

Intellectual Property (IP) Theft in the Semiconductor Industry: Innovation at Risk



What is Intellectual Property?



Intellectual property (IP) is intangible property owned by an organization. It includes financial data, market research reports, creative designs, etc., and gives an organization a competitive edge.

Examples



Plant Specification



Patent Applications



Marketing Content



Integrated Circuit (IC) Design



Customized Software Code



Semiconductor IP (SIP) Core

What is IP Theft ?

Intellectual Property (IP) theft means stealing creative ideas from companies. Storing IP in unsecured locations, on the cloud, or in emails increases the chances of theft and external leaks that may put your organization at risk.

Sensitive and confidential data, such as various types of IP, are instrumental in bringing about a company's intellectual and financial growth and gaining a competitive edge in the market. That is why protecting the IP from being shared unauthorisedly is crucial.



Data Security Challenges in the Semiconductor Manufacturing Industry



Supply chain Security



Merger and Acquisitions

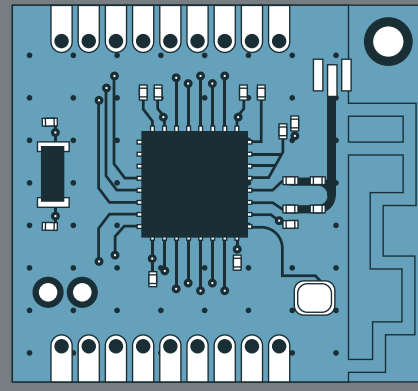


Collaboration amongst external and internal entities for innovation



Business Email Compromise (BEC)

In electronic design, a **semiconductor intellectual property core (SIP core)**, **IP core**, or **IP block** is a reusable unit of logic, cell, or integrated circuit layout design that is the intellectual property of one party.



How Does



70%
Contribution of IP to the value of **Publicly-traded companies**

21.7%
American CFOs think their **companies are victims of IP Theft**

\$225 Billion Annually **\$600**
Cost of IP theft in the US

Source: <https://legaljobs.io/blog/intellectual-property-statistics/#:~:text=27.7%25%20of%20jobs%20in%20the,the%20US%20is%20%248.64%20million.>

21% Manufacturing Sector Suffered **IP Loss** Due to **Security Breaches**

Source: https://www.kaspersky.com/about/press-releases/2014_kaspersky-lab-survey-one-in-every-five-manufacturing-businesses-has-lost-intellectual-property-to-security-breaches-within-the-past-year

\$550 billion
Loss due to IP theft by a foreign organization

Source: [Source: https://www.qml.us/how-intellectual-property-theft-puts-the-semiconductor-industry-at-risk/](https://www.qml.us/how-intellectual-property-theft-puts-the-semiconductor-industry-at-risk/)

Manufacturing and sub-industries
Most attacked industries in 2021

Source: <https://exchange.xforce.ibmcloud.com/industry/guid:4b74981ed5667a9765eb9ae62b610d66>

\$4.24 M per breach
Cost of data breach for an industrial company

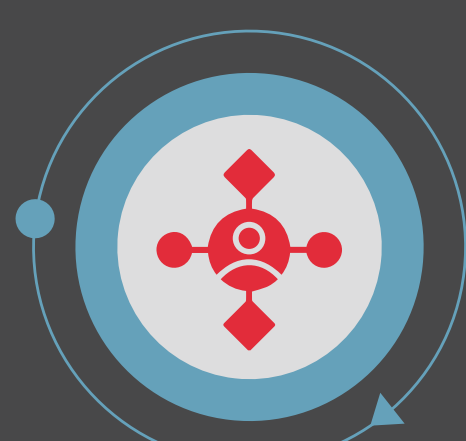
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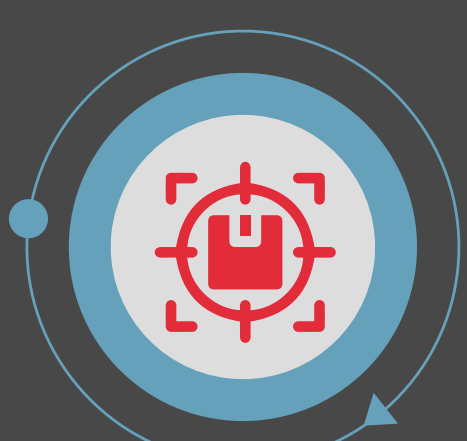
According to the **CNBC Global CFO Council**, **1 in 5 US companies** face IP theft by foreign or state-owned enterprises

Source: <https://www.aabun.com/blog/avoiding-semiconductor-intellectual-property-theft>

Why Digital Asset Protection & Control for IP?



Apply persistent, granular usage controls



Track activities on IP



Modify or revoke access to users at any time

Protect Digital Assets, Curb Insider Threats, Achieve Data Privacy & Compliance with

SECLORE



Protects any file format



Protects IP wherever it is stored



Controls who have access



Integrates with a third-party solution