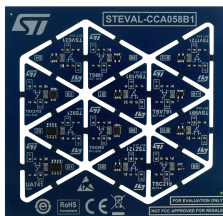
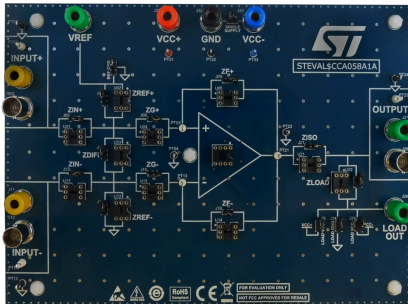


## Training kit for operational amplifiers and comparators



### 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](http://www.st.com).

Product summary	
Training kit for operational amplifiers	STEVAL-CCA058V1
Amplifiers	TS921IDT/ TSC210ICT/ TSU1011LT/ TSV6311LT/ TSV77211LT/ TSV7911LT/ TSV9911LT/ TSZ1211LT/ UA741CDT
Comparators	TS8811LT/ TSX37021ST/ TSX3931ST
Applications	Process and Environment Monitoring

# 1 Schematic diagrams

Figure 1. STEVAL-CCA058A1 main board circuit schematic

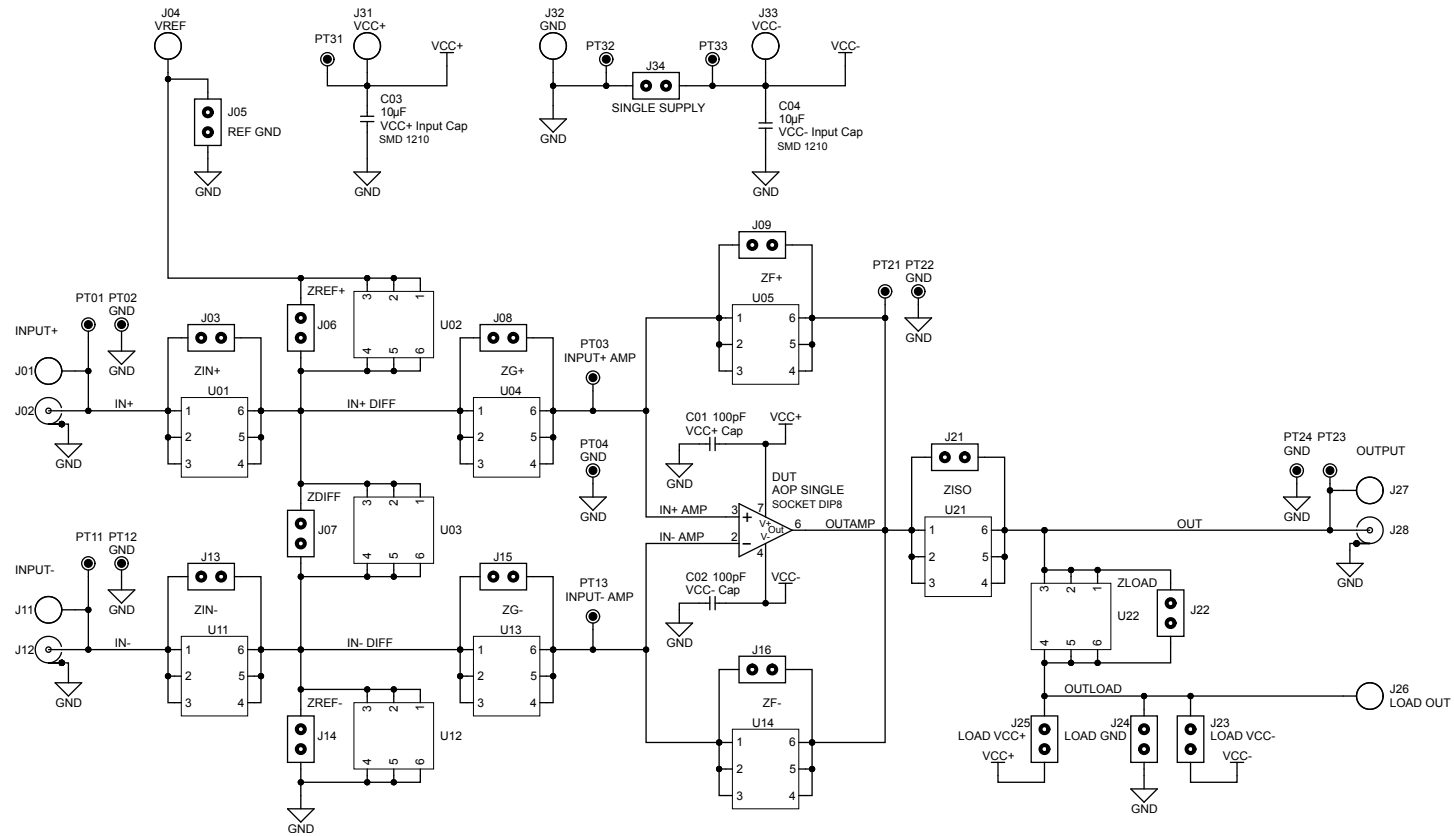
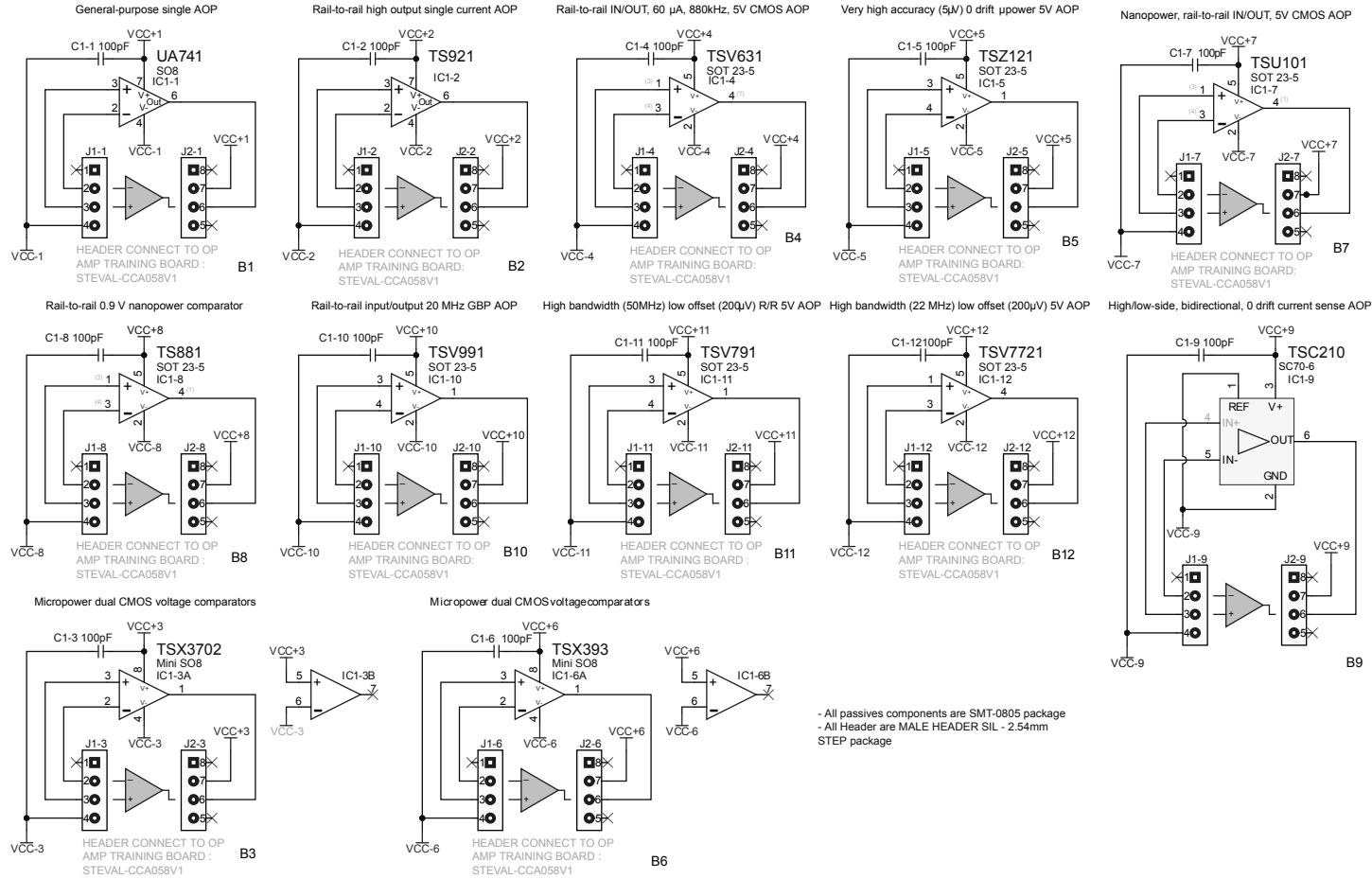


Figure 2. STEVAL-CCA058A1 op-amp adapter board circuit schematic



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



## 2 Kit versions

**Table 1. STEVAL-CCA058V1 kit versions**

Finished good	Schematic diagrams	Bill of materials
STEVAL\$CCA058V1A <sup>(1)</sup>	STEVAL\$CCA058V1A schematic diagrams	STEVAL\$CCA058V1A bill of materials

1. 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, and the STEVAL-CCA058B1 op-amp adapter board, whose version is identified by the code STEVAL\$CCA058B1A.

## Revision history

**Table 2. Document revision history**

Date	Revision	Changes
01-Mar-2022	1	Initial release.