

# Advanced Computing Intelligence Service

## Part of the AI & Intelligent Automation Service Area Package

Tracks and forecasts hardware and related developments in the market for AI-related computing both at the edge and in the data center. Key areas of coverage include AI processor semiconductors, with a focus on AI-enabled graphics processing units (GPUs), application specific integrated circuits (ASICs), application specific standard products (ASSPs), field programmable gate arrays (FPGAs), digital signal processors (DSPs) and central processing units (CPUs). The service also examines markets for hardware products ranging from edge devices to high-performance computing.

“ With AI accelerator becoming a standard feature in virtually all types of electronic systems, system designers soon will no longer have a choice of deciding whether to include dedicated hardware AI acceleration in their hardware. Rather, they will have to decide what level of AI acceleration they need. ”

**Jonathan Cassell**  
Principal Analyst

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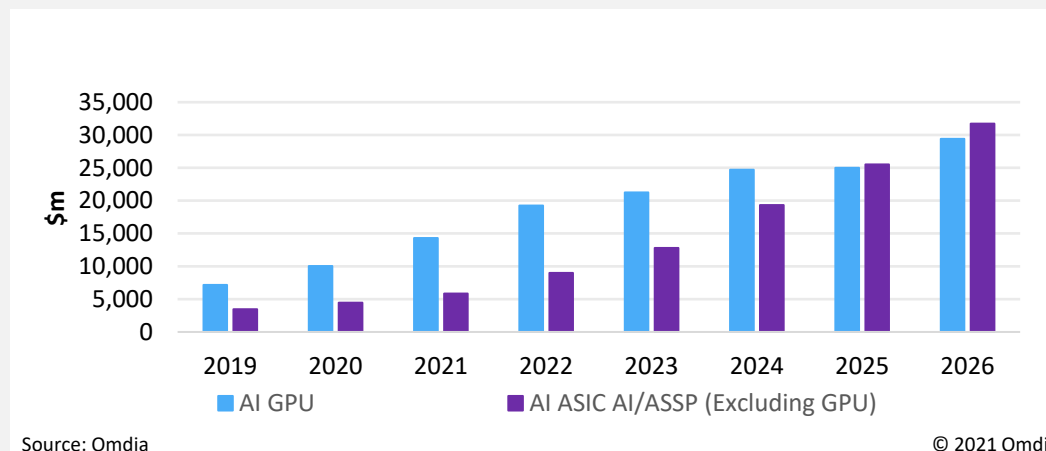
## HOW OMDIA HELPS YOU

- Understand the underlying technologies that are driving the future of computing.
- Build strategies that align with the upcoming shift in compute architectures.
- Identify partners and innovators.
- Deliver on a roadmap of products and solutions that take advantage of new compute paradigms.

## KEY QUESTIONS ADDRESSED

- How will leading-edge compute technologies enable new applications and business models?
- How will the unprecedented demand for compute created by very large AI models be met?
- What impact will these changes have on the semiconductor industry?
- Who are the key ecosystem participants driving new compute paradigms?
- Coverage of AI Hardware in the context of quantum, neuromorphic, blockchain and other emerging technologies.

AI processor market revenue forecast, GPU vs. ASIC/ASSP (\$m)



# Artificial Intelligence (AI) & Intelligent Automation (IA) Analysts



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**Intelligent Automation &  
Enterprise AI**



**Neil Dunay**  
*Principal Forecaster*  
**AI Data Tools**

# Advanced Computing: Deliverables



## Market Analysis

—Annual—

- AI Chipsets for Edge Forecast Report (Q1 2022)
- AI Processors for Cloud and Data Center Forecast Report (Q3 2022)
- AI Servers, Workstations, Cards, Storage and Networking Report (Q1 2022)



## VENDOR BENCHMARKS

—Annual—

- AI Chipsets for Edge Market Radar (Q4 2022)
- AI Processors for Cloud and Datacenter Market Radar (Q1 2022)
- Quantum Computing Market Radar (1Q 2022)



## REPORTS

—Annual—

- AI Edge Servers and Appliances (Q1 2022), AI Workload Analysis for Hardware Infrastructure, AI Chip IP Cores and more



## ANALYST INSIGHTS

—Ongoing—

Analyst commentary on market shifts, technology and regional developments, vendors, events, and more.



## PRESENTATIONS

—Quarterly—

Quarterly briefings with analysts on research highlights from all aspects of the market.



## ANALYST ACCESS

—Ongoing—

For prompt responses to urgent and unique questions.

# Advanced Computing: Market Data

## AI Processors for Cloud and Datacenter Forecast (Q3 2022)

This report focuses on AI processors, including CPUs, GPUs, ASICs, ASSPs and FPGAs. Revenue and shipment data is included for these chips. Data is further broken down by workloads, training vs inference, market segment and industry vertical.

**Frequency:** Annual

## AI Chipsets for Edge Forecast (Q1 2022)

This report focuses on AI CPU, GPU, ASIC, ASSP, DSP and FPGA revenue and shipment data for AI hardware at the edge covering 10 device categories – PC/tablets, mobile, drones, HMDs, smart speakers, automotive, security cameras, edge servers, machine vision and robots.

