Update on strategy & Second quarter results 2023

Aldo Kamper, CEO
Rainer Irle, CFO
Dr Juergen Rebel, SVP Investor Relations

July 2023
Focus on profitability and on monetizing innovation, benefitting from structural growth and our strong position in our key markets

Strategy & business outlook reassessed by new management team

Key challenges of previous business model

- Strong focus on disruptive, custom technologies for high volume opportunities in the Consumer device arena is risky when it comes to industrialization, execution and market adoption
- ‘Home-made’ execution issues, partly due to unclear ownership in current matrix organization
- Uptake of new markets or adoption of new, disruptive technologies have not always happened as quickly as planned
- De-prioritization of some structural growth opportunities in sticky core markets such as Automotive, Industrial and Medical
- High sensitivity to macro-economic shocks such as pandemic and geopolitical crises

Adjusted business model

- Focus semiconductor portfolio on differentiated, intelligent sensors and emitter components
- Expand leading positions in relevant Automotive, Industrial, Medical markets with strengthened investments into structural growth opportunities
- Exit non-core semiconductor businesses with revenue run-rate of EUR 300 – 400 million
- Continue to pursue specific opportunities in Consumer markets where we sustainably differentiate
- Invest selectively in disruptive innovation such as microLED technology
- ‘Re-establish the Base’ program adjusting semiconductor portfolio, company over-head, infrastructure and organization to new adjusted business model
- Streamline organizational set-up within Semiconductor segment by going from 3 to 2 Business Units with full end-to-end ownership & responsibility
- Portfolio streamlining and efficiency measures target savings of EUR 150 million by end-of-2025 and improving Cash Flow of the Group

Laying the foundation for 6 – 10% revenue CAGR from new base and ~15% adj. EBIT by 2026
Benefitting from structural growth and our strong position in Automotive, Industrial, Medical markets

Growing from the core of sensor & emitter components by increasingly adding intelligence to drive system performance

Semiconductor Addressable Markets*
- application view -
2022 / CAGR**

Automotive
EUR 3 bn
17% CAGR

Industrial / Medical
EUR 6 bn
4% CAGR

Selected high-volume Consumer applications
EUR 1.5 bn
24% CAGR

Core Semiconductor Portfolio

Functional Applications
- Sensing
- Illumination
- Visualization

Sensors
Intelligent sensors
Mixed Signal ICs

Emitters
Intelligent emitters

Leading positions
Technology
Leadership
Innovation

Benefitting from structural growth and our strong position in Automotive, Industrial, Medical markets

Growing from the core of sensor & emitter components by increasingly adding intelligence to drive system performance

*ams OSRAM market model due to lack of suitable external market models
** 2022 – 2026 CAGR due to 2022 was last full year actuals, and cyclical dip in 2023

=> No dedicated market reports for ams OSRAM addressed application segments available
Growth in core portfolio is driven by secular megatrends

<table>
<thead>
<tr>
<th>Digitalization</th>
<th>Automotive</th>
<th>Industrial</th>
<th>Medical</th>
<th>Consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Projected lighting</td>
<td>• Industrial automation</td>
<td>• Medical imaging</td>
<td>• Camera enhancement</td>
<td></td>
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<tr>
<td>• Smart surfaces</td>
<td>• Robotics</td>
<td></td>
<td>• Spectral &amp; light sensing</td>
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<tr>
<td>• Advanced displays (incl. microLED)</td>
<td>• Home Automation</td>
<td>• Personal &amp; home care</td>
<td>• AR/VR glasses sensing</td>
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<td></td>
<td>• Building Automation</td>
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<td>&amp; visualization</td>
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<td></td>
<td>• Outdoor lighting</td>
<td></td>
<td>• Vital signs monitoring</td>
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<td></td>
<td>• Industrial lighting</td>
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<tr>
<td>Smart Living (IoT)</td>
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<tr>
<td>• Dynamic forward &amp; signal lighting</td>
<td>• Horticulture</td>
<td>• Enhanced display management</td>
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<tr>
<td>• In-cabin sensing</td>
<td>• LED + laser projection</td>
<td>• Next generation displays</td>
<td></td>
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<tr>
<td>• ADAS/AD (LiDAR)</td>
<td>• UV-C* disinfection</td>
<td>(microLED)</td>
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<tr>
<td>Energy efficiency &amp; sustainability</td>
<td></td>
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<tr>
<td>• Ambient lighting,</td>
<td>• Horticulture</td>
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</tbody>
</table>

*Ultra Violet light at 200 – 280 nm wavelength
Addressed application segments grow faster than the overall market

Semiconductor focus markets – product category view vs addressed application segment view

<table>
<thead>
<tr>
<th>Addressed Semiconductor Markets*</th>
<th>Optoelectronics &amp; Sensors</th>
<th>LED market (incl. microLED)</th>
<th>Light sensors</th>
</tr>
</thead>
<tbody>
<tr>
<td>- application view -</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2022 / 4-yr CAGR**</td>
<td>CAGR 3.1%</td>
<td>CAGR 1.6%</td>
<td>CAGR 8.2%</td>
</tr>
<tr>
<td>*ams OSRAM market model due to lack of suitable external market models</td>
<td>~74bn</td>
<td>~19bn</td>
<td>~3.1bn</td>
</tr>
<tr>
<td>** 2022 – 2026 CAGR due to 2022 was last full year actuals, and cyclical dip in 2023</td>
<td>~66bn</td>
<td>~14bn</td>
<td>~2.2bn</td>
</tr>
<tr>
<td>*** Serviceable Addressed Market =&gt; no dedicated, only partial market reports for ams OSRAM addressed application segments available</td>
<td>(Source: WSTS)</td>
<td>(Source: Trendforce)</td>
<td>(Source: WSTS)</td>
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Automotive
- EUR 3 bn  
  17% CAGR

Industrial / Medical
- EUR 6 bn  
  4% CAGR

Selected high-volume Consumer applications
- EUR 1.5 bn  
  24% CAGR

~€10bn SAM*** of €66bn TAM

(Source: WSTS)

(Source: Trendforce)

(Source: WSTS)
ams OSRAM holds leading positions in its core Semiconductor & Lamps markets

Leverage strong positions with focused core portfolio and commitment to Automotive, Industrial, Medical markets

#2 in LED
LED Suppliers by 2022 market share
(Total market USD ~12bn; TrendForce)

1. Nichia 15%
2. ams OSRAM 13%
3. Seoul Semiconductors 7%
4. Samsung LED 7%
5. Lumileds 6%

#2 in Light Sensors
Light Sensor Suppliers by 2021 market share
(Total market USD ~1.3bn; OMDIA)

1. STMicroelectronics 30%
2. ams OSRAM 25%
3. Maxim 8%
4. Sensortek (Sitronix) 8%
5. Lite-On 4%

#1 in traditional Auto lamps/bulbs
Bulb Suppliers by 2022 market shares
(Total market USD ~1.5bn; own market model due to lack of external research)

1. ams OSRAM
2. Lumileds
3. Others (incl. Asian suppliers)

Sources: TrendForce 2023 LED Player Revenue and Capacity 2Q23, OMDIA Light Sensor Report – 2022
Automotive & Industrial/Medical contribute already today ~80% of revenues

Revenue split H1 2023 for group and by segments

*I&M denotes Industrial & Medical
Benefitting from balanced regional set-up and healthy customer split

Strong regional presence and very balanced customer portfolio

Revenues by region (H1 2023)

- Americas: 22%
- APAC: 47%
- EMEA: 31%

Top customers split (H1 2023)

