

STEVAL-ILM001V1

Plug-in hardware module for the STM8S-DISCOVERY interface for DALI communication

Data brief

Features

- Level translation from DALI voltage levels (-6.5 to 22.5 V) to microcontroller levels (3.3 V / 5 V logic)
- Proper rise/fall times for the communication
- Current consumption limit (2 mA max.)
- Overvoltage protection for misconnection of rated mains voltage to DALI DA connectors
- RoHS compliant

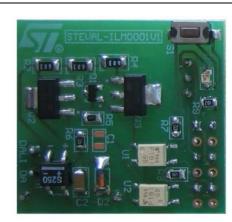
Description

The STEVAL-ILM001V1 is a plug-in module for the STM8S-DISCOVERY kit and SW DALI library, to create a fully working DALI slave application. The STM8S-DISCOVERY + STEVAL-ILM001V1 work as a DALI slave device and can be connected to and controlled by any DALI network.

The LD1 on the STM8S-DISCOVERY kit is used as a light source. Its brightness, fade-in/out times, etc., as defined by the DALI standard, can be controlled through DALI to simulate a normal lamp behavior.

The DALI (Digital Addressable Lighting Interface) standard is a communication protocol widely used in intelligent lighting applications. Its use is not limited to fluorescent tube lamp dimmable ballasts, for which it was initially designed, but also for future LED applications.

The user is expected to be familiar with the DALI standard and its details.

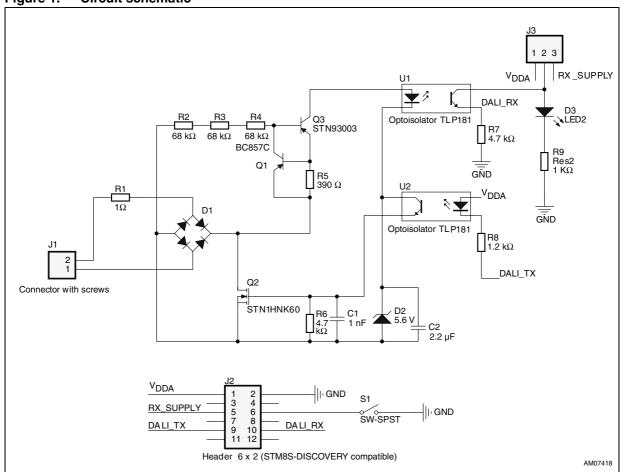


STEVAL-ILM001V1

Circuit schematic STEVAL-ILM001V1

1 Circuit schematic

Figure 1. Circuit schematic



STEVAL-ILM001V1 Revision history

2 Revision history

Table 1. Document revision history

| Date | Revision | Changes |
|-------------|----------|------------------|
| 23-Dec-2010 | 1 | Initial release. |

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 AN AUTHORIZED ST REPRESENTATIVE, 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.

© 2010 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