**Frequency:** Annual

## AI Servers, Workstations, Cards, Storage and Networking Report (Q1 2022)

Provides shipments and revenue for AI hardware largely in the datacenter across cards, workstations, servers and storage.

**Frequency:** Annual

### Regions

- North America
- Latin America & the Caribbean
- Western Europe
- Eastern Europe
- Central & Southern Asia
- Oceania, Eastern & South-Eastern Asia
- Middle East
- Africa

### Coverage

- AI Processors
- AI Servers
- Workstations
- Storage Hardware

# Advanced Computing: Market Reports

## AI Processors for Cloud, Data Center and AI Edge Devices

**Frequency:** Annual

### A Series of eight or more Advanced Computing Research Reports

- Back catalogue of all published Advanced Computing research reports
- Key topics covered including:
  - AI Processors
  - AI Servers, Workstations and Storage
  - AI Edge Servers and Appliances
  - AI Cloud and Data Center
  - AI Edge
  - AI Hardware Development Platforms
  - AI SoC IP Cores
  - AI Workloads

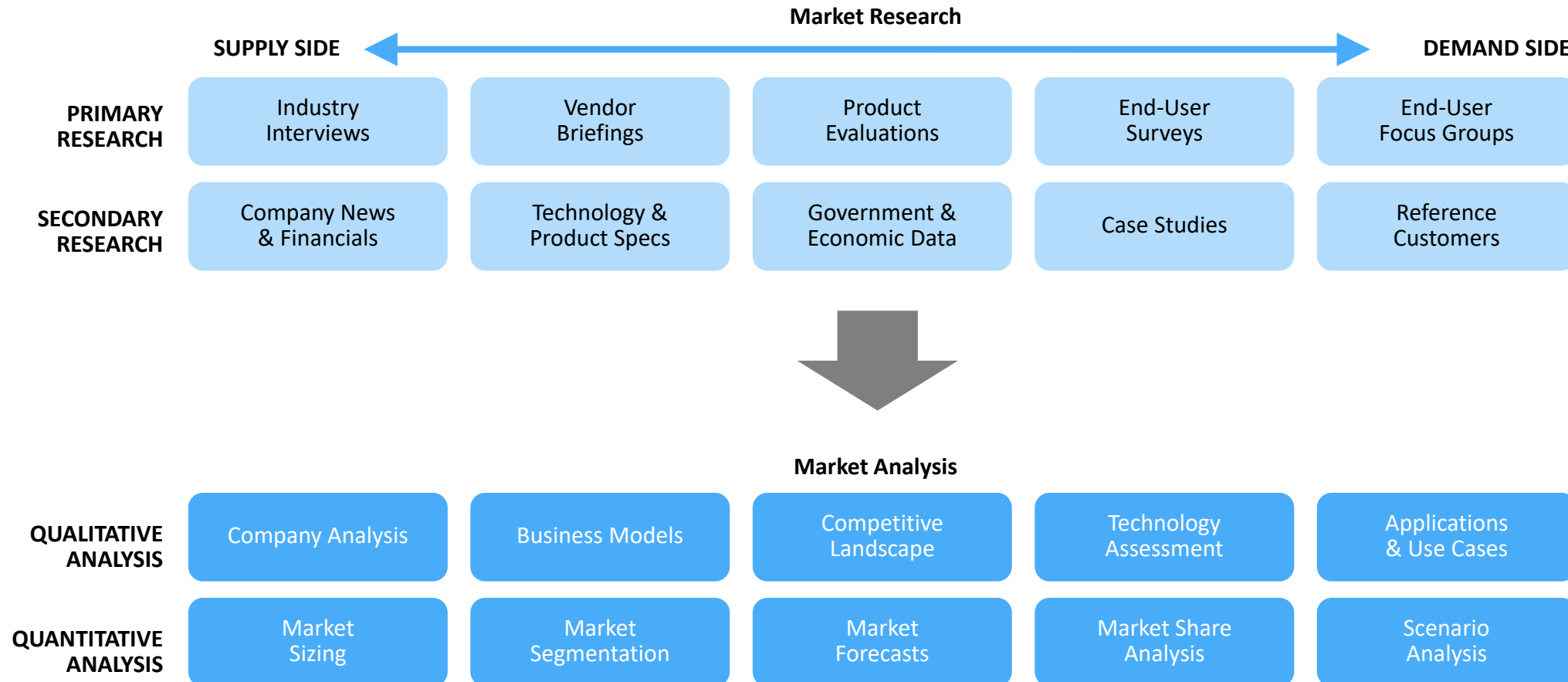
### Regions

- North America
- Latin America & the Caribbean
- Western Europe
- Eastern Europe
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- Oceania, Eastern & South-Eastern Asia
- Middle East
- Africa

### Report Titles

- AI for Anomaly Detection Report
- AI Chip IP Cores
- AI Edge Servers and Appliances Report
- AI Software Forecast Update
- AI Servers, Workstations and Storage Report
- AI Workload Analysis for Hardware Infrastructure
- AI Processor Sustainability
- AI Processor Strategic Advisory
- AI Processor Vertical Market Survey

