

Sense the power of light

ams OSRAM

# Cost-effective System Solutions using OSP-based LED Drivers

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DVN Munich, February 2026

# Key Automotive Trends Driving Us

Innovating the Future of Mobility with Passion

- ECU-free architecture → new protocol standards
- Pixelation → more light points
- Dynamic lighting → fast communication and light quality

➤ ENGINEERED TO FIT YOUR

*Design Vision*

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Forward lighting with EVIYOS



Area lighting with ALIYOS



Strip lighting with OSIRE/SAID

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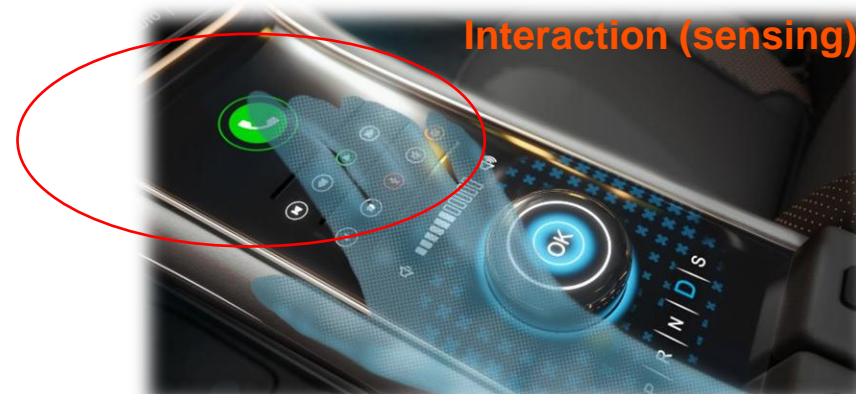
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- A white car is driving on a gravel road towards a sunset. The sun is low on the horizon, casting a warm glow over the scene. In the background, there are mountains with patches of snow. The sky is filled with soft, colorful clouds.
- 1.ams OSRAM Automotive Intelligent LED Drivers
  2. Cost-Effectiveness in Components and Systems
  3. Cost-Effectiveness in Interior and Exterior Applications
  4. Summary and Outlook

# Typical Application and Use Cases Targeted by OSP (Open System Protocol)

OSP was developed for dynamic automotive ambient lighting, enabling real-time control of tens to hundreds of individual light points with precise color settings.



Fast (2.4Mbit/s up to 1000 nodes), low cost (free and open) and (soon) standardized

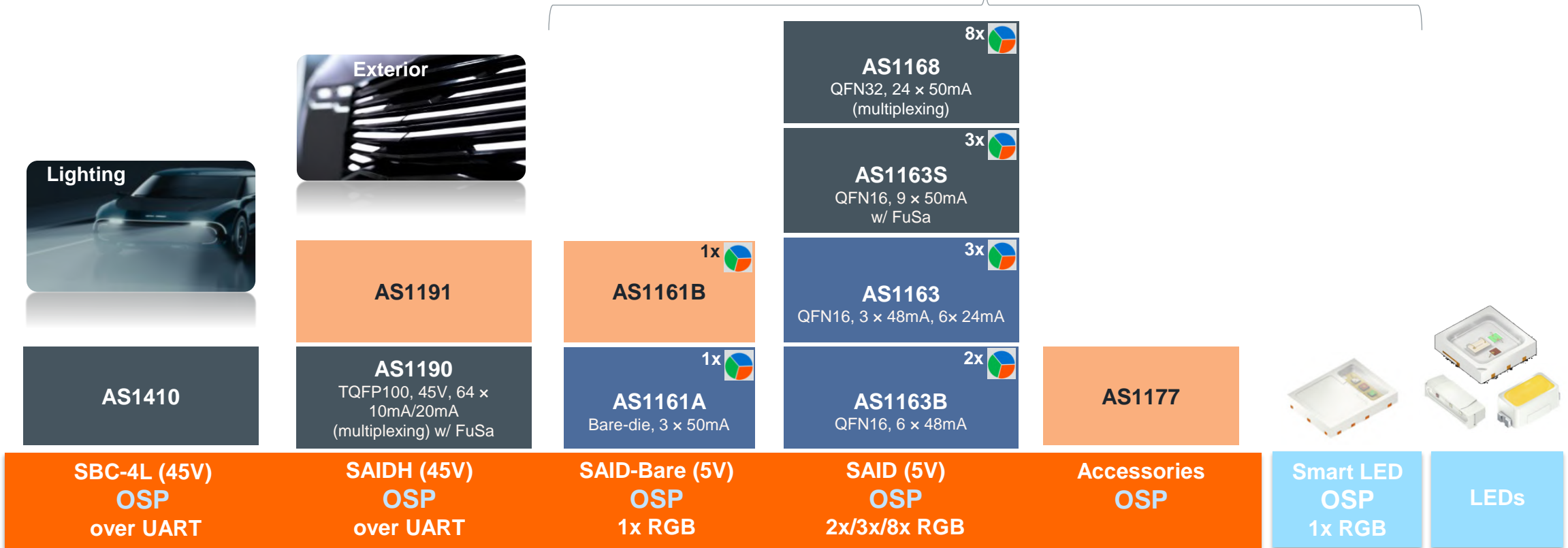
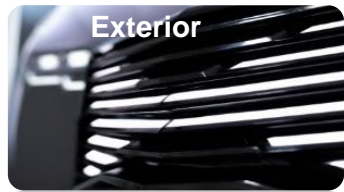


