

# Sensing and Power IC Solutions

Our Energy Efficient ICs are at the Core of Sensing, Regulating, and Driving All Electrical and Electronic Equipment

Allegro's XtremeSense™ TMR Technology Enables Current and Position Sensors to Achieve Industry-leading Performance

## Sense

**Accurately measure** current in a circuit, **precisely detect** position in 1, 2, or 3 dimensions, and measure linear and angular movement, rotational speed, and more.

### Current Sensors

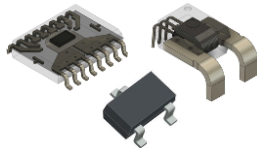
Integrated Conductor  
Field Sensors

### Position Sensors

Switches and Latches  
1D Linear  
2D Angle  
3D Magnetic

### Speed Sensor

Camshaft Sensor  
Crankshaft Sensor  
E-Motor Speed Sensor  
Transmission Sensor  
Wheel Speed Sensor



## Regulate

Robust, automotive-grade DC-DC regulators, power modules, and LED drivers translate power from high to low voltages and regulate it for **safe and reliable** powering of components.

### ClearPower Modules

LED Driver Modules  
Regulator Modules

### LED Drivers

### Regulators

Multiple Output Regulators  
Single Output Regulators



## Drive

Our motor and isolated gate drivers, **simplify designs, minimize board space,** and **reduce costs.** Embedded motion control algorithms **improve your motor performance** and time to market.

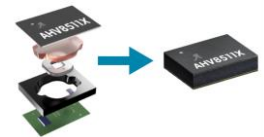
### Brushless DC Motor Drivers

### Brushed DC Motor Drivers

### Stepper Motor Drivers

### Isolated Gate Drivers

### Gate Drivers



	Magnetic Sensor ICs			Power ICs			
	SENSE			REGULATE & DRIVE			
	Current	Position	Speed	Regulators	Motor	Gate Drivers	Isolated Gate Drivers
xEV Powertrain	●	●	●	●	●	●	●
ADAS	●	●	●	●	●	●	
Clean Energy	●	●			●	●	●
Data Centers	●				●		●
Industrial	●	●	●	●	●		●



# Moving the World Toward a Safer and More Sustainable Future.



## e-Mobility

Vehicle electrification and autonomous driving (ADAS)

Advanced powertrain solutions, unmatched safety standards, and energy efficient systems help you develop world-class vehicles.

- Extend driving range
- Faster charging
- ISO 26262 compliant



## Clean Energy

Renewable energy generation, transmission and storage

Highest accuracy, bandwidth and integration increases power conversion efficiency.

- Improve system safety
- More power in less space
- Improve thermal efficiency
















## Industrial








Intelligent automation and cloud infrastructure

Accurate sensing and efficient motor drivers speed up automation across industries.

- Speed and precision
- Simplification and efficiency
- Safety and reliability

 Battery Management	 Thermal Management
 On-board Charger	 Traction Inverter
 DC-DC Converter	 Safety, Comfort & Convenience
 Braking	 Steering

 Solar Inverters	 EV Charging
 Wind Turbines	 Heat Pumps
 Energy Storage	

 Cloud Infrastructure	 Industrial Motor Control
 Factory Automation	 Garden and Power Tools
 Robotics	 Personal Mobility
 Building Automation	



#1

in magnetic sensors<sup>1</sup>



0.14 PPM

zero defect culture



30+ Years

of innovation



>1,400

active patents<sup>2</sup>

1. Omdia, MEMS & Sensors Competitive Analysis Database 2023.  
2. As of the quarter ended June 30, 2023.