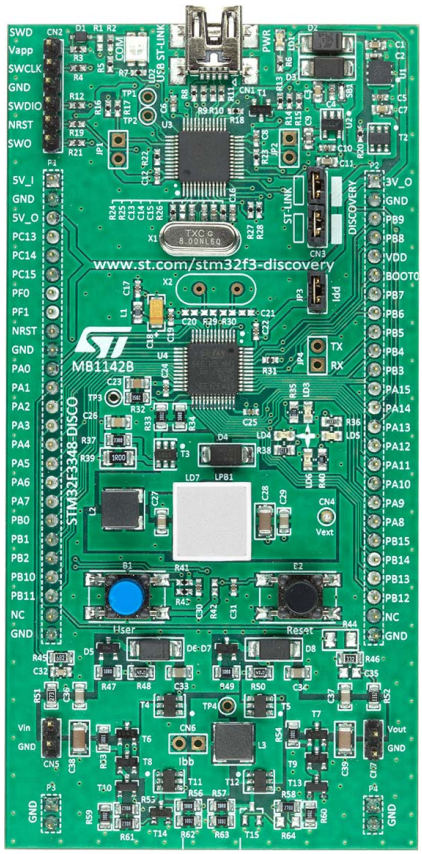
32F3348DISCOVERY

Data brief

Discovery kit with STM32F334C8 MCU



32F3348DISCOVERY top view. Picture is not contractual.

Product status link
32F3348DISCOVERY

Features

- STM32F334C8T6 microcontroller, featuring 64 Kbytes of flash memory, 16 Kbytes of RAM in an LQFP48 package
- One buck/boost converter
- High brightness LED dimming with buck converter
- Two push-buttons (user and reset)
- Six LEDs:
  - LD1 (red) for 3.3 V power on
  - LD2 (red/green) for USB communication
  - Four user LEDs: LD3 (red), LD4 (orange), LD5 (green) and LD6 (blue)
- Board connector:
  - Extension header for LQFP48 I/Os for a quick connection to the prototyping board and easy probing
- External application power supply: 3 V and 5 V
- Flexible power-supply options: ST-LINK USB V_{BUS} or external 5 V sources
- On-board ST-LINK/V2-1 debugger/programmer with USB re-enumeration capability: mass storage, Virtual COM port, and debug port
- On-board ST-LINK/V2-1 with selection mode switch to use the kit as a standalone ST-LINK/V2-1 (with SWD connector for programming and debugging)
- Comprehensive free software libraries and examples available with the STM32CubeF3 MCU Package
- Support of a wide choice of Integrated Development Environments (IDEs) including IAR Embedded Workbench®, MDK-ARM, and STM32CubeIDE

Description

The 32F3348DISCOVERY Discovery kit for the STM32F334 line is based on an STM32F334C8T6 microcontroller. It highlights the digital power features of the STM32F334 line microcontrollers. The Discovery kit for the STM32F334 line makes it possible to develop applications easily, and it offers everything required for both beginners and experienced users to get started quickly.

The Discovery kit for the STM32F334 line includes an ST-LINK/V2-1 embedded debug tool interface, buck/boost converter, high brightness LED dimming with buck converter, LEDs, and push-buttons.

1 Ordering information

To order the 32F3348DISCOVERY Discovery kit, refer to Table 1. For a detailed description of each board, refer to its user manual on the product web page. Additional information is available from the datasheet and reference manual of the target STM32.

Table 1. List of available products

Order code	Board reference	User manual	Target STM32
STM32F3348-DISCO	MB1142(1)	UM1735	STM32F334C8T6

1. *Subsequently called main board in the rest of the documentation.*

1.1 Product marking

The stickers located on the top or bottom side of all PCBs provide product information:

- First sticker: product order code and product identification, generally placed on the main board featuring the target device.
  Example:

  Product order code
  Product identification

- Second sticker: board reference with revision and serial number, available on each PCB.
  Example:

  MBxxxx-Variant-yzz
  syywwxxxxx

On the first sticker, the first line provides the product order code, and the second line the product identification.

On the second sticker, the first line has the following format: *"MBxxxx-Variant-yzz"*, where *"MBxxxx"* is the board reference, *"Variant"* (optional) identifies the mounting variant when several exist, *"y"* is the PCB revision, and *"zz"* is the assembly revision, for example B01. The second line shows the board serial number used for traceability.

Parts marked as *"ES"* or *"E"* are not yet qualified and therefore not approved for use in production. ST is not responsible for any consequences resulting from such use. In no event will ST be liable for the customer using any of these engineering samples in production. ST's Quality department must be contacted prior to any decision to use these engineering samples to run a qualification activity.

"ES" or *"E"* marking examples of location:

- On the targeted STM32 that is soldered on the board (for an illustration of STM32 marking, refer to the STM32 datasheet *Package information* paragraph at the *www.st.com* website).
- Next to the evaluation tool ordering part number that is stuck, or silk-screen printed on the board.

Some boards feature a specific STM32 device version, which allows the operation of any bundled commercial stack/library available. This STM32 device shows a *"U"* marking option at the end of the standard part number and is not available for sales.

To use the same commercial stack in their applications, the developers might need to purchase a part number specific to this stack/library. The price of those part numbers includes the stack/library royalties.

1.2 Codification

The meaning of the codification is explained in Table 2.

Table 2. Codification explanation

STM32XXYYZ-DISCO	Description	Example: STM32F3348-DISCO
XX	MCU series in STM32 32-bit Arm Cortex MCUs	STM32F3 series
YY	MCU product line in the series	STM32F334 product line
Z	STM32 flash memory size: • 8 for 64 Kbytes	64 Kbytes
DISCO	Discovery kit	Discovery kit

2 Development environment

The 32F3348DISCOVERY features the STM32F334C8 32-bit microcontroller based on the Arm® Cortex®-M4 processor.

Note: Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and/or elsewhere.

2.1 System requirements

- Multi-OS support: Windows® 10, Linux® 64-bit, or macOS®
- USB Type-A or USB Type-C® to Mini-B cable

Note: macOS® is a trademark of Apple Inc., registered in the U.S. and other countries and regions.

Linux® is a registered trademark of Linus Torvalds.

Windows is a trademark of the Microsoft group of companies.

2.2 Development toolchains

- IAR Systems® - IAR Embedded Workbench®(1)
- Keil® - MDK-ARM(1)
- STMicroelectronics - STM32CubeIDE

1. *On Windows® only.*

2.3 Demonstration software

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*.

Revision history

Table 3. **Document revision history**

Date	Revision	Changes
06-Jun-2014	1	Initial release.
04-Nov-2014	2	Updated *System requirements* and *Development toolchains*.
12-Jan-2016	3	Arm® Mbed Enabled™ logo added to the cover page. Arm® Mbed Enabled™ added to *Features*. Free AC6 and Arm® Mbed™ online added to *Development toolchains*.
10-Oct-2023	4	Added Product marking, Codification, and Development environment. Updated Features, Description, Ordering information, System requirements, and Development toolchains. Removed the references to Arm® Mbed™.