Features

- STM32F417IGH6 microcontroller
- 16-Mbit SRAM
- microSD™ memory-card slot (card provided)
- Boot from user Flash, system memory or SRAM
- ISO/IEC 14443 smartcard Type-A and Type-B support
- I²C-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
- I²S 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

Description

The STM3241G-EVAL evaluation board is a complete demonstration and development platform for the STM32F417IGH6 high-performance 32-bit microcontroller with ARM® Cortex®-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™-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.
System requirements

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

Development toolchains

- ARM® Keil®: MDK-ARM™ (a)
- IAR™: EWARM (a)
- GCC-based IDEs (free AC6: SW4STM32, Atollic® TrueSTUDIO® (a) 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 www.st.com.

Ordering information

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

<table>
<thead>
<tr>
<th>Order code</th>
<th>Target STM32</th>
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<tbody>
<tr>
<td>STM3241G-EVAL</td>
<td>STM32F417IGH6</td>
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</table>

a. Windows® only
# Revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-Sep-2011</td>
<td>1</td>
<td>Initial release.</td>
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<tr>
<td>16-Dec-2016</td>
<td>2</td>
<td>Updated title with MCU name</td>
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<td></td>
<td></td>
<td>Updated mentions of IrDA</td>
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<tr>
<td></td>
<td></td>
<td>Added Section : System requirements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Added Section : Development toolchains.</td>
</tr>
</tbody>
</table>
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