

# STM3241G-EVAL

### Evaluation board with STM32F417IGH6 MCU

#### Data brief

#### Features

- STM32F417IGH6 microcontroller
- 16-Mbit SRAM
- microSD<sup>™</sup> memory-card slot (card provided)
- Boot from user Flash, system memory or SRAM
- ISO/IEC 14443 smartcard Type-A and Type-B support
- I<sup>2</sup>C-bus interface for compatible 64-Kbit EEPROMs, ST MEMSs and I/O expanders
- IEEE 802.3-2002 compliant Ethernet connector
- Two CAN-2.0 A/B channels on the same D-subminiature connector
- RS-232 communications
- IrDA transceiver (up to board version MB786 C-07)
- USB-OTG (HS and FS) ports with Micro-AB connectors
- Induction-motor control connector
- I<sup>2</sup>S Audio DAC, stereo audio jack for headset
- 3.2" 240x320 TFT color LCD with touch screen
- 4 colored LEDs
- Camera module and extension connector for ST-camera plug-in
- Joystick with 4-direction control and selector
- Reset, wakeup, tamper and user button
- RTC with backup battery
- Extension connector for daughterboard or wire-wrap board
- JTAG, SW and trace debug support
- Embedded ST-LINK/V2
- Five options for 5-V power supply: power jack, USB-FS connector, USB-HS connector, via ST-LINK/V2 or daughterboard



1. Picture is not contractual.

## Description

The STM3241G-EVAL evaluation board is a complete demonstration and development platform for the STM32F417IGH6 high-performance 32-bit microcontroller with ARM<sup>®</sup> Cortex<sup>®</sup>-M4F processor with a cryptographic acceleration cell.

The full range of hardware features on the board helps users to evaluate all the peripherals (USB-OTG HS, USB-OTG FS, Ethernet, motor-control, CAN, microSD<sup>™</sup>-card, smartcard, USART, audio-DAC, RS-232, IrDA (up to board MB786 C-07), SRAM, ST-MEMS, EEPROM and others) and to develop applications.

The in-circuit ST-LINK/V2 tool can easily be used for JTAG and SWD interface debugging and programming.

December 2016

#### DocID022234 Rev 2

For further information contact your local STMicroelectronics sales office.

## System requirements

- Windows<sup>®</sup> OS (XP, 7 or 8) or Linux 64-bit or Mac OS<sup>®</sup> X
- USB Type A to Type B or Mini-B cable

### **Development toolchains**

- ARM<sup>®</sup> Keil<sup>®</sup>: MDK-ARM<sup>™</sup> <sup>(a)</sup>
- IAR™: EWARM <sup>(a)</sup>
- GCC-based IDEs (free AC6: SW4STM32, Atollic<sup>®</sup> TrueSTUDIO<sup>® (a)</sup> and others)

### **Demonstration software**

Demonstration software is preloaded in the STM32F417IGH6 Flash memory for easy demonstration of the device peripherals in standalone mode. For more information and to download the latest version, refer to STM3240G-EVAL demonstration software on <u>www.st.com</u>.

## **Ordering information**

To order the STM3241G-EVAL board with the STM32F417IGH6 MCU refer to the table below.

#### Table 1. Device summary

Order code	Target STM32
STM3241G-EVAL	STM32F417IGH6

a. Windows<sup>®</sup> only





# **Revision history**

Date	Revision	Changes
15-Sep-2011	1	Initial release.
16-Dec-2016	2	Updated title with MCU name Updated mentions of IrDA Added Section : System requirements Added Section : Development toolchains.

Table 2	Document	revision	history
---------	----------	----------	---------



#### 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.

© 2016 STMicroelectronics – All rights reserved

DocID022234 Rev 2

