STM32F4 Discovery kit expansion boards

Features

- **Base board**
  - Micro SD Card™ slot
  - 10/100 Ethernet with IEEE 1588v2 (RJ45 connector)
  - Connector for camera board
  - Connector for LCD board
  - Connector with UART, I²C, SPI, CAN, PWM and GPIOs
- **3.5 LCD board**
  - Driving IC: SSD2119
  - Display format: 320 * 240
  - Color: 262K colors
  - Backlight: PWM control
  - Interface: 16-bit 8080 parallel system interface
  - Touch screen: 4-wire resistive touch screen
- **Camera board**
  - Signal system: CMOS 1.3 Megapixel
  - Resolution: Up to 1280 * 1024
  - Supports still photos
  - Frame rate: 15 fps for SXGA, 30 fps for VGA and CIF.
- **Wi-Fi board**
  - 2.4GHz IEEE 802.11b/g/n
  - Support AP/STA Dual mode
  - Built-in TCP/IP Stack, HTTP, DHCP, DNS and Web Server
  - Support WPA/WPA2 PSK security
  - Wi-Fi SN8200 module: chipset: Broadcom BCM43362 and STM32
  - Host Interface: UART, SPI Interface & Standalone
  - Other Interface: GPIO, ADC, DAC, I²C
  - JTAG Interface for Debugging
  - Power Options:
    - 5V Power Jack
    - Mini USB Plug

Description

This set of 4 boards expands the functionality of the STM32F4 Discovery kit. A base board, connected to the STM32F4 Discovery provides Ethernet connectivity, a micro SD Card™ slot and extension connectors for the LCD and camera boards, and provides easy access to features such as UART, SPI, CAN and so on. The Wi-Fi board connects to the STM32F4 Discovery using serial host interface (UART or SPI). A digital camera board featuring a 1.3 Megapixel CMOS sensor, a 3.5 LCD board with touch screen capability connected to the base board along with a Wi-Fi board featuring the SN8200 Wi-Fi module form a complete system.

For more information, visit

www.element14.com/stm32f4-expansion
Ordering information

Table 1. Order codes

<table>
<thead>
<tr>
<th>Order code</th>
<th>Reference</th>
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<tbody>
<tr>
<td>STM32F4DIS-BB</td>
<td>Base Board for the STM32F4 Discovery</td>
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<tr>
<td>STM32F4DIS-CAM</td>
<td>Camera board for the STM32F4 Discovery</td>
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<td>STM32F4DIS-LCD</td>
<td>3&quot;5 LCD board for the STM32F4 Discovery</td>
</tr>
<tr>
<td>STM32F4DIS-WIFI</td>
<td>Wi-Fi board for the STM32F4 Discovery</td>
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For more information, documentation and downloads, refer to STMicroelectronics microcontroller support site, www.st.com.

Revision history

Table 2. Document revision history

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<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
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<tbody>
<tr>
<td>14-Dec-2012</td>
<td>1</td>
<td>Initial release.</td>
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<tr>
<td>15-Nov-2013</td>
<td>2</td>
<td>Add Wi-Fi features.</td>
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<td></td>
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<td>Description modified</td>
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