NOFFZ TECHNOLOGIES

INFOTAINMENT TEST DEVICE ITD 1024

AUTOMOTIVE AUDIO BUS® (A²B®) TRANSCEIVER

PRODUCT

Application Areas: R&D, Production, Test, Validation and Screening

NATIONAL INSTRUMENTS Platinum Alliance Partner · SIEMENS Solution Partner Automation · TÜVRheinland ZERTIFIZIERT Management System ISO 9001:2015 · csia control system integrators association CERTIFIED

FAST › FLEXIBLE › FOCUSED

Automotive Audio Bus

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ITD 1024 is an off-the-shelf solution for A²B®, an emerging automotive audio bus. In combination with a comprehensive set of software tools, ITD 1024 allows for rapid testing of various A²B® components such as audio speakers, amplifiers, microphone arrays, sensors, and actuators.

Front

Rear

ITD 1024 FEATURES

- Master or Slave node simulation
- AD2433 chipset
- Compatible with AD240x, AD241x, AD242x, and AD243x standard power transceivers
- 44.1 kHz and 48 kHz sampling rate
- Local and phantom power support for slave nodes
- Configurable phantom power voltage level
- Integrated A²B® bus voltage and current monitor
- Node-level I²C device handling, interrupts processing, GPIO handling
- A²B® diagnostics and error management support
- Selectable audio interface: Internal TDM interface, Analog audio or External audio
- Flexible audio channel routing
- Galvanic isolated A²B® network

INTERNAL TDM INTERFACE FEATURES

- 32-bit programmable TDM generator/recorder
- 16 input channels, 16 output channels
- Signal generation with programmable waveform
- Digital file playback
- Continuous data record and playback to and from PC
- Simultaneous recording of all channels to a memory
- Hardware trigger input for synchronization

ANALOG AUDIO INTERFACE FEATURES

- 24-bit audio codec
- 8 input channels, 8 output channels

DSIO (EXTERNAL AUDIO) INTERFACE FEATURES

- Multichannel TDM interface
- Designed for connecting external digital audio devices

SDK FEATURES

- SCPI protocol for external device control
- .NET Framework DLL for Windows
- NI LabVIEW API for automated test integration
- Quick and easy A²B® network configuration with AD SigmaStudio™, examples and templates
- ITD 1024 Management Utility for device configuration
- ITD Studio Application for interactive bus operation and control

INTEGRATED END NODE SLAVE

- 2nd integrated A²B® chipset for end node simulation
- Designed for testing the Port B of a slave A²B® DUT
- AD2433 chipset
- Integrated I²C peripheral devices and IOs
- It is possible to measure the phantom power from the previous device in the A²B® chain

TECHNICAL DATA

Interfaces

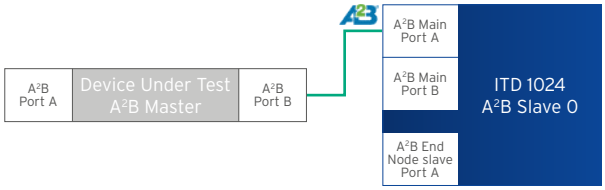
A²B® Main Node	AD2433, Port A and Port B, industrial grade connectors
A²B® End Node Slave	AD2433, Port A, industrial grade connectors
Communication Interface	Ethernet (RJ-45) USB
Analog Audio	D-sub 37 8 differential analog outputs 8 single-ended analog inputs
External DSIO	D-sub 15 External digital audio devices Trigger Input

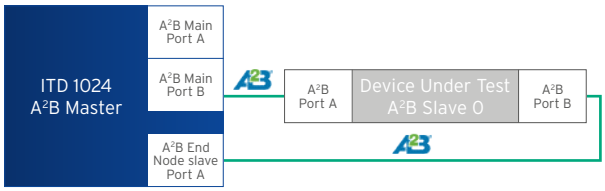
Power Requirements

Voltage	10 - 36 VDC
Current (max.)	1.25 A at 12 V
Power Supply (included)	100 - 240 VAC/50 - 60 Hz

Physical Specifications

Dimensions	190 x 55 x 121 mm (W x H x D)
Weight	865 g





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