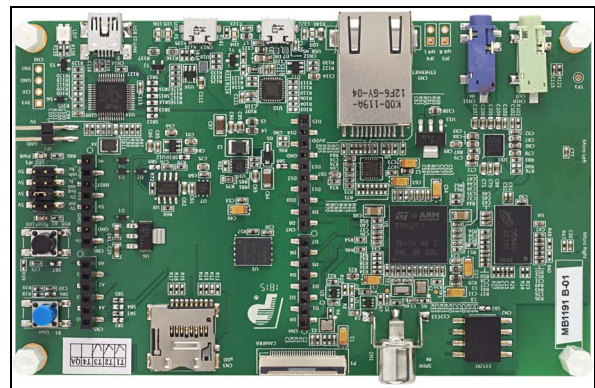
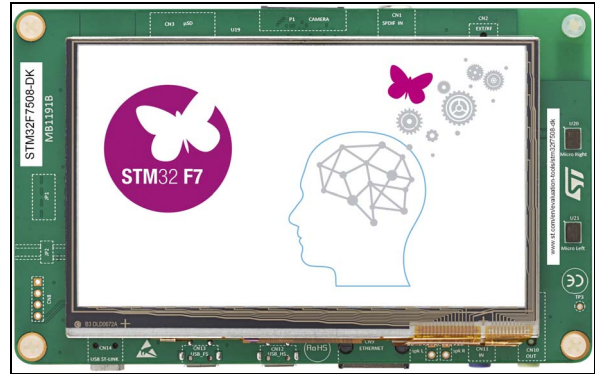


Discovery kit with STM32F750N8 MCU

Data brief

Features

- STM32F750N8H6 microcontroller featuring 64 Kbytes of Flash memory and 340 Kbytes of RAM, in BGA216 package
- 4.3-inch 480x272 color LCD-TFT with capacitive touch screen
- Ethernet connector compliant with IEEE-802.3-2002
- USB OTG HS FS
- SAI audio codec
- 2 ST-MEMS digital microphones
- 128-Mbit Quad-SPI Flash memory
- 128-Mbit SDRAM (64 Mbits accessible)
- 1 user and reset push-button
- Board connectors:
 - Camera 8 bit
 - USB with Micro-AB
 - Ethernet RJ45
 - SPDIF RCA input
 - Audio jack for external speakers and microphone
 - microSD™ card
 - ARDUINO® Uno V3 expansion connectors
 - RF-EEPROM daughterboard expansion connectors
- Flexible power supply options:
 - ST-LINK USB V_{BUS} or external sources
- Power supply output for external applications: 3.3 V or 5 V
- On-board ST-LINK/V2-1 debugger/programmer with USB re-enumeration capability: mass storage, Virtual COM port and debug port
- Comprehensive free software libraries and examples available with the STM32Cube MCU Package
- Support of by a wide choice of Integrated Development Environments (IDEs) including IAR™, Keil® and STM32CubeIDE



Pictures are not contractual.

Description

The STM32F7508-DK Discovery kit allows users to develop and share applications with the STM32F7 Series microcontrollers based on the Arm® Cortex®-M7 core.

The Discovery kit enables a wide diversity of applications taking benefit from audio, multi-sensor support, graphics, security, video, and high-speed connectivity features.

The ARDUINO® connectivity support provides unlimited expansion capabilities with a large choice of specialized add-on boards.

1 Ordering information

To order the STM32F7508-DK Discovery kit, refer to [Table 1](#). For a detailed description, refer to the user manual on the product web page. Additional information is available from the datasheet and reference manual of the target STM32.

Table 1. Ordering information

Order code	Board reference	User manual	Target STM32
STM32F7508-DK	MB1191	UM2470	STM32F750N8H6

1.1 Product marking

Evaluation tools marked as “ES” or “E” are not yet qualified and are therefore not ready to be used as reference designs or in production. Any consequences arising from such usage will not be at ST’s charge. In no event will ST be liable for any customer usage of these engineering sample tools as reference designs or in production.

‘E’ or ‘ES’ marking examples of location:

- on the targeted STM32 that is soldered on the board (For an illustration of STM32 marking, refer to the section ‘Package information’ of the STM32 datasheet at www.st.com).
- next to the evaluation tool ordering part number, that is stuck or silkscreen printed on the board

1.2 Codification

The meaning of the codification is explained in [Table 2](#).

Table 2. Codification explanation

STM32XXYYZ-DK	Description	Example: STM32F7508-DK
STM32XX	MCU series in STM32 32-bit Arm Cortex MCUs	STM32F7 Series
YY	MCU product line in the series	STM32F750
Z	STM32 Flash memory size: – 8 for 64 Kbytes	64 Kbytes
DK	Discovery kit	Discovery kit

The order code is mentioned on a sticker placed on the top or bottom side of the board.

2 Development environment

The STM32F7508-DK Discovery kit features an STM32F7 Series microcontroller based on the Arm^{®(a)} Cortex[®]-M7 processor.

arm

2.1 System requirements

- Windows[®] OS (7, 8 and 10), Linux[®] 64-bit or macOS^{®(b)} (c)
- USB Type-A to Mini-B cable

2.2 Development toolchains

- IAR[™] - EWARM^(d)
- Keil[®] - MDK-ARM^(d)
- STMicroelectronics - STM32CubeIDE

2.3 Demonstration software

The demonstration software, included in the STM32Cube MCU Package, 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 the www.st.com/en/evaluation-tools/stm32f7508-dk.html webpage.

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 - b. macOS[®] is a trademark of Apple Inc. registered in the U.S. and other countries.
 - c. All other trademarks are the property of their respective owners.
 - d. On Windows[®] only

Revision history

Table 3. Document revision history

Date	Revision	Changes
18-Oct-2018	1	Initial release.
17-Mar-2020	2	Removed <i>Technology partners</i> . Reorganized the entire document: – Updated <i>Features</i> , <i>Description</i> , <i>Ordering information</i> , and <i>Development toolchains</i> – Added <i>Product marking</i> and <i>Codification</i>

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