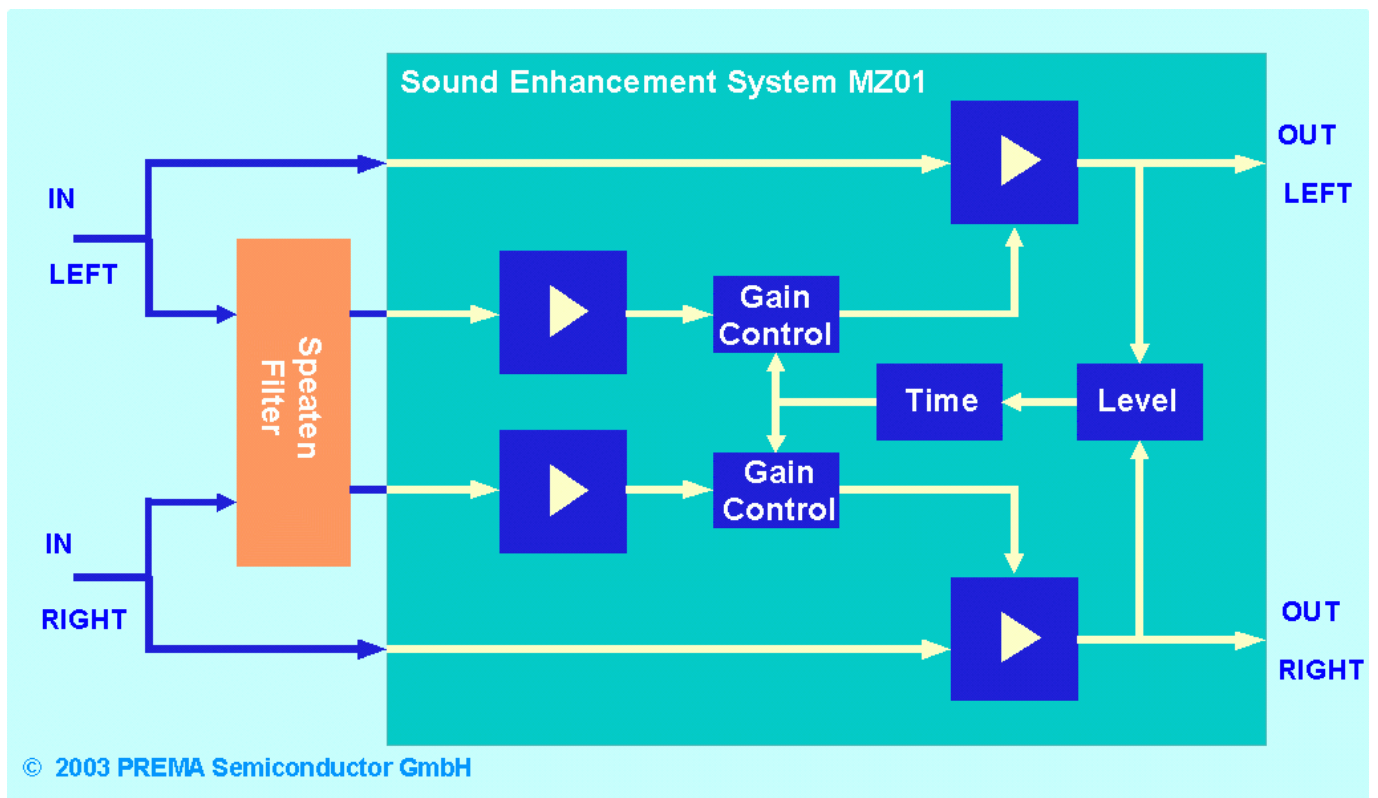


High Performance Sound Chip MZ01 for LCD TV



LCD TVs require small and often low-cost loudspeaker systems. The sound of the mid range frequencies is satisfying, but treble and basses are often lost. The result is that music is perceptively synthetic and spoken words can not be understood.

As a result of a development in cooperation with the Japanese partner Dedekind, a patented filter technique amplifies high and low frequencies and the mid range remains unchanged. Combined with the Speaten Filter the MZ01 reaches stunning results, because the sound of music is more brilliant and spoken words can be heard much better. Filter and IC work almost free of distortion and noise, which increases the quality of sound especially for low amplitudes. The MZ01 offers two inputs per stereo channel, one direct input and one coming from the Speaten Filter for signal conditioning. Afterwards both signals are amplified. The output signal is added to the amplifier as feed back and as automatic control of the amplifier gain. The output is the sum of filtered and unfiltered signal.



The multiple application of the MZ01 is suitable for flat panel TVs as well as in home and car audio, TV, DVD / Video, VCRs, for speech recognition and head sets.

PREMA Semiconductor, the IC manufacturer specialized on analog and mixed-signal ASICs, produces the MZ01 ASIC, one of the important parts of the Speaten Filter. PREMA's modern bipolar technology enabled the development of a complex IC, meeting the high requirements in the field of audio applications. With regard to special requirements for low distortion, low noise and wide operation voltage range PREMA offers the perfect technology for the production of this ASIC.

For more information about ASICs please visit our web site www.prema.com .

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