TechInsights Image Sensor Subscription

Accurate Intelligence on Imagers and Sensors Enabling Fact-Based Assessments to Drive Innovation and De-risk Strategic Planning

Image sensors are rapidly innovating with new structures in pixel layers to improve low-light performance and provide near-human vision output. The market now has wearables with multiple sensors, and new sensors are integrating with AI amongst an evolving scope of applications. To help teams keep pace, make informed decisions, and enable effective planning to accurately estimate costs, the TechInsights Image Sensor Subscription provides comprehensive analyses covering a broad range of current and historical image sensors. Analyses include hard-to-find details on floorplans, process flows, and tool sets used in fabrications. With valuable insights on chip structures, pixel architectures, competitors' pixel designs, and memory capacities of image signal processors, the subscription helps support decision making and plans.



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Why You Need a TechInsights' Image Sensor Subscription



Make business, design, and product decisions with confidence based on high-quality analysis with unparalleled detail at the microscopic level, delivered by TechInsights' state-of-the-art lab technology and subject matter experts



Get an accurate pulse of the competitive image sensor landscape with visibility into the latest image sensor design approaches across market leaders and upcoming potential disrupters to ensure you stay ahead of the competition



Strengthen product innovation with visibility into the latest image sensor design approaches across market leaders



Save time and costs by extending your organization's productivity with insight across a broad range of image sensors from an independent source of reliable, first-hand expert analyses not covered anywhere else in the market

Key Features of the Image Sensor Vertical Subscription

- **Map image sensor vendor and foundry wins** to downstream products with Design Win Tracking
- **Customize a single view** of all the applications, vendors, parts, years of analyses, reports, and parts specifications using search and sort functions supported by **the Content Navigator database tool**
- **Wide range of analyses** covering:
    1. Die size trends, process generation trends (CMOS image sensors (CIS)/image signal processors (ISPs)), and foundry identification
    2. Material analysis of dielectrics, metals, color filters, and micro lenses
    3. Qualitative analysis of photo diodes, reporting on critical dimensions and process steps
    4. Costing as well as floorplan analysis of the ISP
    5. Critical blocks of the analog signal path (row control, column readout, ramp generator)
- **Online briefings** presented by our subject matter experts provide trend projections, insightful commentary, and thought-provoking perspective on the image sensing landscape to enable a thorough understanding of the current industry climate
- **Upcoming analysis** provides visibility into innovative imaging and sensing devices. The parts are flagged by our subject matter experts for future analysis to help inform your own roadmap decisions
- **24/7, self-serve online access** to all current and previous analyses delivered via the TechInsights Platform. Conveniently access and share content with other subscribers in your organization

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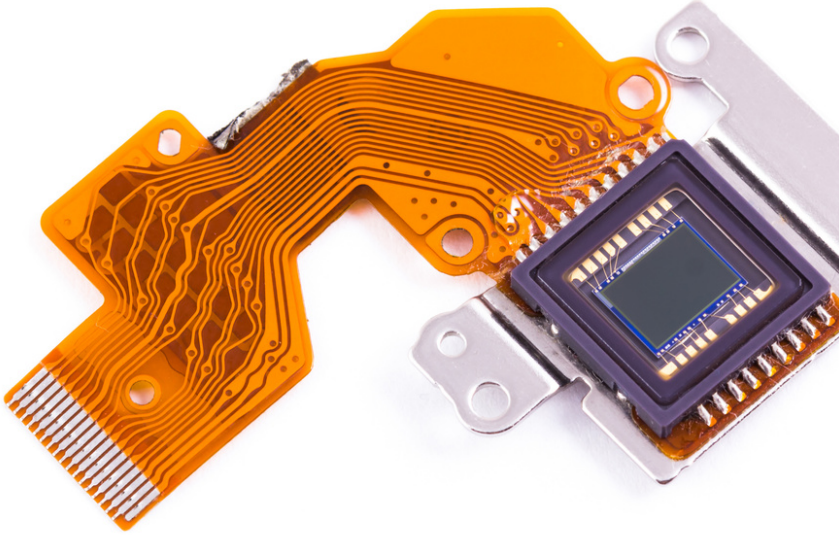
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Product Offerings

TechInsights provides a variety of image sensor product offerings to suit your needs.

