

France Application-Specific Integrated Circuits (ASIC) Market - Strategic Insights and Forecasts (2026-2031)

<https://marketpublishers.com/r/F71993144CFAEN.html>

Date: February 2026

Pages: 82

Price: US\$ 2,850.00 (Single User License)

ID: F71993144CFAEN

Abstracts

The France Application-Specific Integrated Circuits (ASIC) market is forecast to grow at a CAGR of 8.4%, reaching USD 2.4 billion in 2031 from USD 1.6 billion in 2026.

The French ASIC market is undergoing a strategic transformation, shifting from a primarily design and research-focused hub toward a market with rapidly expanding domestic manufacturing ambitions. This shift is anchored by decisive intervention at both the national and European levels, most notably through the France 2030 plan and the European Chips Act, which are mobilising substantial public and private investment to reduce supply chain dependencies and build sovereign capability in advanced semiconductor production. ASICs, as custom-designed silicon optimised for specific workloads, are positioned as critical enablers across electric vehicles, artificial intelligence, 5G connectivity, and industrial IoT, making France a structurally important node in the European semiconductor value chain.

Market Drivers

Automotive electrification is the most powerful and structurally durable growth driver in the French ASIC market. The European mandate for zero-tailpipe emission vehicles by 2035 is compelling automotive manufacturers to integrate high-performance power ASICs, specifically silicon carbide and gallium nitride devices, into traction inverters and onboard charging systems. The proliferation of Advanced Driver-Assistance Systems is simultaneously increasing demand for full-custom ASICs designed to meet ISO 26262 automotive safety standards, with long design-in cycles supporting multi-year demand pipelines.

Government investment programs provide a second major catalyst. The France 2030

plan and the European Chips Act are directly lowering capital expenditure barriers for establishing and expanding fabrication facilities at advanced nodes. This funding is stimulating local ASIC design activity and supporting capacity expansion at STMicroelectronics' Crolles facility, which is targeting significantly higher wafer output volumes by 2027. The development of domestic pilot lines for 5 nm and below nodes is cultivating a local design community and creating demand for domestic prototyping and testing services.

Accelerating demand for AI-specific ASICs is a third driver, particularly from hyperscale cloud providers and sovereign-cloud initiatives. As data centre architectures pivot toward domain-specific silicon for high-performance computing and AI inference, custom chip development is increasingly preferred over general-purpose processors for its power efficiency advantages.

Market Restraints

A severe global shortage of advanced node ASIC design and fabrication engineering talent represents a critical constraint on capacity ramp-up, despite the availability of financial incentives. This skills gap limits the pace at which France can translate policy ambition into manufacturing output.

High non-recurring engineering costs at leading-edge nodes, including 5 nm and 3 nm, create significant adoption barriers for smaller enterprises, concentrating advanced ASIC development among large industrial players and well-funded research institutions. Additionally, national export controls on advanced semiconductors, effective March 2024, introduce licensing requirements for non-EU exports of cutting-edge ASIC technology, adding procedural complexity to international commercial activity.

Supply chain concentration in Asia-Pacific for advanced node fabrication remains a structural vulnerability. French-designed ASICs at the most advanced process nodes continue to rely on foundries in Taiwan and South Korea for manufacturing, exposing the market to geopolitical and logistical disruption risks that the European Chips Act explicitly seeks to address.

Technology and Segment Insights

By process technology, mature and mid-range nodes continue to account for substantial volume, particularly for automotive and industrial applications. Leading-edge nodes at 5 nm and 7 nm are the fastest-growing segments, driven by AI accelerator and data

centre demand. By product type, full-custom ASICs dominate the automotive and defence segments, while semi-custom and programmable ASICs serve networking, telecommunications, and industrial IoT applications.

By application, automotive holds the largest share, followed by data centres and cloud computing, networking and telecommunications, and industrial IoT. The defence and aerospace segment represents a stable, high-reliability demand stream. France's unique position in FD-SOI substrate production through Soitec creates a distinct competitive advantage for low-power ASIC designs targeting 5G, IoT, and edge-AI applications.

Competitive and Strategic Outlook

The competitive landscape is defined by a dual structure: a strong domestic ecosystem for materials and power or mixed-signal ASICs, and intense global competition in advanced digital ASICs. STMicroelectronics leads as the dominant integrated device manufacturer, with significant design, manufacturing, and R&D presence in Grenoble and Crolles. Soitec, while not an ASIC manufacturer, is a critical upstream enabler whose FD-SOI substrates underpin a growing share of European ASIC design activity. Intel, AMD, and NVIDIA represent global competitive forces in the advanced digital ASIC and compute segment.

Strategic partnerships between industry players and research institutions, particularly CEA-LETI, are central to the French market's innovation pipeline. These collaborations ensure that domestic substrate and process technology capabilities feed directly into next-generation ASIC design roadmaps, reinforcing France's position as a leader in the European semiconductor ecosystem.