# OSP Roadmap

Open System Protocol is the strong foundation and enables a comprehensive IC portfolio strategy  
no company offers an integrated solution combining Driver, PMIC, LEDs and smart LEDs



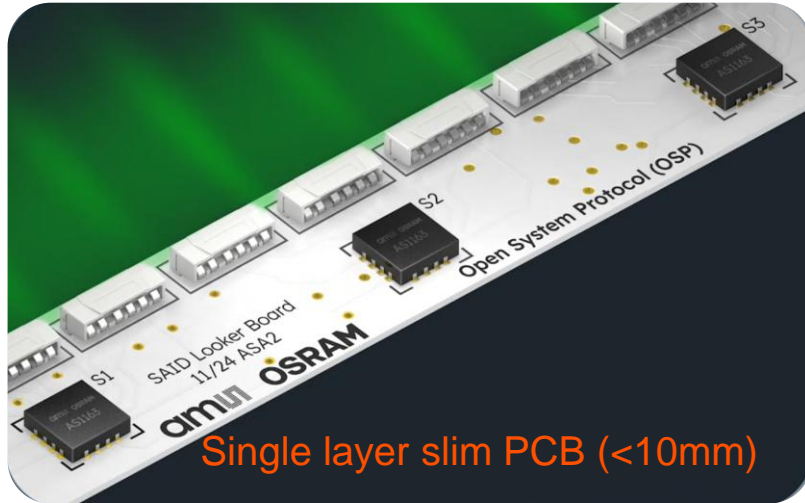
In Production  
In Development  
In Roadmap



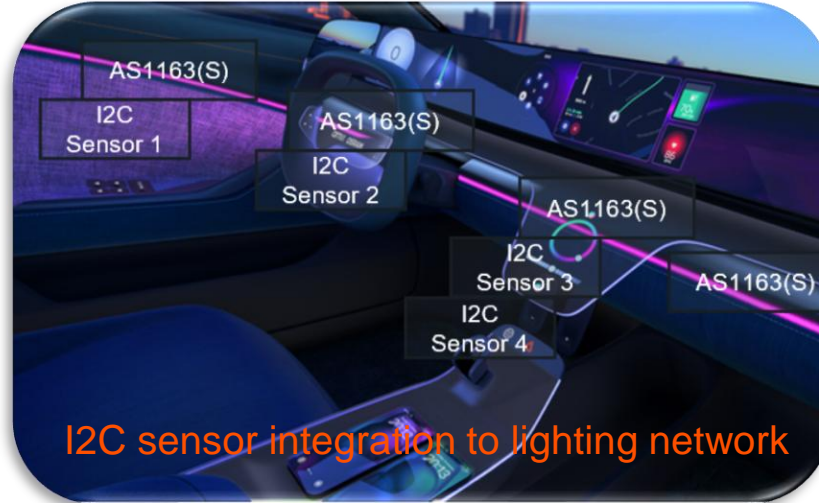
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# 3 RGB (9 Single Color) Intelligent AS1163 and AS1163S

Optimized Local MCU-free Devices for Grille/Logo Illumination and Dynamic Ambient Lighting



