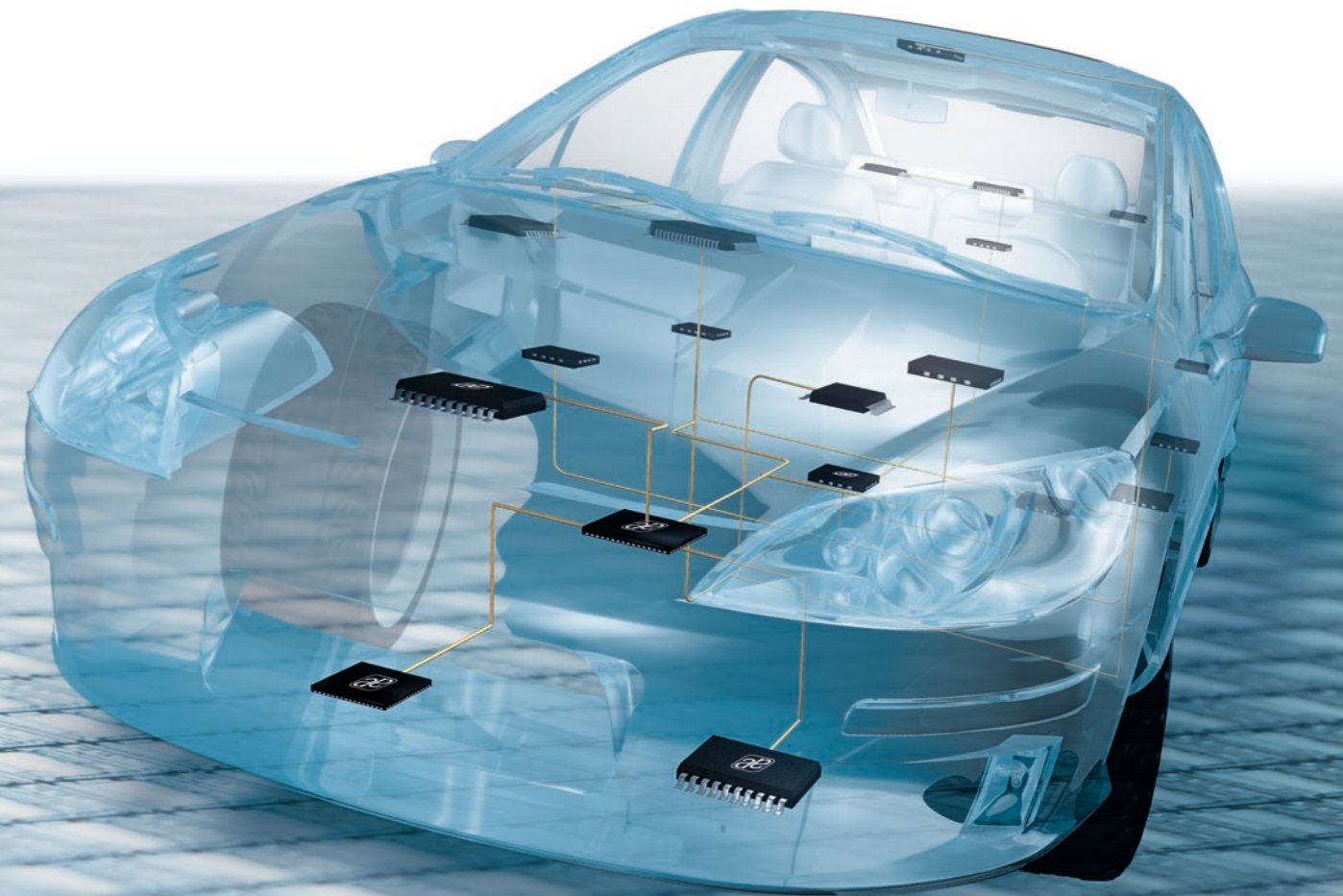




Automotive IC Solutions



ae austriamicrosystems
a leap ahead in analog

www.austriamicrosystems.com

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More than 25 years leading in automotive IC design

Our portfolio

austriamicrosystems is a global leader in the design and manufacture of high performance analog ICs. We develop and produce industry-leading analog and mixed signal semiconductors, including high performance standard products and customized ASICs (Application Specific Integrated Circuits). We focus on the areas of power management, sensing and mobile entertainment, where we combine more than 27 years of analog design capabilities and system know-how.