Key Takeaways

The France ASIC market is set for robust growth through 2031, supported by automotive electrification mandates, targeted government investment, and rapidly rising demand for AI and connectivity-focused custom silicon. Talent development, advanced node manufacturing capacity, and supply chain diversification will be the key strategic priorities shaping market competitiveness over the forecast period.

Key Benefits of this Report

Insightful Analysis: Gain detailed market insights across regions, customer

segments, policies, socio-economic factors, consumer preferences, and industry verticals.

Competitive Landscape: Understand strategic moves by key players to identify optimal market entry approaches.

Market Drivers and Future Trends: Assess major growth forces and emerging developments shaping the market.

Actionable Recommendations: Support strategic decisions to unlock new revenue streams.

Caters to a Wide Audience: Suitable for startups, research institutions, consultants, SMEs, and large enterprises.

What businesses use our reports for

Industry and market insights, opportunity assessment, product demand forecasting, market entry strategy, geographical expansion, capital investment decisions, regulatory analysis, new product development, and competitive intelligence.

Report Coverage

Historical data from 2021 to 2025 and forecast data from 2026 to 2031

Growth opportunities, challenges, supply chain outlook, regulatory framework, and trend analysis

Competitive positioning, strategies, and market share evaluation

Revenue growth and forecast assessment across segments and regions

Company profiling including strategies, products, financials, and key developments

Contents

1. EXECUTIVE SUMMARY

2. MARKET SNAPSHOT

- 2.1. Market Overview
- 2.2. Market Definition
- 2.3. Scope of the Study
- 2.4. Market Segmentation

3. BUSINESS LANDSCAPE

- 3.1. Market Drivers
- 3.2. Market Restraints
- 3.3. Market Opportunities
- 3.4. Porter's Five Forces Analysis
- 3.5. Industry Value Chain Analysis
- 3.6. Policies and Regulations
- 3.7. Strategic Recommendations

4. TECHNOLOGICAL OUTLOOK

5. FRANCE APPLICATION-SPECIFIC INTEGRATED CIRCUITS (ASIC) MARKET BY PROCESS TECHNOLOGY

- 5.1. Introduction
- 5.2. Advanced Nodes
 - 5.2.1. 3 nm and below
- 5.3. Leading-Edge Nodes
 - 5.3.1. 5 nm
 - 5.3.2. 7 nm
- 5.4. Mid-Range Nodes
 - 5.4.1. 10 nm
 - 5.4.2. 12 nm
 - 5.4.3. 14 nm
 - 5.4.4. 16 nm
- 5.5. Mature Nodes
 - 5.5.1. 22 nm and above

6. FRANCE APPLICATION-SPECIFIC INTEGRATED CIRCUITS (ASIC) MARKET BY PRODUCT TYPE

- 6.1. Introduction
- 6.2. Full-Custom ASIC
- 6.3. Semi-Custom ASIC
 - 6.3.1. Standard Cell-Based ASIC
 - 6.3.2. Gate-Array Based ASIC
- 6.4. Programmable ASIC
- 6.5. Others

7. FRANCE APPLICATION-SPECIFIC INTEGRATED CIRCUITS (ASIC) MARKET BY APPLICATION

- 7.1. Introduction
- 7.2. Consumer Electronics
- 7.3. Automotive
- 7.4. Networking & Telecommunications
- 7.5. Data Centers & Cloud Computing
- 7.6. Healthcare
- 7.7. Industrial & IoT
- 7.8. Defense & Aerospace
- 7.9. Others

8. COMPETITIVE ENVIRONMENT AND ANALYSIS

- 8.1. Major Players and Strategy Analysis
- 8.2. Market Share Analysis
- 8.3. Mergers, Acquisitions, Agreements, and Collaborations
- 8.4. Competitive Dashboard

9. COMPANY PROFILES

- 9.1. STMicroelectronics
- 9.2. Soitec
- 9.3. Intel
- 9.4. AMD
- 9.5. NVIDIA

- 9.6. Marvell Technology
- 9.7. Onsemi
- 9.8. Infineon Technologies
- 9.9. NXP Semiconductors
- 9.10. Broadcom

10. APPENDIX

- 10.1. Currency
- 10.2. Assumptions
- 10.3. Base and Forecast Years Timeline
- 10.4. Key Benefits for the Stakeholders
- 10.5. Research Methodology
- 10.6. Abbreviations

I would like to order

Product name: France Application-Specific Integrated Circuits (ASIC) Market - Strategic Insights and Forecasts (2026-2031)

Product link: <https://marketpublishers.com/r/F71993144CFAEN.html>

Price: US\$ 2,850.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/F71993144CFAEN.html>