The CS8422 is a digital audio interface receiver that decodes audio data according to the EIAJ CP1201, IEC-60958, AES3, and S/PDIF standards integrated with a 24-bit, high performance, asynchronous sample-rate converter. This integrated feature set removes the requirement for system platforms to vary system clocking when integrating asynchronous digital interfaces such as S/PDIF. System integrators can now maintain a constant-frequency, high-quality system clock and provide a digital interface to external devices operating at various asynchronous samples rates from 32 kHz to 211 kHz.

Audio data is input through the digital interface receiver or a 3-wire serial audio input port. Audio is output through one of two 3-wire serial audio output ports. Serial audio data outputs can be set to 24-, 20-, 18-, or 16-bit word-lengths. Data into the digital interface receiver and serial audio input port can be up to 24 bits long. Input and output data can be completely asynchronous, synchronous to an external clock through XTI, or synchronous to the recovered master clock.

The CS8422 can be controlled through the control port in software mode or in a stand-alone hardware mode. In software mode, the user can control the device through an SPI™ or I²C® control port.

Target applications include: DTVs, digital recording systems, audio video receivers and home theaters in a box, automotive applications such as amplifiers, radio head units, or telematics systems, professional audio systems such as mixing consoles or digital effects processors and computers.