



Training kit for operational amplifiers and comparators





• 8

Features

- Schematics and applications based on operational amplifiers and comparators:
 - Follower, inverter, noninverter
 - Filters
 - Low-side current sensing
 - Photodiode transimpedance amplification
- Low cost to high-performance low-voltage operational amplifiers:
 - Rail-to-rail
 - High bandwidth
 - Low offset
 - High output current
 - Low-power

Description

The STEVAL-CCA058V1 training kit is intended for hands-on training on operational amplifiers and comparator-based analog circuits.

You can use the kit in an academic context for students' training, as well as for professionals' training: junior analog engineers, distributors, and customers. It is also useful for a fast evaluation and prototyping of low frequency op amp-based applications.

The STEVAL-CCA058V1 consists of a configurable board, which features the most widely used op-amp-based schematics and applications, and ST op-amps mounted on DIP adaptors.

It should be used with a set of through passive components (resistors and capacitors), and a set of lab instruments (power supply, function generator, multimeter, and oscilloscope).

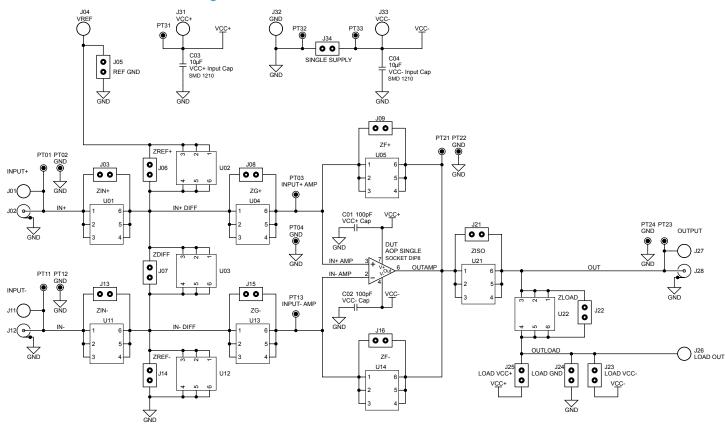
The kit allows the trainee to experiment the most common op-amp-based schematics. It also allows learning how to choose the most suited op-amp for a custom application. You can find the detailed documentation on guided experiments at www.st.com.

Product summary		
Training kit for operational amplifiers	STEVAL-CCA058V1	
Amplifiers	TS921IDT/ TSC210ICT/ TSU101ILT/ TSV631ILT/ TSV7721ILT/ TSV791ILT/ TSV991ILT/ TSZ121ILT/ UA741CDT	
Comparators	TS881ILT/ TSX3702IST/ TSX393IST	
Applications	Process and Environment Monitoring	

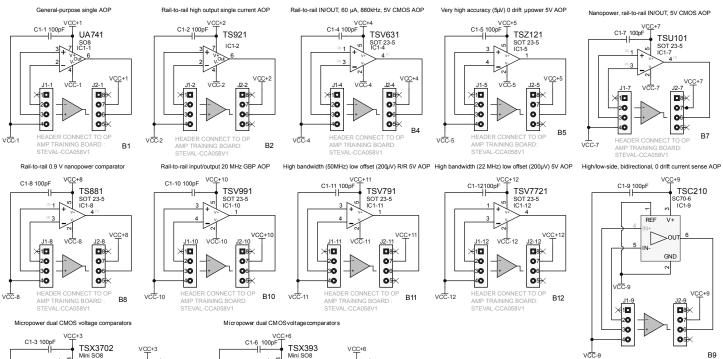
Schematic diagrams



Figure 1. STEVAL-CCA058A1 main board circuit schematic







VCC-6

- All passives components are SMT-0805 package - All Header are MALE HEADER SIL - 2.54mm

STEP package

IC1-6A

HEADER CONNECT TO OP

AMP TRAINING BOARD

STEVAL-CCA058V1

□8×

O7

J1-6

√1□

20

VCC-6

IC1-3B

IC1-3A

√1□

VCC-3

□8×

07

06-

HEADER CONNECT TO OP

AMP TRAINING BOARD :

STEVAL-CCA058V1



2 Kit versions

Table 1. STEVAL-CCA058V1 kit versions

Finished good	Schematic diagrams	Bill of materials
STEVAL\$CCA058V1A (1)	STEVAL\$CCA058V1A schematic diagrams	STEVAL\$CCA058V1A bill of materials
STEVAL\$CCA058V1B (2)	STEVAL\$CCA058V1B schematic diagrams	STEVAL\$CCA058V1B bill of materials

- This code identifies the STEVAL-CCA058V1 evaluation kit first version. The kit consist of the STEVAL-CCA058A1 main board, whose version is identified by the code STEVAL\$CCA058A1A on the silkscreeen, and the STEVAL-CCA058B1 opamp adapter board, whose version is identified by the code STEVAL\$CCA058B1A on the silkscreeen.
- This code identifies the STEVAL-CCA058V1 evaluation kit second version. The kit consist of the STEVAL-CCA058A1 main board, whose version is identified by the code STEVAL\$CCA058A1B on the silkscreeen, and the STEVAL-CCA058B1 opamp adapter board, whose version is identified by the code STEVAL\$CCA058B1B on the silkscreen.

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Revision history

Table 2. Document revision history

Date	Revision	Changes
01-Mar-2022	1	Initial release.
24-Aug-2023	2	Updated cover image and Section 2 Kit versions.

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