Product Offering	IDM	Fabless Semiconductor	Foundry	Capital Equipment	Vehicle/Transport	Product Manufacturer
Comprehensive	✓	✓	✓	✗	✗	✗
Floorplan & Design	✗	✓	✗	✗	✓	✓
Process	✗	✗	✗	✓	✗	✗

Information Included	Type of Analysis	Comprehensive	Floorplan & Design	Process
Circuit Analysis	Circuit	✓	✓	✗
Device Essentials	Process, Packaging	✓	✓	✓
Device Essentials Plus	Process	✓	✗	✓
Image Signal Processor	IC Floorplan	✓	✓	✗
Process Flow Analysis	Process Flow	✓	✗	✓



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Image Sensor Subscription Overview

Circuit Analysis (CAR)

Leverage the advantage of insights into the detailed differentiated designs in use by leading fabricators. This content provides proprietary analysis of image sensor circuit functionality, structure, and layout through a highly interactive, easy-to-navigate view into circuit design.

Device Essentials (DEF)

Access a wide range of device information from a single, reliable source with Device Essentials analysis, which provides you a broad overview of imaging and optical sensing devices each year for ongoing monitoring of state-of-the-art mainstream and emerging/high-growth applications.

Device Essentials Plus (DEP)

Discover the innovation hiding in the details with a deeper level of process analysis using more advanced techniques.

Image Signal Processor (ISP)

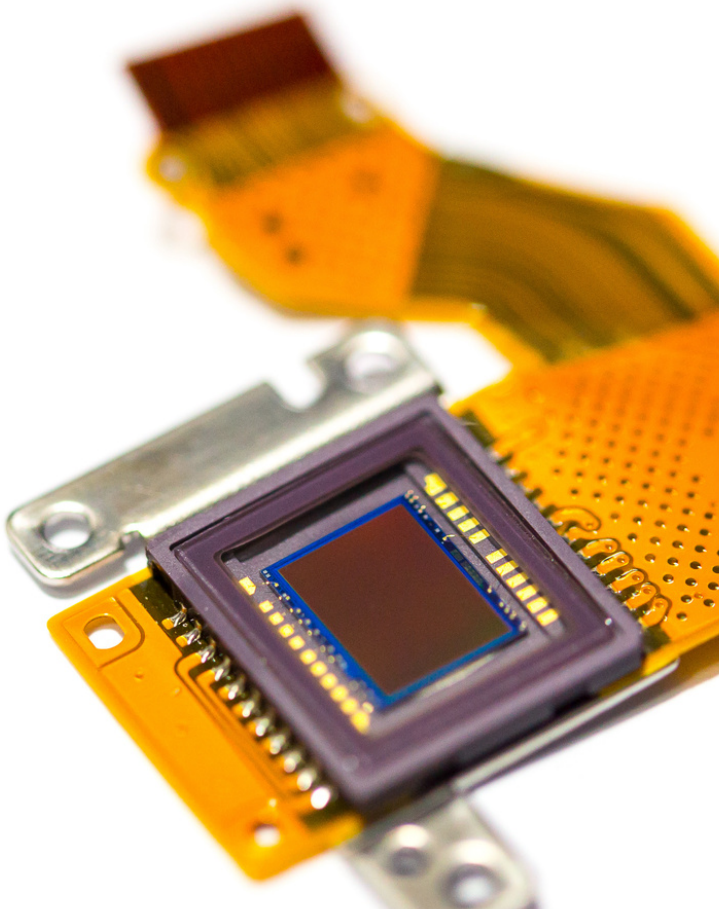
Gain insights into the functional blocks and die utilization of stacked and standalone image signal processors. This content provides floorplan (functional) analysis of image signal processors (ISP) in applications such as smartphone, automotive imaging and optical sensing, computer/machine vision, edge AI, IoT, LiDAR, security/ surveillance, and more.

Process Flow Analysis (PFA)

Access hard-to-find details on process steps and tool sets in imaging and sensing equipment fabrications. This content provides insight into the process steps required to fabricate a variety of imaging/optical sensing ICs and a deep understanding of the real development costs.

Why Choose TechInsights?

- Continuous and sustained use of best-in-class equipment including planned upgrades to enhance image quality in SCM/SMIM analysis
- Substantial investments in new X-ray capabilities, scanning electron microscopes (SEMs), and transmission electron microscopes (TEMs)
- Quadrupled magnifications capability with the investments in the TEMs, allowing for clearer identification of smaller features and material elements
- Increased focus on automotive imaging and sensing applications
- Top-tier experts work with cutting-edge equipment to maintain and enhance their understanding of innovations in image sensors



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