ISG Provider Lens®

Semiconductor Industry — Services and Solutions 2026

A research report comparing provider strengths, challenges and competitive differentiators

BROCHURE | JANUARY 2026 | U.S. AND EUROPE

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Introduction

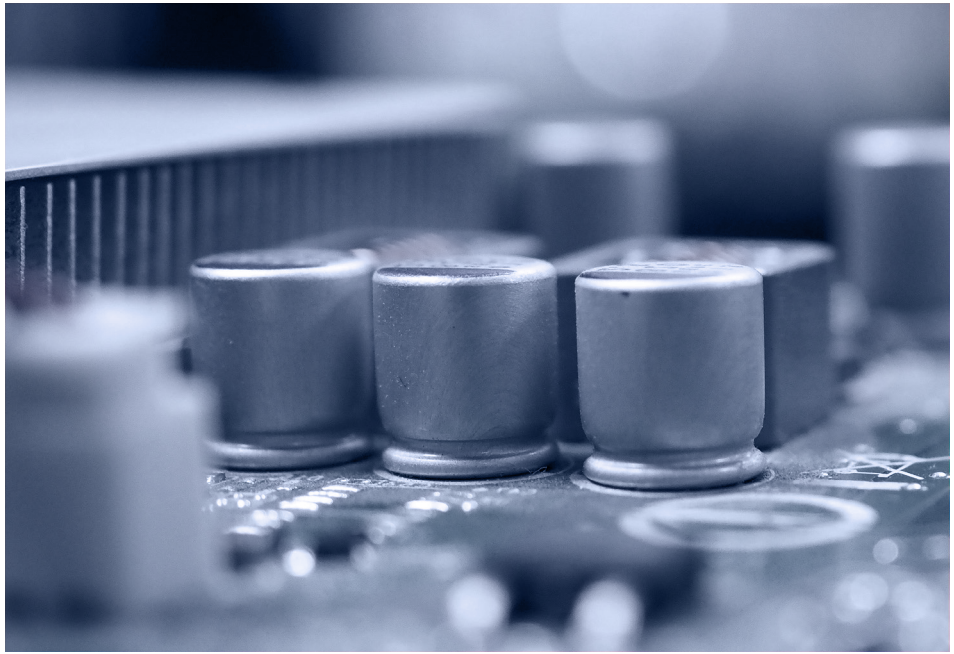
The semiconductor industry is entering a transformational phase due to a high demand for advanced electronics, short innovation cycles and expanding global dependencies on semiconductor chips. Key trends observed:

- Shift to smaller, denser and more energy-efficient chip architectures that enable innovations in AI, edge computing and next-gen connectivity
- Growth in advanced packaging, 3D stacking and chiplet-based designs that overcome fabrication limitations and improve performance, scalability and thermal efficiency
- Rise in adoption of digital manufacturing, virtual fabrication and intelligent automation with digital twins, predictive process control and connected devices for high accuracy, yield and production efficiency

