

Integrated Wavetable Music Synthesizer

Features

- Integrated synthesizer combines a RISC-based DSP and a flexible CISC micro-controller on a single chip
- 32-note polyphony, 32-part multi-timbral at 31.25kHz output rate
- Dos Games compatible synthesis
- 18-bit audio output directly supports the 96 dB CS4331 Stereo DAC
- Glueless interface to external ROM/DRAM for PCM samples
- Direct support for the optional CS8905 Programmable Effects Processor
- Independent control of reverb and chorus send levels for each voice

General Description

The CS9233 is a highly integrated music synthesizer circuit designed for PC multimedia, musical instrument, Karaoke, arcade game and set-top applications. Interface logic is included on-chip for glueless connections to external memory, DAC circuitry and an optional effects processor.

When the CS9233 is combined with PCM sample data and associated firmware, full General MIDI (GM), Roland General Synthesis (GS), Microsoft Windows, and MPC level 2 compliancy is achieved (including recommendations for enhanced multi-timbral synthesizers).

In addition to standard serial MIDI I/O, a parallel ISA-bus interface has been provided, permitting emulation of the common register sets (e.g. MPU-401 UART mode) needed for DOS games compatibility.

**For more information contact
your sales representative (Chapter 7)**

