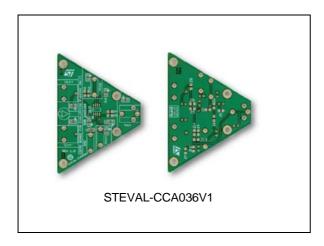


STEVAL-CCA036V1

Demonstration board for single channel op-amp in SO8 package

Data brief



Features

- This demonstration board with its components allow it to be configured as:
 - Low-pass Sallen-Key circuit
 - High-pass Sallen-Key circuit
 - Differential amplifier
 - AC-coupled circuit
 - In-loop compensation circuit
 - Out-of-loop compensation circuit
 - Numerous other possible configurations not described here
- RoHS compliant

Description

The STEVAL-CCA036V1 demonstration board is designed to help characterize single operational amplifiers in SO8 packages.

With this board, the most common op-amp based circuits can be achieved.

The board is designed for surface-mounted components and can be used to perform onboard characterization prior to the integration of STMicroelectronics' products in your designs. Resistor and capacitor footprints are implemented for the 0805 series. A set of two decoupling capacitors have been implemented on both power supply pins so as to benefit from the maximum performances of ST products. In order to reject a wide range of frequencies, 10 nF and 4.7 μF are good values for these capacitors.

Schematic diagram STEVAL-CCA036V1

1 Schematic diagram

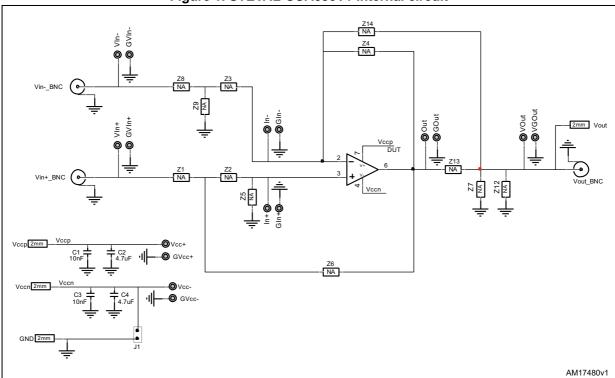


Figure 1. STEVAL-CCA036V1 internal circuit

STEVAL-CCA036V1 Revision history

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
07-Jun-2013	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.

ST PRODUCTS ARE NOT AUTHORIZED FOR USE IN WEAPONS. NOR ARE ST PRODUCTS DESIGNED OR AUTHORIZED FOR USE IN: (A) SAFETY CRITICAL APPLICATIONS SUCH AS LIFE SUPPORTING, ACTIVE IMPLANTED DEVICES OR SYSTEMS WITH PRODUCT FUNCTIONAL SAFETY REQUIREMENTS; (B) AERONAUTIC APPLICATIONS; (C) AUTOMOTIVE APPLICATIONS OR ENVIRONMENTS, AND/OR (D) AEROSPACE APPLICATIONS OR ENVIRONMENTS. WHERE ST PRODUCTS ARE NOT DESIGNED FOR SUCH USE, THE PURCHASER SHALL USE PRODUCTS AT PURCHASER'S SOLE RISK, EVEN IF ST HAS BEEN INFORMED IN WRITING OF SUCH USAGE, UNLESS A PRODUCT IS EXPRESSLY DESIGNATED BY ST AS BEING INTENDED FOR "AUTOMOTIVE, AUTOMOTIVE SAFETY OR MEDICAL" INDUSTRY DOMAINS ACCORDING TO ST PRODUCT DESIGN SPECIFICATIONS. PRODUCTS FORMALLY ESCC, QML OR JAN QUALIFIED ARE DEEMED SUITABLE FOR USE IN AEROSPACE BY THE CORRESPONDING GOVERNMENTAL AGENCY.

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.

© 2013 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

4/4 DocID024760 Rev 1



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Amplifier IC Development Tools category:

Click to view products by STMicroelectronics manufacturer:

Other Similar products are found below:

EVAL-ADCMP566BCPZ EVAL-ADCMP606BKSZ AD8013AR-14-EBZ AD8033AKS-EBZ AD8044AR-EBZ AD8225-EVALZ

ADA4859-3ACP-EBZ ADA4862-3YR-EBZ DEM-OPA-SO-2B AD744JR-EBZ AD8023AR-EBZ AD8030ARJ-EBZ AD8040ARU-EBZ

AD8073JR-EBZ AD813AR-14-EBZ AD848JR-EBZ ADA4858-3ACP-EBZ ADA4922-1ACP-EBZ 551600075-001/NOPB DEM-OPA-SO2E THS7374EVM EVAL-ADCMP553BRMZ EVAL-ADCMP608BKSZ MIOP 42109 EVAL-ADCMP609BRMZ MAX9928EVKIT+

MAX9636EVKIT+ MAX9611EVKIT MAX9937EVKIT+ MAX9934TEVKIT+ MAX44290EVKIT# MAX2644EVKIT MAX4073EVKIT+

DEM-OPA-SO-2C MAX2643EVKIT ISL28158EVAL1Z MAX40003EVKIT# MAX2473EVKIT MAX2472EVKIT MAX4223EVKIT

MAX9700BEVKIT MADL-011014-001SMB DC1685A DEM-OPA-SO-2D MAX2670EVKIT# DEM-OPA-SO-1E AD8137YCP-EBZ

EVAL-ADA4523-1ARMZ MAX44242EVKIT# EVAL-LT5401 32FDAZ