

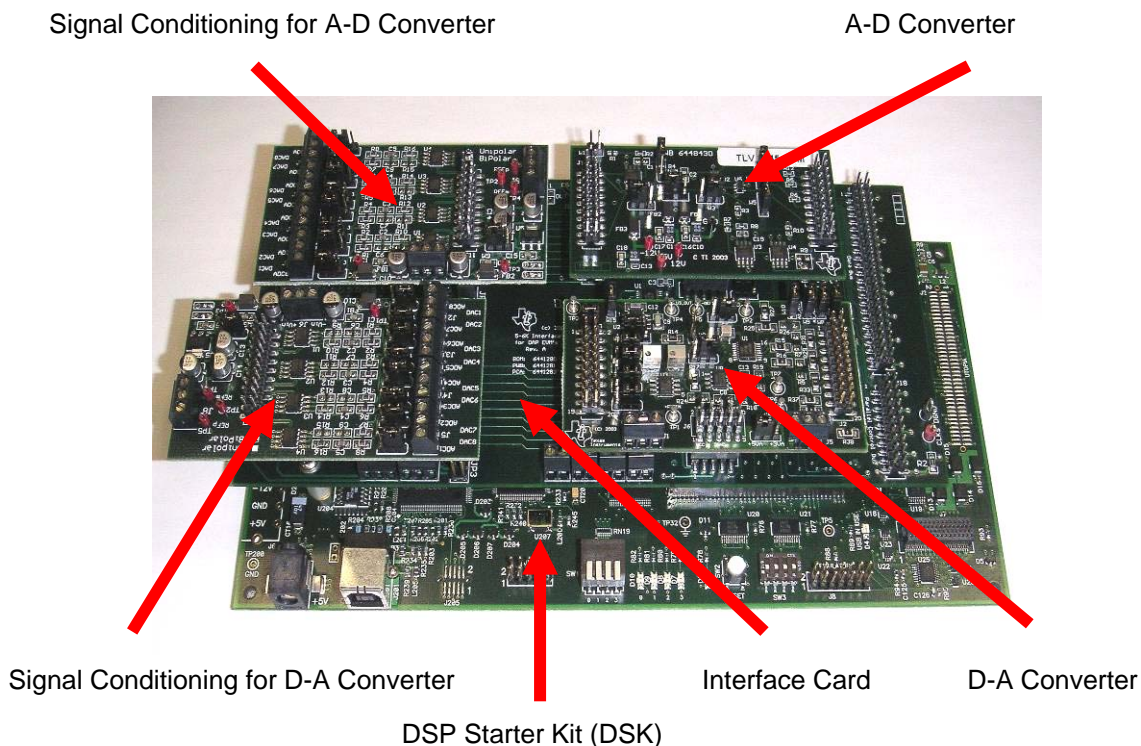
Signal Chain Prototyping System

Our latest Analog Mini-EVMs make a complete Signal Chain Prototyping System

The new Signal Chain Prototyping System allows design engineers to evaluate the complete signal chain without custom hardware. Using the boards together, a complete signal processing system can be built in minutes just by stacking cards on top of each other. Comparisons of different converters are easily facilitated without having to rebuild the system (just change the EVMs). This gives engineers the opportunity to demonstrate different applications such as the implications of 8-bit versus 14-bit different word-lengths. The system consists of:

- Amplifier with the DAP signal conditioning board
- A-to-D converter with the data converter EVMs
- Signal processing with DSK connected via the 5-6K interface card or the HPA –MCU Interface card
- D-to-A converter with the data converter EVMs
- Amplifier with the DAP signal conditioning board

All the mini-EVMs listed in this brochure are compatible with both the 5-6K and the HPA-MCU Interface cards.



Software: Texas Instruments Data Converter Support Plug-in

The first of its kind, the data converter support plug-in tool (DCP) accelerates the creation of the data converter interface and configuration software. It is fully integrated into Code Composer Studio and its graphical user interface (GUI) allows easy selection of interface software, configuration functions and options for the user's data converter + DSP combination. The data converter support plug-in is only available for TI's data converters and is included with Code Composer Studio. A list of all supported data converters and an updated version can be found at www.ti.com/sc/dcplug-in.

Interface Card for the C5000 and C6000 DSKs:

5-6K Interface Card

Part#: 5-6KINTERFACE

\$49

<http://focus.ti.com/docs/toolsw/folders/print/5-6kinterface.html>

Regardless of the interface type, all EVMs compatible with the 5-6K Interface Board have a standard connector. The 5-6K Interface board is intended to provide Data Converter customers with the greatest amount of flexibility for the evaluation of Data Acquisition Products from Texas Instruments.

The Interface Board maintains a compatible Interface with the TMS320 series of Digital Signal Processors (DSP) according to the guidelines set in the TMS320 Cross-platform Daughtercard Specification (SPRA711).



