iLAB

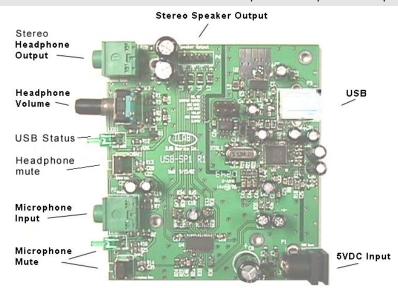
OEM Series

Preliminary Product Definition

3-SP1-S

with microphone input and headphone output

USB speaker/headphone/microphone Subassembly System



Key Features

- USB digital stereo, full-duplex enables two-way digital sound with PC or Gaming Console
- USB-IF Certified , can customize USB device and string descriptor
- USB audio controller, audio class encoder/decoder
- USB serial interface engine, USB transceiver, 2 end points (FIFO)
- Automatic detection using standard Windows 2000, Windows XP drivers
- Standard 16 bit USB audio , 8Khz/11.025KHz/22.05KHz/44.1KHz/48KHz
- Mute, Volume control operates PC volume control window
- No sound card required for PC

Description

Applications

Voice recognition Voice command and control Internet phone and chat Videoconferencing Speakerphones Headphones Microphones Headsets



The USB-SP1 is a powered stereo speaker system utilizing a USB audio and control interface. Ideal for PC speaker OEMs to adapt current models to create USB versions of their products.

Audio outputs are either stereo speaker, or stereo headphone. Audio inputs are USB and microphone. The microphone input is sent via the USB port to the PC.

Volume and mute control can be operated by either the PC or the front panel of the USB-SP1. This allows for central control, avoiding mismatched volume levels in common powered speakers/PC's.

The USB-SP1 uses the standard Windows USB drivers. The identifying code can be easily modified to display any company or brand when the USB driver detects the USB-SP1. Ideal for creating brand recognition for speaker products.

USB-SP1 Specifications

Technical Specifications

USB 1.1 specification, 16 bit

Audio Sampling Rates: 8Khz / 11.025KHz / 22.05KHz / 44.1KHz / 48KHz

Frequency Response: THD+N: -56dB (Headphone), -67dB (Mic) Signal to Noise Ratio : -75dB (headphone), -69dB (Mic) Dynamic Range: 76dB (Headphone), 69dB (Mic) Output Level Adjustment: Uses Windows USB driver Input Level Adjustment: Uses Windows USB driver

Inputs: USB type B Stereo microphone, 1/8" mini jack

Analog Audio Outputs Stereo Speaker Stereo Headphone

Technical Specifications

Speakers / Amplifier Internal 4 pin 0.1" header connector Bridged: 1.1W per channel @ 8 ohms 2.0W per channel @ 4 ohms 2.2W per channel @ 3 ohms Higher output power versions optional

Headphone Output: Stereo, 1/8" mini jack

Power Requirements 5VDC, 2.5mm input jack for powered speakers No external supply needed for headphone/microphone only version

Operating Conditions 5-45 degrees Celsius , natural convection cooling 0-90% relative humidity (non-condensing)



