

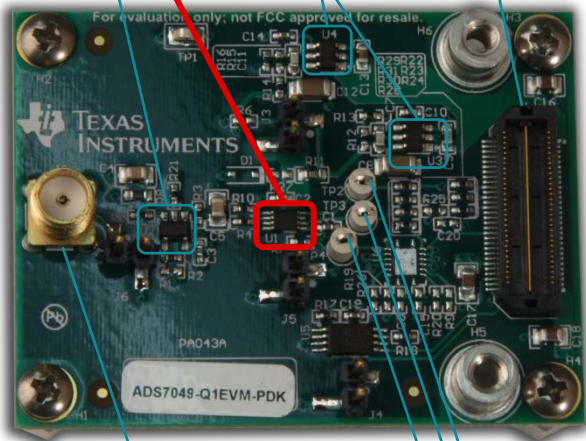
ADS7049-Q1 EVM Board

ADS7049-Q1 ADC

PRECISION HOST INTERFACE
BOARD (PHI) CONNECTOR

OPA365-Q1 ADC Driver

TPS791-Q1



SPI nCS Test Point

SPI SCLK Test Point

SPI SDO Test Point

SMA Input Connector

More information about Precision Analog SAR ADCs can be found at <http://www.ti.com/precisionadc>

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Quick Start Guide: ADS7049-Q1EVM-PDK

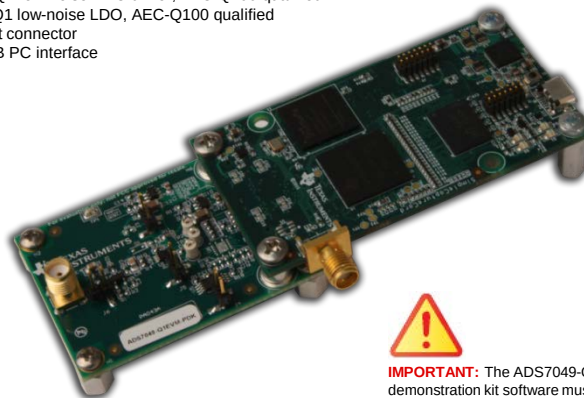


TEXAS INSTRUMENTS

The ADS7049-Q1 Performance Demonstration Kit (PDK) is ideal for evaluating and starting development with the Q100 Grade 1 automotive-qualified ADS7049-Q1 precision analog to digital converter. This kit is comprised of a ADC evaluation board (EVM), a precision host interface board (PHI), a micro USB cable and board attachment screws. An easy-to-use PC-based application (GUI) is available to help evaluate the performance of the ADC on the ADS7049-Q1 EVM.

ADS7049-Q1EVM-PDK Features:

- ADS7049-Q1 12-bit, 2 MSPS SAR ADC, AEC-Q100 qualified
- OPA365-Q1 low-noise ADC driver, AEC-Q100 qualified
- TPS791-Q1 low-noise LDO, AEC-Q100 qualified
- SMA input connector
- Micro USB PC interface



IMPORTANT: The ADS7049-Q1 performance demonstration kit software must be installed before the USB cable is plugged into the PC.
[The software may be downloaded from](http://www.ti.com/tool/ADS7049-Q1EVM-PDK)
<http://www.ti.com/tool/ADS7049-Q1EVM-PDK>

The complete user guide for the kit can be found at
<http://www.ti.com/lit/sbau280>

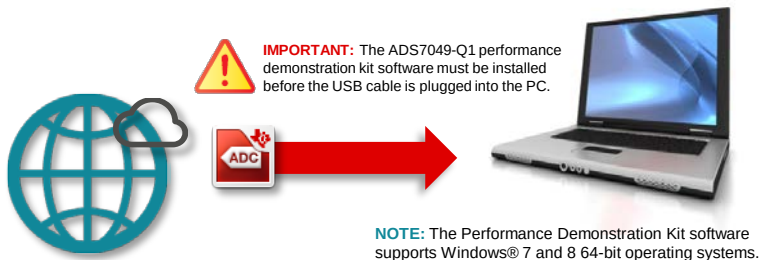
Quick Start Guide: ADS7049-Q1EVM-PDK

Performance Demonstration Kit

1

Download and install the ADS7049-Q1EVM-PDK GUI Software

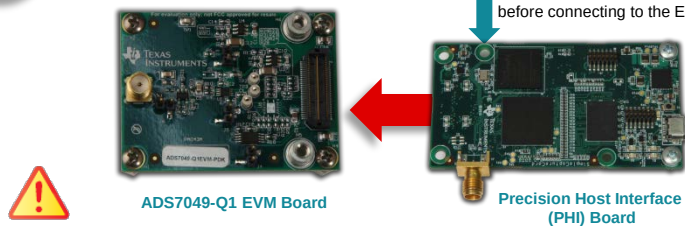
<http://www.ti.com/tool/ADS7049-Q1EVM-PDK>



2

Connect the Precision Host Interface (PHI) Board to the ADS7049-Q1 EVM

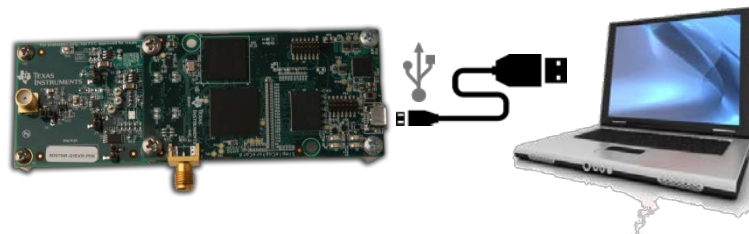
NOTE: Remove the standoff if installed on the PHI Board before connecting to the EVM.



IMPORTANT: The included screws should be used to make a secure connection between the two boards to avoid damage.

3

Connect the micro USB cable to the Precision Host Interface Board and the PC

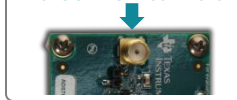


4

Launch the ADS7049-Q1EVM-PDK GUI software on the PC from the Start menu

An input signal can be connected to the EVM's SMA connector and conversion results can be viewed using the GUI software.

INPUT SIGNAL SMA CONNECTOR



The GUI software also include data analysis tools to evaluate the ADC's DC, AC and settling parameters.



Technical support for Precision ADCs can be found at <http://www.ti.com/precisionadcsupport>



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