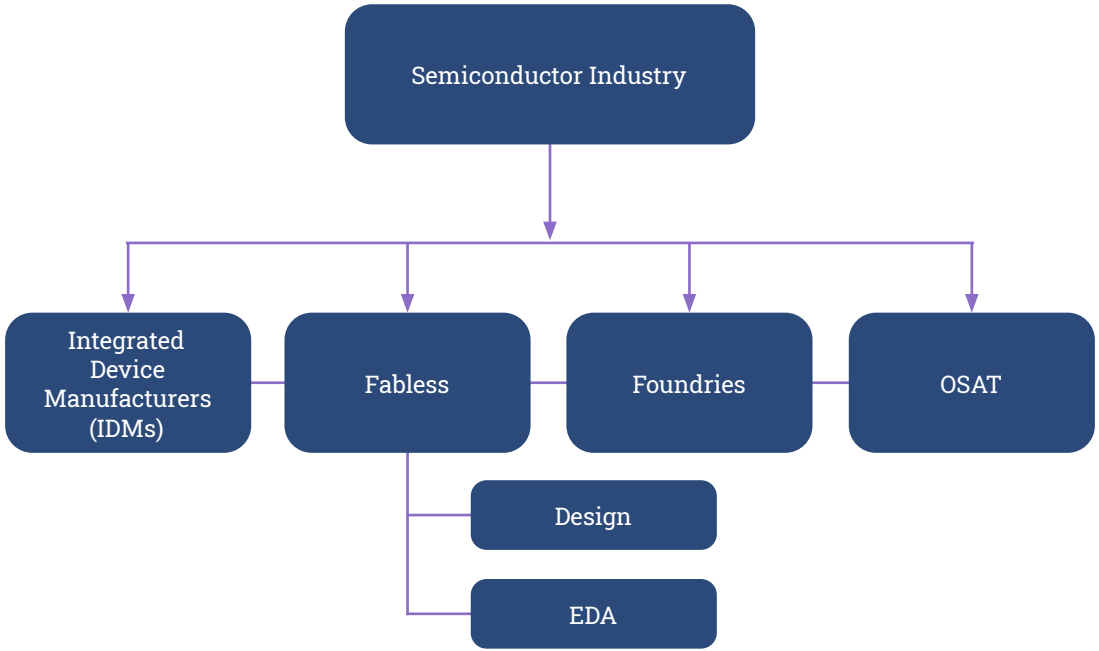
Manufacturers are focusing on stabilizing and de-risking global supply chains amid raw material shortages, geopolitical issues and production complexities by increasing investments in fortifying fabrication capacity, diversifying supplier ecosystems and ensuring transparency. Sustainability is becoming a priority as they set up guardrails for energy use, water consumption and emissions in manufacturing.

Semiconductor companies are navigating shifts in market demand with significant growth in AI systems, electrification, autonomous vehicles, 5G/6G networks and industrial automation. Reliability, security and lifecycle resilience are becoming key differentiators, especially with cyber and OT vulnerabilities on the rise in connected manufacturing environments.

In this study, ISG examines the growing importance of semiconductors and evaluates provider capabilities in this evolving landscape. The global race to strengthen semiconductor self-sufficiency, in the face of developments in technology, continues to drive innovation investments, capacity expansions and next-gen engineering.

