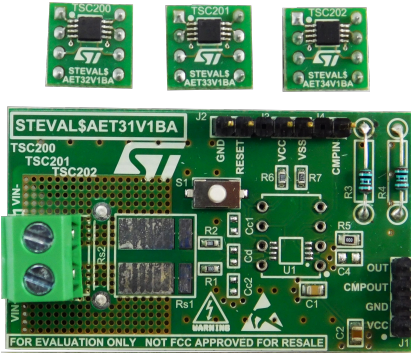


Evaluation kit for high voltage current sense amplifier with comparator



Features

- Wide common-mode voltage: -16 to 80 V
- 2.7 to 18 V supply voltage
- Quiescent current: 1.8 mA maximum
- Internal open-drain comparator
- 0.6 V internal reference
- Latching capability on comparator
- SO-8 and MiniSO-8 package
- Temperature range -40 to 125°C
- RoHS compliant

Description

The **STEVAL-AETKT3V1** is an evaluation kit demonstrating **TSC200**, **TSC201**, **TSC202** performances.

These devices are current sense amplifier with an overcurrent protection function that can operate in both high side and low side configuration.

The **STEVAL-AET31V1B** is a mother board, which can accept different daughter boards to use different gain configuration.

STEVAL-AET32V1B is a daughter board with a **TSC200** mounted with a gain of 20.

STEVAL-AET33V1B is a daughter board with a **TSC201** mounted with a gain of 50.

STEVAL-AET34V1B is a daughter board with a **TSC202** mounted with a gain of 100.

TSC20x is specially designed to accurately measure current by amplifying the voltage across a shunt resistor connected to its input.

Product summary	
Evaluation kit for high voltage current sense amplifier with comparator	STEVAL-AETKT3V1
High voltage, current sense amplifier with open drain comparator and ref	TSC200 TSC201 TSC202
Applications	Electro-mobility Factory automation Industrial power tools

1 Schematic diagrams

Figure 1. STEVAL-AET31V1B (mother board) circuit schematic

The STEVAL-AET31V1B board is not available for separate sale.

