Our driving force is the automobile – our task is the development of future-oriented technologies. As a development partner to the automotive industry, the ASAP Group offers comprehensive services with a focus on the mobility of the future. As an independent subsidiary of the global player HCLTech, we combine stability with an innovative mindset. We are future-oriented and always have the latest technologies firmly in mind.

Benefit from our development expertise in the areas of electromobility, autonomous driving and connectivity. With our five service segments – Electrics/Electronics, Software, Consulting & Service, Test & Validation, Vehicle Engineering – our strategic development focus is on the future-oriented technologies of the automotive industry.



# get in touch

Any questions or projects that you would like to discuss? We'd love to share ideas and explore synergies with you.

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# **Test Systems**

customized. ready to use. modular.

Test systems for future mobility. Maximum customization. A breeze with our modular, scalable and triedand-tested building block system. As experts in automotive testing, we offer turnkey solutions for safeguarding vehicle functions. From the concept to the finished test system.

We go even further: maintenance, care, service and system architecture upgrades – our services do not end with curbside delivery. Our repertoire: Functional validation with a focus on comfort and ADAS/AD functions as well as automotive test systems for reliability and durability testing.

# **Services Test Systems**

#### Control and automation

#### STEP software

- Integration of test bench components in HW and SW
- Proprietary protocols and plugin concepts

#### Current Loupe

- Automatic measuring range switchover and calibration capability
- Easy integration via Ethernet or CAN

#### Rotor position sensor

- Reproduction of a real speed sensor signal
- Measurement resolution up to 3 kHz
- Up to four tracks also differential and including processing of an excitation signal

### Integration test bench

#### Concept for all HIL categories

- Scalable and compatible test bench hardware with appealing appearance
- From component HILs (K-HIL) to overall vehicle HILs (G-HIL)
- Sustainability and robustness concept for current and subsequent networking

#### Benefits

- Long-term availability common part concept
- High safety and quality
- Low support effort
- High reliability and automation operation 24 / 7
- Turnkey delivery

# Lifetime test bench

#### Modular system

- LV rack and HV rack for six DUTs / device under test
- Customized load simulation
- Control via Step | Canoe

#### Scalability

- DC and phase current measurement
- Rotor position encoder

## Individual test bench

#### Mechatronic racks

- Automatic actuation e.g. of a button or door handle
- Original actuator moves e.g. rear roller blind
- Back measurement or own sensor technology •
- Physical fault injection e.g. blocking •
- Full automation
- Data logging

#### Test benches and benchtop setups for

- Quality engineering
- HV start up and flash test benches
- Air conditioning units and temperature control components