- Top 3 customers: 18%
- Top 4-10 customers: 14%
- Other customers: 68%
Semiconductors core portfolio in Automotive, Industrial, Medical drives significant future growth

Strong design win base enables meaningful growth from new core portfolio in Semiconductors

2023-2026 CAGR from new base (predominantly driven by '25 and '26)

Exit of Semi non-core business: ~300 - 400 m€

6% to 10%

Semi 9% to 13%

L&S 0 to 2%

Ramping Kulim-2 / microLED

Monetizing innovation:

Automotive:
- Pixelated LED Forward Lighting
- Standard LED Forward Lighting
- LED Signaling
- LED Ambient Lighting
- Lasers for Lidar
- Specialty sensors (Driver Monitoring, Rain, Position, …)

Industrial/Medical:
- Broad based growth vectors:
  - LED lighting Horticulture
  - Lasers for projection
  - Specialty sensors for CT scanning
  - Emitters / Sensors for robotics
  - Emitter / Sensors for diverse applications

Consumer:
- Re-won and new sockets in portable Consumer devices:
  - Ambient Light Sensing
  - Proximity Sensing
  - 1d/2d/3d ToF Camera Enhancement

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- Re-won and new sockets in portable Consumer devices:
  - Ambient Light Sensing
  - Proximity Sensing
  - 1d/2d/3d ToF Camera Enhancement
Re-establish the Base program
Focusing on our core as the new base for sustainable, profitable growth

Objectives:

1. Focus the portfolio on the core with the highest profitability and the best growth perspective
2. Center mindset and accountability on “monetizing innovation” and overall profitability
3. Make the company lean and efficient by having the appropriate size, infrastructure and agility
4. Bottom-line improvements from portfolio-measures and savings (75m€ run-rate by end-2024, 150m€ run-rate by end-2025) for improved profitability in 2024 and ~15% adj. EBIT by 2026 onwards
First L&S, now Semiconductors: Focused portfolio for improved profitability

Development of L&S segment revenues and EBIT margin (adj.) since 2021, figures in EUR million

- Proven track record of successful portfolio re-alignment with focus on sustainable and profitable businesses
- Reduction of revenue base while markedly increasing profitability
- Focus on attractive core business areas, similar approach now applied to Semiconductors segment

<table>
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<tr>
<th>Quarter</th>
<th>Revenues (EUR million)</th>
<th>EBIT margin (adj.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 2021</td>
<td>451</td>
<td>1.0%</td>
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<tr>
<td>Q2 2021</td>
<td>448</td>
<td>0.6%</td>
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<tr>
<td>Q3 2021</td>
<td>422</td>
<td>5.5%</td>
</tr>
<tr>
<td>Q4 2021</td>
<td>439</td>
<td>4.5%</td>
</tr>
<tr>
<td>Q1 2022</td>
<td>457</td>
<td>6.0%</td>
</tr>
<tr>
<td>Q2 2022</td>
<td>384</td>
<td>1.6%</td>
</tr>
<tr>
<td>Q3 2022</td>
<td>400</td>
<td>7.6%</td>
</tr>
<tr>
<td>Q4 2022</td>
<td>411</td>
<td>10.2%</td>
</tr>
<tr>
<td>Q1 2023</td>
<td>380</td>
<td>17.1%</td>
</tr>
<tr>
<td>Q2 2023</td>
<td>251</td>
<td>14.6%</td>
</tr>
</tbody>
</table>
Re-assessment of portfolio and market outlook leads to an updated mid-term target financial model

Focus on profitability and structural growth from the new core portfolio in Semiconductors

Over-the-cycle mid-term target financial model

<table>
<thead>
<tr>
<th>Metric</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue growth CAGR</td>
<td>6% - 10%*</td>
</tr>
<tr>
<td>Adjusted EBIT</td>
<td>~15% (2026+)</td>
</tr>
<tr>
<td>CAPEX</td>
<td>10%</td>
</tr>
</tbody>
</table>

Assumptions:
- Starting base is CY 2023 revenues, less EUR ~300m to 400m of non-core semiconductor portfolio to be exited
- Target Financial Model is valid for new Semiconductor Segment + Lamps & Systems Segment combined

Long-term target leverage

<table>
<thead>
<tr>
<th>Metric</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term leverage</td>
<td>Net Debt / (adj.) EBITDA &lt; 2</td>
</tr>
</tbody>
</table>

* >2x WSTS opto-electronics F99 & sensors H99 = 3.1% CAGR `22 to `26 due to addressed segments
Macro headwinds expected to prevail throughout next 12 months – afterwards, back to growth track towards 2026

<table>
<thead>
<tr>
<th>next 12 months</th>
<th>3 years outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Macro sentiment</strong></td>
<td><strong>3 years outlook</strong></td>
</tr>
</tbody>
</table>
| - June Eurozone and US PMIs weaken further into contraction territory. China weaker but still above 50.  
- GDP consensus expectations 2023/24 have stabilized at Eurozone 0.6% / 1.0%, US 1.3% / 0.7% and China 5.5% / 4.8%.  
- 2023 and 2024 semiconductor forecast w/o memory reduced to -3% yoy and +5.7% y-o-y. | - GDP consensus forecast 2025 shows moderately improving growth in Eurozone (1.6%) and US (1.9%).  
- China growth expected slightly lower (4.7%). |
| **Automotive sentiment** |  
- Light vehicle production in H2/2023 benefits from inventory restocking and still existing pent-up demand after improved supply chain conditions; +5.3% y-o-y in 2023.  
- H1/2024 reflects lowered demand due to expected macroeconomic headwinds; +1.4% y-o-y in 2024. |  
- Light vehicle production expected to grow +2.9% y-o-y in 2025 to 90.5m and +2.0% y-o-y in 2026 to 92.3m units.  
- Significant growth in EVs (CAGR 30% over next 3 years; S&P Global Mobility) that usually also have come with additional emitter & sensor enabled innovations |
| **Consumer sentiment** |  
- Global smartphone forecast 2023/24 reduced to 1.144m / 1.170m units implying -5.2% / +2.3% growth.  
- Despite an expected rebound in 4Q23, global smartphone shipments in 2023 lower than 2022.  
- Wearable forecast 2023/24 reduced to 504 / 545m units implying +2.4% / +8.2% growth y-o-y. |  
- Global smartphone forecast 2025 shows growth increasing to 4.7% y-o-y to 1.224m units.  
- Wearable forecast shows 6.3% y-o-y growth in 2025 to 580m units.  
- MicroLED display shipments to increase to 51.7m units in 2030 (1.3% of FPD shipments) |
| **Industry and Medical sentiment** |  
- China’s Industrial Laser Market shows recovery, China high-tech manufacturing industries grew 7.4% y-o-y.  
- German Robotic & Automation sector to grow +13% y-o-y in 2023.  
- Global LED Lighting shipment forecast for 2023 reduced to +3.6% y-o-y. |  
- Steady growth of 5-7% p.a. for global industrial robot market until 2027  
- Horticulture: growing importance of hyper-red lighting for additional yields of almost one-fifth in tomatoes  
- China UV disinfection market expected to reach a market size of US $2.8 bn by 2030 (CAGR 16.2%) |

Sources:  
- WSTS Semiconductor Market Forecast Spring 2023  
- IHS Light Vehicle Production Forecast July 2023  
- OMDIA Micro LED Display Market Tracker 2Q23  
- OMDIA Smartphone Model Market Tracker 1Q23  
- IDC Quarterly Wearable Device Tracker Forecast 1Q23  
- TrendForce 2023 Global LED Lighting Market Analysis 1H23  
- VDMA Robotics Automation Market Update  
- S&P Global, Bloomberg, Hortidaily.com
In Summary: sharpening the profile & the set up for maximum result