Single layer slim PCB (<10mm)



I2C sensor integration to lighting network



Compatible with cost-effective and eco-efficient Flex PCB

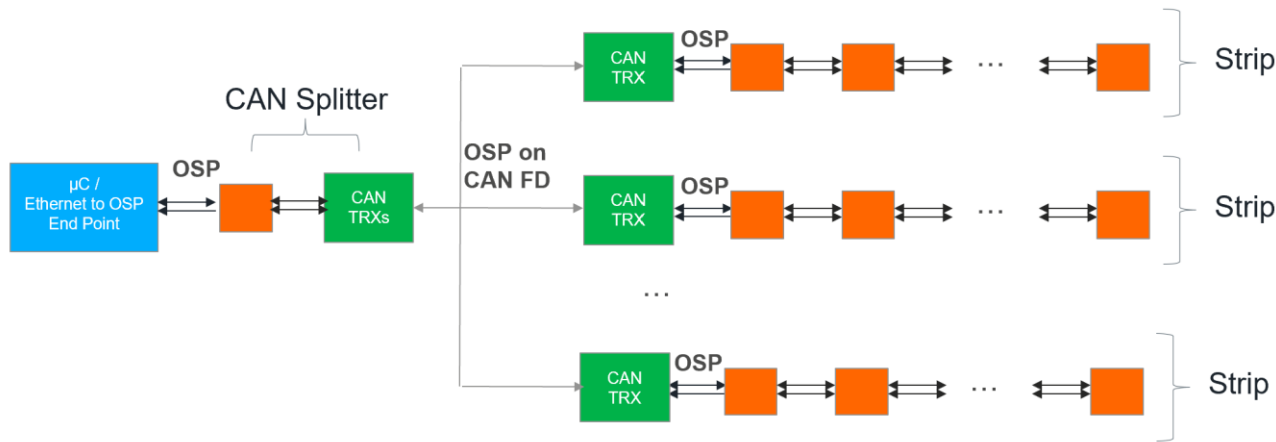


Channel-clustering supporting mid-power LEDs

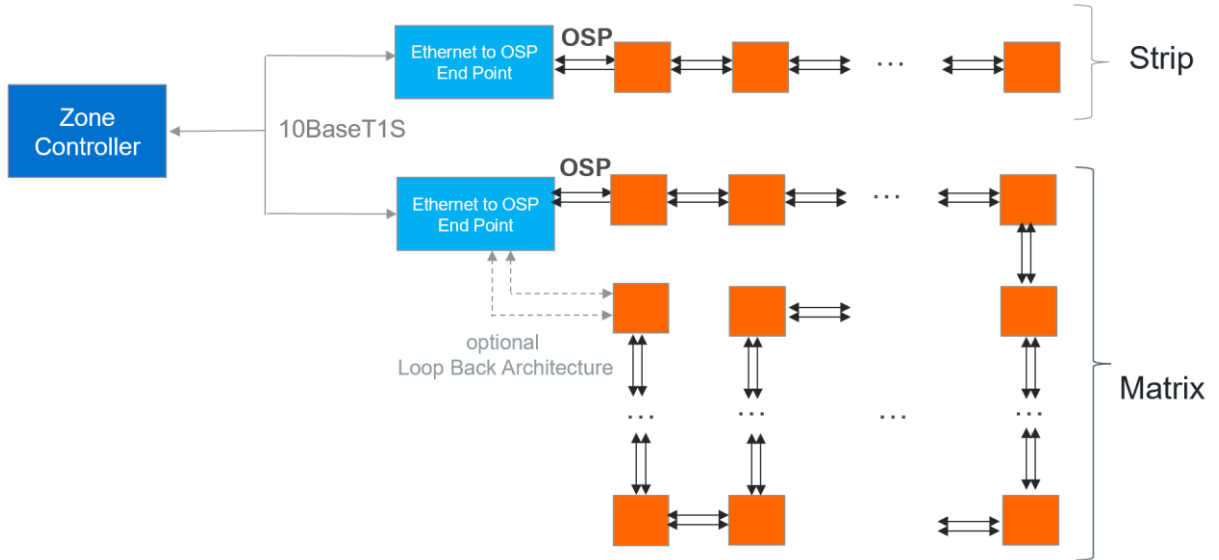
# Star Topology for OSP Daisy Chain and Ethernet to OSP Endpoint

