

# Azoteq Unveils Innovative Haptic Solutions with the IQS390 and IQS396 ICs

AUSTIN, TX, UNITED STATES, January 31, 2025 /EINPresswire.com/ -- Azoteq, a global leader in sensor technology innovation, is excited to announce the launch of two groundbreaking integrated circuits (ICs) designed to provide precise, customizable, and energy-efficient haptic feedback solutions for a wide range of applications. The IQS390 Haptics Driver and the IQS396 ProxFusion® IC combine advanced technologies to enhance the user experience in wearables, mobile devices, automotive interfaces, and other interactive systems.

## The IQS390 Haptic Driver for Linear Resonant Actuators (LRA)

The IQS390 is a versatile haptic driver IC designed to provide highly customizable and efficient feedback through linear resonant actuator (LRA) motors. It offers two operation modes: I2C and PWM, allowing engineers to select the best mode for their applications, whether they require high-speed communication, or more control options for feedback intensity and duration. The IQS390 is ideal for applications that need fine-tuned, low-power haptic responses, such as mobile devices, wearables, and automotive controls.



The IQS390 and IQS396 are a natural expansion of our product portfolio, making Azoteq a one-stop solution provider for sense and sensation.”

*Jean Viljoen, CSO*



### Key Features of the IQS390:

- I2C Mode for high-speed communication and real-time motor frequency adjustments.
- PWM Mode for external pulse-width modulated (PWM)

signal inputs and additional control over motor direction.

- Ultra-low power consumption for extended battery life, especially in portable devices.
- Flexible integration with PC software tools for easy configuration and optimization.
- Internal and external H-bridge configurations, real-time closed-loop auto-resonance technology, and selectable LRA drive frequencies.

### The IQS396 ProxFusion® Sensor with Integrated Haptics Driver

The IQS396 combines Azoteq's ProxFusion® sensor technology with an integrated haptics driver, offering a comprehensive solution that integrates both touch sensing and haptic feedback in a single IC. The touch sensing can be either through capacitive sensing or inductive sensing. This combination makes it an ideal choice for interactive devices that require both user input sensing and responsive tactile feedback. The IQS396 supports I2C and Standalone modes, allowing event-based haptic feedback triggered by sensor actions or external commands.

### Key Features of the IQS396:

- Standalone Mode for event-driven haptic feedback triggered by sensor actions, such as proximity detection.
- I2C Mode for high-speed communication and real-time motor frequency adjustments.
- Advanced haptic features, including selectable LRA drive frequency and built-in protection for the internal H-bridge.
- Ultra-low power mode and automatic power mode management for optimized energy consumption.
- Easy integration with PC software tools for configuration, debugging, and optimization.

### Shared Benefits of the IQS390 and IQS396:

Both the IQS390 and IQS396 are designed with energy efficiency in mind, ensuring long battery life in portable and battery-powered devices. These ICs are easy to integrate into existing product platforms, with extensive developer support, including detailed datasheets, programming guides, and prototype kits. Their versatility makes them ideal for enhancing user interfaces in a wide range of products.

Jean Viljoen, Chief Sales Officer at Azoteq, commented, "The IQS390 and IQS396 are a natural expansion of our product portfolio, making Azoteq a one-stop solution provider for sense and

sensation. The IQS396 is an integrated sensor and driver, providing a single IC alternative to electromechanical switches.”

#### Packaging and Voltage Options for Both ICs:

- Supply Voltage: 1.71 V to 3.6 V
- Package: QFN20 (3 × 3 × 0.55 mm) with 0.4 mm pitch for efficient PCB integration.

Comprehensive Developer Support: Azoteq provides developers with a comprehensive range of resources, including:

- Detailed datasheets and programming guides
- Prototype design kits
- Engineering support for system integration and troubleshooting
- PC-based software tools for optimization and debugging

#### About Azoteq (Pty) Ltd:

Azoteq ([www.azoteq.com](http://www.azoteq.com)) is a pioneering force in the field of sensor fusion. With more than a decade of expertise in capacitive sensing, Azoteq’s product portfolio now includes multisensory technologies integrated into single ICs. The company’s ProxFusion® technology offers a unique combination of sensing modalities, including capacitive, Hall-effect, IR, PIR, inductive, and ambient-light sensors. Azoteq operates design and manufacturing centers in South Africa and Asia, with a global network of sales offices and distributors.

Jean Viljoen

Azoteq

+27218630033 ext.

[email us here](#)

---

This press release can be viewed online at: <https://www.einpresswire.com/article/777518133>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.