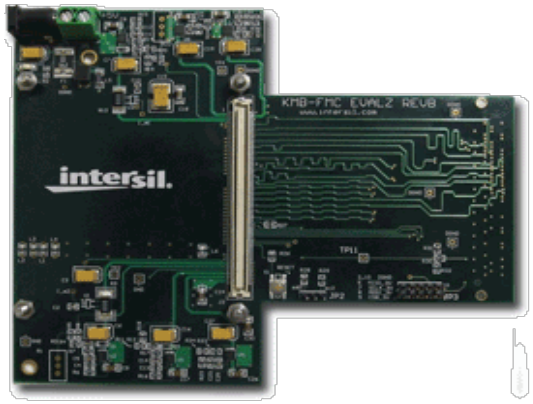
Evaluation Platform



Enlarge +

Description

Intersil offers two options for evaluating high-speed Analog-to-Digital converter products. A complete, turnkey evaluation platform is available, which includes data capture hardware and software to process and display acquired data. This system provides the fastest and easiest path to evaluating an ADC since no additional software coding is required of the user. The second option is an adapter board that facilitates connection of an ADC daughter card to an FMC-based FPGA development board. This solution offers greater flexibility since the user has full access to the FPGA functionality and can therefore perform signal processing operations and/or "hardware in the loop" simulations. No software is provided for this option since there are a wide variety of supported FGPA development boards.

Attribute	Complete Evaluation Platform	FMC Motherboard
Motherboard	KMB-001LEVALZ: LVDS interface KMB001CEVAL: CMOS interface	KMB-FMC-EVALZ
Motherboard contains FPGA	Yes	No
Capture Memory	1 million words	Depends on FPGA development board
Uses ADC Daughter Card	Yes	Yes
Includes Konverter Analyzer for processing and displaying acquired data	Yes	No
Allows access to FPGA code	No	Yes
Allows for "hardware in the loop" simulations	No	Yes

FMC Motherboard

The FMC (FPGA Mezzanine Card) standard was developed by a group of embedded system vendors along with Xilinx and Samtec under the auspices of the VITA Standards Organization, and is described in VITA 57. More information on the FMC standard can be found on the VITA web site. Intersil's FMC adapter board (KMB-FMC-EVALZ) primarily serves to adapt the mezzanine connector used on the ADC daughter cards to a standard low-pincount FMC connector. It also provides filtered and regulated supplies for the connected daughter card. Numerous FPGA developments boards adhering to the FMC standard are available from Xilinx and other member companies in the FMC Marketing Alliance. Note that the FMC-based motherboard merely provides a mechanical and electrical connection between an ADC daughter card and a user-supplied FPGA development board. There is no FPGA on the adapter, and no software or FPGA code is provided as part of this solution. Further details and usage guidelines can be found in the FMC Motherboard User's Guide (AN1665).

an1665.pdf

Schematics and layouts for the evaluation boards are linked to the individual product pages and are available in PDF format.

Ordering Guide

This spreadsheet shows the appropriate evaluation kit part numbers based on the ADC that is to be tested.

Eval Board Part Numbers.xls

Konverter Analyzer Quick-Start: First-Time Installation

Download the MATLAB Component Runtime installer.

MCRInstaller7.13.exe

Download the Intersil Konverter Analyzer installer.

IntersilKonverterInstallerV1.22c.exe

Download the Konverter Installation Guide (AN1434) and follow the detailed instructions contained within that document.

an1434.pdf

After the software is installed, read the Intersil Konverter Analyzer User's Guide (AN1433) for detailed operating instructions.

an1433.pdf

Konverter Analyzer Software Update

The Intersil Konverter Analyzer GUI can be updated to the latest version as follows:

Uninstall Konverter: Start Menu → All Programs → Intersil Konverter Analyzer → Uninstall
Download and run the Intersil Konverter Analyzer installer.

IntersilKonverterInstallerV1.22c.exe

If an older version of the MATLAB Component Runtime engine is installed, then the latest version must be installed.

MCRInstaller7.13.exe