Allegro MicroSystems Introduces Advanced Magnetic and Inductive Position Sensing Solutions at Electronica 2024

11/12/2024

New Solutions Enhance Accuracy, Efficiency, and Reliability While Reducing Power Consumption by up to 50% Compared to Existing Switches and Latches

MANCHESTER, N.H., Nov. 12, 2024 (GLOBE NEWSWIRE) -- Allegro MicroSystems, Inc. (“Allegro”) (Nasdaq: ALGM), a global leader in power and sensing solutions for motion control and energy efficient systems, today at Electronica 2024, introduced its new inductive position sensors and a series of micropower magnetic switches and latches. These advanced sensing products lower system costs, extend battery life and offer reliable performance across a variety of automotive, industrial and consumer applications.

The new micropower magnetic switches and latches, APS11753 and APS12753, redefine position sensing with higher sensitivity options for enhanced air gap tolerance, and ultra-low power consumption using 50% less power than our existing micropower products. This makes them perfectly suited for challenging battery-powered applications in medical, consumer and industrial markets.

"We are excited to announce our latest inductive position sensors as we continue to drive innovation in sensing technology,” said Ram Sathappan, Sr. Director, Global Marketing & Applications at Allegro MicroSystems. "Our inductive sensors deliver high accuracy, advanced diagnostics and connectivity options essential for safety-critical traction motors in electric vehicles, while the magnetic switches and latches enable designers to achieve reliable and energy-efficient position sensing in a variety of applications. We’re anticipating a lot of interest in our solutions and look forward to showcasing these innovations at Electronica.”

Key Features and Benefits of the New Inductive Position Sensors (A17802 and A17803):

- **Precise Contactless Angle and Motor Position Sensing:** Enables dynamic speed and torque control for smoother motion, reduced vibration and energy savings.
- **Wide Temperature Range:** Maintains consistent performance and stability in extreme temperatures, ensuring reliability in harsh conditions.
- **Integrated Digital Compensation and Programmable Linearity:** Enhances accuracy and resolution while offering design flexibility.

Key Features and Benefits of the New Micropower Magnetic Switches and Latches (APS11753 and APS12753):

- **Ultra-low Power Consumption:** Extends battery life, making them ideal for portable and wireless devices.
- **Design flexibility:** Wide offering of Magnetic sensitivity options provides design flexibility over a broad set of application needs ranging from stray field rejection to high sensitivity low magnetic field use cases.
- **Lower Total Solution Cost:** Greater magnetic sensitivity options compensate for mechanical misalignments and variations in magnetic field strength allowing for wider airgap variation and total cost savings

Allegro’s latest solutions highlight its commitment to sensing innovation throughout 2024. Earlier this year, Allegro introduced the industry’s highest bandwidth current sensors (ACS37030 and ACS37032) designed for rapid response and minimal power loss in high-power density Silicon Carbine (SiC) and Gallium Nitride (GaN) systems. These solutions are widely used in electric vehicles, clean energy equipment, and data centers. Allegro also introduced shunt replacement current sensors (ACS37220 and ACS37041) that reduce both energy loss and component count compared to traditional shunt-based solutions.

Additionally, Allegro expanded its portfolio with the new XtremeSense™ TMR sensors (CT455 and CT456), providing space and cost savings while improving energy efficiency. Representatives from Allegro will be present at Electronica in Munich, Germany from **November 12 – 15, 2024 at booth # C5.479** to showcase the company’s latest advancements in power and sensing technology. Attendees interested in discovering how Allegro’s innovations deliver performance, efficiency and cost benefits are encouraged to visit.

About Allegro MicroSystems
Allegro MicroSystems, Inc. is leveraging more than three decades of expertise in magnetic sensing and power ICs, to propel automotive, clean energy and industrial automation forward with solutions that enhance efficiency, performance and sustainability. Allegro’s commitment to quality drives transformation across industries, reinforcing our status as a pioneer in "automotive grade" technology and a partner in our customers' success. For additional information, please visit https://www.allegromicro.com/en/.

Media Contact:
Tyler Weiland
Corporate Communications
(972) 571-7834
tweiland.cw@allegromicro.com

Allegro Contact:

Laura Kozikowski
Sr. Director of Global Marketing
lkozikowski@allegromicro.com