



# STEVAL-ICB001V1

## Capacitive touch sensor demonstration board based on the STMPE1208S

Data Brief

### Features

- Host software and ST7 source code provide a user-friendly environment for operating the board in:
  - Standalone mode
  - PC GUI mode
- In standalone mode, touch events are displayed on a 64 X 128 monochrome LCD
- Board power is supplied either through a Mini B-type USB connector, or by AAA-size Ni batteries
- The board is equipped with an alternate I<sup>2</sup>C path for external control, and an ICC connector to reprogram the ST7 microcontroller Flash memory



### Description

The STEVAL-ICB001V1 demonstration board is based on the capacitive touch sensor STMPE1208S. An ST72F63B microcontroller functions as the I<sup>2</sup>C master.

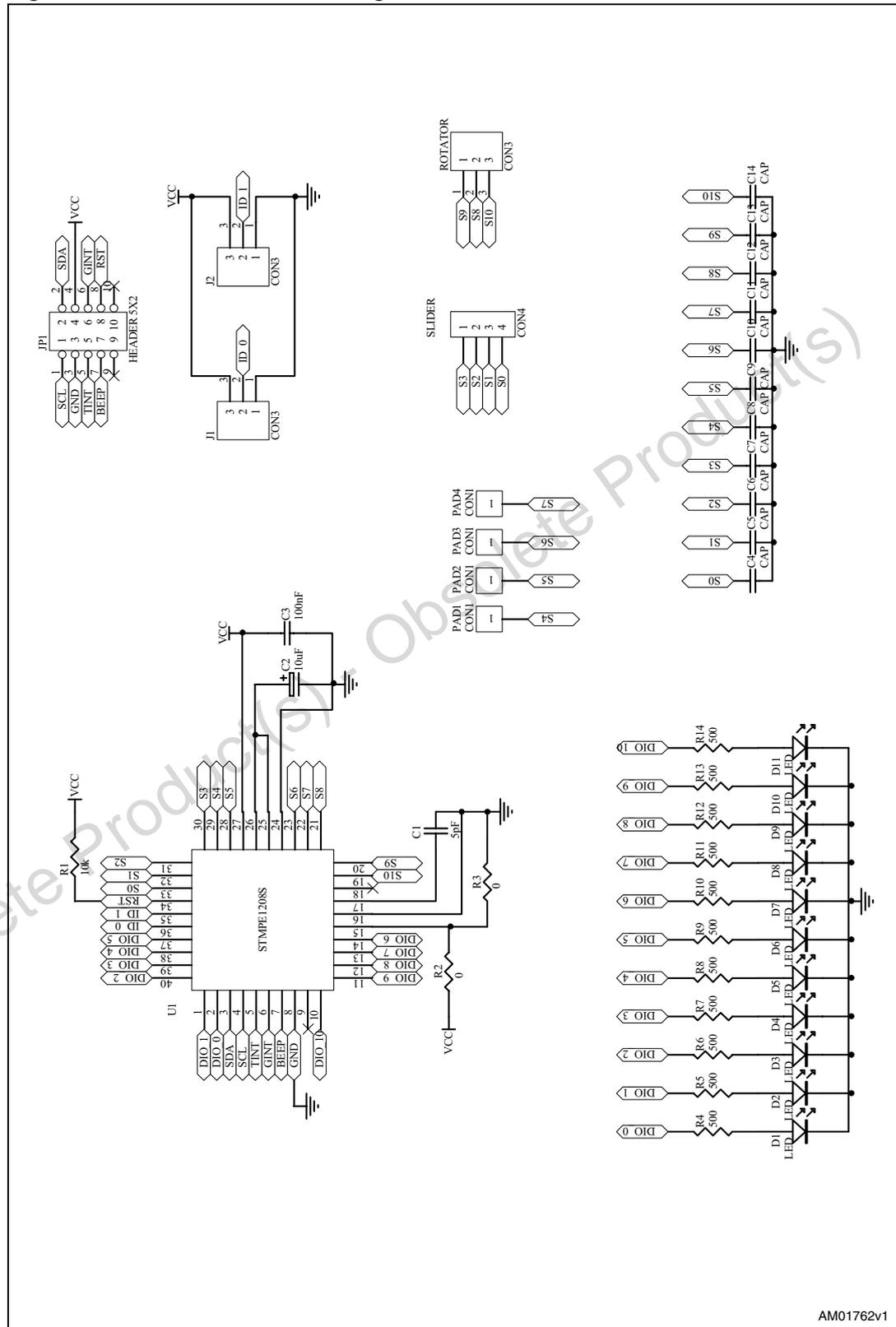
The purpose of the board is to demonstrate the features and capabilities of the STMPE1208S, using a Windows<sup>®</sup>-based host software application and one of several USB low-speed microcontrollers from ST acting as the control device (in this board the ST72F63B is used).

For the STEVAL-ICB001V1, the ST72F63B microcontroller acts as the I<sup>2</sup>C master and controls STMPE1208S device, which functions as an I<sup>2</sup>C slave.

The STMPE1208S device interfaces with the touch keys, slider and rotator. The device senses touch events and provides the information to the ST72F63B via I<sup>2</sup>C communication.



Figure 2. STEVAL-ICB001V1 daughter board schematic



AM01762v1

## 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
05-Nov-2008	1	Initial release.

Obsolete Product(s) - Obsolete Product(s)

**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.

© 2008 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](http://www.st.com)

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Touch Sensor Development Tools](#) category:*

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

Other Similar products are found below :

[TSC2008EVM-PDK](#) [TSC2100EVM](#) [TSC2003EVM-PDK](#) [ATMXT1066T2-DEV-PCB](#) [ATEVK-MXT1066T2-A](#) [ATMXT2952T2-DEV-PCB](#)  
[ATMXT144U-DEV-PCB](#) [ATMXT449TDAT-I2C-PCB](#) [ATEVKMXT799TATA](#) [ATMXT641TAT-I2C-PCB](#) [ATMXT336UDEVPCB](#)  
[ATEVK-MXT225TDAT-A](#) [LC717A00ARGEVK](#) [ATEVK-MXT641TDAT-A](#) [ATMXT641TDAT-I2C-PCB](#) [CY3290-CYAT8168X](#) [ATEVK-](#)  
[MXT641TDAT-B](#) [4830](#) [ATMXT2952TD-DEV-PCB](#) [ATMXT1189TDAT-I2C-PCB](#) [ATMXT1665TDAT-SPI-PCB](#) [ATMXT1067TDAT-SPI-](#)  
[PCB](#) [ATMXT1189TDAT-SPI-PCB](#) [ATMXT1665TDAT-I2C-PCB](#) [ATEVK-MXT2952TD-A](#) [CY3280-CPM1](#) [TSC2004EVM-PDK](#) [1374](#)  
[1571](#) [MIKROE-1906](#) [1602](#) [1982](#) [1602](#) [ATQT5-XPRO](#) [STEVAL-PCC009V3](#) [ATQT1-XPRO](#) [ATQT2-XPRO](#) [ATQT3-XPRO](#) [ATQT6-](#)  
[XPRO](#) [2340](#) [TSC2008EVM](#) [IQS231AEV02-S](#) [IQS266EV02-S](#) [ATEVK-MXT640T-A](#) [LDC2114EVM](#) [CAPTIVATE-METAL](#) [FIT0318](#)  
[FIT0096](#) [IQS572EV02](#) [IQS211AEV02-S](#)