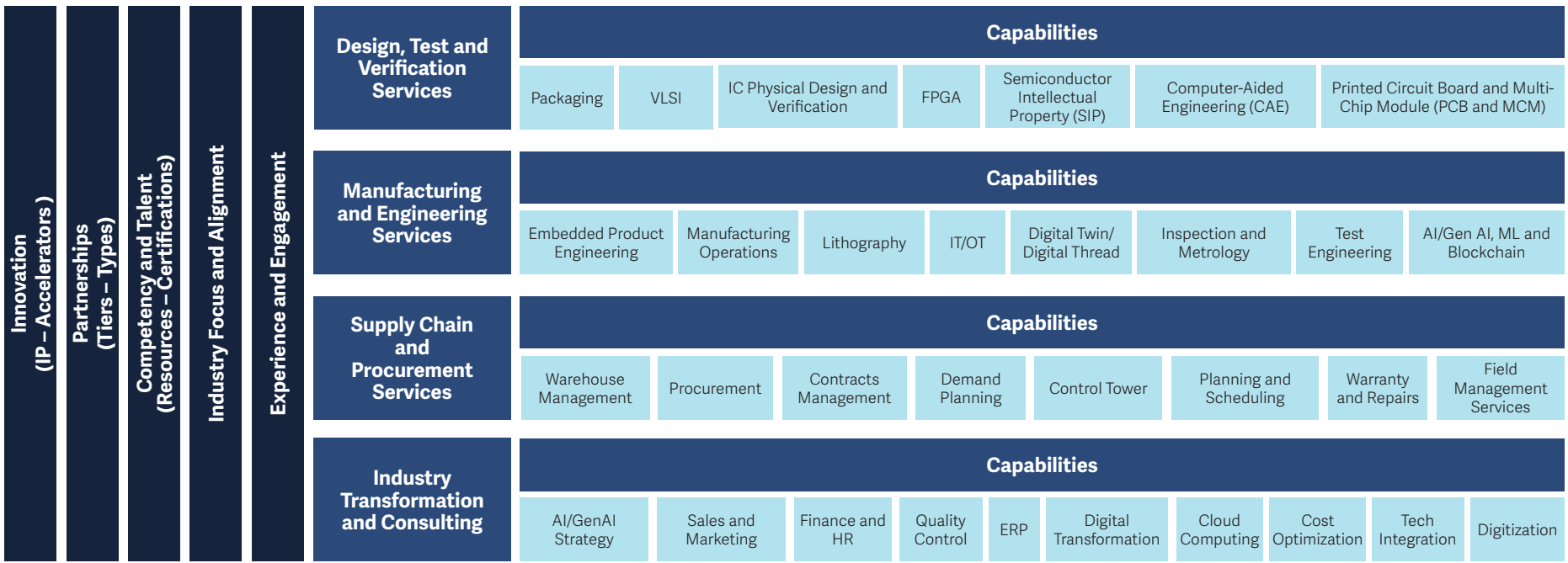


Industry Structure:



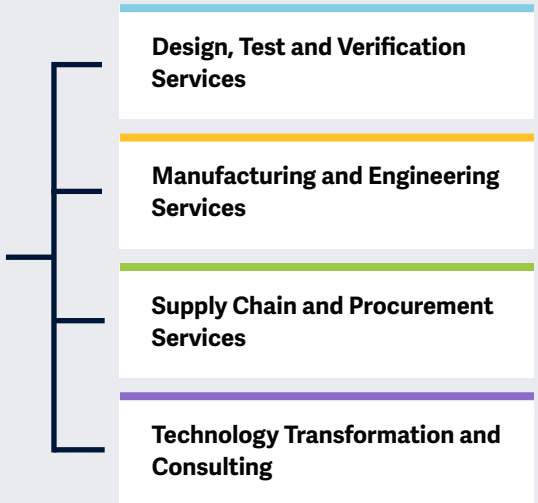
Note: *Semiconductors are classified into major product groups, mainly based on their function. Some of these products have broad functionalities; others are designed for specific uses. The product groups include integrated circuits (ICs), optoelectronics, sensors, and discretes (O S D). The biggest product group, ICs has four segments: Logic devices, memory devices, Microprocessors and Analog devices.*

Blueprint* of the Semiconductor Industry



*Non-exhaustive

This study explores the challenges faced by the **semiconductor industry** and assesses provider capabilities to address enterprise needs.



Simplified Illustration Source: ISG 2026

Scope of the report

The ISG Provider Lens® Semiconductor Industry — Services and Solutions 2026 study offers the following to business and IT decision-makers:

- Transparency on the strengths and weaknesses of relevant providers
- A differentiated positioning of providers by segments on their competitive strengths and portfolio attractiveness
- Focus on the U.S. and Europe markets

Our study serves as an important decision-making basis for positioning, key relationships and go-to-market considerations. ISG advisors and enterprise clients also use information from these reports to evaluate their current vendor relationships and potential engagements.

Definition

This quadrant focuses on providers offering design, test and verification services for the semiconductor industry. It includes the full engineering lifecycle of the creation and validation of complex chips, with a focus on functional correctness, performance and reliability. These services encompass architecture definition; register-transfer level (RTL) and physical design; design-for-test (DFT) implementation; functional, formal and system-level verification; test plan development; test bench creation; and silicon bring-up. By leveraging advanced methodologies, automation and domain expertise, these providers help customers reduce design risks, accelerate time to market, enhance product quality and optimize power,performance,area (PPA).

Customers benefit from low development costs, early defect detection, improved yield, predictable execution and ease of scaling engineering capacity to meet the demands of next-gen products requiring semiconductors.

Eligibility Criteria

1. **Demonstrate** scale, including minimum client numbers, revenue thresholds and geographic presence defined by the report's scope
2. **Show documented experience** in semiconductor design, development, and test and verification services through completed engagements or domain-focused projects
3. **Offer a combination (or all)** of the following **across the value chain**:
   * Analog/mixed-signal design
   * RTL design, architecture development and integration
   * Proprietary or third-party engineering tools
   * Packaging
   * VLSI capabilities
   * IC physical design and verification
   * FPGA prototyping
   * Semiconductor intellectual property (SIP)
   * Computer-aided engineering (CAE)
   * Printed circuit board and multi-chip module (PCB and MCM)
   * EDA tools
   * Post-silicon validation and stress testing
   * Hardware-assisted validation
   * Wafer sort
   * Final package testing
4. **Support agile, continuous and rapid development,** CI/CD, and continuous testing unit and integration
5. **Integrate next-gen technologies,** including automation, analytics, IoT, AI/GenAI, cybersecurity, cloud, AR/VR/MR and blockchain
6. **Claim partnerships** with industry associations, regulatory bodies, technology firms and semiconductor start-ups
7. **Show referenceable case studies** for services and solutions across the value chain in key areas involving new-age technologies such as **AI and GenAI**

