



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 STMicroelectronics' 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.

Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY TWO AUTHORIZED ST REPRESENTATIVES, ST PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER'S OWN RISK.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners.

© 2012 STMicroelectronics - All rights reserved

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan - Malaysia - Malta - Morocco - Philippines - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Programmiers - Processor Based](#) category:

Click to view products by [Adafruit](#) manufacturer:

Other Similar products are found below :

[5.05.10](#) [TPG100004](#) [X2S-FP-X](#) [APM32PROG](#) [ECC111429EU](#) [UMFTPD2A](#) [MIKROPROG FOR 8051](#) [JTAG HS2 PROGRAMMING CABLE](#) [JTAG-SMT2-NC SM PROGRAMMING MODULE](#) [MIKROPROG FOR AVR](#) [MIKROPROG FOR PIC,DSPIC AND PIC32](#) [MIKROPROG FOR STM32](#) [MIKROPROG FOR TIVA](#) [ZL20PRG](#) [AVR-ISP500-TINY](#) [GP-ARM](#) [DFR0116](#) [PGM-08702](#) [ACNPROG](#) [PGM-07834](#) [XUP USB-JTAG PROGRAMMING CABLE](#) [CK-USB-04A](#) [REVELPROG-IS](#) [FLASHPRO-2000-STD](#) [GANGPRO-ARM-1V](#) [CODEGRIP FOR ARM](#) [CODEGRIP FOR STM32](#) [CODEGRIP FOR TIVA](#) [FLASHPRO-430-CC](#) [FLASHPRO-430-LJ](#) [FLASHPRO-430-STD](#) [FLASHPRO-ARM\(X2S\)](#) [FLASHPRO-ARM-1V\(XS\)](#) [GANGPRO-430\(XS\)](#) [GANGPRO-ARM-1V\(XS\)](#) [AVR-ISP500-ISO](#) [AVR-JTAG-USB-A 462](#) [MIKROPROG FOR MSP432](#) [JTAG USB CABLE](#) [PROGRAMMER FOR CMT 2548 46](#) [VA800A-PROG](#) [CY8CKIT-005](#) [FlashPro-CC-STD](#) [FLASHPRO-X](#) [REP430F](#) [USB-MSP430-FPA-LJ](#) [JTAG-SMT3-NC PROGRAMMING MODULE](#)