Focus on profitability and monetizing innovation, benefitting from structural growth in Automotive, Industrial, Medical

- New management with holistic value creation mindset and proven track record
- Focusing the Semiconductor portfolio on its profitable core in differentiated, intelligent sensor and emitter components
- Strong commitment to structural growth opportunities in AIM backed by secular mega-trends
- Continue selected investments into high-volume Consumer opportunities where ams OSRAM can provide sustainable differentiation with cutting-edge technology
- Exit non-core business with revenue run-rate of EUR 300 – 400m, e.g. passive Optical Components
- Impairment charge of EUR 1,313m due to market re-assessment
- Automotive & specialty lamps (Lamps & Systems Segment) will continue to contribute meaningfully to Group results
- “Re-establish the Base” efficiency program & portfolio focus target together EUR 150m savings by end of 2025
- Centering our organizational set-up on “Monetizing Innovation” with clear end-to-end ownership
- Pursuing selected, disruptive innovation such as microLED

Mid-term Target Financial Model: 6 – 10% revenue CAGR from new base, ~15% adj. EBIT 2026+
### Overview of Q2 - Financials

Figures in EUR million (for details refer to “Financial results in detail Q2 2023 and H1 2023”)

<table>
<thead>
<tr>
<th>EUR millions (except per share data)</th>
<th>Q2 2023</th>
<th>Q1 2023</th>
<th>QoQ</th>
<th>Q2 2022</th>
<th>YoY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>851</td>
<td>927</td>
<td>-8%</td>
<td>1,183</td>
<td>-28%</td>
</tr>
<tr>
<td>Gross margin adj.¹)</td>
<td>27.8%</td>
<td>29.3%</td>
<td>-150 bps</td>
<td>31.6%</td>
<td>-380 bps</td>
</tr>
<tr>
<td>Results from operations (EBIT) adj.¹)</td>
<td>50</td>
<td>50</td>
<td>0%</td>
<td>104</td>
<td>-52%</td>
</tr>
<tr>
<td>EBIT margin adj.¹)</td>
<td>5.9%</td>
<td>5.4%</td>
<td>+50 bps</td>
<td>8.8%</td>
<td>-290 bps</td>
</tr>
<tr>
<td>Net result adj.¹)</td>
<td>31</td>
<td>6</td>
<td>464%</td>
<td>-54</td>
<td>N/A</td>
</tr>
<tr>
<td>Diluted EPS adj.¹)</td>
<td>0.12</td>
<td>0.02</td>
<td>464%</td>
<td>-0.21</td>
<td></td>
</tr>
<tr>
<td>Diluted EPS adj. (in CHF)¹²)</td>
<td>0.12</td>
<td>0.02</td>
<td>464%</td>
<td>-0.21</td>
<td></td>
</tr>
<tr>
<td>Operating Cash Flow</td>
<td>232</td>
<td>162</td>
<td>43%</td>
<td>100</td>
<td>133%</td>
</tr>
<tr>
<td>Net debt</td>
<td>2,034</td>
<td>1,940</td>
<td>5%</td>
<td>1,727</td>
<td>18%</td>
</tr>
</tbody>
</table>

¹) Excluding M&A-related, transformation and share-based compensation costs, results from investments in associates and sale of businesses

²) Earnings per share in CHF were converted using the average currency exchange rate for the respective periods
Short term outlook and FY 2024 comments

**Q3 2023 guidance**

- **Revenues***: EUR 840 - 940 million
- (adj.) **EBIT margin**: 5 – 8%

*EUR ~120m YOY deconsolidation effects vs. Q3 2022

**Q4 2023 comments**

- **Semiconductors**:  
  - High uncertainty in end-markets persisting  
  - Especially Industrial and Consumer end-markets are challenged  
  - Automotive revenues should continue to stabilize with normalizing supply chain and new products ramping

- **Lamps & Systems**:  
  - Robust revenues expected due to seasonally strong Automotive aftermarket

**FY 2024 comments**

- Absolute Group revenues expected to decline compared to 2023 due to portfolio decisions
- Semiconductor core business expected to outgrow target markets - assuming end-markets stabilize
- Group targets slightly positive Free Cash Flow assuming end-markets stabilize. Significantly reduced CAPEX compared to 2023.
- Focus on improving profitability

Expected and based on current information and exchange rates  
Adjusted figures exclude M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of businesses
Semiconductors: Automotive Growth Drivers
Offering full technology range and innovation leadership in automotive emitters and light sensors

Leading Positions in Automotive Semiconductor Sub-Segments

#1 in Automotive Emitters
Auto LED suppliers by 2022 market share (Total market USD ~3.2bn; TrendForce)

1. ams OSRAM 35%
2. Nichia 25%
3. Lumileds 9%
4. Dominant 7%
5. Seoul Semiconductor 6%
6. Samsung LED 6%
7. Stanley 5%
8. Everlight 2%
9. Cree LED 1%
10. Jufei 1%

#1 in Automotive Light Sensors
Auto Light Sensor suppliers by 2021 market share (Total market USD ~68m; OMDIA)

1. ams OSRAM 34%
2. Elmos 18%
3. Vishay 15%
4. Melexis 6%
5. Hamamatsu 4%
6. Rohm 1%

#16 in Automotive Semiconductors
Automotive semiconductor suppliers by 2022 market share (Total market USD ~64bn; OMDIA)

1. NXP 11%
2. Infineon 11%
3. STMicro 8%
4. ... ...
5. Toshiba 1.5%
16. ams OSRAM 1.5%
17. Melexis 1.2%
18. Sanken 1.1%
19. Fuji Electric 1.0%
20. Nichia 0.9%

Sources: TrendForce 2023 LED Player Revenue and Capacity 2Q23, OMDIA Light Sensor Report – 2022; OMDIA Competitive Landscaping Tool 1Q23
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>1st radial LED in VW</td>
</tr>
<tr>
<td>1991</td>
<td>Rain sensor</td>
</tr>
<tr>
<td>1997</td>
<td>1st LED brand color program with VW</td>
</tr>
<tr>
<td>2003</td>
<td>1st full color head up display for BMW</td>
</tr>
<tr>
<td>2007</td>
<td>1st daytime running LED light with Audi</td>
</tr>
<tr>
<td>2008</td>
<td>1st ambient light sensor reproducing human eye behavior</td>
</tr>
<tr>
<td>2008</td>
<td>Ice-blue backlighting color theme with Ford</td>
</tr>
<tr>
<td>2009</td>
<td>1st full LED front lighting</td>
</tr>
<tr>
<td>2010</td>
<td>1st IR laser for emergency braking for Volvo</td>
</tr>
<tr>
<td>2012</td>
<td>1st standard scalable LED forward lighting with BMW, VW</td>
</tr>
<tr>
<td>2013</td>
<td>Capacitive sensor for Airbag - Child Seat Suppression System</td>
</tr>
<tr>
<td>2014</td>
<td>1st 12V battery with high precision current aO sensor</td>
</tr>
<tr>
<td>2017</td>
<td>Tailgate sensor (capacitive) for 1st touchless trunk opener</td>
</tr>
<tr>
<td>2020</td>
<td>1st VCSEL for Driver Monitoring</td>
</tr>
<tr>
<td>2021</td>
<td>LED matrix headlights</td>
</tr>
<tr>
<td>2017+</td>
<td>1st ADB</td>
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<tr>
<td>2003</td>
<td>1st full color head up display for BMW</td>
</tr>
<tr>
<td>2007</td>
<td>1st daytime running LED light with Audi</td>
</tr>
</tbody>
</table>