Our expertise

austriamicrosystems leverages its significant expertise in low power consumption, high accuracy and high voltage know-how to provide best-in-class products for automotive markets worldwide. We bring our world-class capabilities to exciting solutions for many automotive applications including safety systems such as ESP (Electronic Stability Control) or EPS (Electric Power Steering). Many of our customers are leading global Tier 1 suppliers and OEMs and rely on austriamicrosystems as their sole source supplier.

Our automotive competence

austriamicrosystems provides excellent IP for safety critical inductive and magnetic solutions.

Our innovative spirit is proven by creating standard products such as our turnkey FlexRay product family, our flexible and scalable battery management solutions, our application specific SBCs and our broad portfolio of Magnetic Encoders.

Your Partner for Turnkey Solutions

Position & Motion Detection



ASICs

- ▶ Focus on the individual needs of our customers
- ▶ Enabling technology and best in class IP for ASIC design offer highest performance on smallest silicon area
- ▶ Safe product launch and process corner lots ensure highest quality standards



Hall based Magnetic Encoders

- ▶ True automotive robustness proven by overvoltage protection, reverse polarity and intelligent short circuit monitoring
- ▶ Excellent insensitivity to external magnetic stray fields saves shielding costs
- ▶ Patented solution for best intrinsic accuracy without calibration or temperature compensation

In-vehicle Network



Battery Management

- ▶ Unique circuit architecture allows offset-free voltage and current measurement for battery management in conventional, electric and hybrid electric vehicles
- ▶ Cost effective three chip battery sensor solution for low side and high side systems
- ▶ Flexible, individually scalable approach for ultimate precision battery control systems



FlexRay™

- ▶ Highest network reliability on the physical layer with best-in-class output differential voltage levels
- ▶ World's first bit-reshaper embedded in the FlexRay Active Star Device for next generation network topologies
- ▶ High-end diagnostic mechanisms for reliable failure detection at the FlexRay wiring level



System Basis Chips

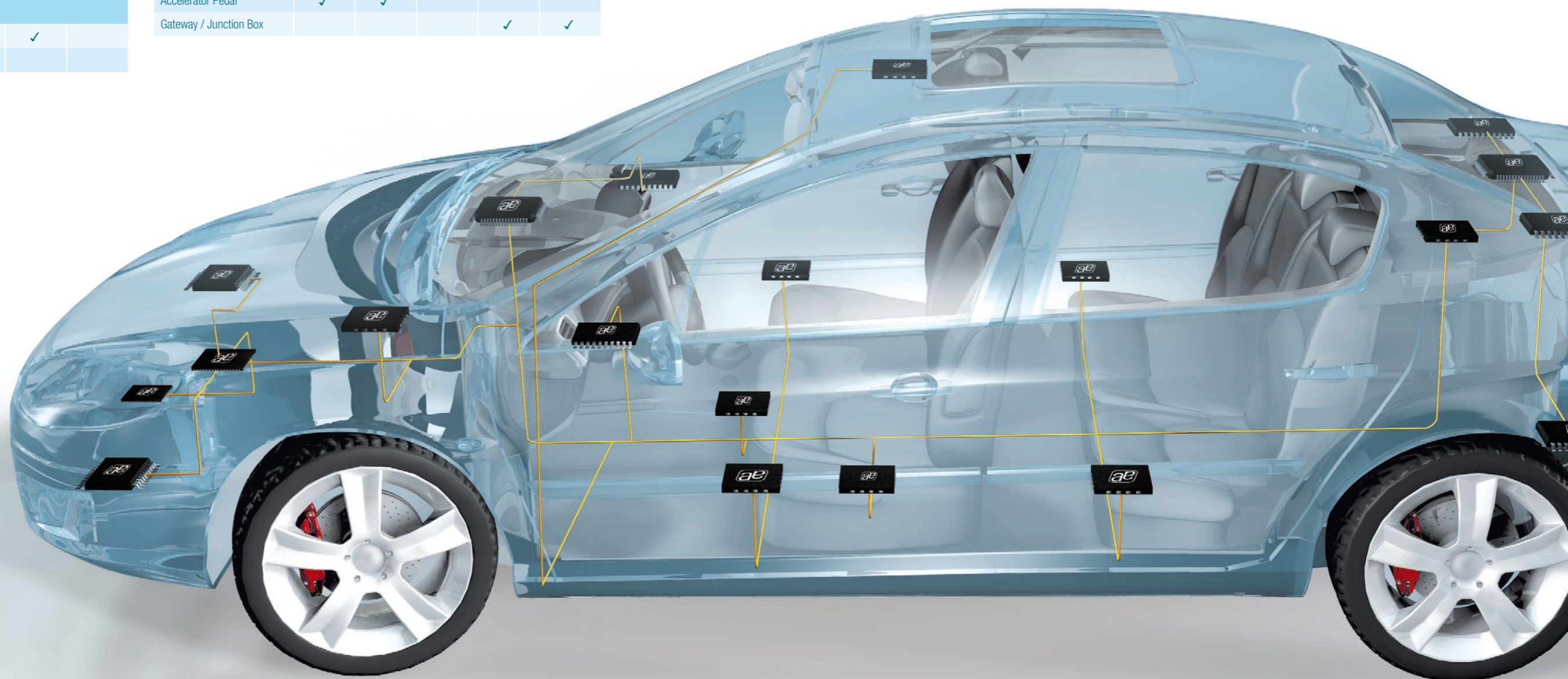
- ▶ Integration of application specific features for actuator and sensor systems reduces size and increases reliability
- ▶ Highest flexibility includes factory customization of device for microcontroller-less sensor & actuator modes
- ▶ Extremely fast development of device derivatives offer absolute time-to-market advantages