Optimized System Architectures for High Performance and Low-Cost Applications

Parallel branching via OSP for single or multiple applications



Synchronized parallel connection via Endpoint for multi-applications

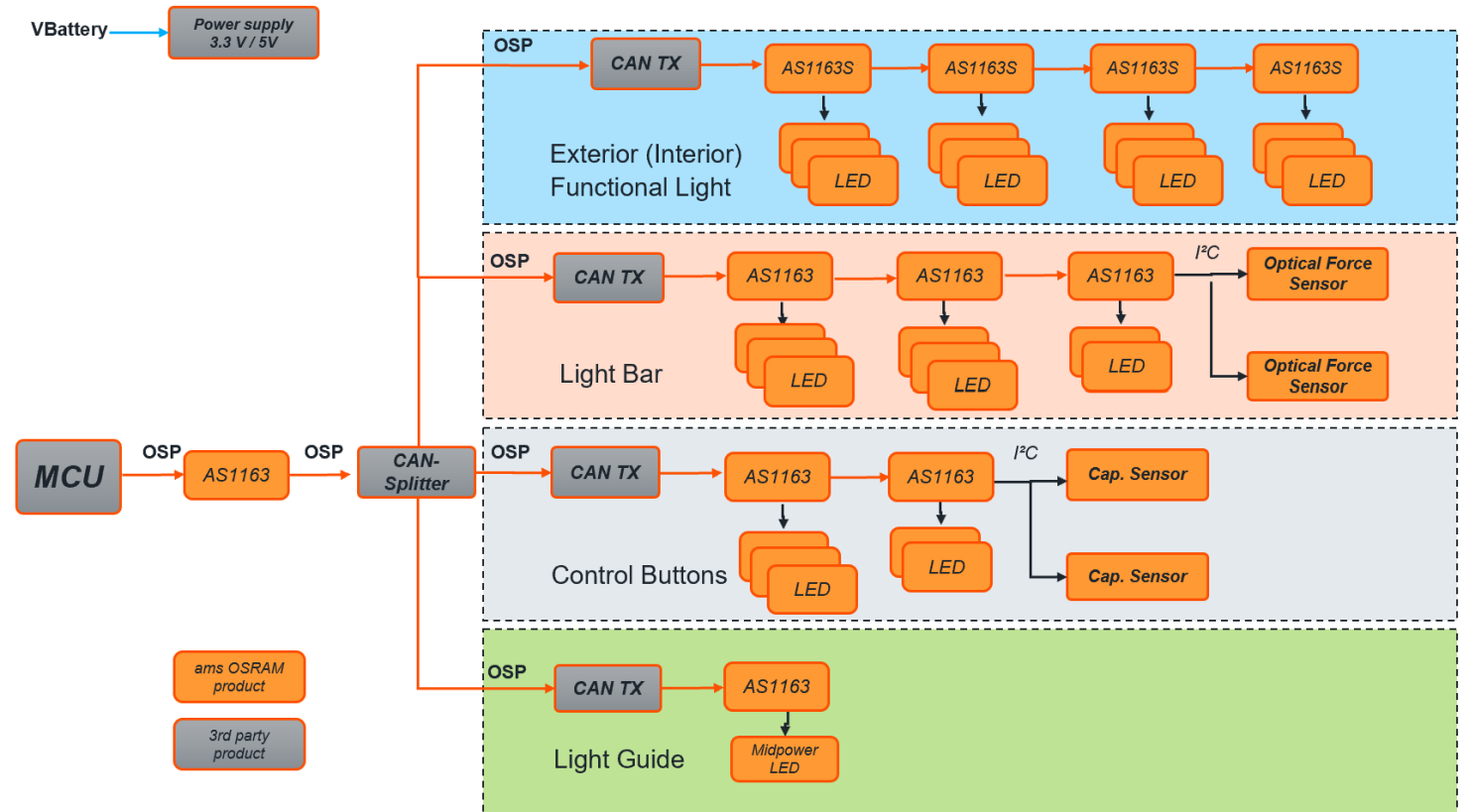


OSP Node  
(e.g. OSIRE® E3731i, SAID)

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# Smart Surface, Functional Lighting, Ambient Lighting (Interior/Exterior)

Using a combination of Optical Force Touch, Capacitive Touch and addressable RGB LEDs

