

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 Operations

For ensuring safe and efficient operations

Fast out-of-range detection and diagnostics



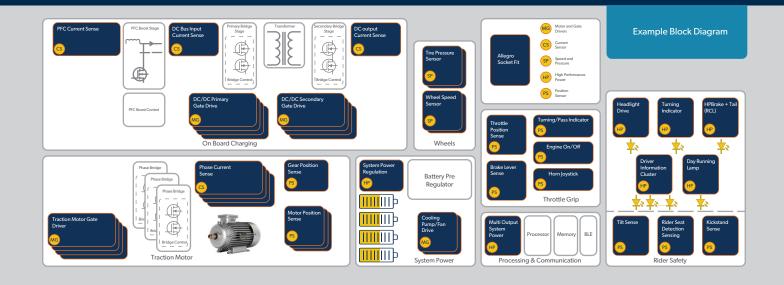
Accelerated Time-to-Market

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	Application	Component	Allegro Product	Evaluation Board
Motor Control	Brush DC motor/ Solenoid driver	HB Driver	A89500	APEK89500GEJ-01-T
	Traction Motor	BLDC Driver	AMT49100	APEK49100KJP-A-03-T
	Battery cooling fan/pump	BLDC Driver	A5947	APEK5947GET-01-T
Motor Current Feedback	Core based current sense	Current Sensor	ACS70311	N/A
	Coreless current sense	Current Sensor	ACS37610	ASEK-37610-QRIFT-DC-PCB
	Coreless current sense	Current Sensor	<u>CT455</u>	CTD455-PT-06B3 (3.3V) CTD455-PT-06B5 (5.5V)
	Integrated bus bar current sense	Current Sensor	ACS772	ASEK772ECB-200B-T
Motor Position Feedback	Rotor position sensing	Position Sensor	AAS33001	N/A
	Rotor position sensing	Position Sensor	<u>CT310</u>	EVB310
	Rotor position sensing	Position Sensor	A33230	N/A
Wheel	Wheel speed sensor ABS	Speed Sensor	ATS19480	N/A
Sprocket	PAS sensor	Hall Effect Latch	APS12625	N/A
Linear position sensor	Brake Level sensing	Position Sensor	<u>A1308</u>	N/A
	Tilt, Lever, Side Strand	Position Sensor	CT8150, CT8152	CTD8103
Magnetic Switches	Tilt, Side Stand, Turning Pass Indicator, Engine on/off, Horn	Position Sensor	<u>APS11202</u>	N/A
		Position Sensor	CT8131, CT8132	CTD8103
Angle Sensor	Throttle (APS)	Position Sensor	<u>A31315</u>	ASEK31315-SUBKIT-T
	Level and Throttle Sensor	Position Sensor	<u>CT310</u>	EVB310
Illumination	Head Lamp, DRL	LED Driver	<u>A6217</u>	APEK6217KEJ-01-MH-0
	Stop-Tail, DRL, Blinker	LED Driver	<u>A6263</u>	N/A
Battery and Charging	Current sensor	Current Sensor	<u>ACS711</u>	ASEK711KEX-15AB-T
	DC-DC regulator	Switching Regulator	<u>A8586</u>	APEK8586KEJ-01-MH
LCD Bias		Switching Regulator	<u>A8603</u>	APEK8603KES-01-MH
LCD Backlight		LED Driver	A80601	APEK80601KES

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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