

## Evaluation kit for high voltage bidirectional current sense amplifier



## Features

- Wide common mode voltage range: -20 to 70 V
- Offset voltage:  $\pm 200 \mu\text{V}$  max.
- 2.7 to 5.5 V supply voltage
- Quiescent current: 20  $\mu\text{A}$  in Shutdown mode
- Temperature range: -40 to 125°C
- SO8 and MiniSO8 package
- RoHS compliant

## Description

The [STEVAl-AETKT1V2](#) evaluation kit represents a bidirectional current sense amplifier with high side or low side sense resistor. The kit consists of a main board and individual daughter boards for the [TSC2011](#), [TSC2010](#) and [TSC2012](#) high voltage, bidirectional, current sense amplifier ICs, which provide a fixed gain of 60, 20 or 100, respectively.

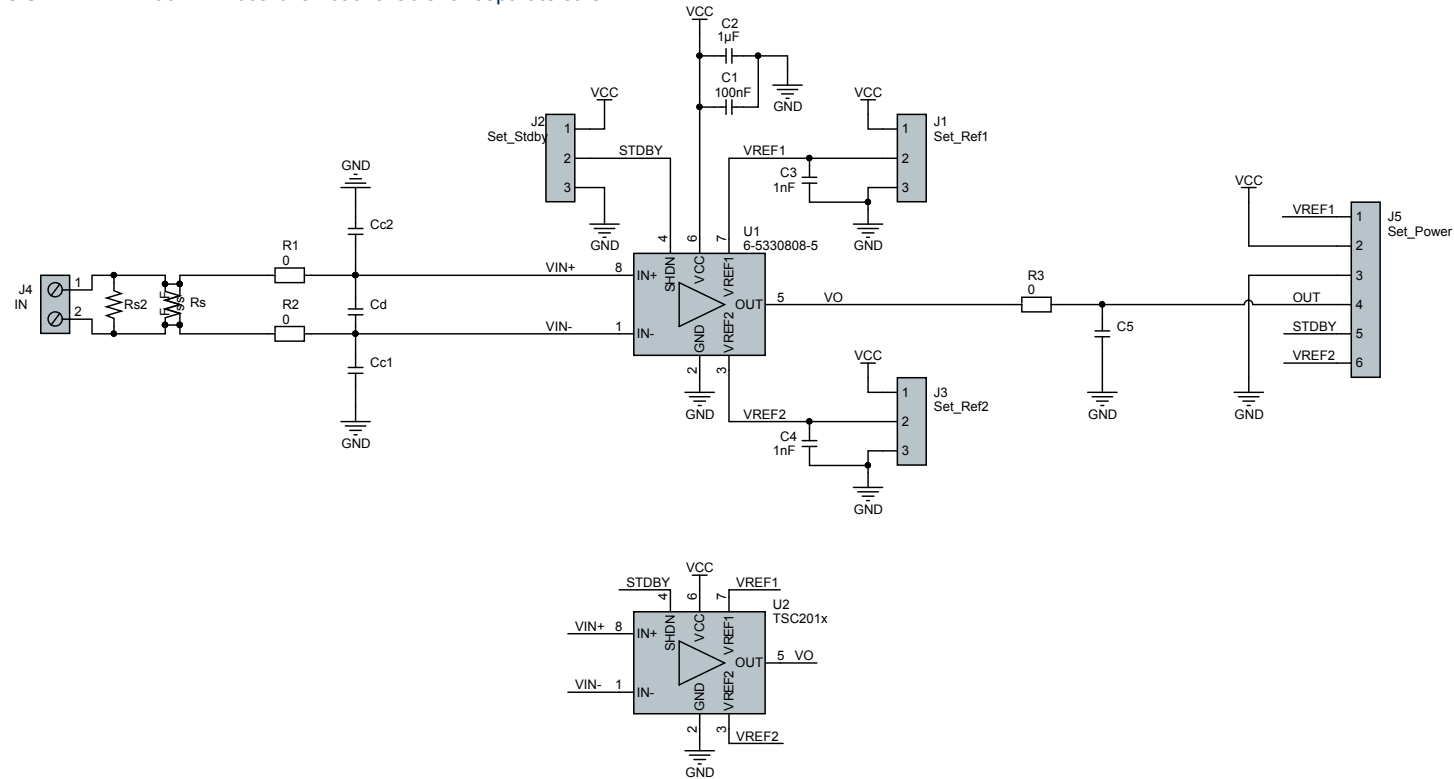
The thin film resistor on the TSC201x devices ensure extremely precise gain and very high common-mode rejection ratio (CMRR) performance, even in high frequency ranges. They accurately measure current by amplifying the voltage ( $V_{SENSE}$ ) across a shunt resistor connected to the input. Moreover, the ability to fix the output common mode voltage means that the device can be either used as unidirectional or bidirectional current sensing amplifier.

