

# DRIVING CHANGE: ADVANCING PERSONAL MOBILITY THROUGH CUTTING-EDGE TECHNOLOGY

The Gold Standard in Performance, Efficiency, and Reliability



Allegro MicroSystems specializes in developing innovative solutions for Electric Vehicles (EV) and Internal Combustion Engine (ICE) vehicles. Our advanced sensor and power IC solutions are engineered specifically to meet the unique requirements of these designs, providing superior performance and reliability in harsh environments and under complex operating conditions.

Driven by innovation and long history servicing the automotive market, Allegro offers state-of-the-art magnetic current sensors, 1, 2, and 3D position sensors, integrated magnet wheel speed sensors, and intelligent motor drivers that help you take your design to the next level in terms of energy efficiency, size, reliability, and robustness. Allegro's offerings improve, simplify, and differentiate your final product.

Stay ahead of the technological curve in the ever-evolving transportation industry We are a trusted and reliable partner to many global customers in the Personal Mobility segment with > 50M + ICs shipped annually.



## Maximized Power Efficiency

For reduced energy consumption and costs

- Low ohmic losses and thermal dissipation
- High voltage ratings



#### **Robust System**

For ensuring operational reliability

- Stable lifetime operations
- Low maintenance



### Streamlined System Design

For reduced Bill of Materials (BoM) and board space requirements

- Integrated solutions
- · High power density



Safe and Efficient

For ensuring safe and

efficient operations

• Fast out-of-range

detection and

diagnostics

**Operations** 

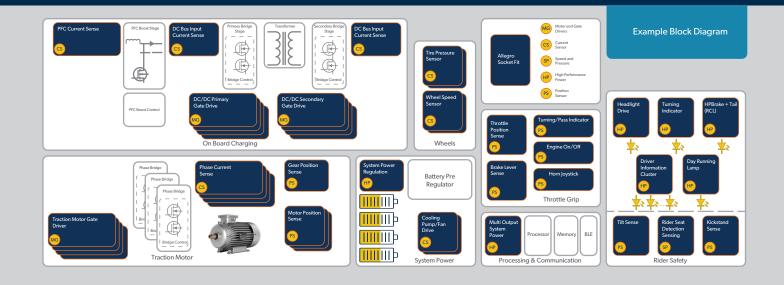
#### Accelerated Time-to-Market

For optimized turn-around-time

- Easy-to-use turnkey solutions
- Strong technical support
- Automotive-inspired product quality

# Key Products for Electric 2-wheelers (E2W)

Transform your design challenges with our innovative solutions that sense, regulate, and drive.



#### **Key Products and Solutions for EV Personal Mobility**

Complete list of available products and solutions can be found on the Personal Mobility site.

Function	Component	Allegro Product	Evaluation Board
Motor Control	Brush DC Driver	A89500	APEK89500GEJ-01-T
	BLDC Driver	<u>AMT49100</u>	APEK49100KJP-A-03-T
	BLDC Driver	<u>A5947</u>	APEK5947GET-01-T
Motor Current Feedback	Current Sensor	ACS724	ASEK724LLC-30AB-T
	Current Sensor	ACS71240	ASEK71240EXB-030B3
	Current Sensor	<u>ACS772</u>	ASEK772ECB-200B-T
<b>Motor Position Feedback</b>	Position Sensor	AAS33001	N/A
Wheel	Speed Sensor	ATS19480	N/A
Sprocket	Hall Effect Latch	<u>APS1262x</u>	N/A
Tilt, Level, Side Stand	Position Sensor	<u>A1308</u>	N/A
	Position Sensor	<u>A1330</u>	ASEK-1330-SUBKIT-T
	Hall Effect Switch	<u>A112x</u>	N/A
Throttle	Position Sensor	<u>A31315</u>	ASEK31315-SUBKIT-T
Illumination	LED Driver	<u>A6217-1</u>	APEK6217KEJ-01-MH-0
	LED Driver	<u>A6260</u>	APEK6260KLJ-01-T
	LED Driver	<u>APS13568</u>	ASEK13568KLJA
	Hall Effect Switch	<u>APS11700</u>	N/A
Battery and Charging	Current Sensor	<u>ACS711</u>	ASEK711KEX-15AB-T
	Switching Regulator	<u>A8586</u>	APEK8586KEJ-01-MH
LCD Bias	Switching Regulator	<u>A8603</u>	APEK8603KES-01-MH
LCD Backlight	LED Driver	<u>A80601</u>	APEK80601KES-01-MH

#### **Purpose-built Solutions for Superior Vehicle Experiences**

Upgrade your transportation experience with futuristic innovation — where cutting-edge technology meets unmatched convenience for personal and industrial applications.

- Higher Integration
- Robust Packaging
- ISO26262 Safety
- Energy Efficient
- Automotive Quality





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