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32F769IDISCOVERY

Discovery kit with STM32F769NI MCU

Data brief

Features

- STM32F769NIH6 microcontroller featuring
 2 Mbytes of Flash memory and
 512+16+4 Kbytes of RAM, in BGA216 package
- On-board ST-LINK/V2-1 supporting USB reenumeration capability
- USB ST-LINK functions: virtual COM port, mass storage, debug port
- 4" capacitive touch LCD display with MIPI[®] DSI connector (on STM32F769I-DISCO only)
- SAI audio codec
- Two audio line jacks, one for input and one for output
- Stereo speaker outputs
- Four ST MEMS microphones on DFSDM inputs
- Two SPDIF RCA input and output connectors
- Two push-buttons (user and reset)
- 512-Mbit Quad-SPI Flash memory
- 128-Mbit SDRAM
- Connector for microSD card
- Wi-Fi or Ext-EEP daughterboard connector
- USB OTG HS with Micro-AB connector
- Ethernet connector compliant with IEEE-802.3-2002
- · Five power supply options:
 - ST LINK/V2-1
 - USB HS connector
 - 5 V from RJ45 (Power Over Ethernet)
 - 5 V from Arduino[™] or external connector
 - USB charger
- Power Over Ethernet based on IEEE 802.3af (Powered Device, 48 V to 5 V, 3 W)
- Power supply output for external applications:
 3.3 V or 5 V
- Arduino[™] Uno V3 connectors







- Pictures are not contractual. From top to bottom: STM32F769I-DISCO top view, STM32F769I-DISC1 top view, STM32F769I-DISCO and STM32F769I-DISC1 bottom view.
- Comprehensive free software including a variety of examples, part of the STM32Cube package
- Supported by a wide choice of integrated development environments

Description 32F769IDISCOVERY

1 Description

The STM32F7 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.

2 System requirements

- Windows[®] OS (XP, 7, 8) or Linux 64-bit or OS X[®]
- USB Type-A to Micro-B cable

3 Development toolchains

- Keil[®]: MDK-ARM^{™(a)}
- IAR[™]: EWARM^(a)
- GCC-based IDEs (free AC6: SW4STM32, Atollic® TrueSTUDIO®(a), ...)

4 Demonstration software

The demonstration software is preloaded in the STM32F769NIH6 MCU Flash memory. The latest versions of the demonstration source code and associated documentation can be downloaded from the www.st.com/stm32f7-discovery webpage.

a. On Windows only.

2/5 DocID029089 Rev 2



5 Ordering information

To order the discovery kit with the STM32F769NI MCU, refer to *Table 1*.

Table 1. List of the order codes

Order code	Product package
STM32F769I-DISCO	with LCD display
STM32F769I-DISC1	without LCD display

6 Technology partners

MICRON:

• 128-Mbit SDRAM, part number MT48LC4M32B2

MACRONIX:

• 512-Mbit Quad-SPI NOR Flash memory device, part number MX25L51245G

Revision history 32F769IDISCOVERY

7 Revision history

Table 2. Document revision history

Date	Revision	Changes
20-Apr-2016	1	Initial release.
26-Aug-2016	2	Updated the Section 5: Ordering information to introduce the STM32F769I-DISC1 order code.

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