| Product summary   |  |
|---|--|
| Evaluation kit for high voltage bidirectional current sense amplifier | STEVAL-AETKT1V2  |
| High voltage, precision, bidirectional current sense amplifier        | TSC2010<br>TSC2011<br>TSC2012  |
| Applications  | Automotive Motor Control<br>Electro-Mobility<br>Factory Automation<br>Industrial Power and Tools |

# Schematic diagrams

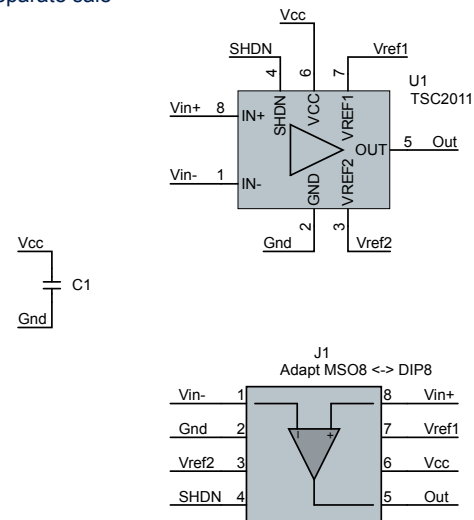
**Figure 1. STEVAL-AETKT1V2 main board (STEVAL-AET001V1B) schematic diagram**

The STEVAL-AET001V1B board is not available for separate sale

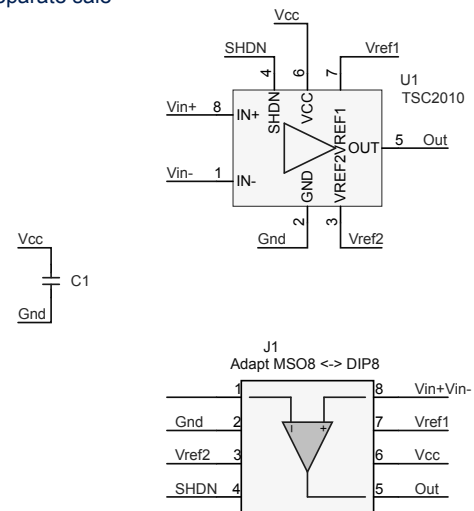


**Figure 2. STEVAL-AETKT1V2 daughter board (STEVAL-AET002V1B) schematic diagram**

The STEVAL-AET002V1B board is not available for separate sale

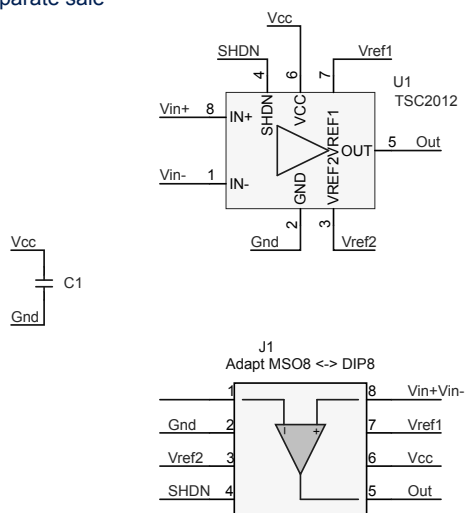
**Figure 3. STEVAL-AETKT1V2 daughter board (STEVAL-AET003V1B) schematic diagram**

The STEVAL-AET003V1B board is not available for separate sale



**Figure 4. STEVAL-AETKT1V2 daughter board (STEVAL-AET004V1B) schematic diagram**

The STEVAL-AET004V1B board is not available for separate sale



## Revision history

**Table 1. Document revision history**

| Date        | Version | Changes                   |
|-------------|---------|---------------------------|
| 02-Oct-2020 | 1       | Initial release.          |
| 09-Dec-2020 | 2       | Updated cover page image. |

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