

EAA 4-2-1

Embedded Audio Analyzer

What you hear and how people hear you constitute an important part of the user experience of electronic devices. Audio measurement and analysis is usually performed with multiple data acquisition cards and extensive cabling which may result in signal interferences and unreliable test results. Additionally only raw data is usually transferred to computer for analysis which loads the computer system heavily

With EAA 4-2-1 audio testing is comprehensive and easy.



Audio performance test

Audio line test

Digital audio test

Microphone test

Speaker test

WHAT IS IT

EAA 4-2-1 is an embedded audio analyzer with built-in analysis functions. Raw data is analyzed within the unit, and only the measurement results are transferred to computer.

A very compact size enables integrating the analyzer in various environments where it can be used close to the signal source in order to prevent signal interferences.

EAA 4-2-1 can be integrated in Chameleon test platforms and other test environments, or it can be used as a stand-alone measurement device.

WHERE'S THE BENEFIT

One test instrument instead of multiple data acquisition cards and cabling provides a more reliable and cost-efficient audio test solution.

Minimized signal interferences guarantee more reliable test results and overall product quality.

EAA 4-2-1 comes with an easy-to-use desktop application for audio test design and analysis.

Built-in analysis functions reduce the computer system load and overall testing time.

TECHNICAL DATA



TECHNICAL DETAILS

Dimensions (l x d x h)
105x123x44mm (4.13x4.84x1.73in)
Operating temperature
15-35°C (59-95°F)
Audio inputs 4pcs

- Balanced 4dBu signal level, 24bit

Audio outputs 2pcs

- Balanced 4dBu signal level, 24bit

Up to 4 digital microphone inputs (PDM)
Voltage measurement
4 IO lines
Controlling via LAN
NI sbRIO digital board
CE safety compliant



TEST FEATURES

Audio input

- Amplitude measurements (RMS, Vp, Vpp and dBu)
- Frequency
- Total harmonic distortion + noise (THDN)
- Fast fourier transform (FFT) with available raw data
- Analog to digital conversion (ADC) with available raw data
- Peak values

Audio Output

- Single tone
- Dual tone
- Multi tone
- Noise
- Chirp
- Wav file

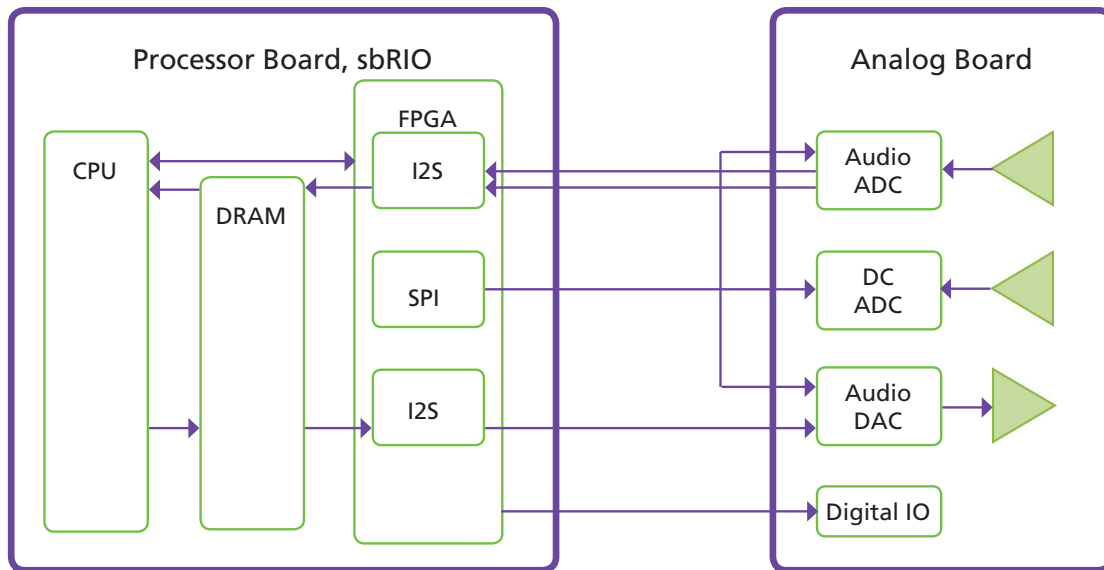
Voltage measurement range

- ±4.5V-±45V
- Digital IO interface
Digital audio SPDIF



USE CASES

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Speaker test



EAA 4-2-1 Functional Diagram

RE-THINK YOUR TESTING!

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