

STEVAL-IAC001V1

Alarm platform

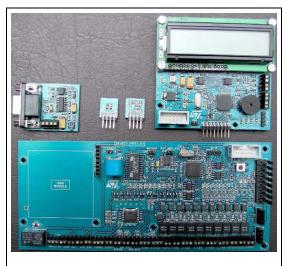
Data Brief

Features

- 8 configurable, hard-wired inputs with programmable balance control
- 7 configurable, hard-wired outputs that can be associated with each input (4 SSR, 2 transistorized, and 1 relay)
- Alarm-on and CU-active output indicators
- 16 configurable partitions for inputs/outputs
- Expandable inputs and outputs with the I/O Expander modules connected to the bus
- Balanced and programmable tamper line (currently not managed by firmware)
- Programmable fire/smoke sensor inputs
- Mains loss and low battery indicators (currently not managed by firmware)
- Test mode for inputs/outputs
- Timer events for inputs/outputs
- Date and time stamp for up to 999 log events
- Up to 8 users with programmable access code for all partition combinations
- Encrypted communication bus for I/O expansion and system management
- Three-level password access control
- Protected bus installation and setup mode for additional security
- PC interface directly connected via the communication bus with user-friendly GUI

Description

The central unit for the alarm system evaluation board provides a complete reference system for addressing the low to mid-range security sectors. The tool includes all the necessary hardware and software for the development of a complete alarm platform based on a bus network. In addition to a



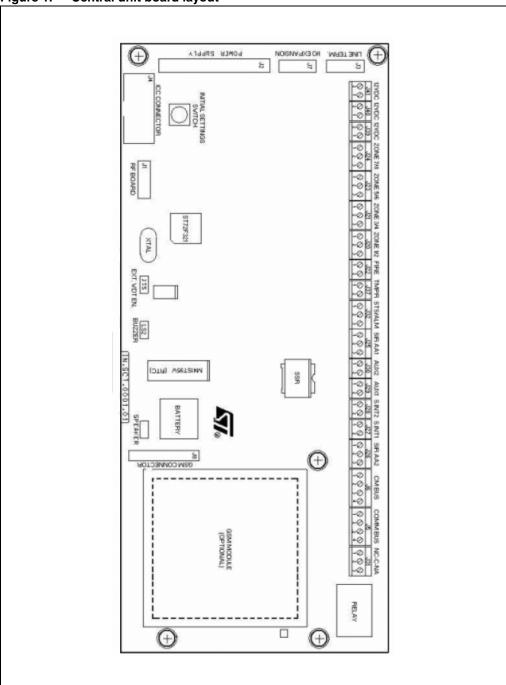
STEVAL-IAC001V1

control/programming panel connected through the bus, the GUI (graphical user interface) makes it simple to set up all control parameters. The entire system consists of four boards: the Central Unit board, control module board, Power supply board and the PC interface board. There is also PC GUI software that enables the user to easily configure all central unit parameters and to execute certain system tests. The system can be expanded by means of input/output expansion boards, as well as a GSM board (connector available) for managing the CU using a cell phone, and other modules using radio-frequency identification (RFID), smartcard or keyboard devices connected through the bus. For more information please refer to the document UM0272.

Board schematics STEVAL-IAC001V1

1 Board schematics

Figure 1. Central unit board layout



577

2/5

STEVAL-IAC001V1 Board schematics

Figure 2. PC interface board layout

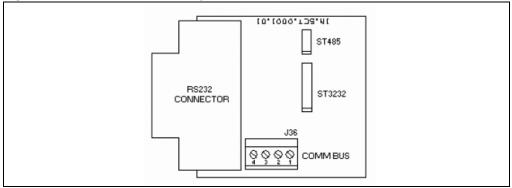


Figure 3. Control module board layout

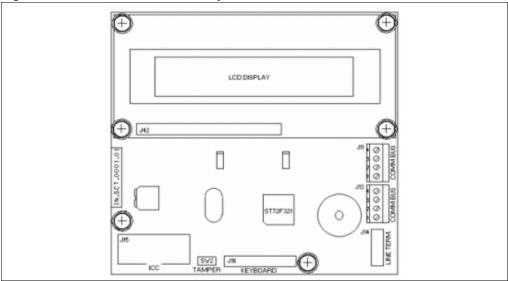
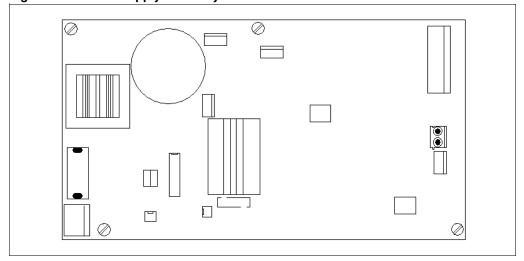


Figure 4. Power supply board layout



3/5

Revision history STEVAL-IAC001V1

2 Revision history

Table 1. Document revision history

| Date | Revision | Changes |
|-------------|----------|-----------------|
| 22-Oct-2007 | 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.

© 2007 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 - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com

577

5/5