TechInsights Logic Subscription

Empower Your SoC Design and Manufacturing Decisions using Fact-Based Competitive Intelligence and Cutting-Edge Insights

The global semiconductor industry’s Logic market continues to grow and innovate, marked by rapid advancements and fierce competition. In this fast-paced industry, knowledge is crucial to survive and thrive. To address the increasing demand for smaller, faster, and more efficient chips driven by transformative technologies like AI, IoT, and 5G, TechInsights equips development teams with comprehensive logic benchmarking analysis through its Logic Subscription. This subscription enables organizations to stay competitive with the latest advancements, apply crucial product benchmarks to their strategic product rollout, and position their product against competitive designs. The technical, business, and market analysis of the system-on-chip (SoC) processor landscape further enables fact-based product and design decisions.
Why You Need a TechInsights Logic Subscription

- Get an accurate pulse of the competitive SoC landscape with visibility into leading SoC design approaches across market leaders and upcoming potential disruptors to ensure you stay ahead of the competition.
- Understand the impact of disruptive technology and SoC innovation with insightful perspective and interpretation from our subject matter experts and engineering analysts.
- Make business, design, and product decisions with confidence based on high-quality analysis with unparalleled detail at the microscopic level, owing to TechInsights’ state-of-the-art lab technology.

Key Features of TechInsights’ Logic Subscription

- It provides an in-depth analysis of chipsets, including structural, material, DC performance, and circuit-level examinations, focusing on global frontrunners in processor products, high-performance data centers, AI computing, and emerging fields.
- State-of-the-art laboratories are equipped to perform comprehensive analyses of increasingly smaller process nodes. Our labs are fully equipped to extract crucial information about the structural, material, performance, and circuit-level attributes of chipsets manufactured using the latest commercially available technology nodes.
- It enables you to leverage both technical and business perspectives of the microprocessor and SoC landscape.
- The Roadmap provides visibility into upcoming innovative SoC devices and parts flagged by our subject matter experts and engineering analysts for future analysis to help inform your roadmap decisions.

- Analytic dashboards offer effortless benchmarking and comparisons, revealing insights into chipset manufacturers’ strategic approaches to product design and technology integration. They provide a clear understanding of product evolution across generations by aggregating data from the entire channel. Easy-to-share visualizations support fact-based decision-making, making it an efficient tool for strategic analysis and collaboration, saving your organization effort and time.
- Online briefings presented by our subject matter experts provide digital functional analysis, comparative analysis, design technology interaction, process integration strategies, technology trends, and packaging implementations to enable a thorough understanding of the current SoC climate.
- Self-serve online access to all previous and current analyses and the features above via the TechInsights Platform anytime, anywhere. These key features are easy to access and share with other subscribers in your organization.
Logic Subscription

Channels

**Digital Floorplan** provides a high-level view of SoC design implementation, covering leading-edge APU, CPU, GPU, AI accelerator, FPGA, baseband and connectivity, VPU, and advanced MCU components, including devices from high-end server SoCs and AI/Edge SoCs. **Digital Floorplan Analytics** provides tools to query TechInsights’ data, conduct trend analysis, and compare and create visualizations of Digital Floorplan (DFR), and other data within the Logic subscription.

**SoC Design** concentrating on high-volume, first-to-market SoCs from top fabless and foundry partnerships, this subscription offers standard cell circuit extraction and layout analysis on key areas of cutting-edge SoCs. It gives insights on area and routing trade-offs and informs future design library choices. TechInsights’ **SoC Design Analytics** tools enable querying data, trend analysis, comparisons, and visualizations within the Logic subscription.

**Transistor Architecture Comparison** provides insight into the front end of line (FEOL) innovation that drives the world’s most advanced technology solutions and how industry leaders deployed them (TSMC, Samsung, Intel) over the last three generations.

**Process (Advanced CMOS Essentials or ACE)** focuses on leading-edge SoCs and the technology used to manufacture through structural and materials analysis. It identifies differences or nuances between competing technologies and differences between process technology options from the same company. **Process Analytics** offers aggregated data from the Logic Process channel, helping you create visualizations and trends of company, product, and technology evolution.

**Advanced Packaging** provides insight on advanced chipset packaging through structural and materials analysis, critical dimensions of the key chip-to-chip interconnects, and information on form factors. **Packaging Analytics** provides tools to query TechInsights’ data, conduct trend analysis, compare, and create visualizations of Advanced Packaging and other data within the Logic subscription.

Don’t fall behind the competition! Get more information and start your free trial at [www.techinsights.com](http://www.techinsights.com)
Logic Subscription Channels

**Process Flows** (Requires a subscription to Process & Advanced Packaging.) This channel is focused on leading-edge advanced CMOS process technologies, process integration, and architecture analysis. Enhance your Advanced Process & Packaging subscription with Process Flow Analysis (PFA), Process Flow Full Emulation (PFF), and more. **Process Flow Analytics** provides tools to query TechInsights’ data, conduct trend analysis, perform comparisons, and create visualizations of process flow and other data within the Logic Vertical.

**Communications Market Service** provides the detailed market information needed to sort out the dynamics of this market. Coverage focuses on processors, Ethernet ASSPs and adapters, and FPGAs.

**AI Processor Service** This 300+ page report provides deep technology analysis, head-to-head product comparisons, and analysis of company prospects in the rapidly developing market segment of deep learning and AI.

**Microprocessor Report** provides articles on the latest microprocessor news, covering a new product, technology, or trend. The content in the channel includes new companies, mergers and acquisitions, market shifts, SoC design and manufacturing technologies, and new design approaches.

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**Why Choose TechInsights?**

- We were the first company to reveal China’s 7nm achievement despite facing sanctions from Western countries in SMIC bitcoin mining.
- We have cutting-edge tools for and knowledge of reverse engineering advanced technology.
- We have invested substantially in laboratory technology, including the Raith CHIPSCANNER for imaging at the 3nm node.
- We can achieve delayering at 3nm and beyond with proprietary sample preparation techniques by our world-class technologists.
- We’ve acquired a second-generation ion beam etcher (IBE) to enhance delayering capabilities for chips.
- Our transmission electron microscope (TEM) offers high-resolution viewing.
- Our TALOS TEM refines resolution and allows for clearer identification of smaller features and materials (elements).
- We combine top-tier experts with cutting-edge equipment to lead the world in understanding the innovations in today’s advanced chipsets.
## Bundling Options

TechInsights offers a variety of Logic analysis bundles to suit your needs.

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<th>Channels Included</th>
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Our content informs decision makers and professionals whose successes depend on accurate knowledge of the semiconductor industry – past, present, or future.

Our unmatched reverse engineering analysis, images, and expert commentary are accessed through the TechInsights Platform, the world’s largest research library of semiconductor and market analysis. Our customers include the most successful technology companies, who rely on TechInsights analysis to make informed business decisions faster and with greater confidence.

TechInsights
1891 Robertson Road
Suite 500
Ottawa, Ontario K2H 5B7
Canada
T: 1-613-599-6500
F: 1-613-599-6501
Web site: www.techinsights.com
Email: info@techinsights.com