32F429IDISCOVERY
Discovery kit for STM32F429/439 lines

Features

- STM32F429ZIT6 microcontroller featuring 2 MB of Flash memory, 256 KB of RAM in an LQFP144 package
- On-board ST-LINK/V2 with selection mode switch to use the kit as a standalone
- ST-LINK/V2 (with SWD connector for programming and debugging)
- Board power supply: through the USB bus or from an external 3 V or 5 V supply voltage
- 2.4" QVGA TFT LCD
- 64-Mbit SDRAM
- L3GD20 ST MEMS motion sensor 3-axis digital output gyroscope
- Six LEDs:
  - LD1 (red/green) for USB communication
  - LD2 (red) for 3.3 V power-on
  - Two user LEDs: LD3 (green), LD4 (red)
  - Two USB OTG LEDs: LD5 (green) VBUS and LD6 (red) OC (over-current)
- Two push-buttons (user and reset)
- USB OTG with micro-AB connector
- Extension header for LQFP144 I/Os for a quick connection to the prototyping board and an easy probing
- Comprehensive free software including a variety of examples, part of STM32CubeF4 package or STSW-STM32138 for legacy Standard Libraries usage

Description

The 32F429IDISCOVERY helps you to discover the high-performance microcontrollers of the STM32 F4 series and to develop your applications easily. It offers everything required for beginners and experienced users to get started quickly.

Based on the STM32F429ZIT6, it includes an ST-LINK/V2 embedded debug tool, a 2.4" QVGA TFT LCD, an external 64-Mbit SDRAM, an ST MEMS gyroscope, a USB OTG micro-AB connector, LEDs and push-buttons.
System requirements

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

Development toolchains

- IAR EWARM (IAR Embedded Workbench®)
- Keil® MDK-ARM™
- GCC-based IDE (ARM® Atollic® TrueSTUDIO®, ...).

Demonstration software

The demonstration software is preloaded in the board Flash memory. It displays on the screen icons to run different applications: clock/calendar, a game, a video player and an image browser, performance monitoring and system information.

The latest versions of the demonstration source code and associated documentation can be downloaded from www.st.com/stm32f4-discovery.

Ordering information

To order the Discovery kit for STM32F429/439 lines microcontrollers, use the STM32F429I-DISCO order code.

Revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>06-Sep-2013</td>
<td>1</td>
<td>Initial version.</td>
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<tr>
<td>29-Sep-2014</td>
<td>2</td>
<td>Updated Section : Features and Section : Description to introduce STM32cubeF4 and STSW-STM32138.</td>
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<td>Updated ST MEMS feature.</td>
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<td>Updated Section : System requirements and Section : Development toolchains.</td>
</tr>
</tbody>
</table>
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