Powertrain	ASIC	FlexRay	SRP
BLDC Motor Control with position sensing & Multiturn			
Gearbox	✓	✓	✓
Cooler	✓	✓	
Oil Pump	✓	✓	✓
Water Pump	✓	✓	✓
Sensors & Actuators			
Throttle	✓	✓	
Cam & Crankshaft	✓	✓	
EGR	✓	✓	✓
Engine Management			
EM Diesel	✓		✓
EM Gasoline	✓		✓
Direct Injection/ Common Rail	✓		✓
Others			
Transmission	✓	✓	✓
2W/4W Switch	✓	✓	

Body & Convenience	ASIC	FlexRay	SRP
Window Lift	✓		✓
Mirror	✓		✓
Sunroof	✓		✓
Battery Management	✓		✓
Power Management	✓	✓	✓
Reverse Aid Camera	✓		✓
HVAC	✓		✓
Rain Sensor	✓		✓
Dashboard	✓	✓	✓
Key Ignition	✓	✓	✓
Headlight Position	✓	✓	
Wiper Control	✓	✓	
Accelerator Pedal	✓	✓	
Gateway / Junction Box			✓

Chassis & Safety	ASIC	FlexRay	SRP
Chassis			
Power Steering	✓	✓	✓
Torque Measurement	✓		
Safety / Driving Assistance			
Distance Control w. LIDAR	✓		✓
ABS / Stability Control	✓		✓
Active Suspension	✓	✓	
Electronic Braking	✓	✓	✓

In-Vehicle Network	ASIC	FlexRay	SRP
FlexRay		✓	
CAN	✓		✓
LIN	✓		✓
SENT	✓		
PSI5	✓		



Commitment to Automotive Excellence

Focus on research & development

austriamicrosystems offers more than 27 years of experience in developing high value automotive silicon solutions and continues to invest significantly in research & development to offer cutting-edge products and technologies.

Manufacturing at highest quality level

austriamicrosystems offers high performance integrated analog and mixed-signal process technologies such as CMOS, HV-CMOS and SiGe (silicon germanium). We are a recognized leader in high voltage CMOS technology which is the base of a wide range of automotive applications. Our technologies and our safe launch program perfectly fit automotive requirements. We provide the highest quality standard in manufacturing based on our state-of-the-art in-house 8-inch fab. We can ensure long term source of supply and have an excellent reputation as a first or second source supplier.

Commitment to quality

austriamicrosystems is committed to meeting the highest quality standards and has been certified to TS16949:2002 as well as ISO 9001:2000, QS 9000, VDA 6.1 and Ford's Q1 certification. This makes us one of the few semiconductor manufacturers worldwide to be fully automotive qualified.



To discuss your specific requirements,
please contact your local sales office:

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