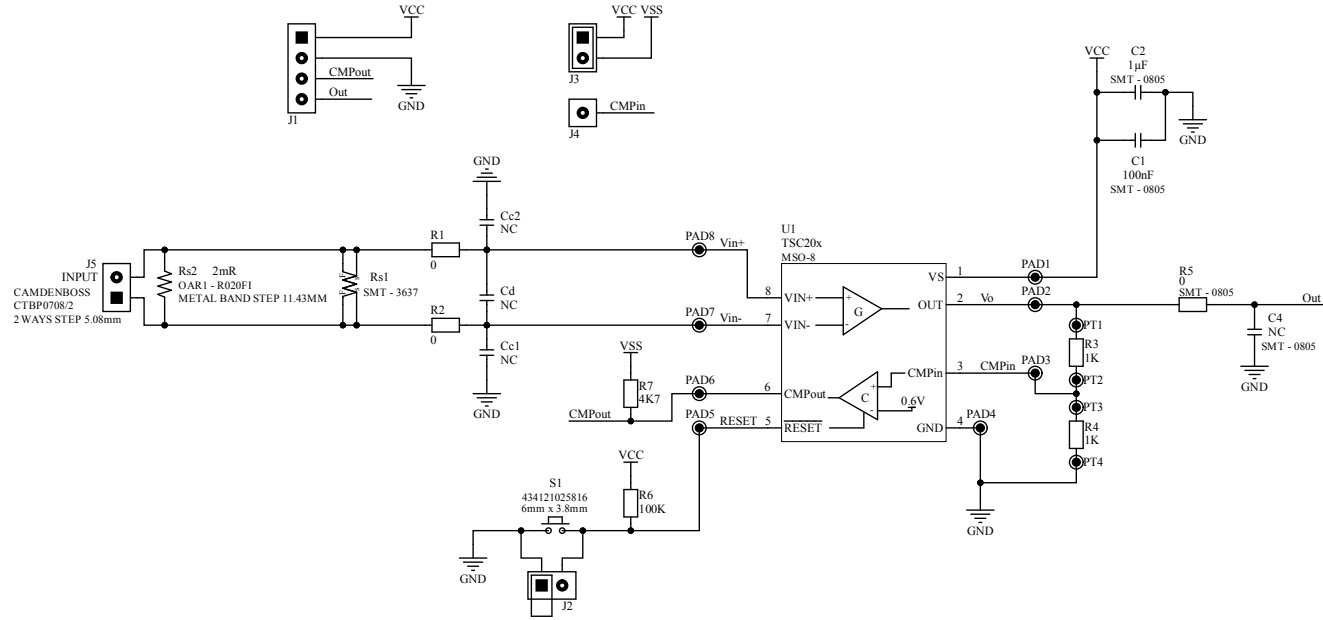


Figure 2. STEVAL-AET32V1B (daughter board) circuit schematic

The STEVAL-AET32V1B board is not available for separate sale.

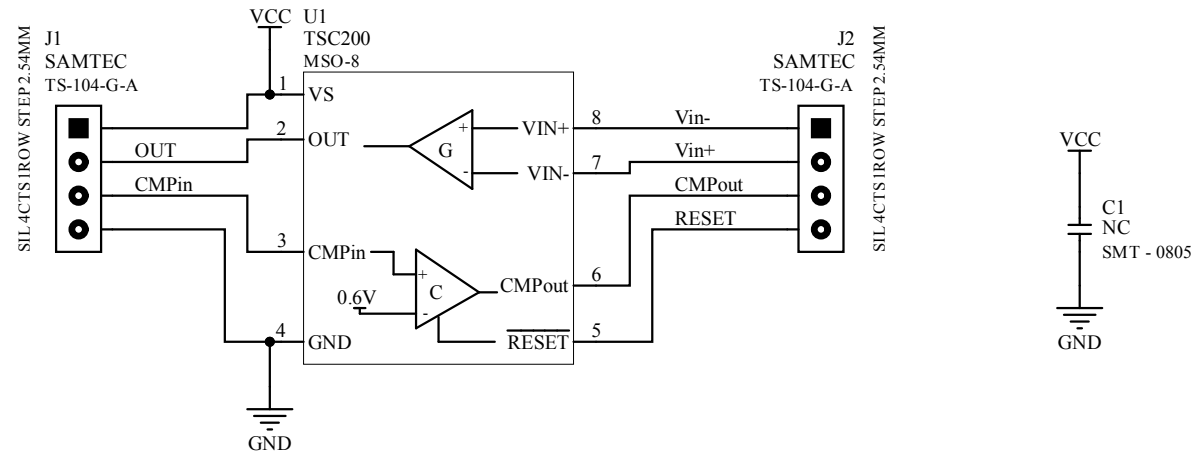


Figure 3. STEVAL-AET33V1B (daughter board) circuit schematic

The STEVAL-AET33V1B board is not available for separate sale.

