

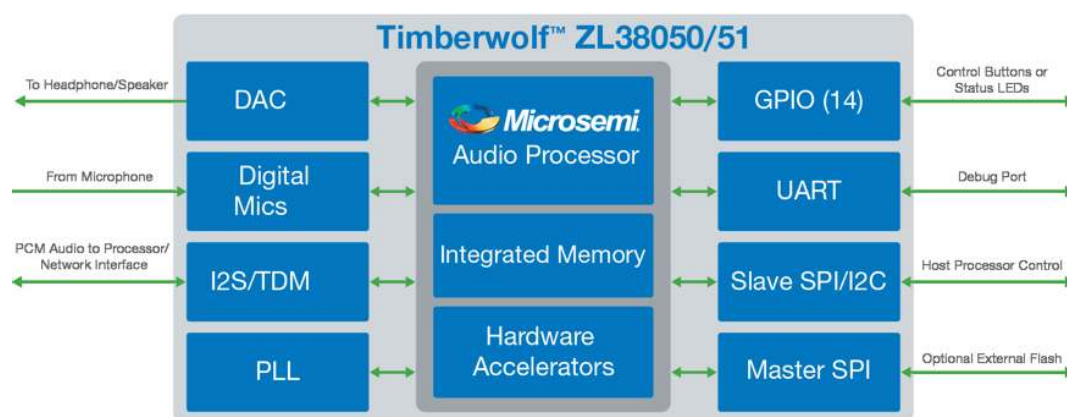
Microsemi AcuEdge™ Technology

HD Voice Audio for IP Camera

New High-performance Audio Processors Enable the Streamlined Development of IP Camera for HD Voice Capabilities

Designed for High Definition (HD) Voice 2 way audio in IP Camera, Microsemi's new audio processors ZL38050 and ZL38051 feature the company's innovative AcuEdge™ acoustic technology, which is a

set of highly-complex and integrated algorithms that allow the user to extract intelligible information from the audio environment from which they are communicating.



ZL38050/51 Block Diagram

Audio Processor for IP Camera

Microsemi's AcuEdge Technology integrates industry leading features and dedicated firmware to deliver high-quality hands-free voice performance while reducing system design complexity.

In complex noisy environments, Microsemi's AcuEdge Technology cancels echo and reduces ambient noise. While the most solutions deliver only half-duplex operation, Microsemi's proprietary algorithm is able to converge and track changes in the echo path to support full-duplex operation.

DVR, NVR, or security camera users have difficulty trying to monitor a large number of video feeds for certain incidents, crimes, or events. By adding audio to the surveillance camera, it will enable security personal at the control room to make judgment calls on security concerns. Microsemi AcuEdge Technology will provide audio enhancement to allow more accurate monitoring. The ZL38051 audio processor adds audio enhancement functions such as far field microphone, detection of sound location, and beam forming capabilities.

Getting Started

Use the following resources to explore:

- Microsemi AcuEdge™ Technology
- ZL38050 IP Camera Audio Processor
- ZL38051 Advanced IP Camera Audio Processor

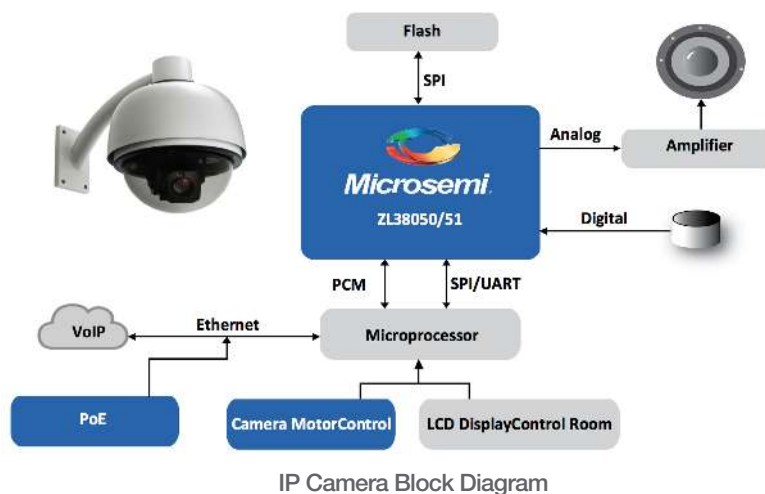
- MiTuner™ Automatic Tuning Kit
- MiTuner™ Information
- MiTuner™ GUI Software Guide
- ZLS38508 MiTuner™ GUI

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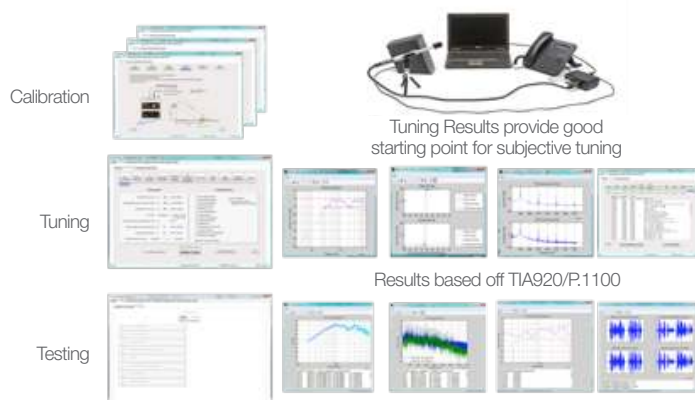
Features and Benefits

- Full duplex AEC (Narrowband and Wideband)
- Mid field audio pick up to 3 meters (ZL38050)
- Far field audio pick up to 10 meters (ZL38051)
- Sound location estimation (ZL38051)
- Beam forming for effective noise attenuation (ZL38051)
- Long tail echo cancellation (up to 256 ms)
- Advanced Noise Reduction to reduces background noise from the near-end speech signal
- 16/22 band equalizer
- Howling cancellation: prevents oscillation in echo canceller audio path



Microsemi Auto Tuning Tool (ZLE38475)

Microsemi's MiTuner™ Kit eases the system tuning complexity and speed up design cycle for quick development. MiTuner™ kit provides hardware, software and support for the automatic tuning of TIMBERWOLF family of audio processors.



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