ST-LINK/V2

ST-LINK/V2 in-circuit debugger/programmer for STM8 and STM32

Data brief

Features

- 5 V power supplied by a USB connector
- USB 2.0 full speed compatible interface
- USB standard A to mini B cable
- SWIM specific features
  - 1.65 V to 5.5 V application voltage supported on SWIM interface
  - SWIM low-speed and high-speed modes supported
  - SWIM programming speed rate: 9.7 Kbytes/s in low speed and 12.8 Kbytes/s in high speed
  - SWIM cable for connection to the application via an ERNI standard vertical connector (ref: 284697 or 214017) or horizontal connector (ref: 214012)
  - SWIM cable for connection to the application via a pin header or a 2.54 mm pitch connector
- JTAG/serial wire debugging (SWD) specific features
  - 1.65 V to 3.6 V application voltage supported on the JTAG/SWD interface and 5 V tolerant inputs
  - JTAG cable for connection to a standard JTAG 20-pin pitch 2.54 mm connector
  - JTAG supported
  - SWD and serial wire viewer (SWV) communication supported
- Direct firmware update feature supported (DFU)
- Status LED which blinks during communication with the PC
- Operating temperature 0 to 50 °C
- 2500 VRMS high isolation voltage (ST-LINK/V2-ISOL only)

Table 1. Device summary

Part number	Order Code	Description
ST-LINK/V2	ST-LINK/V2	In-circuit debugger/programmer
	ST-LINK/V2-ISOL	In-circuit debugger/programmer with digital isolation

ST-LINK/V2

ST-LINK/V2-ISOL

1 Description

The ST-LINK/V2 is an in-circuit debugger and programmer for the STM8 and STM32 microcontroller families. The single wire interface module (SWIM) and JTAG/serial wire debugging (SWD) interfaces are used to communicate with any STM8 or STM32 microcontroller located on an application board.

In addition to providing the same functionalities as the ST-LINK/V2, the ST-LINK/V2-ISOL features digital isolation between the PC and the target application board. It also withstands voltages of up to 2500 VRMS.

STM8 applications use the USB full speed interface to communicate with STMicroelectronic's ST Visual Develop (STVD) or ST Visual Program (STVP) software.

STM32 applications use the USB full speed interface to communicate with Atollic, IAR, Keil or TASKING integrated development environments.

2 Revision history

Table 2. Document revision history

Date	Revision	Changes
21-Apr-2011	1	Initial release.
07-May-2012	2	Added SWD to JTAG connection features.
14-Sep-2012	3	Added ST-LINK/V2-ISOL.

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