



VS1073 - Incredibly Capable Audio Codec Coprocessor

Tampere, Finland, 2nd April 2025 - VLSI Solution announces VS1073, the world's most advanced audio codec coprocessor with earphone amplifier.

The VS1073 IC is a low-power mixed-signal audio coprocessor that can encode and decode a myriad of different formats. It can greatly lower the workload of a system microcontroller, freeing its time for other operations like communicating over Wi-Fi or Ethernet. To better connect with the outside world, VS1073 contains both a high-quality stereo ADC and DAC, along with an earphone amplifier capable of driving a 30-ohm load, and a **32-bit I2S** digital output.



From a hardware point of view VS1073 is a pin-compatible replacement for VLSI Solution's best-selling VS1053b and VS1063a audio coprocessors, except for the **1.2 V core voltage**, lowered from 1.85 V to 1.25 V, and contributing to a lowered total power consumption. This lower voltage is made possible by a new manufacturing process, also making it possible to maintain longevity of the chip supply, always a priority of VLSI.

VS1073 can decode (new formats in **bold**) MP3, MP2, Ogg Vorbis, FLAC, **ALAC**, **Ape**, AAC, **DSD**, **Opus**, WMA, **AC-3**, WAV, and **AIFF** files. It can encode MP3, Ogg Vorbis, **FLAC**, WAV PCM / ADPCM, G.711 or G.722. There is also a full-duplex codec mode that can handle PCM, IMA ADPCM, G.711 and G.722.

VS1073 provides a 5-band equalizer, and sound effects like a speed shifter and VLSI Solution's proprietary EarSpeaker headphone processing. It is also possible to mix PCM sound effects or audio from a stereo analog input on top of playback audio.

All these features, combined with CD-quality Analog-to-Digital and Digital-to-Analog signal path performance as well as the 30-ohm earphone amplifier, make VS1073 the first choice for a wide range of consumer and industrial applications.

VS1073 is offered in the familiar LQFP-48 7x7x1.4 RoHS compatible package.

VS1073 engineering samples are available now. Mass production is expected to start in Q3/2025.

More information, including the datasheet for VS1073, is available at <https://www.vlsi.fi/en/products/vs1073.html>



About VLSI Solution

VLSI Solution is an established Finnish IC designer and manufacturer. Within its over 30-year existence VLSI has built an extensive in-house IP library and has the capability to pull through complicated mixed-signal IC projects, ranging from digital audio to RF applications.