# We are ASAP

Our driving force is the automobile – our task is the

development of future-oriented technologies. As a

Benefit from our development expertise in the areas

of electromobility, autonomous driving and connectivity. With our five service segments - Electrics/Elec-

tronics, Software, Consulting & Service, Test & Validation, Vehicle Engineering – our strategic develop-

ment focus is on the future-oriented technologies of

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 techno-

logies firmly in mind.

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.









asap.de



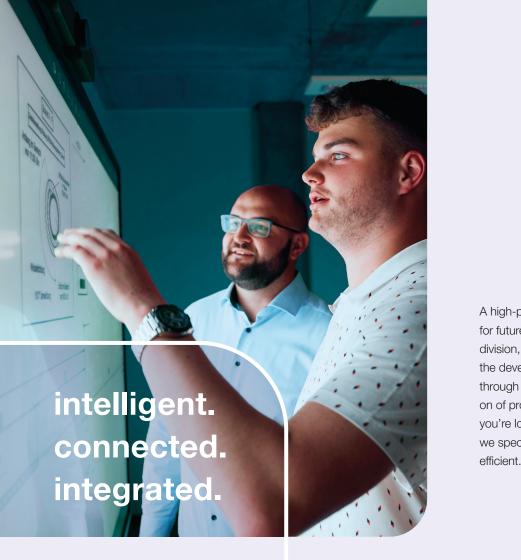
**Martin Ott** COO martin.ott@asap.de



Stefan Schmidt Director Division Wiring Systems stefan.schmidt@asap.de



Wiring Systems



A high-performance wiring system will be essential for future vehicle generations. In our Wiring Systems division, we cover the full service spectrum, throughout the development process – from architecture design through to installation. We also support the construction of prototypes and sample wiring systems. Whether you're looking for virtual validation or real-world testing, we specialise in both. But we're one thing above all:

# **Services Wiring Systems**

# DMU | 3D

### 3D cable routing

- Cable routing design (e.g. compliance with all relevant parameters, fastening and protection concepts)
- Design of topology concepts from customerspecific harnesses to power cables
- Definition of routing areas subject to dynamic stresses

### Wiring system simulation (IPS)

- Simulation of routing areas subject to dynamic stresses
- Cable/assembly design with regard to their function/production
- Depiction of installation methods for critical areas/ results
- Clearance analysis in static and dynamic areas

# Electrologic | 2D

- Development of system plans and wiring diagrams for the entire vehicle
- Control and development of module and feature variants
- Creation and implementation of change requests from OEMs and suppliers in compliance with all processes
- Preparation of production drawings in accordance with OEM, Tier 1 and process standards
- Full-scope development from a single source, from concept to series manufacturing
- Independent participation in architecture roundtables
- Interdisciplinary coordination with related domains

## Components

### 3D component development

- Development and design of all non-electrifiable wiring system components
- Geometric integration into all vehicle architectures
- Component analysis and optimisation (e.g. manufacturing and dimensional accuracy)
- Tool-appropriate design of metal, plastic and elastomer components (1K/2K)
- Development from a single source, from concept to series production

### ADAS integration

- Component development and integration of ADAS sensors, control units and antennae for all phases
- Sensor setting throughout the entire vehicle
- Production of technical specifications for OEMs and Tier 1
- Integration of sensor technology into prototype vehicles

# **Component ownership**

- Geometric integration of all wiring system elements in line with all customer-specific design guidelines
- Control of wiring system variants throughout the entire development cycle
- Change management and approval processes in line with OEM guidelines
- Interdisciplinary interface management between OEMs and suppliers
- Cost monitoring, schedule tracking and presenting topics to various bodies
- Development throughout the entire product engineering process