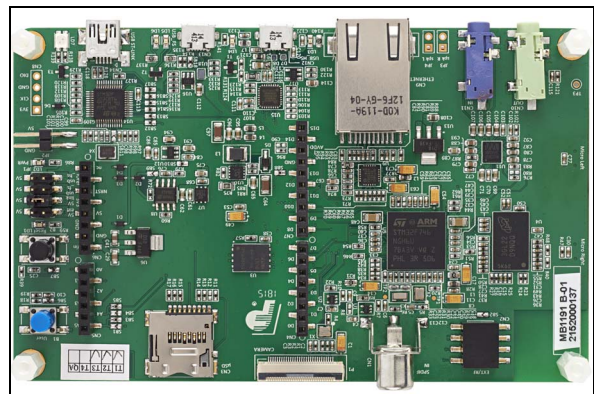
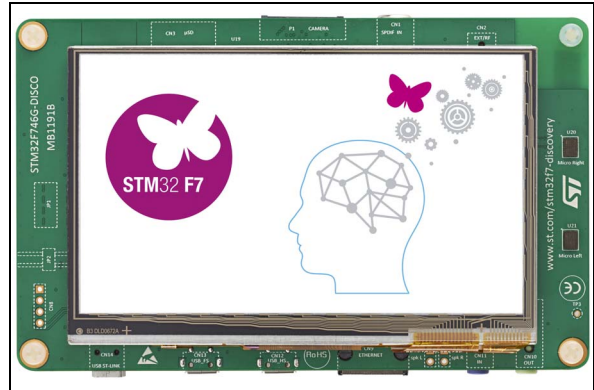


Features

- STM32F746NGH6 microcontroller featuring 1 Mbytes of Flash memory and 340 Kbytes of RAM, in BGA216 package
- On-board ST-LINK/V2-1 supporting USB re-enumeration capability
- Mbed-enabled (mbed.org)
- USB functions: virtual COM port, mass storage, debug port
- 4.3-inch 480x272 color LCD-TFT with capacitive touch screen
- Camera connector
- SAI audio codec
- Audio line in and line out jack
- Stereo speaker outputs
- Two ST MEMS microphones
- SPDIF RCA input connector
- Two pushbuttons (user and reset)
- 128-Mbit Quad-SPI Flash memory
- 128-Mbit SDRAM (64 Mbits accessible)
- Connector for microSD card
- RF-EEPROM daughterboard connector
- USB OTG HS with Micro-AB connectors
- USB OTG FS with Micro-AB connectors
- Ethernet connector compliant with IEEE-802.3-2002
- Five power supply options:
 - ST LINK/V2-1
 - USB FS connector
 - USB HS connector
 - VIN from Arduino connector
 - External 5 V from connector
- Power supply output for external applications: 3.3 V or 5 V
- Arduino Uno V3 connectors
- Comprehensive free software including a variety of examples, part of STM32Cube package
- Supported by a wide choice of integrated development environments



1. Pictures not contractual

Description

The STM32F7 discovery kit allows users to develop and share applications with the STM32F7 Series microcontrollers based on 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 System requirements

- Windows OS (XP, 7, 8)
- USB type A to Mini-B cable

2 Development toolchains

- IAR EWARM (IAR Embedded Workbench[®])
- Keil[®] MDK-ARM[™]
- GCC-based IDEs (free AC6: SW4STM32, Atollic[®] TrueSTUDIO[®],...)
- ARM[®] mbed[™] online

3 Demonstration software

The demonstration software is preloaded in the STM32F746NGH6 Flash memory. The latest versions of the demonstration source code and associated documentation can be downloaded from www.st.com/stm32f7-discovery.

4 Ordering information

To order the discovery kit with STM32F746NG MCU, use the order code: STM32F746G-DISCO.

5 Technology partners

MICRON:

- 128-Mbit SDRAM (64 Mbits accessible on the kit), part number MT48LC4M32B2
- 128-Mbit Quad-SPI NOR Flash memory device, part number N25Q128A

ROCKTECH:

- Color display, 4.3-inch LCD-TFT (resolution: 480x272), capacitive touch, part number RK043FN48H-CT672B

6 Revision history

Table 1. Document revision history

Date	Revision	Changes
04-Jun-2015	1	Initial release.
29-Jun-2015	2	Updated Section : Features adding 2 bullets: mbed-enabled, supported by a wide choice of integrated development environments. Added mbed-enabled logo. Updated Section : Description . Updated Section 1: System requirements adding OS at windows. Updated Section 2: Development toolchains adding ARM® mbed™ online.

IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2015 STMicroelectronics – All rights reserved