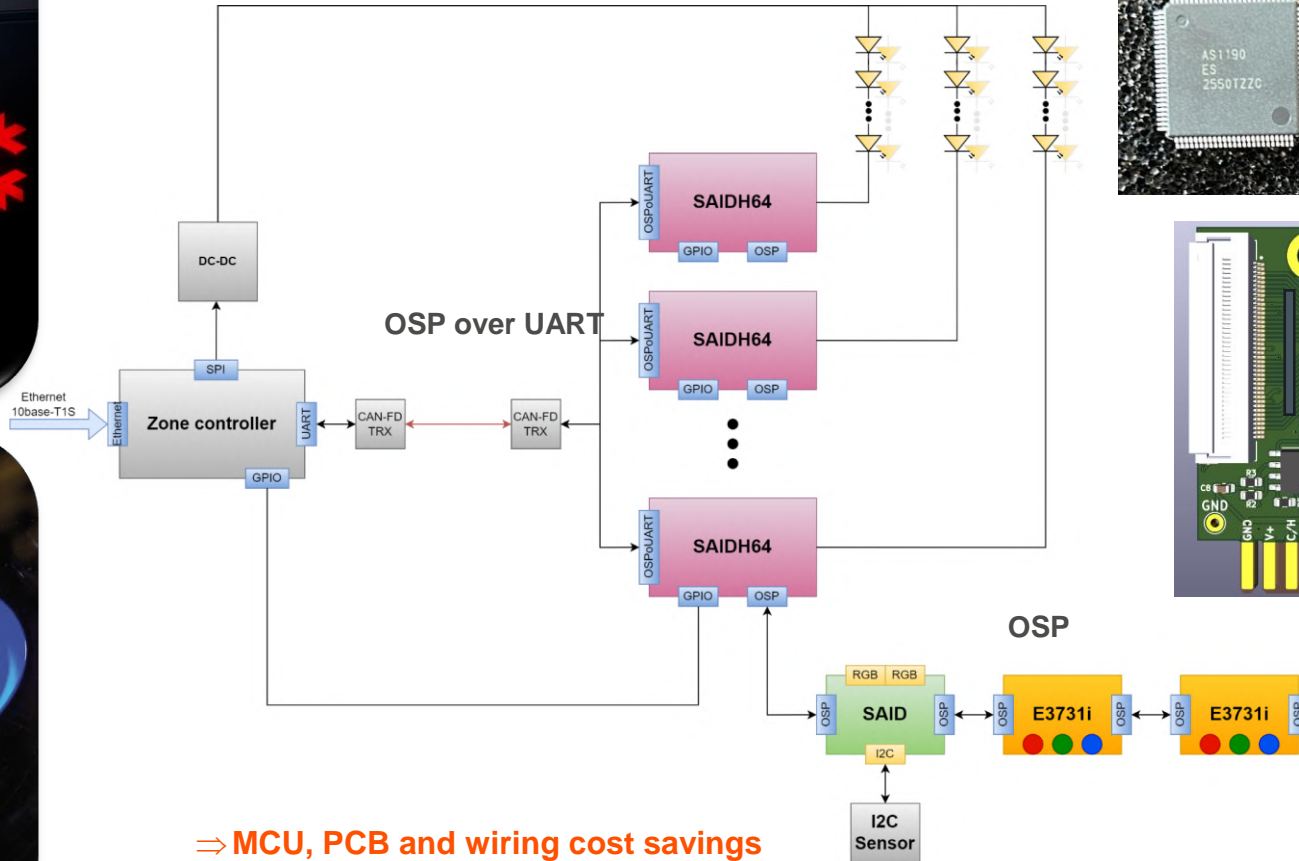


⇒ MCU, PCB and wiring cost savings

⇒ Software development cost savings

# Signaling, Display, Charging Light (Exterior)

Using a combination of segmented Mini LED array and addressable RGB LEDs



⇒ MCU, PCB and wiring cost savings

⇒ Software development cost savings

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# Summary and Outlook

High design freedom via OSP ecosystem for innovative and cost-effective products

Committed to Automotive Lighting

Portfolio Expansion serving more Customer Needs

ams OSRAM: OPEN approaches with a future plan!



Explore our OSP webpage and LED driver portfolio.  
Welcome to ams OSRAM booth!