Definition

This quadrant focuses on providers offering services and solutions for the rapid developments in semiconductor manufacturing and engineering and to address the need for precision, automation and digital integration in producing advanced electronic components. Optimized processes, intelligent fabrication environments and data-driven control systems are redefining how complex devices are built and validated.

The core capabilities of these providers span process engineering and plant design, front-end fabrication, back-end assembly, packaging and final testing, equipment engineering and maintenance, quality and reliability engineering, productization, and ramp-up and lifecycle sustenance. Their strengths in digital manufacturing threads, linking design intent, production workflows and equipment intelligence, improve yield, accelerate ramp-to-volume and ensure compliance. As the areas of AI, 5G, automotive, defense and IoT become increasingly complex, these services help develop high-performance hardware for next-gen innovation.

Eligibility Criteria

1. **Demonstrate experience in semiconductor manufacturing and engineering services,** including process engineering, fabrication, assembly, testing or related production-support activities
2. **Show successful engagements** with semiconductor companies in manufacturing or engineering project areas
3. **Offer a combination (or all)** of the following **across the value chain**:
   * Production optimization for AI, automotive and HPC chips
   * Embedded product engineering
   * Lithography
   * Manufacturing operations
   * Test engineering
   * Inspection and metrology
   * Process development
   * Creation of custom intellectual property assets
   * System-on-chip integration
   * Wafer fabrication
   * Advanced packaging (fan-out and 3D stacking)
   * Yield analytics platforms
   * AI/GenAI and blockchain integration
   * Digital twins
   * IT/OT integration
4. **Use enabling technologies and tooling** such as automation frameworks, digital engineering platforms or integrated manufacturing tool chains
5. **Integrate next-gen technologies,** including automation, analytics, IoT, AI/ GenAI, cybersecurity, cloud, AR/ VR/MR and blockchain
6. **Claim strong partnerships** with industry associations, regulatory bodies, technology firms and start-ups specializing in semiconductor manufacturing
7. **Show referenceable case studies** from the semiconductor industry

Definition

This quadrant focuses on providers offering supply chain and procurement services that are becoming essential for semiconductor companies facing disruptions that impact production, inventory and completion. These services support complex procurement, warehousing, inventory control, logistics, supplier management and contracting needs across global, multi-layered supply networks.

To foster resilience and efficiency, organizations are rapidly adopting automation, AI/GenAI, intelligent workflows, and blockchain and focusing on establishing partner ecosystems, while integrating sustainability into their operations. As reliability and transparency become critical, manufacturers are prioritizing automated supply chain and procurement processes. Rising OT focused cyberattacks are also driving security investments to protect production environments. Together, these guardrails strengthen end to end visibility, continuity and operations across semiconductor supply chains.

Eligibility Criteria

1. Demonstrate expertise in **providing IT, business strategy and consulting services** to help companies handle supply chain and procurement complexities, either independently or through partners
2. **Have proficiency in defining roadmaps and helping with the design,** implementation and maintenance of IT systems, as well as managing back-office processes
3. **Offer services and solutions in areas including, the following aspects of warehouse management**:
   * Logistics and transportation management systems
   * Purchasing
   * Shipping
   * Traceability
   * Scheduling
   * Order management
   * Control tower
   * Forecasting
   * Demand planning
   * Materials management
   * Third-party risk management
   * Supply chain and procurement optimization
   * Supply chain segmentation
   * Supply chain planning and BPO
   * Sustainability solutions in procurement and supply chain
4. **Integrate next-gen technologies,** including automation, analytics, IoT, AI/GenAI, cybersecurity, cloud, AR/VR/MR and blockchain
5. **Claim strong partnerships** with industry associations, regulatory bodies, technology firms and start-ups specializing in semiconductor manufacturing
6. **Show referenceable case studies** from the semiconductor industry

Definition

This quadrant focuses on providers offering technology transformation and consulting services to semiconductor companies seeking to modernize and transform their IT infrastructure for streamlining complex operations, boosting efficiency and enabling large-scale digital and business transformation. Transformation in this asset-intensive industry implies increased productivity, accelerated R&D cycles, enhanced CX and partner experiences, and resilient supply chains aimed at achieving cost, quality and sustainability targets.

