

STEVAL-CCA010V1

Demonstration board for video buffer plus filter with SAG correction based on the TSH122

Data Brief

www.st.com

Features

- Operation supply from 2.25 to 5 V single power supply
- Very low consumption: 1.7 mA
- Ultra low power-down mode: 4 nA typ., 500 nA max.
- Internal 6th order reconstruction filter
- Internal gain of 6 dB
- Rail-to-rail output buffer for 75 Ω video line
- Excellent video performances:
 - Differential gain 0.5%
 - Differential phase 0.10°
 - Group delay of 10 ns
- SAG correction
- Bottom of video signal close to 0 V

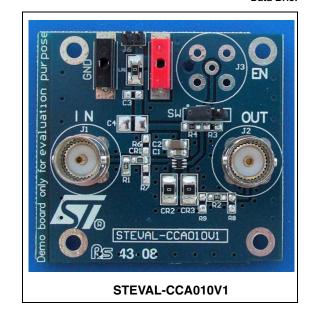
Description

The demonstration board STEVAL-CCA010V1 is designed to evaluate the TSH122 that is a video buffer that uses a voltage feedback amplifier, with an internal gain of 6 dB, an output rail-to-rail, an internal input DC-shift and a SAG correction. A power-down function allows switching to a sleep mode with an ultra-low consumption.

The TSH122 features a 6th-order internal reconstruction filter to attenuate the parasitic frequency of 27 MHz from the clock of the video DAC.

The TSH122 is a single operator available in a tiny SC70 plastic package for space saving.

For further information contact your local STMicroelectronics sales office.



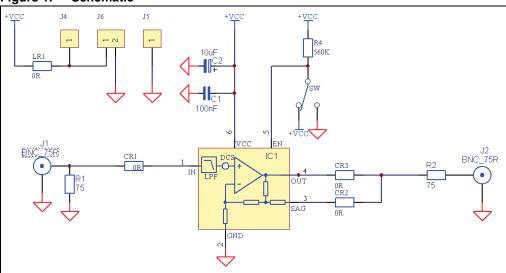
February 2009 Rev 1 1/4

Downloaded from Elcodis.com electronic components distributor

Circuit schematic STEVAL-CCA010V1

1 Circuit schematic

Figure 1. Schematic



2/4

STEVAL-CCA010V1 Revision history

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
02-Feb-2009	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.

© 2009 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

477

4/4