**ams OSRAM can build on a strong track record as trusted innovation partner**

**ams OSRAM’s long history of driving innovation in the Automotive semiconductor world**
ams OSRAM Automotive and Mobility

Driven by safety, convenience and digitalization

Illumination / Visualization
Sensing

Ambient lighting
Smart Surface
Display Backlighting
In Cabin Sensing
Battery management
Head Up Display / Projection
Exterior Sensing (LiDAR)

Dynamic signaling
Static signaling
Functional illumination
Position & Angle Sensing

Optical Sensing
- Ambient Light Sensing
- Rain, light & tunnel sensing
- Touchless trunk opener

Dynamic forward lighting
Static forward lighting

Automotive Semicon Market**

Power/Analog/Discretes 26.1%
Memory 10.9%
Sensors 6.5%
LED 13%

Processors/Logic 43.5%

BOM 2022 (SAM)
- ~38€*
- ~14€
- ~24€

BOM 2026 (SAM)
- ~53€
- ~19€
- ~34€

average € across all vehicle classes

*premium cars >50€ already today
**Source: Yole Overview of the Semiconductor Devices Industry 2023
Safe Mobility – High Pixelated Forward Lighting (Eviyos)
Increasing ams OSRAM semiconductor BoM per car with a strong design-win base

Example applications

Adaptive Driving Beam

Symbol projection

2023  2024  2025+
1 OEM   7 OEMs  > 12 OEMs

>150 m€
Design-wins to date
(lifetime value)
Safe & Autonomous Mobility – InCabin Sensing

Increasing ams OSRAM semiconductor BoM per car with a strong design-win base driven by regulation & comfort

On-going business relationships with all global OEMs and Tier-1

Product portfolio

Infrared LEDs
IR LEDs are preferred by most OEMs due to better cost efficiency for high-volume 2D Driver Monitoring applications

Infrared VCSELs
Mid-term, VCSEL growth will be accelerated by use cases related to autonomous driving that require 3D capability

>250 m€
Design-wins to date (lifetime value)

Driver safety & assistance
Cabin & Occupant safety

Both technologies in-house
Semiconductors: Medical / Industrial Growth Drivers
ams OSRAM has been a trusted partner for decades in Industrial / Medical

**Leading by system defining component performance, innovation & IP portfolio and deep customer relationships**

<table>
<thead>
<tr>
<th>Value proposition for our customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>- System defining component performance: Differentiating LED and laser technologies with leading performance - know-how across the entire value chain</td>
</tr>
<tr>
<td>- Innovation leadership &amp; broad IP portfolio - recognition of strong technology know-how by our customers</td>
</tr>
<tr>
<td>- In all focus applications, we have deep relationships with the leading customers and innovation drivers across all regions</td>
</tr>
</tbody>
</table>

- Broad portfolio of high-performance light and other optical sensors as discrete components elements or integrated module
- Best in Class LED emitters reinforcing market leadership and unrivaled performance, e.g. in horticulture lighting with hyper red innovation
- Supply security: European-based specialty analog mixed-signal CMOS fab (Austria)
- Worldwide regional presence and technical support
Addressing Industrial / Medical applications with key to system performance

Leveraging differentiated technology base into multi niches where we are key for the system performance

<table>
<thead>
<tr>
<th>Selected applications</th>
<th>Structural growth drivers</th>
<th>Typical ams OSRAM BoM potential</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medical Imaging &amp; Diagnostics</strong></td>
<td>- Aging population&lt;br&gt;- Lower radiation dosage&lt;br&gt;- Higher specificity</td>
<td>~ 25 – several ten k € (from image sensor to module for high end CT scanner)</td>
</tr>
<tr>
<td><strong>Horticulture &amp; Smart Farming</strong></td>
<td>- HPS lamp replacement&lt;br&gt;- Focus on near-shoring and freshness&lt;br&gt;- Yield improvement through optimized illumination&lt;br&gt;- Project business: subject to energy &amp; financing cost</td>
<td>~100 – 200 € per luminaire*</td>
</tr>
<tr>
<td><strong>Robotics</strong></td>
<td>- Automation, productivity&lt;br&gt;- Contextual Awareness</td>
<td>~20+ €</td>
</tr>
<tr>
<td><strong>LED &amp; laser projection</strong></td>
<td>- Home entertainment, lifestyle&lt;br&gt;- Replacement of traditional lamps&lt;br&gt;- Trickle-down from premium to mid-range</td>
<td>~5 – 190 € (from simple LED projector to high power material processing)</td>
</tr>
<tr>
<td><strong>Outdoor / Industrial lighting</strong></td>
<td>- Aging and growing population&lt;br&gt;- Urbanization&lt;br&gt;- HID replacement</td>
<td>~5 – 50 € per luminaire* (from small LED street luminaire to high power stadium light)</td>
</tr>
<tr>
<td><strong>UV-C disinfection</strong></td>
<td>- Growth opportunity &gt;2026&lt;br&gt;- Regulation &amp; Hg Lamp replacement once LEDs reach &gt;15% WPE</td>
<td>~20 – 2.500 € (from consumer device to industry scale water reactor disinfection)</td>
</tr>
</tbody>
</table>

*fixture combining light source with reflector, lens elements, etc.
Example of leading position in niche – Medical Imaging CT scan sensors/ICs

8 out of 10 OEMs employ ams OSRAM products – solid revenue growth 2x market growth projected

CT scan detectors (units)

CAGR 5.8%

~10.9k
~8.7k

(Source: Yole)

2022 2026

Top 10 CT Players

#1 CT Player
#2 CT Player
#3 CT Player
#4 CT Player
#5 CT Player
#6 CT Player
#7 CT Player
#8 CT Player
#9 CT Player
#10 CT Player

Customer Engagement

engaged

no engagement

Generation of 3D images based on X-ray properties

#1 CT Player
#2 CT Player
#3 CT Player
#4 CT Player
#5 CT Player
#6 CT Player
#7 CT Player
#8 CT Player
#9 CT Player
#10 CT Player

Engaged

No engagement

(a) ams OSRAM 64-Slice CT Detector Module

(b) ams OSRAM 64-Slice CT Detector Module

X-ray Tube

Detector

start of spiral scan

Path of continuously rotating x-ray tube and detector

Direction of continuous patient transport

Z

Detector Coverage

Attenuation readings

To computer

Sources: Yole Intelligence, Digital X-Ray Imaging 2022 volumes
Semiconductors: Opportunities & growth drivers in Consumer portable devices
ams OSRAM offering full technology range and best value in focus applications

Strong Positions in Consumer Semiconductor Sub-Segments

**#2 Light Sensor Supplier in Smartphones**

Light Sensor suppliers by 2021 market share (Total market USD ~1bn; Omdia)

1. STMicroelectronics 36%
2. ams OSRAM 26%
3. Sensortek 9%
4. Maxim 7%
5. Lumentum 5%
6. Lite-On 5%
7. Broadcom 3%
8. TXC 2%
9. Elan 2%
10. Dyna Image 1%

**#3 Sensor & Actuator Supplier in Wearables**

Sensor & Actuator suppliers by 2022 market share (Total market USD ~864m; Yole)

