

STEVAL-IFP001V1

8-channel high-side driver demonstration board with the VN808CM-E

Data brief

Features

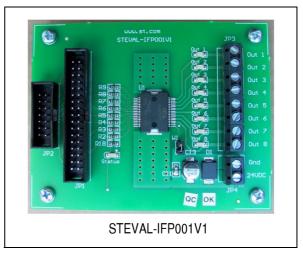
- Compatible with existing ST tools (CANIC10, ARMIC30..., etc.)
- 8 output channels + 1 feedback channel (diagnostic - status)
- CMOS compatible signals allow direct connection to a microcontroller
- Outputs and diagnostic status indicated by LEDs
- EMC immunity proof 4 kV level EFT (IEC 61000-4-4), 2 kV voltage surge (IEC 61000-4-5)
- RoHS compliant

Description

The STEVAL-IFP001V1 demonstration board implements the functions of the VN808CM-E, an 8-channel high-side driver with CMOS compatible voltage levels in industrial applications, and is developed using VIPower M0-3 proprietary technology. The VN808CM-E completes the series of octal high-side drivers for the factory automation market.

It is intended for driving any kind of load with one side connected to ground and can be driven by using a 3.3 V logic supply. Active current limitation, combined with thermal shutdown and automatic restart, protects the device against overload.

The STEVAL-IFP001V1 is compliant with international electromagnetic compatibility (EMC) specifications as well as EMC immunity proof 4 kV level EFT (IEC 61000-4-4), and 2 kV voltage surge (IEC 61000-4-5), and has been tested at different typical ambient temperatures. It is suitable for use in programmable logic controllers to produce the related digital outputs according to IEC standards.

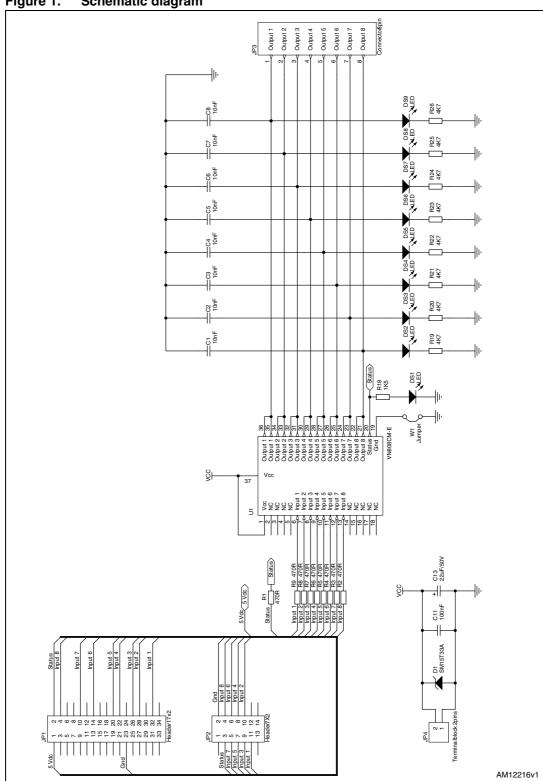


The STEVAL-IFP001V1 is also based on the SM15T33A, a unidirectional Transil™ diode.

Schematic diagram STEVAL-IFP001V1

Schematic diagram 1

Figure 1. Schematic diagram



STEVAL-IFP001V1 Revision history

2 Revision history

Table 1. Revision history

Date	Revision	Changes
02-Oct-2006	1	First issue
01-Jun-2012	2	- Changed photo on the coverpage - Minor text changes

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

57/