



Actual Size!

VL-ADR-01

USB to Audio Adapter

Overview

The ADR-01 is a wide temperature audio input / output card. It provides standard stereo PC audio inputs and outputs for embedded single board computers that do not have on-board audio capabilities. It operates with systems running Windows and Linux using standard USB audio drivers.

The ADR-01 plugs into a standard USB 2.0 port to take advantage of the built-in OS support for audio input and output.

As with all VersaLogic products, the VL-ADR-01 is designed to support OEM applications where high reliability and long-term availability are required. From application design-in support, to 10+ year extended availability, the VL-ADR-01 provides durable audio capabilities with an excellent cost of ownership.

Tailor a Module to Your Exact Requirements

Product customization is available, even in low quantities. Options include conformal coating, application-specific testing, BOM revision locks, special labeling, and more.

Ordering Information

Model	Function	Operating Temp.
VL-ADR-01S	USB to Stereo Audio Adapter, RoHS	-25°C to +85°C

Accessories

Part Number	Description
Cables	
VL-CBR-0503	0.5m USB 2.0 Male A to Male Micro-B Cable
Hardware	
VL-HDW-105	0.6" standoff package (metric thread)
VL-HDW-106	0.6" standoff package (English thread)

Call VersaLogic Sales at (503) 747-2261 for more information!

Specifications

General	
Board Size	40 mm x 50 mm (1.58" x 1.97")
Power Requirements (+5V)	352 mW (supplied by USB host interface)
Manufacturing Standards	IPC-A-610 Class 2 compliant
RoHs	Compliant

Environmental		
Operating Temperature	Temp. Range	Altitude
	-25°C to +85°C	Derate -1.1°C per 305m (1,000 ft.) above 2,300m (7,500 ft.).*
Storage Temperature	-40° to +85°C	
Altitude	Operating *	To 15,000 ft. (4,570m)
	Storage	To 40,000 ft. (12,000m)
Cooling	None (fanless)	
Airflow Requirements	None (free air)	
Thermal Shock	5°C/min. over operating temperature.	
Humidity	Less than 95%, noncondensing.	
Vibration, Sinusoidal Sweep †	MIL-STD-202G, Method 204, Modified Condition A: 2g constant acceleration from 5 to 500 Hz, 20 min. per axis.	
Vibration, Random †	MIL-STD-202G, Method 214A, Condition A: 5.35g rms, 5 min. per axis.	
Mechanical Shock †	MIL-STD-202G, Method 213B, Condition G: 20g half-sine, 11 msec. duration per axis.	

Device I/O		
Host Interface	USB Micro-B receptacle. Fully compliant with the USB 2.0 Specification	
Audio Controller	Texas Instruments PCM2906C stereo audio codec. USB full-speed protocol controller, and S/PDIF.	
Audio Input/Output	Connector	Signal Characteristics
	Line Input - Stereo 3.5 mm jacks	10 kΩ minimum
	Line Output - Stereo 3.5 mm jacks	600 Ω (to drive a 10 kΩ load)
On-Board Controls	Push-button switches for Volume Up, Down, and Mute.	
Auxiliary Connector	2x6 2 mm header for audio in/out and volume controls (push button volume up, volume down, and mute).	

Software	
Operating Systems	Compatible with USB 2.0 drivers in most x86 operating systems including Windows, Windows Embedded, and Linux.

* For extended altitude information contact VersaLogic Sales Dept.

† MIL-STD-202G shock and vibrate levels are used to illustrate the ruggedness of this product in general. Testing to higher levels and/or different types of shock or vibration methods can be accommodated per the specific requirements of the application. Contact a VersaLogic Sales Engineer for further information.

Specifications are subject to change without notification.