Interface Card for the C2000 DSK:

HPA-MCUINTERFACE Evaluation Module

Part#: HPA-MCUINTERFACE

\$49

<http://focus.ti.com/docs/toolsw/folders/print/hpa-mcuinterface.html>

The HPA-MCU Interface board is intended to provide Data Converter customers with the greatest amount of flexibility for the evaluation of Data Acquisition.

The Interface Board maintains compatible interface with the TMS320 Series of Digital signal Processors (DSP's) Including TMS320LF2407, TMS320F2808 and the TMS320F2812.

Features:

- The interface board communicates through 9-pin D, CAN and RS232
- Signal Conditioning sites provided by two 20 pin analog I/O headers
- All power connectors are screw terminals for more secure connections
- Analog I/O connectors provide 8 single ended or 4 differential channels



Data Acquisition Product (DAP):

Signal Conditioning Board (Unipolar & Bipolar)

Part#: DAPSIGCNDBRDUNPEVM

\$49

<http://focus.ti.com/docs/toolsw/folders/print/dapsigcnbrdunpevm.html>

Part#: DAPSIGCNDBRDBPEVM

\$49

<http://focus.ti.com/docs/toolsw/folders/print/dapsigcnbrdbpevm.html>

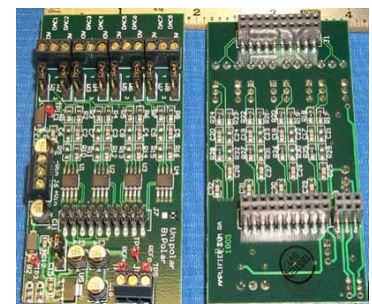
Both Signal Conditional Boards can be used with the 5-6K Interface card and the C2000 Interface board. This signal conditioning boards provide up to eight single ended or four differential conditioning channels for use with a wide selection of data converter evaluation boards.

While the Signal Conditioning Board can serve as a stand-alone amplifier for many applications, its primary purpose is to be used as an interface for data acquisition evaluation boards.

Features:

Four single-supply OPA2350 operational amplifiers operate at 0 and +5 volts for the unipolar version.

- Four dual supply OPA2132 operational amplifiers operate at $\pm 12V$
- The board contains jumpers and additional component locations that provide a variety of configuration options.



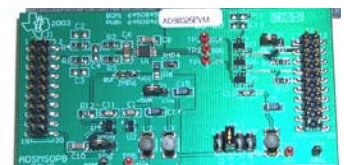
ADS8325, 16-Bit, 100KSPS ADC, serial out EVM:

ADS8325 Evaluation Module **Part#: ADS8325EVM**

\$49

<http://focus.ti.com/docs/toolsw/folders/print/ads8325evm.html>

The Modular MSOP6 Evaluation Module is an updated version of the popular Burr Brown DEM-MSOP8 evaluation board. The EVM is designed so that a single printed wiring board (PWB) supports a variety of high speeds 12 and 16 bit serial ADC's including the following: ADS7816, ADS7817, ADS7818, ADS7822, ADS7834, ADS7835, ADS8320, ADS8321, ADS8324 & ADS8325. The Modular EVM form factor allows for direct evaluation of the ADC's performance and operating characteristics



Applications: Battery-operated systems, Remote data acquisition, Isolated data acquisition, Simultaneous sampling, multi-channel systems, Industrial controls and Robotics

Features:

- 16-bits no missing codes
- Very low noise: 3LSBp-p
- Excellent linearity: ± 1.5 LSB typ
- *microPower*: - 4.5mW at 100kHz
-1mW at 10kHz
- Pin-compatible with the ADS7816, ADS7822, ADS7826, ADS7827, ADS7829 and ADS8320
- Serial (SPI™/SSI) Interface

ADS7953, 12/10/8-Bit 1MSPS 2 ADCs, 16 channels, serial out data converter EVM:

ADS7953 Evaluation Module Part#: ADS7953EVM **\$49**
<http://focus.ti.com/docs/toolsw/folders/print/ads7953evm.html>

The ADS7953EVM is an evaluation module for the 12/10/8-bit multi-channel ADS7953 analog-to-digital converter family. The EVM is provided with the 12-bit ADS7953, the 10-bit ADS7957 or the 8-bit ADS7961. The EVM provides access to all of the features found within the device including GPIO and Alarm functions. The flexible board layout can accommodate the 4/8 channel devices as well.



Applications: PLC/IPC, Battery Powered Systems, Medical Instrumentation, Digital Power Supplies, Touch Screen Controllers, High Speed Data Acquisition Systems and High-Speed Closed-Loop Systems

Features:

- All support circuitry for the ADS79xx family of ADCs
- EVM Layout for 4/8/12 or 16 channels
- Voltage reference options: external or on board
- Analog input to CH0 can be direct coupled or OpAmp buffered
- Compatible with the TI Modular EVM Systems

DAC9881, 18-Bit Single Channel D-A Converter, serial input EVM:

DAC9881 Evaluation Module Part#: DAC9881EVM **\$75**
<http://focus.ti.com/docs/toolsw/folders/print/dac9881evm.html>

The DAC9881EVM evaluation module is designed for quick and easy evaluation of the 18-bit performance, voltage-output, single-channel serial input DAC9881. This EVM is designed to work by default for unipolar output range, but it can also be configured for bipolar output range with the addition of an external amplifier and some resistors. The voltage reference configuration implemented uses the Kelvin connection. This connection helps minimize the internal errors caused by changing reference current and its associated circuit impedances.



