VT1708S

VIA Vinyl HD Audio codecs represent the next generation of sound quality, supporting the high definition HD Audio standard for a whole new immersive surround sound experience. The VIA Vinyl VT1708S is a low-power optimized, high fidelity, 8-channel High Definition audio codec which is compatible with Intel® High Definition Audio specification and supports stereo 24-bit resolution and up to 192 kHz sample rate for DACs/ADCs.

The VIA Vinyl VT1708S features four stereo DACs, two stereo ADCs, analog input to analog output mixing, and two independent S/PDIF outputs. It can achieve high performance 100 dB Signal-to-Noise Ratio (SNR) for DACs and 90 dB SNR for ADCs. A high quality analog mixer is used to support A-A path.

The VIA Vinyl VT1708S features eight integrated microphone amplifiers with four sets of adjustable Vref-out pins for microphone bias which can be programmed with 10/20/30-dB boost gain. The stereo ADCs and microphone array can support Acoustic Echo Cancellation (AEC), Beam Forming (BF), and Noise Suppression (NS) technologies for an unmatched PC audio experience.

The VIA Vinyl VT1708S uses three jack detection pins for presence detection on up to twelve audio jacks allowing software to determine if there is a device plugged into the circuit.

The VIA Vinyl VT1708S is embedded with software utilities such as environment emulation, EQ, extender, and optional sound effects, including support for QSound, DTS Connect, DTS Surround Sensation, Dolby PCEE program, Creative Audio Program and Third Party Microphone Array Technology.

Product Features

High Definition Codec

- Intel® High Definition Audio Specification Rev.1.0 Compliant
- Exceeds Microsoft® Windows® Logo Program (WLP) Requirements
- High-performance ADCs with 90dB SNR, DACs with 100dB SNR Various Output Format
- 4 Stereo DACs Output Pairs supporting 16/20/24-bit, 48/96/192/44.1/88.2 kHz sample rate
- 2 Stereo ADCs supporting 16/20/24-bit, 44.1K/48K/96K/192KHz sample rate

- 2 independent 16/20/24-bit S/PDIF TX Outputs supporting 48K/96K/44.1K/88.2 KHz sample rate

Others

- HPF In ADC Path for DC Removal
- High performance analog mixer for AA path
- Two Jack Detection Pins

Power Supply

- Digital: 3.3V
- Analog: 5V
- Built-in 5V to 4.4V LDO (Low-Dropout) Voltage Regulator
- Supports External Amplifier Power Down (EPAD)
- Power Management and Enhanced Power Saving Features

Package

- Available in 48-Pin LQFP Lead-Free and RoHS compliant package

Applications

- Desktop PCs

Americas
+1-510-687-4688 (https://web.archive.org/web/20160513060317/tel:+1-510-687-4688)
embedded@viatech.com (https://web.archive.org/web/20160513060317/mailto:embedded@viatech.com)

Europe
+39-342-5754296 (https://web.archive.org/web/20160513060317/tel:+39-342-5754296)
embedded@via-tech.eu (https://web.archive.org/web/20160513060317/mailto:embedded@via-tech.eu)

Rest of the World
+886-2-2218-5452 (https://web.archive.org/web/20160513060317/tel:+886-2-2218-5452)
embedded@via.com.tw (https://web.archive.org/web/20160513060317/mailto:embedded@via.com.tw)