# Advanced Computing: Research Methodology



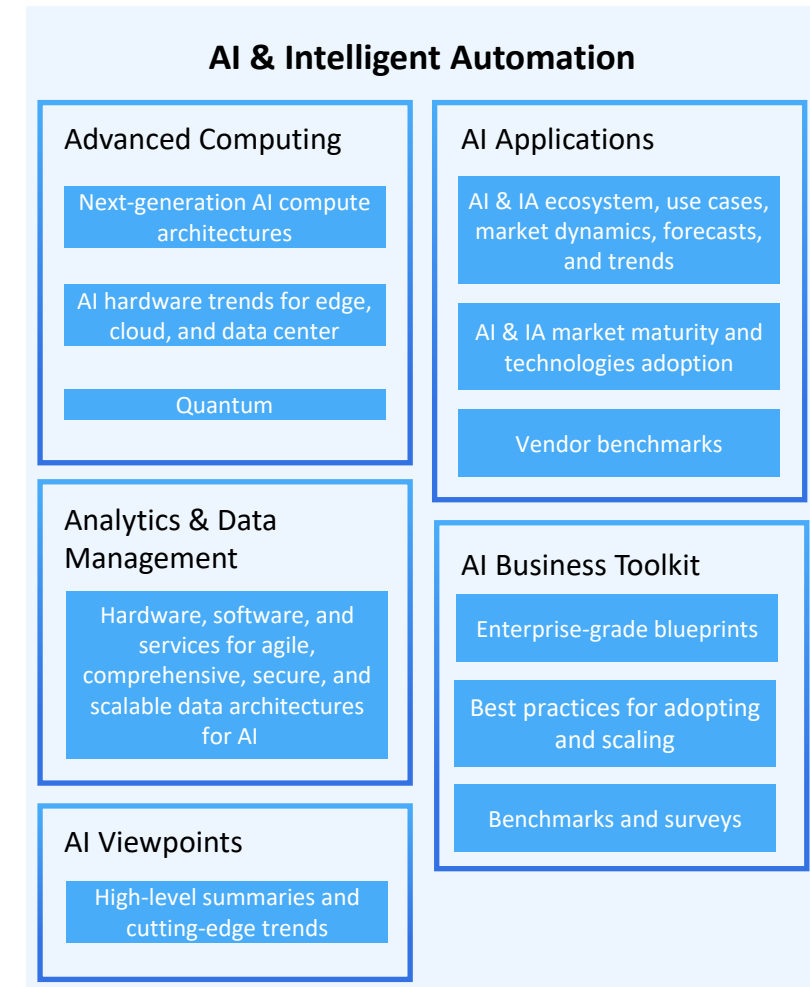
# AI & Intelligent Automation Overview

## About Omdia's AI & Intelligent Automation Research

Omdia provides valuable, detailed, and comprehensive research on the core elements of the AI and IA ecosystem. Our research portfolio spans the entire AI and IA value chain, from AI hardware to AI use cases, applications, software, platforms, and services. We cover a wide variety of companies including AI startups, hyperscalers, chipset vendors, cloud providers, OEMs, IT vendors, AI platform vendors, AI and IT services companies, and enterprises deploying AI and IA across different vertical markets.

Omdia's AI & IA research also provides insights into the drivers and barriers in key vertical markets and examines the challenges, investment strategies, and supplier choices of enterprises that are in the process of adopting and scaling AI, ML, and data science.

Omdia's syndicated AI & IA research is delivered via five distinct intelligence services: Advanced Computing, AI Applications, Analytics & Data Management, AI Business Toolkit, and AI Viewpoints. Through a rich collection of reports, forecasts, surveys, and analyses, each of these intelligence services provides our clients with insights into the latest AI and IA business and technology trends and how these developments affect the market (and their organizations) now and in the future. Our clients also enjoy access to our analyst team, thus ensuring their questions are answered completely and promptly.





# Our “Ask an Analyst” Service Provides Best in Class Customer Support

Whether you need guidance to navigate the service, information regarding our methodologies or you want to better understand a data trend, Omdia’s support team is here to help.

## Draw on our expertise

- Make the right decisions
- Sanity-check your own findings
- Get the most out of your subscription
- Understand more about our methodologies

Our Ask an Analyst service gives you direct contact via telephone, email or face-to-face session with our expert analyst team:



**Tom Coate**  
Customer Success  
Manager



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Manager



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### ABOUT OMDIA

Omdia is a global technology research powerhouse, established following the merger of the research division of Informa Tech (Ovum, Heavy Reading, and Tractica) and the acquired Omdia technology research portfolio\*. We combine the expertise of more than 400 analysts across the entire technology spectrum, covering 150 markets. We publish over 3,000 research reports annually, reaching more than 14,000 subscribers, and cover thousands of technology, media, and telecommunications companies.

Our exhaustive intelligence and deep technology expertise enable us to uncover actionable insights that help our customers connect the dots in today's constantly evolving technology environment and empower them to improve their businesses—today and tomorrow.

\* The majority of Omdia technology research products and solutions were acquired by Informa in August 2019 and are now part of Omdia.