Organizations are pursuing these goals by simplifying and reengineering processes; adopting automation and AI; and leveraging ITO, BPO and global capability centers (GCCs) to meet rapidly changing business and engineering demands. Leading names in the semiconductor industry aim to improve yields, optimize costs, ensure operational excellence and enhance process efficiency through advanced digital tools, intelligent automation and data-driven methodologies aligned with their strategic objectives.

Eligibility Criteria

1. Show references of engagements **in the semiconductor** industry for developing integrated models and broad-based solutions to drive transformation
2. Demonstrate ability to **drive initiatives around business and operational strategy,** change management and end-to-end transformation
3. Can **reorganize IT operating models** to align with changing business demands, including GCCs, nearshoring/offshoring and agility
4. **Offer services/solutions in areas,** including the following:
   * Digital strategy development
   * IIoT
   * Big data analytics
   * Infrastructure and cloud (multicloud and hybrid cloud)
   * Cybersecurity (SOCs and SIEM)
   * Service management
   * Vendor management
   * New-age ERP systems
   * Sustainability reporting
   * Cost optimization
   * Workforce enablement
   * Digital technology integration
   * Digitization/digitalization
   * Workplace of the future
4. **Have expertise in next-gen technologies,** including automation, analytics, IoT, AI/GenAI, cybersecurity, cloud, AR/VR/MR, 3D printing and blockchain
5. **Claim strong partnerships with industry associations,** regulatory bodies, technology firms and start-ups specializing in the semiconductor industry
6. **Show referenceable case studies** from the semiconductor industry

ISG's Semiconductor Industry Framework*

Key characteristics of the proprietary framework:

- Encapsulates what enterprises are doing across the semiconductor industry and helps connect them to the digital solutions
- Represents the entire value chain of supply and demand within the market
- Inner tiles represent themes of enterprise objectives
- Outer tiles represent initiatives
- Behind each outer tile is a specific set of capabilities, with unique market-leading providers and solutions

Quadrants by Region

As part of this ISG Provider Lens® quadrant study, we are introducing the following four quadrants on Semiconductor Industry — Services and Solutions 2026:

Quadrant	U.S.	Europe
Design, Test and Verification Services	✔	✔
Manufacturing and Engineering Services	✔	✔
Supply Chain and Procurement Services	✔	✔
Technology Transformation and Consulting	✔	✔

The research phase falls in the period between December 2025 and February 2026, during which survey, evaluation, analysis and validation will take place. The results will be presented to the media in June 2026.

Milestones	Beginning	End
Survey Launch	January 19, 2026	
Survey Phase	January 20, 2026	February 27, 2026
Sneak Preview	May 2026	
Press Release & Publication	June 2026	

Collecting client testimonials via the Star of Excellence™ Program requires early client referrals (no official reference needed) because CX scores have a direct influence on the provider's position in the IPL quadrant and the awards.

Please refer to the link to view/download the ISG Provider Lens® 2026 research agenda.

Access to Online Portal

You can view/download the questionnaire from here using the credentials you have already created, or refer to the instructions in the invitation email to generate a new password. We look forward to your participation!

Buyers Guide

ISG Software Research, formerly "Ventana Research," offers market insights by evaluating technology providers and products through its Buyer's Guides. The findings are drawn from the research-based analysis of product and customer experience categories, ranking and rating software providers and products to help facilitate informed decision-making and selection processes for technology.

In the course of the Semiconductor Industry IPL launch, we want to take advantage of the opportunity to draw your attention to related research and insights that ISG Research will publish in 2026. For more information, refer to the Buyers Guide research schedule.

