



ITD 1024

INFOTAINMENT TEST DEVICE
AUTOMOTIVE AUDIO BUS® (A²B®) TRANSCEIVER



PRODUCT

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



SIEMENS



Management System
ISO 9001:2015
www.noffz.com
ID: 910011383



FAST > FLEXIBLE > FOCUSED



**Automotive
Audio Bus**



NOFFZ
TECHNOLOGIES

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.

A²B[®] FEATURES

- › 50 Mbps data rate
- › Up to 32 independent up- and downstream channels
- › Single master, multiple slave (up to 10) line topology
- › Up to 15 m between nodes and up to 40 m overall cable length
- › 44.1 kHz and 48 kHz sampling rate, up to 32-bit audio

ITD 1024 FEATURES

- › Master or Slave node simulation
- › Compatible with AD240x, AD241x, AD2442x and AD242x transceivers
- › Local and phantom power (up to 300 mA) support for slave nodes
- › Configurable phantom power voltage to simulate the specific nodes in the A²B[®] chain (sw-option)
- › Node-level I²C device handling
- › Interrupts support
- › GPIO handling
- › A²B[®] diagnostics and error management support
- › Selectable audio interface: Internal TDM interface, Analog audio or External audio

INTERNAL TDM INTERFACE FEATURES

- › 32-bit multichannel TDM generator/recorder
- › 16 output channels, 16 input channels
- › Signal generation: sine or square wave with programmable amplitude, frequency and duty cycle (sw-option)
- › Signal recording: simultaneous recording of all channels (sw-option)

ANALOG AUDIO INTERFACE FEATURES

- › 24-bit multichannel In/Out audio codec with TDM interface
- › 8 input channels, 8 output channels

DSIO (EXTERNAL AUDIO) INTERFACE FEATURES

- › Multichannel TDM interface
- › Active (Master) or passive (Slave) TDM configuration

SDK FEATURES

- › SCPI protocol for external device control
- › LabVIEW API for automated test integration
 - NI LabVIEW 32- and 64-bit support
- › Quick and easy A²B[®] network configuration with AD SigmaStudio™, examples and templates
- › ITD 1024 Management Utility
 - Search devices in local area network
 - Configure network parameters
 - Perform software updates



TECHNICAL DATA

ITD 1024

Interfaces

A²B[®]	Industrial grade connectors
PC Communication	Ethernet (RJ 45)
Audio	Digital serial I/O interface 8 differential analog Outputs (D-sub) 8 single-ended analog Inputs (D-sub)
Reset	Button Additionally, electrically triggerable

Power Requirements

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

Physical Specifications

Dimensions	170 mm x 55 mm x 121 mm (W x H x D)
Weight	830 g

INTEGRATED ENDNODE SLAVE

- › 2nd integrated A²B[®] chipset for end node simulation
- › It is possible to measure the phantom power from the previous device in the A²B[®] chain
- › The additional A²B[®] end node is ideal for additional testing of the A²B[®] port on a DUT



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