STLINK-V3SET debugger/programmer for STM8 and STM32

Features

- Stand-alone probe with modular extensions
- Self-powered through a USB connector (Micro-B)
- USB 2.0 high-speed compatible interface
- Direct firmware update support (DFU)
- JTAG / serial wire debugging (SWD) specific features:
  - 3 V to 3.6 V application voltage support and 5 V tolerant inputs
  - Flat cables STDC14 to MIPI10 / STDC14 / MIPI20 (connectors with 1.27 mm pitch)
  - JTAG communication support
  - SWD and serial wire viewer (SWV) communication support
- SWIM specific features (only available with adapter board MB1440):
  - 1.65 V to 5.5 V application voltage support
  - SWIM header (2.54 mm pitch)
  - SWIM low-speed and high-speed modes support
- Virtual COM port (VCP) specific features:
  - 3 V to 3.6 V application voltage support on the UART interface and 5 V tolerant inputs
  - VCP frequency up to 15 MHz
  - Available on STDC14 debug connector (not available on MIPI10)
- Multi-path bridge USB to SPI/JUART/I²C/CAN/GPIOs specific features:
  - 3 V to 3.6 V application voltage support and 5 V tolerant inputs
  - Signals available on adapter board only (MB1440)
- Drag-and-drop Flash programming
- Two color LEDs: communication, power

Description

The STLINK-V3SET is a modular stand-alone debugging and programming probe for the STM8 and STM32 microcontrollers. It is composed of a main module and a complementary adapter board.

The SWIM and JTAG/SWD interfaces are used to communicate with any STM8 or STM32 microcontroller located on an application board.

The STLINK-V3SET also provides a Virtual COM port interface allowing the host PC to communicate with the target microcontroller through one UART, and bridge interfaces (SPI, I²C, CAN, GPIOs) allowing for instance the programming of the target through bootloader.

The modular architecture of STLINK-V3SET enables to extend its main features through additional modules such as the adapter board.
General information

The STLINK-V3SET embeds an STM32 32-bit microcontroller based on the Arm®(a) Cortex®-M processor.

System requirements

- Windows® OS (7, 8 and 10), Linux® 64-bit, or macOS®(b)
- USB Type-A to Micro-B cable

Development toolchains

- Keil® MDK-ARM(c)
- IAR™ EWARM(c)
- GCC-based IDEs

Ordering information

To order the STLINK-V3SET, refer to Table 1.

<table>
<thead>
<tr>
<th>Order code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STLINK-V3SET</td>
<td>STLINK-V3 modular in-circuit debugger and programmer for STM8 and STM32.</td>
</tr>
</tbody>
</table>

---

a. Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and or elsewhere.
b. macOS® is a trademark of Apple Inc. registered in the U.S. and other countries.
c. On Windows® only.
Revision history

Table 2. Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-Sep-2018</td>
<td>1</td>
<td>Initial release.</td>
</tr>
</tbody>
</table>