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IT9620E

Cost Effective AC'97 2.1 VSR Audio Codec with 3D Expansion

The IT9620E is a low cost 18-bit $\Sigma\Delta$ audio codec conforms to the AC'97 2.1 specification with excellent analog performance.

The IT9620E integrates a sophisticated Sample Rate Converter that can be adjusted in 1Hz increments. This makes it ideal for host-based signal processing motherboard applications that lack a hardware accelerator. The mixer circuitry integrates a stereo enhancement to provide a pleasing 3D surround effect for stereo media.

This codec is designed with aggressive power management to achieve ultra low power consumption when used with a 3.3V supply. The primary applications for this part are desktop and portable personal computers multimedia subsystems. However, it is suitable for any system requiring audio domain conversion, mixing and volume control at competitive prices.

The chip is available in a standard 48-pin LQFP (Low-Profile Quad Flat Package).

Features

- **AC'97 2.1 compliant codec**
- **18-bit stereo full duplex $\Sigma\Delta$ codec**
- **VSR (Variable Sampling Rate), 1Hz resolution**
- **3D stereo expansion for simulated surround**
- **4 stereo analog line-level inputs**
- **2 mono analog line-level inputs**
- **MIC level input switchable from two sources**
- **Second line-level output with volume control**
- **Multiple codec mode**
- **External Audio Amplifier Control**
- **Power management support**
- **Low Power consumption mode**
- **Exceeds Microsoft® PC'9x requirements**
- **3.3V, 5V or split analog/digital power supply**
- **Standard 48-pin LQFP Package**

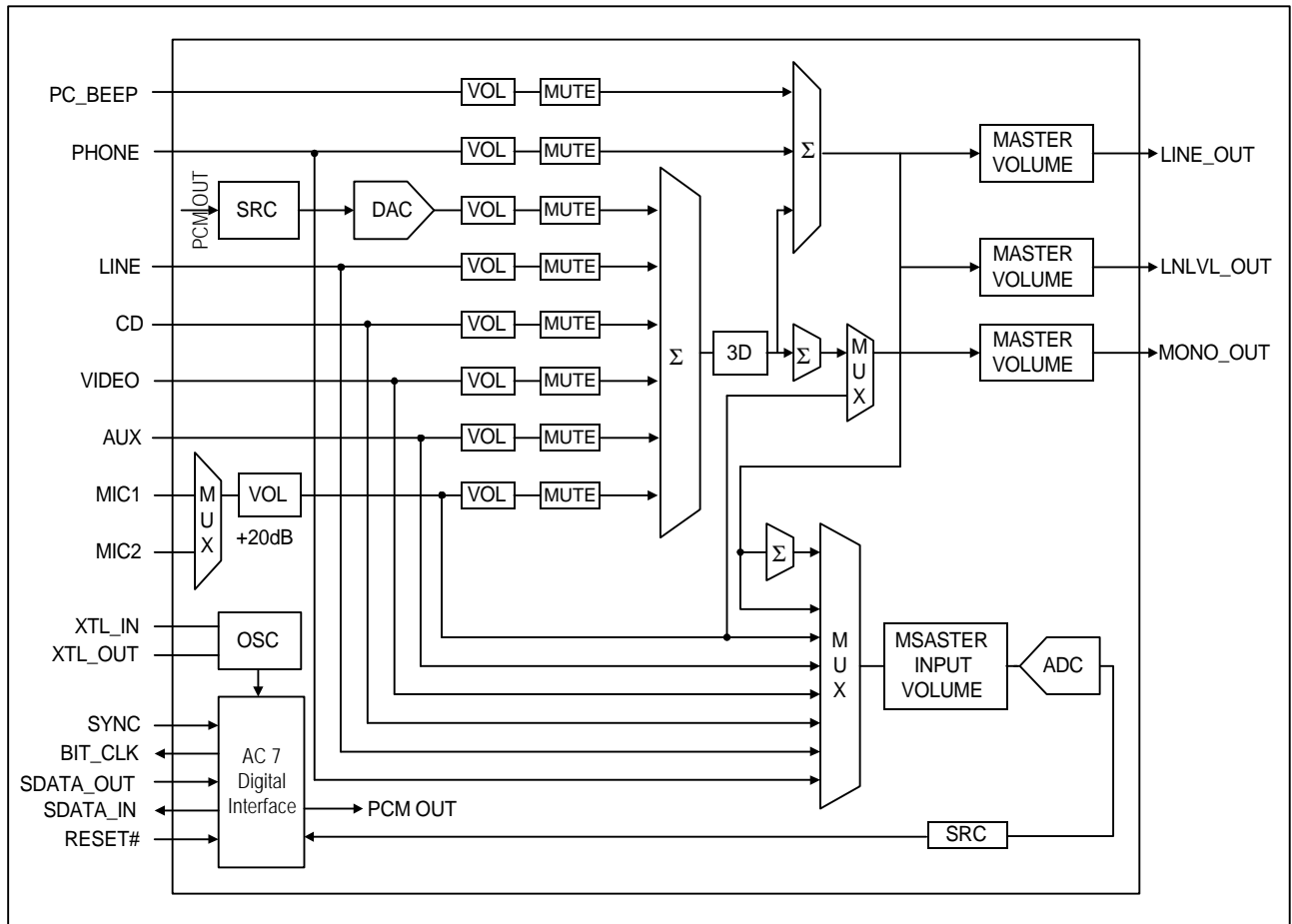




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System Block Diagram



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Headquarters
Integrated Technology Express, Inc.
3F, No.13, Innovation Road I
Science-Based Industrial Park
Hsin-Chu City, Taiwan, R.O.C.
Tel:[886] (3) 579-8658
Fax: [886] (3) 579-4803
<http://www.ite.com.tw>

Taipei Sales Office
Integrated Technology Express, Inc.
7F, No. 435, Jui Kuang Rd.,
Taipei 114,
Taiwan, R.O.C.
Tel: [886] (2) 2657-9896
Fax: [886] (2) 2657-8561/ 2657-8576
<http://www.ite.com.tw>

U.S.A. West
Integrated Technology Express, Inc.
2710 Walsh Ave.
Santa Clara, CA 95051
U.S.A.
Tel: [1] (408) 980-8168
Fax: [1] (408) 980-9232
<http://www.iteusa.com>

U.S.A. Eastern
Integrated Technology Express, Inc.
896 Summit St., #105
Round Rock, TX 78664
U.S.A.
Tel: [1] (512) 388-7880
Fax: [1] (512) 388-3108
<http://www.iteusa.com>