Applications: Automatic Test Equipment, Precisions Instrumentation, Industrial Control and Data Acquisition Systems.

Features:

- Bipolar and Unipolar mode supported
- An external +5V precision reference is included
- Kelvin sense connection is implemented in the reference circuit
- Test points included to allow users own external reference
- Flexible power supplies for AVDD and IOVDD
- Daisy chaining multiple EVMs is supported

TLC3578, EVM Bipolar-input 8 channel, 14-bit Serial analog-to-digital Converter:

TLC3518 Evaluation Module Part#: TLC3578EVM **\$49**
<http://focus.ti.com/docs/toolsw/folders/print/tlc3578evm.html>

The TLC3548 EVM is designed to support the following IC's: TLC3578 (8-channel, 14-bit, bipolar input), TLC3574 (4-channel, 14-bit, bipolar input), TLC3548 (8-channel, 14-bit, unipolar input), TLC3544 (4-channel, 14-bit, unipolar input), TLC2578 (8-channel, 12-bit, bipolar input), and TLC2274 (4-channel, 12-bit, bipolar input).



Applications: Industrial Control, Test Equipment, Digital signal acquisition and Motor Control

Features:

- 14-Bit Resolution for TLC3574/78, 12-Bit for TLC2574/2578
- Maximum Throughput 200-KSPS
- Multiple Analog Inputs
- 8 Single-Ended Channels for TLC3578/2578, 3548
- 4 Single-Ended Channels for TLC3574/2574, 3544
- Analog Input Range: $\pm 10V$
- Low Power

DAC8534, Quad Channel, 16-Bit, serial input EVM:

DAC8534 Evaluation Module Part#: DAC8534EVM **\$49**
<http://focus.ti.com/docs/toolsw/folders/print/dac8534evm.html>

The EVM features the DAC8534 digital-to-analog converter. The DAC8534EVM is a simple evaluation module designed for a quick and easy way to evaluate the functionality and performance of the high resolution, quad-channel, and serial input DAC.



Applications: Portable Instrumentation, Closed-loop servo-control, Process control, Data acquisition systems and PC Peripherals

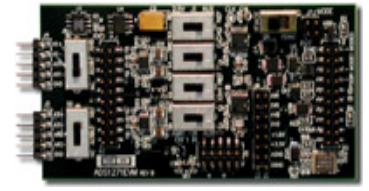
Features:

- Power supply: +2.7V to +5.5V
- *MicroPower* operation: 950 μ A at 5V
- 16-bit monotonic over temperature
- Double buffered input architecture
- Ultra-low AC crosstalk: -100dB typ
- Power-on reset to zero-scale
- On-chip output buffer amplifier with rail-to-rail operation

ADS1278, 24-bits, 105KSPS ADS1271 Evaluation module:

ADS1278 Evaluation Module Part#: ADS1278EVM **\$99**
<http://focus.ti.com/docs/toolsw/folders/print/ads1278evm.html>

The ADS1278EVM is a modular EVM form factor, which allows direct evaluation of the ADS1278 multi-channel, delta sigma analog-to-digital converter (ADC).



Applications: Vibration/Mode Analysis, Acoustics, Pressure Sensors and Dynamic Strain Gauges

Features:

- Contains all support circuitry for the ADS1278
- +10V & -10V generated from the +5V supply or externally supplied

THS1206M, 12-bit, 6 MSPS ADC Quad ch. Integ. 16xFIFO, THS1206M Evaluation Module:

THS1206M Evaluation Module Part#: THS1206M-EVM **\$49**
<http://focus.ti.com/docs/toolsw/folders/print/ths1206m-evm.html>

This EVM consists of high-speed, low power, 10 and 12-bits ADCs that operate from independent 5V, Avdd, and 3.0-5.25V, DVdd, supplies.



Features:

- High-Speed 6 MSPS ADC
- 4 Analog Inputs

Applications:

- Communications, Radar
- Control Application

Prices valid as of 1st August 2009

Product Support:

Europe, Middle East and Africa
www.ti.com/europe/csc



Important Notice: The products and services of Texas Instruments Incorporated and its subsidiaries described herein are sold subject to TI's standard terms and conditions of sale. Customers are advised to obtain the most current and complete information about TI products and services before placing orders. TI assumes no liability for applications assistance, customer's applications or product designs, software performance, or infringement of patents. The publication of information regarding any other company's products or services does not constitute TI's approval, warranty or endorsement thereof.