1. Bosch 25%
2. ST Micro 19%
3. ams OSRAM 7%
4. Goermicro 7%
5. Knowles 5%
6. OMRON 5%
7. TDK 3%
8. Zilltek 2%

**We are present at all Top 15+ Smartphone OEMs globally**

Shipments 2021>> % of smartphones with ams OSRAM content

1. Smartphone OEM 1 60%
2. Smartphone OEM 2 100%
3. Smartphone OEM 3 20%
4. Smartphone OEM 4 20%
5. Smartphone OEM 5 30%
6. Smartphone OEM 6 20%
7. Smartphone OEM 7 100%
8. Smartphone OEM 8 20%
9. Smartphone OEM 9 90%
10. Smartphone OEM 10 40%

TOTAL (all OEMs) 50%

- ams OSRAM is present in 50% of smartphones shipped in 2021
- The addressed OEMs have a unit market share of >80%

Sources: OMDIA Light Sensor Report Database - 2022, OMDIA Mobile Handset Database Historical Data - 3Q22
Addressing relevant, system defining functions in portable consumer devices

Focus on significant growth opportunities in camera enhance, 3D AR, body tracking, microLED & smart glasses

<table>
<thead>
<tr>
<th>Focus applications</th>
<th>Addressed Functionalities</th>
<th>ams OSRAM BOM Potential</th>
</tr>
</thead>
</table>
| Smartphone         |  - Camera enhancement (Flicker, Spectral Color Sensors, ToF)  
|                    |  - 3D AR sensing  
|                    |  - 3D Authentication  
|                    |  - Display Management / BOLED sensing  
|                    |  - MicroLED display | Mobile BOM: €1-25¹ |
| Tablets            |  - 3D AR sensing  
|                    |  - 3D Authentication  
|                    |  - Display Management / BOLED sensing  
|                    |  - MicroLED display | Tablet BOM: €3-40¹ |
| Smartwatch         |  - Display Management / BOLED sensing  
|                    |  - MicroLED display  
|                    |  - User Interaction (Rotary Encoder)  
|                    |  - Vital Sign Monitoring | Watch BOM: €2+ ¹ |
| AR / VR            |  - Display Management  
|                    |  - Vital Sign Monitoring  
|                    |  - Face / Hand / Body Tracking  
|                    |  - Eye Tracking / Authentication  
|                    |  - 2D/3D sensing  
|                    |  - Visualization (Light engine, microLED display, Optical coupling) | AR/VR Glasses BOM: €5-100¹ |

¹) excluding microLED display
Our technologies and products are relevant or key for system performance.

Display Proximity sensing
Intensity or ToF-based sensors for touch display on/off.

Flicker Detection
Elimination of artificial light modulation bands

Spectral Ambient Light Sensing

Depth Sensing for Auto Focus & Bokeh
Single and Multi-zone dToF-based depth sensing for depth-of-field effects and sharp images, also in low light situations.

AR Support
Social media (SnapChat, TikTok), room scanning, navigation, gaming, E-Commerce
ams OSRAM’s Spectral Ambient Light Sensing makes the difference

8 out of the top 10 smartphones by camera score use ams OSRAM sensors for superior camera performance

**Autofocus:**
“Fast and accurate autofocus, even in challenging light conditions”**

**AWB & Flicker:**
“Excellent for photographing family and friends, thanks to accurate skin tones and high details”**

**Top Smartphones by Camera score**

<table>
<thead>
<tr>
<th>Smartphone Model</th>
<th>Launch Date</th>
<th>Camera score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huawei P60 Pro</td>
<td>Mar 2023</td>
<td>156</td>
</tr>
<tr>
<td>Oppo Find X6 Pro</td>
<td>Mar 2023</td>
<td>153</td>
</tr>
<tr>
<td>Honor Magic5 Pro</td>
<td>Feb 2023</td>
<td>152</td>
</tr>
<tr>
<td>Oppo Find X6</td>
<td>Mar 2023</td>
<td>150</td>
</tr>
<tr>
<td>Huawei Mate 50 Pro</td>
<td>Sep 2022</td>
<td>149</td>
</tr>
<tr>
<td>Google Pixel 7 Pro</td>
<td>Oct 2022</td>
<td>147</td>
</tr>
<tr>
<td>Honor Magic4 Ultimate</td>
<td>Mar 2022</td>
<td>147</td>
</tr>
<tr>
<td>Apple iPhone 14 Pro Max</td>
<td>Sep 2022</td>
<td>146</td>
</tr>
<tr>
<td>Apple iPhone 14 Pro</td>
<td>Sep 2022</td>
<td>146</td>
</tr>
<tr>
<td>Huawei P50 Pro</td>
<td>Jul 2021</td>
<td>143</td>
</tr>
</tbody>
</table>

source: https://www.dxomark.com/smartphones/

**Camera Enhancement:** Light, Color, Flicker & Range sensors

- TMF882x Mutizone dToF
- TSL2585 ALS/UV/Flicker
- TCS3410 RGB/Flicker

**Winning combination:** Spectral + ALS

*DXOMARK February 2023, ALS denotes Ambient Light Sensor
Lamps & Systems: Lamps for Automotive, Industrial and Entertainment
Strong and stable profit contributor with excellent position in lamps business

AMSP is covering automotive, entertainment and industry applications

### Automotive
- LED retrofits
- Fixtures & car accessories
- Traditional lamps
- LED & Laser modules (e.g. XLS)

### Entertainment and Industry
- Semiconductors
- Entertainment
- Cinema
- Medical

#### End market split in AMSP lamps
- Automotive lamps: ~80%
- Entertainment & Industry lamps: ~20%

- Large installed base globally
- Expanding our leading market position softens slowly declining market volume
- LEDr and XLS with positive market growth in declining lamps business
- New opportunities beyond lamps with fixtures & car accessories using our strong brand and channel position.
Monetizing innovation: Next generation (micro)LED and 8” manufacturing
Extremely small microLED are required to enable disruptive mass adoption

<table>
<thead>
<tr>
<th>Chip size</th>
<th>Traditional LED</th>
<th>miniLED</th>
<th>microLED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;300 µm</td>
<td>&gt;100 µm</td>
<td>50 µm</td>
</tr>
<tr>
<td></td>
<td>50 µm</td>
<td>30 µm</td>
<td>10 µm</td>
</tr>
<tr>
<td></td>
<td>5 µm</td>
<td>5 µm</td>
<td>1 µm</td>
</tr>
</tbody>
</table>

→ Strongly increasing technological challenge →

Applications

- AR/VR
- microdisplay
- Dashboard
- 4k TV
- Door display
- External displays
- Videowall
- Smartwatch
- Smartphone
- AR/VR microdisplay
- Streetlighting
- Rear light
- Display: Direct backlight
- Luxury TV
- 4k TV
- 8k TV
- External displays
- Door display
- Dashboard
- Headlamp
- Automotive: Rear light

Older “microLED” products are actually based on miniLED

microLED demo products shown

ams OSRAM microLED focus
microLED displays promise a new and unique user experience

Ready to combine some of the really important features that the industry is looking for:

- **Highest brightness** (e.g. for head-up displays), and robustness to temperature and sunlight
- **No burn-in** even for fixed image patterns in bright sunlight
- **Wide viewing angles**
- **Transparent or curved displays**
- **Seamless stitching and bezel-free screens**
Next-generation LED production is key enabler for significant microLED shrink

Shrink required to reach acceptable cost level for high-volume applications

**Status today:** Die sizes in existing products typically in the range of 35x60µm² to 15x30µm²

**Key enabler: 8” LED manufacturing**

Modern state-of-the-art and first 8” fab for advanced LED technologies

- Fully automated material handling system and factory control, advanced process control and material scheduling and fault detection (FDC) technologies
- SMIF concept that allows lowest defect densities required for advanced (µ)LED manufacturing
- Fab built in industry record time: 1 year from start of construction to first wafer starts

