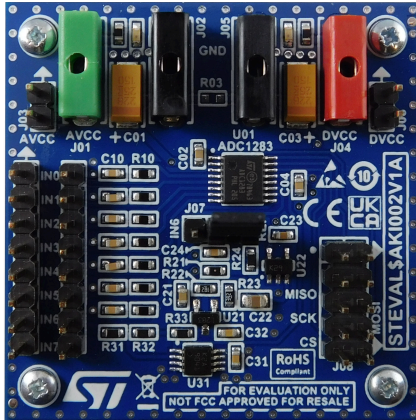


Evaluation board for the ADC1283 8-channel, 50 to 200 ksps, 12-bit analog to digital converter



Features

- 12-bit ADC implementing SAR technology
- 50 to 200 ksps conversion rate
- 8 to 1-channel input MUX
- 2.7 to 5.5 V operating supply
- SPI, serial digital output
- Very low power consumption
- RoHS compliant

Description

The [STEVAL-AKI002V1](#) evaluation board allows the user to evaluate the conversion performance of the [ADC1283](#) 8-channel analog-to-digital converter designed for 50 to 200 ksps conversion.

The board can accept external signals to allow measurement and evaluation of the [ADC1283](#) conversion performance based on its successive approximation register (SAR) with the internal track-and-hold cell.

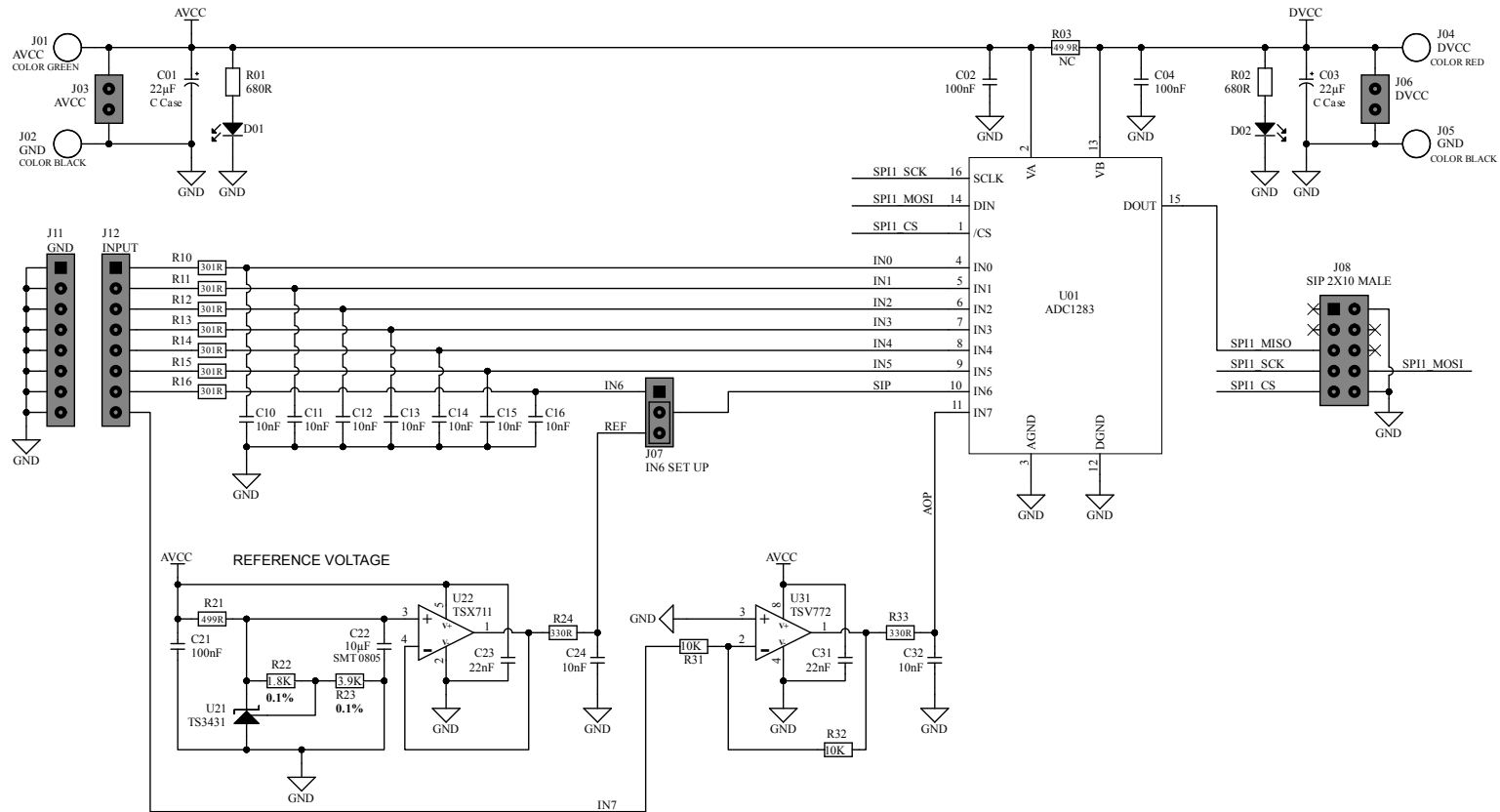
A reference voltage is also present on the board and can be connected to one of the channels through a jumper.

The board is supplied in ready-to-use in standalone mode, or it can be connected to a [NUCLEO-L476RG](#) board with a STM32 microcontroller, which enables further signal processing and PC communication. This product can be used with the [STSW-AKI](#) GUI.

Product summary	
Evaluation board for the ADC1283 8-channel, 50 to 200 ksps, 12-bit analog to digital converter	STEVAL-AKI002V1
Graphical user interface for the STEVAL-AKI001V1/ STEVAL-AKI002V1 boards	STSW-AKI
8-Channel, 50ksps to 200ksps, 12-Bit A/D Converter	ADC1283
STM32 Nucleo-64 development board with STM32L476RG MCU	NUCLEO-L476RG
Applications	Motor control

1 Schematic diagram

Figure 1. STEVAL-AKI002V1 circuit schematic



COMMENT

- All passives components without package indication are SMT-0603 package
- All test jack components without package indication are HORIZONTAL TEST JACK 2MM package
- All connector without package indication are MALE HEADER SIP with 2.54 mm STEP package

2 STEVAL-AKI002V1 versions

Table 1. STEVAL-AKI002V1 versions

PCB version	Schematic diagrams	Bill of materials
STEVAL\$AKI002V1A ⁽¹⁾	STEVAL\$AKI002V1A schematic diagrams	STEVAL\$AKI002V1A bill of materials

1. This code identifies the STEVAL-AKI002V1 expansion board first version. It is printed on the board PCB.

Revision history

Table 2. Document revision history

Date	Revision	Changes
08-Mar-2023	1	Initial release.

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