Research Production Disclaimer:

ISG collects data for the purposes of conducting research and creating provider/vendor profiles. The profiles and supporting data are used by ISG advisors to make recommendations and inform their clients of the experience and qualifications of any applicable provider/vendor for outsourcing the work identified by clients. This data is collected as part of the ISG FutureSource™ process and the Candidate Provider Qualification (CPQ) process. ISG may choose to only utilize this collected data pertaining to certain countries or regions for the education and purposes of its advisors and not produce ISG Provider Lens® reports. These decisions will be made based on the level and completeness of the information received directly from providers/vendors and the availability of experienced analysts for those countries or regions. Submitted information may also be used for individual research projects or for briefing notes that will be written by the lead analysts.

ISG Star of Excellence™ — Call for nominations

The Star of Excellence™ is an independent recognition of excellent service delivery based on the Voice of the Customer concept. ISG has designed the Star of Excellence program to collect client feedback about service providers' success in demonstrating the highest standards of client service excellence and customer centricity.

The global survey is all about services that are associated with IPL studies. In consequence, all ISG Analysts are continuously provided with information on the customer experience of all relevant service providers. This information comes on top of existing first-hand advisor feedback that IPL leverages in its practitioner-led consulting approach.

Providers are invited to nominate their clients to participate. Once the nomination has been submitted, ISG sends out a mail confirmation to both sides. It is self-evident that ISG anonymizes all customer data and does not share it with third parties.

Our vision for the Star of Excellence is to become acknowledged as the leading industry recognition for client service excellence and serve as the benchmark for measuring client sentiments.

To ensure your selected clients complete the feedback for your nominated engagement, please use the "Nominate (for Providers)" section on the Star of Excellence™ website.

We have set up an email where you can direct any questions or provide comments. This email will be checked daily, please allow up to 24 hours for a reply.

Here is the email address:
star@cx.isg-one.com

ISG Star of Excellence

The ISG Provider Lens® – Semiconductor Industry — Services and Solutions services study analyzes the relevant software vendors/ service providers in the U.S. and Europe market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology.

Study Sponsor:
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Lead Analysts:
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Arjun V Das

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The research and analysis presented in this report includes research from the ISG Provider Lens® program, ongoing ISG Research programs, interviews with ISG advisors, briefings with service providers and analysis of publicly available market information from multiple sources. The data collected for this report represent information that ISG believes to be current as of April 2026 for providers that actively participated and for providers that did not. ISG recognizes that many mergers and acquisitions may have occurred since then, but this report does not reflect these changes.

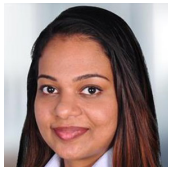
All revenue references are in U.S. dollars ($US) unless noted otherwise.

Contacts For This Study

Study Sponsor

Iain
Fisher

Study Sponsor - Global



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Lead Analyst

Swadhin
Pradhan

Assistant Director & Principal Analyst

Arjun V
Das

Assistant Manager & Lead Research Specialist

Sumit
Kumar

Data Analyst

Sreya
Ghosh

Project Manager

ISG Provider Lens® Advisors Involvement Program

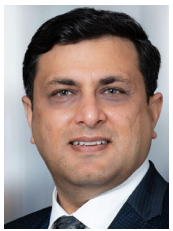
ISG Provider Lens® offers market assessments incorporating practitioner insights, reflecting regional focus and independent research. ISG ensures advisor involvement in each study to cover the appropriate market details aligned to the respective service lines/technology trends, service provider presence and enterprise context.

In each region, ISG has expert thought leaders and respected advisors who know the provider portfolios and offerings as well as enterprise requirements and market trends. On average, three consultant advisors participate as part of each study's quality and consistency review process. The consultant advisors ensure each study reflects ISG advisors' experience in the field, which complements the primary and secondary research the analysts conduct. ISG advisors participate in each study as part of the consultant advisors' group and contribute at different levels depending on their availability and expertise.

The consultant advisors:

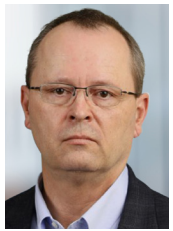
- Help define and validate quadrants and questionnaires,
- Advise on service provider inclusion, participate in briefing calls,
- Give their perspectives on service provider ratings and review report drafts.