**ams OSRAM focus:** Die sizes of 10x10µm and below

1 wafer per color

1 to 4 4k displays

25 to >80 4k displays

Acceptable LED cost for high-volume applications

Chip cost too high for market breakthrough of microLED technology
Sustainability commitments
Creating sustainable value and improving lives with optical solutions

ESG update: Sustainability Strategy, Carbon Neutrality Goal, ESG Committee

**ESG ACHIEVEMENTS**

- Second group sustainability report published, demonstrating our commitment to transparency and accountability (GRI compliant)
- Development and implementation of a comprehensive group sustainability strategy including climate strategy, aligned with the Paris Climate Agreement' 1.5°C target
- Comprehensive reporting of CO₂ emissions, including our own activities (Scope 1 & 2) and significant progress in reporting emissions along the value chain (Scope 3)
- Establishment of the ESG Committee, driving our sustainability efforts and ensuring focused decision-making
- Release of our Sustainability Policy and internal Sustainability Guideline, guiding our actions towards a more sustainable future

**ESG GOAL**

**Carbon neutrality by 2030**

- Group to be carbon neutral (Scope 1 & 2) by 2030, endeavor towards net zero ambition
- Near and long-term targets for science-based reductions of Scope 3 emissions (purchased goods/services)
- Strategy based on principle “avoid, reduce, compensate”, reduction path developed
- 100% green electricity at production sites in Germany and Austria
- Reducing emissions via energy efficiency measures at several locations, plan established to compensate for inevitable CO₂ emissions
- CO₂ saving of 9% compared to basis year 2021
At ams OSRAM, we are highly committed to sustainability

External recognitions confirm our engagement within ESG (actual status per rating)

<table>
<thead>
<tr>
<th>Institution</th>
<th>Rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDP</td>
<td>C</td>
<td>Climate Change Water Security</td>
</tr>
<tr>
<td>ecovadis</td>
<td>Silver</td>
<td>within best 5% of sector</td>
</tr>
<tr>
<td>SUSTAINALYTICS</td>
<td>Score 21</td>
<td>low medium risk, improvement +30%</td>
</tr>
<tr>
<td>ISS</td>
<td>Score C</td>
<td>improvement from C-</td>
</tr>
<tr>
<td>MSCI</td>
<td>BBB</td>
<td></td>
</tr>
<tr>
<td>S&amp;P Global CSA</td>
<td>Score 72</td>
<td>improvement +18%, scored #13 within sector, Yearbook listed</td>
</tr>
</tbody>
</table>
Financial results in detail Q2 2023 and H1 2023
Group revenues slightly up sequentially (excluding deconsolidation effect in Q1)

All figures in EURm / % of revenues

- Revenues at midpoint of guidance range, challenging market environment continued in Q2 as expected
- Slight revenue growth sequentially on like-for-like basis (excl. deconsolidation effects)
- Year-on-year comparison reflects de-consolidation effects of around EUR 140m from several disposals, including former OSRAM Continental JV business AMLS, Digital System business and others
Automotive, Industrial, Medical represent ~80% of revenues

APAC most important sales region and semiconductors contribute ~70% of revenues

Revenues by segment (Q2 2023)
- Semiconductors: 71%
- Lamps & Systems: 29%

Revenues by end market (Q2 2023)
- Automotive: 51%
- Industrial & Medical: 20%
- Consumer: 29%

Revenues by region (H1 2023)
- Americas: 22%
- EMEA: 47%
- APAC: 31%

- Lower sequential Lamps & Systems contribution, due to seasonal effects + meaningful deconsolidation (disposal)
- Automotive: Stabilization and first signs of improved inventory situation and more normalized order pattern
- Industrial & Medical: Mixed industrial development, inventory correction in certain areas / strong medical business
- Consumer: Muted demand environment continued with typical seasonality, sequential improvements in some areas

Note: Revenues by region are updated on a half-yearly basis.
Group revenue development: I&M, Consumer up sequentially

Like-for-like Q2 development QoQ & YoY (excl. disposal effects), figures in EURm

QoQ revenue development

<table>
<thead>
<tr>
<th>Segment</th>
<th>Q1 2023</th>
<th>Q2 2023</th>
<th>QoQ %</th>
<th>Disposal Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive</td>
<td>465</td>
<td>234</td>
<td>-7%</td>
<td>~79m</td>
</tr>
<tr>
<td>I&amp;M</td>
<td>433</td>
<td>243</td>
<td>+4%</td>
<td>I&amp;M QoQ disposal effects</td>
</tr>
<tr>
<td>Consumer</td>
<td>149</td>
<td>175</td>
<td>+18%</td>
<td></td>
</tr>
</tbody>
</table>

YoY revenue development

<table>
<thead>
<tr>
<th>Segment</th>
<th>2022</th>
<th>2023</th>
<th>YoY %</th>
<th>Disposal Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive</td>
<td>443</td>
<td>316</td>
<td>-23%</td>
<td>AUT YoY disposal effects</td>
</tr>
<tr>
<td>I&amp;M</td>
<td>433</td>
<td>243</td>
<td>-38%</td>
<td>I&amp;M YoY disposal effects</td>
</tr>
<tr>
<td>Consumer</td>
<td>284</td>
<td>175</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Automotive: Stabilizing and positive trends in order patterns, seasonal effects in aftermarket business
- I&M: Strong medical, mixed industrial business depending on sub-market business trends
- Consumer: Positive development across business areas after challenging Q1

- Automotive: Stable YoY development with normalizing supply chain in Q2 2023 and seasonality in aftermarket auto lamps
- I&M: Challenging environment in several industrial sub-markets
- Consumer: Muted demand across device classes and expected end-of-life of certain volume projects

I&M denotes Industrial & Medical
Semiconductors: Positive sequential development across markets

Semiconductors segment, like-for-like Q2 development QoQ & YoY (excl. disposal effects), figures in EURm

<table>
<thead>
<tr>
<th></th>
<th>Q2 2023</th>
<th>Q1 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive</td>
<td>238</td>
<td>225</td>
</tr>
<tr>
<td>I&amp;M</td>
<td>187</td>
<td>175</td>
</tr>
<tr>
<td>Consumer</td>
<td>175</td>
<td>147</td>
</tr>
</tbody>
</table>

QoQ revenue development

<table>
<thead>
<tr>
<th></th>
<th>Q2 2023</th>
<th>Q2 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive</td>
<td>238</td>
<td>255</td>
</tr>
<tr>
<td>I&amp;M</td>
<td>187</td>
<td>175</td>
</tr>
<tr>
<td>Consumer</td>
<td>175</td>
<td>284</td>
</tr>
</tbody>
</table>

YoY revenue development

- Automotive: Stabilizing inventory situation and order pattern, positive trend towards end of quarter
- I&M: Strong medical business, mixed industrial business depending on sub-market trends
- Consumer: Strong sequential improvement in existing sockets

- Automotive: Global demand still muted in spite of stabilizing supply chain
- I&M: YoY decline reflects overall weak macro economics in many areas, such as industrial lighting
- Consumer: YoY reflects some big sockets approaching End-of-Life, before new designs will kick-in

I&M denotes Industrial & Medical
Lamps & Systems: Seasonal effects in Q2, stable YoY development

Lamps & Systems segment: Like-for-like Q2 development QoQ & YoY (excl. disposal effects), figures in EURm