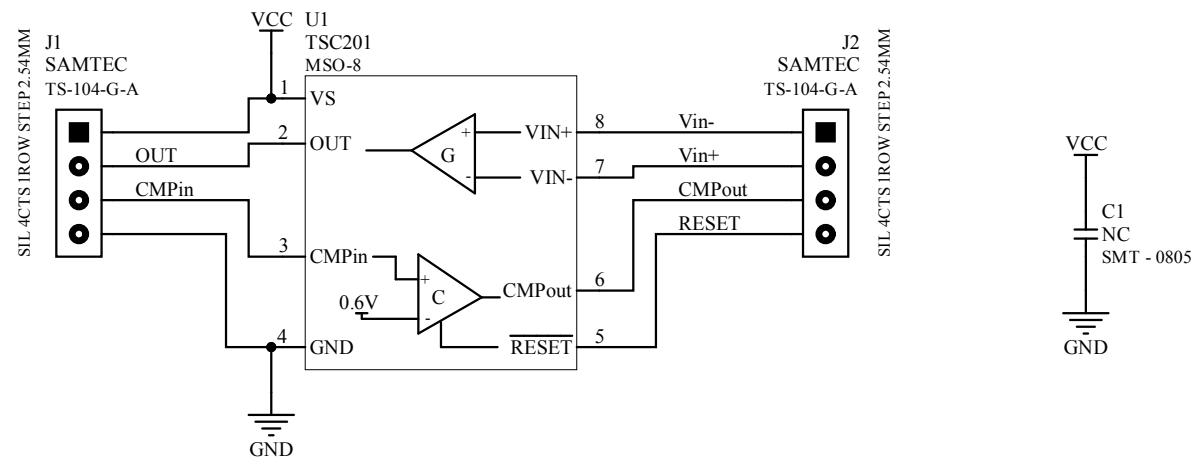
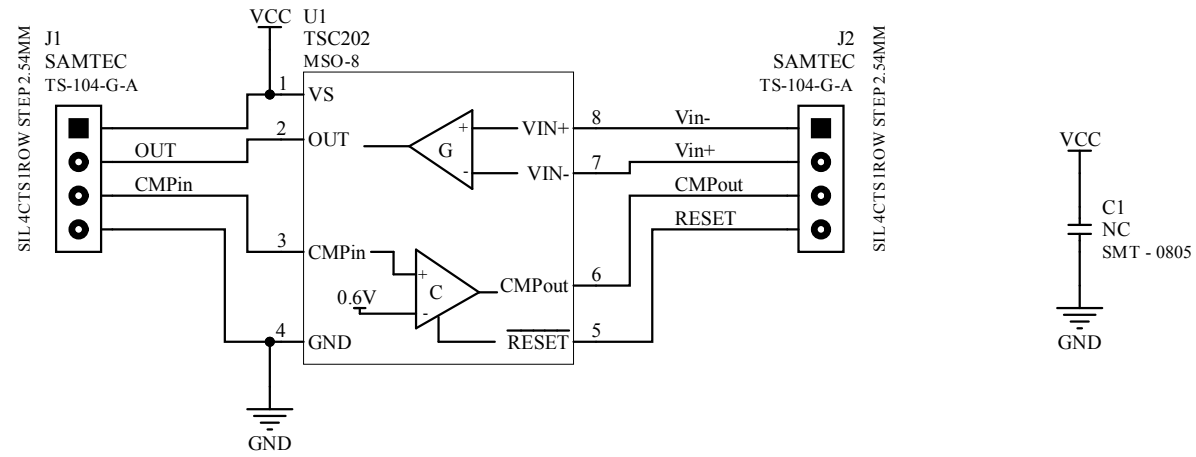


Figure 4. STEVAL-AET34V1B (daughter board) circuit schematic

The STEVAL-AET34V1B board is not available for separate sale.



2 Kit versions

Table 1. STEVAL-AETKT3V1 versions

PCB version	Schematic diagrams	Bill of materials
STEVAL\$AETKT3V1A ⁽¹⁾	STEVAL\$AEKT3V1A schematic diagrams	STEVAL\$AEKT3V1A bill of materials

1. This code identifies the STEVAL-AETKT3V1 evaluation kit first version. The kit consists of the STEVAL-AET31V1B mother board whose version is identified by the code STEVAL\$AET31V1BA, the STEVAL-AET32V1B daughter board whose version is identified by the code STEVAL\$AET32V1BA, the STEVAL-AET33V1B daughter board whose version is identified by the code STEVAL\$AET33V1BA and the STEVAL-AET34V1B daughter board whose version is identified by the code STEVAL\$AET34V1BA.

Revision history

Table 2. Document revision history

Date	Revision	Changes
19-Sep-2024	1	Initial release.

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