STM3240G-EVAL

Evaluation board with STM32F407IGH6 MCU

Features

- STM32F407IGH6 microcontroller
- 16-Mbit SRAM
- microSD™ memory-card slot (card provided)
- Boot from user Flash memory, 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 buttons
- 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 STM3240G-EVAL evaluation board is a complete demonstration and development platform for the STM32F407IGH6 high-performance 32-bit microcontroller with ARM® Cortex®-M4F processor.

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 STM32F407IGH6 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 STM3240G-EVAL board with the STM32F407IGH6 MCU refer to the table below.

<table>
<thead>
<tr>
<th>Order code</th>
<th>Target STM32</th>
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<tbody>
<tr>
<td>STM3240G-EVAL</td>
<td>STM32F407IGH6</td>
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a. Windows® only
# Revision history

## Table 2. Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
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<tbody>
<tr>
<td>15-Sep-2011</td>
<td>1</td>
<td>Initial release.</td>
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<tr>
<td>10-Jan-2017</td>
<td>2</td>
<td>Updated title with MCU name</td>
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<td></td>
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<td>Updated mentions of IrDA</td>
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<tr>
<td></td>
<td></td>
<td>Added Section : System requirements</td>
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<td>Added Section : Development toolchains.</td>
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