**QoQ revenue development**

- Automotive: Seasonality in automotive lamps business drives sequential development
- I&M: Reflects substantial disposals effects, remaining business focuses on specialized entertainment and industry lamps

**YoY revenue development**

- Automotive: Strong YoY development, further expanding leading market position, also driven by strong “LED replacement lamps” portfolio
- I&M: Remaining business driven by certain industrial trends, such as softer demand for specialty lamps for semiconductor manufacturing equipment

---

I&M denotes Industrial & Medical
Group profitability – adj. EBIT margin improved sequentially

All figures in EURm / % of revenues

Gross profit, gross margin (adj.)¹

- Gross profit in-line with company expectations
- Continued to be impacted by meaningful underutilization effects in manufacturing

EBIT, EBIT margin (adj.)¹

- Adj. EBIT margin at top end of guidance range
- Reduced adj. operating expenses support improved profitability sequentially
- Clear target to increase profitability

¹ Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of businesses
Reconciliation from EBIT IFRS reported to EBIT adjusted figures

Q2 2023, All figures in EURm

- EBIT Adj. best reflects underlying profitability of business and overall group development
- Historic M&A transactions (e.g. OSRAM) result in significant purchase price allocation expenses (non-cash, resulting in D&A), heavily impacting EBIT IFRS
- One-time integration costs (part of M&A-related costs) as well as transformation costs for personnel restructuring programs affect short-term profitability and mask true business development
- One-time impairment charges overshadow operating business development including profitability
- Book gain / losses of disposals + results from smaller historic equity investments are not part of operating business model
Operating expenses – adj. R&D and SG&A expenses reduced sequentially

All figures in EURm / % of revenues

- Strong decrease in adj. operating expenses on absolute basis over last quarters
- R&D development reflects ongoing stream-lining and efficiency programs, majority of R&D in Semiconductors segment
- Clear SG&A base-line reduction from efficiency programs and synergies over last 12 months

1) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of businesses
Semiconductors segment: revenues up and return to profitability

All figures in EURm / % of revenues

- Double-digit sequential increase driven by stabilization in some Consumer and certain Industrial areas
- Automotive business still impacted by inventory correction while showing signs of improved order patterns
- Mixed development in Industrial markets, strong Medical business
- Profitability still impacted by lower production volumes and underutilization, noticeable improvement sequentially

1) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of businesses
Lamps & Systems: strong profitability in spite of seasonal revenues decline

All figures in EURm / % of revenues

- Significant deconsolidation effects due to disposal of Digital Systems business
- Seasonal effects in L&S automotive business (~80% of remaining L&S business)
- Substantially and structurally improved profitability reflecting positive disposal-related and portfolio streamlining effects

1) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of businesses
Adj. net result / Adj. EPS – strong improvement sequentially to 0.12 CHF EPS

All figures in EURm / EUR / CHF per share

---

**Net result (adj.)**

<table>
<thead>
<tr>
<th></th>
<th>Q2 2022</th>
<th>Q1 2023</th>
<th>Q2 2023</th>
<th>H1 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHF</td>
<td>-54</td>
<td>6</td>
<td>31</td>
<td>37</td>
</tr>
</tbody>
</table>

**EPS diluted (adj.)**

<table>
<thead>
<tr>
<th></th>
<th>Q2 2022</th>
<th>Q1 2023</th>
<th>Q2 2023</th>
<th>H1 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHF</td>
<td>-0.21</td>
<td>0.02</td>
<td>0.12</td>
<td>0.14</td>
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</tbody>
</table>

---

- Financial result Q2 EUR -25m (Q1 EUR -50m), due to positive FX effects and adjustments to the yearly compensation payment to the OSRAM Licht AG minority shareholders (reduced amount of outstanding shares)
- Positive income tax result Q2 EUR 7m based on reduction of deferred tax liabilities
- Q2 IFRS reported net result EUR -1,342m, impacted by impairment charge / IFRS EPS diluted EUR -5.14 / CHF -5.02

---

1) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of businesses
Cash Flow – Strong Operating CF at EUR 232 million in Q2

All figures in EURm / Operating Cash Flow % of revenues

### Operating / Free Cash Flow (FCF)

- Very strong operating cash flow generation, up year-on-year and sequentially (27% of revenues)
- Free cash flow (FCF) development as expected given substantial capital expenditures

<table>
<thead>
<tr>
<th></th>
<th>Q2 2022</th>
<th>Q1 2023</th>
<th>Q2 2023</th>
<th>Q1 2023</th>
<th>Q2 2023</th>
<th>H1 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100</td>
<td>162</td>
<td>232</td>
<td>394</td>
<td>8%</td>
<td>18%</td>
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<tr>
<td>Operating Cash Flow</td>
<td>3</td>
<td>-139</td>
<td>-31</td>
<td>-171</td>
<td></td>
<td></td>
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<tr>
<td>Free Cash Flow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

### Capital expenditures

- Continued meaningful CAPEX driven by industry-first 8” LED front-end fab, in line with plans
- Focused investments in European manufacturing footprint (Austria and Germany)

<table>
<thead>
<tr>
<th></th>
<th>Q2 2022</th>
<th>Q1 2023</th>
<th>Q2 2023</th>
<th>H1 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>97</td>
<td>302</td>
<td>263</td>
<td>565</td>
</tr>
</tbody>
</table>
More conservative approach on long-term view leads to non-cash impairment

Assessment and impairment testing

Periodic impairment testing in line with IFRS requirements and regulations

Approach

- New management re-assessed the business outlook of each business line of the Group
- Meaningfully more conservative view in light of current macro-economic environment
- Applied across all businesses and segments

Effect and outcome

- Updated internal outlook and external parameters lead to decreased fair value of certain goodwill assets, triggering impairment charge
- Non-cash, one-time impairment charge of EUR 1.3 billion related to goodwill
- Related to “Semiconductors” segment
- No impact on liquidity
Cash and debt overview – leverage slightly up as expected

All figures in EURm

- Expected uptick in group leverage to 2.9x net debt/adjusted\(^1\) EBITDA driven by CAPEX and trailing EBITDA trend
- EUR ~930 million undrawn multi-year lines (incl. EUR 800m revolving facility)
- ~90% of outstanding debt on fixed rate basis
- Adj. EBITDA\(^1\) LTM EUR 693m (based on adj. EBIT + D&A not related to adjustments)
- Considerations and detailed planning incl. potential instruments for refinancing 2025 maturities ongoing

\(^1\) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of businesses
Short term outlook and FY 2024 comments

Q3 2023 guidance

Revenues*: EUR 840 - 940 million
(adj.) EBIT margin: 5 – 8%

*EUR ~120m YOY deconsolidation effects vs. Q3 2022

Q4 2023 comments

Semiconductors:
- High uncertainty in end-markets persisting
- Especially Industrial and Consumer end-markets are challenged
- Automotive revenues should continue to stabilize with normalizing supply chain and new products ramping

Lamps & Systems:
- Robust revenues expected due to seasonally strong Automotive aftermarket

FY 2024 comments

- Absolute Group revenues expected to decline compared to 2023 due to portfolio decisions
- Semiconductor core business expected to outgrow target markets - assuming end-markets stabilize
- Group targets slightly positive Free Cash Flow assuming end-markets stabilize. Significantly reduced CAPEX compared to 2023.
- Focus on improving profitability

Expected and based on current information and exchange rates
Adjusted figures exclude M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of businesses
Sensing is life
# Profit and loss statement

