

Micro Analog Systems Releases MAS6254 60Vpp Piezo Driver IC with Integrated Boost Converter

Offering higher output voltage, flexible control options and self-drive capability for audio, atomizers, piezo pumps and other advanced piezo applications

Helsinki, Finland – 22 September 2026 - Micro Analog Systems Oy today announced MAS6254, a high output voltage Piezo driver IC

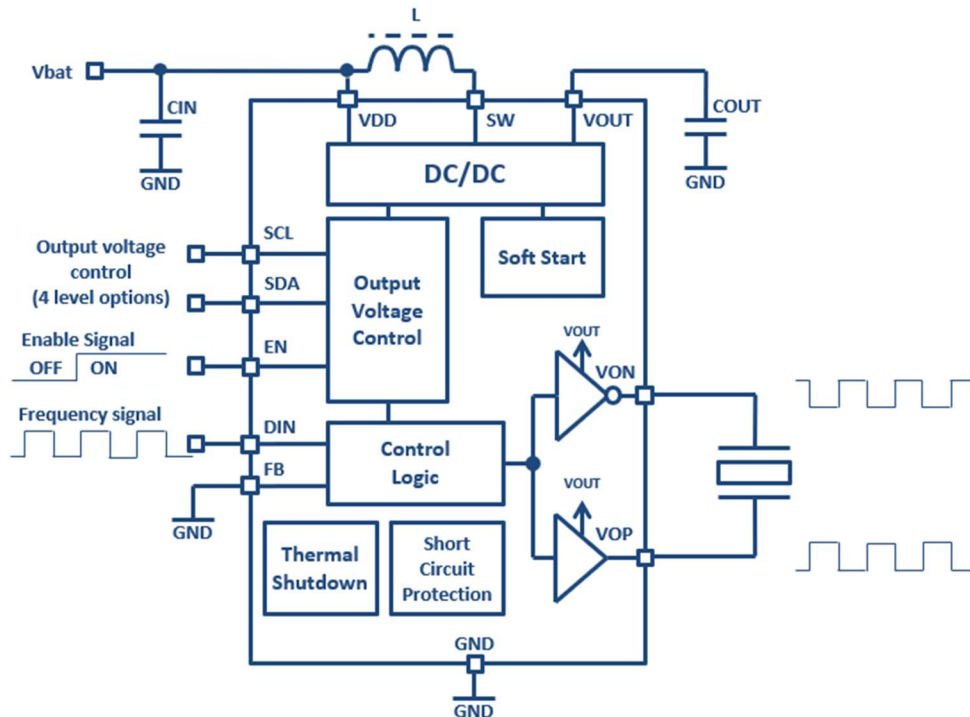
Micro Analog Systems Oy today announced MAS6254, a high-performance piezo driver IC with an integrated boost converter capable of driving piezo transducers with output voltages up to 60Vpp. Designed for portable and battery-powered applications requiring high output voltages like for high sound pressure levels, MAS6254 offers outstanding efficiency, flexible output voltage control and support for both standard and self-driven piezo configurations.

The heart of the MAS6254 is a high-efficiency boost DC/DC converter that generates up to 30V output voltage from a wide supply voltage range of 2.6V to 5.5V. The integrated piezo driver stage supports both single-ended and differential bridge-tied load (BTL) operation, enabling output drive levels of up to 60Vpp for demanding piezo applications.

The device features flexible output voltage control with four selectable voltage levels in pin-control mode and eight voltage levels via an I²C interface. In addition, MAS6254 supports self-drive operation for 3-terminal piezo elements, simplifying the implementation of resonant piezo applications while maximizing sound output and efficiency.

Designed for power-sensitive portable products, the MAS6254 incorporates a soft-start function for low inrush current, very low leakage current, integrated short-circuit protection for piezo outputs and thermal shutdown protection. The boost converter requires only a small external inductor, and no external Schottky diode is needed, reducing overall solution size and component count.

The MAS6254 is currently available as prototype samples in a TSSOP-16 package, with production planned in a compact 3 × 3 × 0.75 mm DFN-12 package. For further information and sample requests, please contact Micro Analog Systems Oy at info-



FEATURES

- Up to 60Vpp piezo drive output
- High-Efficiency Boost DC/DC Converter
- Adjustable Output Voltage up to 30V
- Four Output Voltage Settings in Pin-Control Mode
- Eight Output Voltage Settings via I²C Bus
- Self-Drive Support for 3-Terminal Piezo Elements
- Wide Supply Voltage Range 2.6V to 5.5V
- Low Inrush Current with Soft-Start Feature
- External Schottky Diode Not Needed
- Very Low Leakage Current
- Piezo Output Short-Circuit Protection
- Thermal Shutdown Protection
- 1.8V Compatible Digital Inputs

Typical Applications

- Portable Tracker Devices
- Personal Safety Sirens
- Smoke and other Alarms
- Atomizers
- Piezo pumps with moderate power (2 W)
- Ultrasonic cleaners
- Battery-Powered Devices with Sound or Atomizer Features

About Micro Analog Systems

Founded in 1984, Micro Analog Systems Oy is a privately owned fabless semiconductor house located in Helsinki, Finland. MAS supplies Application Specific Standard Parts and ASICs for worldwide customer base. MAS current product portfolio consists of time signal receiver ICs, crystal oscillator ICs and AD converters for sensor applications as well as of other high performance analog ICs.

For More Information

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