ISG Advisors for this study



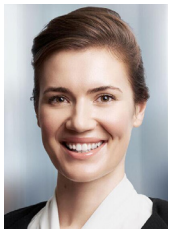
Rajeev Chatrath

Principal Consultant



John Lytle

Director, Manufacturing



Dr. Dorotea Baljević

Director

Invited Companies

If your company is listed on this page or you feel your company should be listed, please contact ISG to ensure we have the correct contact person(s) to actively participate in this research.

Alten
Accenture
Accion Labs
Accso
ACL Digital
Adesso
AFRY
Akkodis
All For One
Allied Digital
Altair
Altimetrik
Amplimind
AND Digital
Atos Group
AVL
AXISCADES
Bahwan Cybertek
Bairesdev
Bell Techlogix
Bertrandt
Birlasoft
Bluebinaries
Bosch SDS
Capgemini
Caresoft Global
CENIT AG
Centroid
Centum Electronics
CGI
CI&T
Ciklum
CMS IT Services
Coforge
Cognisys
Cognitus Consulting
Cognizant
Computacenter
Cyient
Datamatics
Delaware Digital
Deloitte
DXC Technology
EDAG
Einfochips
Endava
Engineering Industries Excellence
EPAM Systems
Etteplan
EXL
Expleo
EY
FEV
Firstsource
FORCAM
Fortude
FPT Software
Fujitsu
Genpact
Globallogic

Invited Companies

Globant
Happiest Minds
Hcltech
Hexaware
Hitachi Digital Services
IBM
Ignitarium
Indra Sistemas
Infinite Computer Solutions
Infogain
Infosys
Innominds
Innova Solutions
Innover Digital
Innowise
Inspirage
Intelizign
Intellectsoft
Intellias
ITC Infotech
Itransition
JIT Team
Kongsberg IT
KPIT
Kyndryl
Latentview
Ltimindtree
LTTS
Mastek
MHP
Microland
Mirafra Technologies
Movate
Mphasis
Nagarro
NCS
NEC
Ness Digital Engineering
Netguru
N-ix
NTT DATA
Orange Business
Orion Innovation
Perficient
Persistent Systems
Publicis Sapient
Pwc
Qualitest
Quest Global
R Systems
Randstad Digital
Reply
Sasken
Sciencesoft USA
SETS
Shift5
Siemens Advanta
SII
Softdel
Softtek

Invited Companies

Sonata Software
Sopra Steria
Stefanini
Sutherland
Synoptek
Syntax
Systema
Tata Elxsi
Tata Technologies
TCS
Tech Mahindra
Tessolve
Thoughtworks
T-Systems
Unisys
UST
Valcon
Virtusa
Vivicta
VVDN Technologies
Wipro
Xoriant
Zensar Technologies
Zentrix (zenkins)
Zuhlke

ISG Provider Lens®

The ISG Provider Lens® Quadrant research series is the only service provider evaluation of its kind to combine empirical, data-driven research and market analysis with the real-world experience and observations of ISG's global advisory team. Enterprises will find a wealth of detailed data and market analysis to help guide their selection of appropriate sourcing partners.
ISG advisors use the reports to validate their own market knowledge and make recommendations to ISG's enterprise clients. The research currently covers providers offering their services across multiple geographies globally.

For more information about ISG Provider Lens® research, please visit this webpage.

ISG Research™

ISG Research™ provides subscription research, advisory consulting and executive event services focused on market trends and disruptive technologies driving change in business computing. ISG Research™ delivers guidance that helps businesses accelerate growth and create more value.

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For more information about ISG Research™ subscriptions, please email contact@isg-one.com, call +1.203.454.3900, or visit research.isg-one.com.

ISG

ISG (Information Services Group) (Nasdaq: III) is a leading global AI-centered technology research and advisory firm. A trusted partner to more than 900 clients, including 75 of the world's top 100 enterprises, ISG is a long-time leader in technology and business services sourcing that is now at the forefront of leveraging AI to help organizations achieve operational excellence and faster growth.

The firm, founded in 2006, is known for its proprietary market data, in-depth knowledge of provider ecosystems, and the expertise of its 1,600 professionals worldwide working together to help clients maximize the value of their technology investments.

For more information, visit isg-one.com.

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JANUARY, 2026

BROCHURE: SEMICONDUCTOR INDUSTRY — SERVICES AND SOLUTIONS