**IFRS reported figures, all figures in EURm**

<table>
<thead>
<tr>
<th></th>
<th>Q2 2023</th>
<th>Q2 2022</th>
<th>H1 2023</th>
<th>HY 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>851</td>
<td>1,183</td>
<td>1,778</td>
<td>2,429</td>
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<tr>
<td>Gross profit</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- Gross margin (IFRS reported)</td>
<td>201</td>
<td>348</td>
<td>411</td>
<td>733</td>
</tr>
<tr>
<td>- Gross margin (adjusted(^1))</td>
<td>24%</td>
<td>29%</td>
<td>23%</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>28%</td>
<td>32%</td>
<td>29%</td>
<td>32%</td>
</tr>
<tr>
<td>Research and development</td>
<td>-118</td>
<td>-151</td>
<td>-265</td>
<td>-313</td>
</tr>
<tr>
<td>Selling, general and administrative</td>
<td>-108</td>
<td>-157</td>
<td>-250</td>
<td>-313</td>
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<tr>
<td>Other operating income</td>
<td>27</td>
<td>160</td>
<td>42</td>
<td>163</td>
</tr>
<tr>
<td>Other operating expenses</td>
<td>-1,324</td>
<td>17</td>
<td>-1,341</td>
<td>-14</td>
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<tr>
<td>Results from investments in associates</td>
<td>-2</td>
<td>-1</td>
<td>-10</td>
<td>-1</td>
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<tr>
<td>Result from operations (EBIT)</td>
<td>-1,324</td>
<td>216</td>
<td>-1,413</td>
<td>256</td>
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<tr>
<td>- EBIT margin (IFRS reported)</td>
<td>-155%</td>
<td>18%</td>
<td>-79%</td>
<td>11%</td>
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<tr>
<td>- EBIT margin (adjusted(^1))</td>
<td>6%</td>
<td>9%</td>
<td>6%</td>
<td>9%</td>
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<tr>
<td>Net financing result</td>
<td>-25</td>
<td>-50</td>
<td>-57</td>
<td>-100</td>
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<tr>
<td>Result before tax</td>
<td>-1,349</td>
<td>166</td>
<td>-1,471</td>
<td>156</td>
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<tr>
<td>Income tax result</td>
<td>7</td>
<td>-108</td>
<td>-5</td>
<td>-82</td>
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<tr>
<td>Net result (IFRS reported)</td>
<td>-1,342</td>
<td>58</td>
<td>-1,476</td>
<td>74</td>
</tr>
<tr>
<td>Net result (adjusted(^1))</td>
<td>31</td>
<td>-54</td>
<td>37</td>
<td>48</td>
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</tbody>
</table>

\(^1\) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of businesses
## Balance sheet

### All figures in EURm

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>841</td>
<td>1,087</td>
<td>Current interest-bearing loans</td>
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<td>Current financial investments</td>
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<td>21</td>
<td>Trade payables</td>
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<td>Trade receivables</td>
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<td>533</td>
<td>Income tax payables</td>
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<td>87</td>
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<td>Inventories</td>
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<td>864</td>
<td>Current provisions</td>
<td>199</td>
<td>256</td>
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<td>Other current receivables and assets</td>
<td>209</td>
<td>223</td>
<td>Other current liabilities</td>
<td>1,384</td>
<td>1,345</td>
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<tr>
<td>Assets held for sale</td>
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<td>157</td>
<td>Liabilities held for sale</td>
<td>23</td>
<td>50</td>
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<tr>
<td><strong>Total current assets</strong></td>
<td><strong>2,385</strong></td>
<td><strong>2,884</strong></td>
<td><strong>Total current liabilities</strong></td>
<td><strong>2,656</strong></td>
<td><strong>2,717</strong></td>
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<td>Property, plant and equipment</td>
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<td>1,856</td>
<td>Non-current interest-bearing loans</td>
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<td>2,635</td>
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<td>Intangible assets</td>
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<td>Employee benefits</td>
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<td>179</td>
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<tr>
<td>Right-of-use assets</td>
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<td>230</td>
<td>Deferred tax liabilities</td>
<td>72</td>
<td>105</td>
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<tr>
<td>Investments in associates</td>
<td>24</td>
<td>35</td>
<td>Non-current provisions</td>
<td>44</td>
<td>45</td>
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<tr>
<td>Deferred tax assets</td>
<td>68</td>
<td>69</td>
<td>Other non-current liabilities</td>
<td>262</td>
<td>318</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>50</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-current financial assets</td>
<td>36</td>
<td>59</td>
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<tr>
<td><strong>Total non-current assets</strong></td>
<td><strong>4,674</strong></td>
<td><strong>5,948</strong></td>
<td><strong>Total non-current liabilities</strong></td>
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<td><strong>3,281</strong></td>
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<td>Shareholders’ equity ams-OSRAM AG</td>
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<td>Shareholders’ equity</td>
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<td>Non-controlling interests</td>
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<td>6</td>
<td>7</td>
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<tr>
<td><strong>Total assets</strong></td>
<td><strong>7,059</strong></td>
<td><strong>8,832</strong></td>
<td><strong>Total liabilities and equity</strong></td>
<td><strong>7,059</strong></td>
<td><strong>8,832</strong></td>
</tr>
</tbody>
</table>
## Cash flow

### Selected cash flow items, all figures in EURm

<table>
<thead>
<tr>
<th></th>
<th>Q2 2023</th>
<th>Q2 2022</th>
<th>H1 2023</th>
<th>H1 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net result</strong></td>
<td>-1,342</td>
<td>58</td>
<td>-1,476</td>
<td>74</td>
</tr>
<tr>
<td>Amortization, depreciation and impairment</td>
<td>1,446</td>
<td>141</td>
<td>1,618</td>
<td>298</td>
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<tr>
<td><strong>Cash flows from operating activities</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Capital expenditures</td>
<td>-263</td>
<td>-97</td>
<td>-565</td>
<td>-210</td>
</tr>
<tr>
<td>Acquisitions of subsidiaries, net of cash acquired</td>
<td>-64</td>
<td>-7</td>
<td>-95</td>
<td>-7</td>
</tr>
<tr>
<td>Proceeds from sale of businesses, net of cash disposed</td>
<td>78</td>
<td>251</td>
<td>89</td>
<td>251</td>
</tr>
<tr>
<td><strong>Cash flows from investing activities</strong></td>
<td>-245</td>
<td>148</td>
<td>-551</td>
<td>39</td>
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<tr>
<td>Proceeds from loans</td>
<td>151</td>
<td>0</td>
<td>151</td>
<td>0</td>
</tr>
<tr>
<td>Repayment of loans</td>
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<td>-5</td>
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<td>-67</td>
</tr>
<tr>
<td>Repayment of lease liabilities</td>
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<td>-39</td>
<td>-29</td>
<td>-56</td>
</tr>
<tr>
<td>Interest paid</td>
<td>-30</td>
<td>-16</td>
<td>-76</td>
<td>-62</td>
</tr>
<tr>
<td>Dividends paid to shareholders of OSRAM Licht AG</td>
<td>-37</td>
<td>-53</td>
<td>-37</td>
<td>-53</td>
</tr>
<tr>
<td><strong>Cash flows from financing activities</strong></td>
<td>-13</td>
<td>-112</td>
<td>-76</td>
<td>-239</td>
</tr>
<tr>
<td>Net change in cash and cash equivalents (incl. FX effects)</td>
<td>-30</td>
<td>200</td>
<td>-255</td>
<td>111</td>
</tr>
<tr>
<td><strong>Cash and cash equivalents at end of the period</strong></td>
<td>841</td>
<td>1,413</td>
<td>841</td>
<td>1,413</td>
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</tbody>
</table>