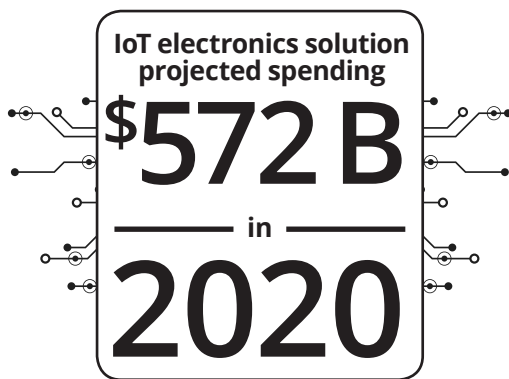


IoT opportunity in the world of semiconductor companies

IT'S TIME TO REINVENT. TAKE A LOOK AT THE STRATEGIES.

The market potential is tremendous, but if semiconductor companies are going to participate they need to understand evolving customer expectations and the nuances of specific industries to deliver products with positive business outcomes.

Understanding the potential areas of play

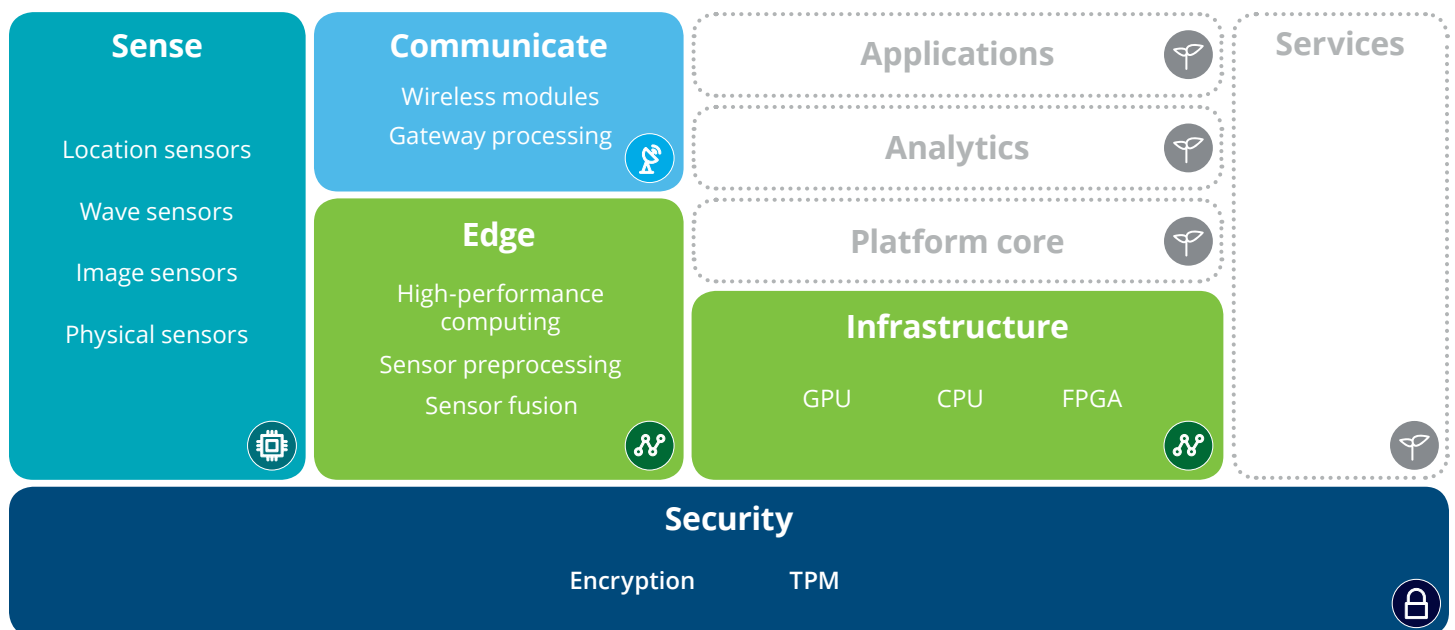


According to Gartner, IoT semiconductor spending is projected to be \$34B in 2020. At the same time, IoT electronics solution spending is projected to reach \$572B, or \$1.03T if including connectivity and professional services spending. This type of spending presents semiconductor companies the opportunity for revenue growth other than from device sales. However, to realize the revenue growth benefits, semiconductor companies should adapt their product development and go-to-market strategy for the IoT market.

The IoT market is currently highly fragmented and covers broad end applications, which makes it impossible for a single company to own the complete solutions. Semiconductor companies will need to forge an ecosystem with various partners who provide different components of the IoT stack. In addition, semiconductor companies also need to build a digital sales platform to bring the ecosystem partners together to jointly sell the end-to-end solution. A typical IoT stack with representative electronics subsystems is illustrated below.

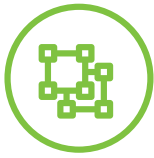
IoT stack opportunities

There are opportunities for semiconductor companies to provide products and services in four key areas of an IoT stack: Sense, Analyze, Communicate, and Security.



Expanding capabilities is challenging

While the opportunity is large, the IoT market presents entry challenges to semiconductor companies. These challenges range from providing products and services beyond devices, to security and privacy issues, to industry-specific go-to-market nuances. Semiconductor companies can embrace IoT strategies by:



BUILDING A BUSINESS ECOSYSTEM

that enables the partners to jointly develop the end-to-end solutions and creates a win-win situation for all parties involved. For an ecosystem to be successful, semiconductor companies may need to nurture and develop the partners to enable their growth.



CREATING A DIGITAL SALES PLATFORM

that brings together various ecosystem partners and enables them to manage opportunities and sell the end-to-end solutions to the broad and highly fragmented IoT market.



ENSURING SECURITY AND PRIVACY

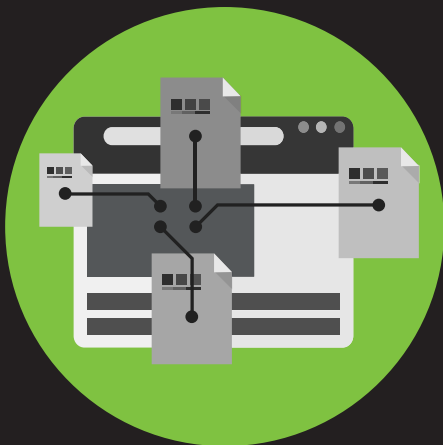
to not only address the hardware vulnerabilities but also the security gaps created during integration and implementation of IoT systems as well as those created during remote device access, communication, and management.

Start talking industry-specific business outcomes



Semiconductor companies can also address the specific needs of different industries as each industry is utilizing IoT technology in different ways. While the underlying principles are similar, the business outcomes customers are trying to achieve are vastly unique. For example, in entering the industrial market, forging alliance with platform providers and/or analytics software providers facilitates device adoption. For the automotive market, companies should account for a long product life cycle, automotive-grade requirements, security, and public and regulator concerns. Like automotive, the Smart City market emphasizes security and also requires collaboration with regulators and governments. Besides security and compliance, the health care market requires partnership with other players in the ecosystem to develop common standards. Finally, the consumer market needs alignment with partners to ensure that products meet the end user's interoperability and standardization requirements.

Build an ecosystem and enable the partners



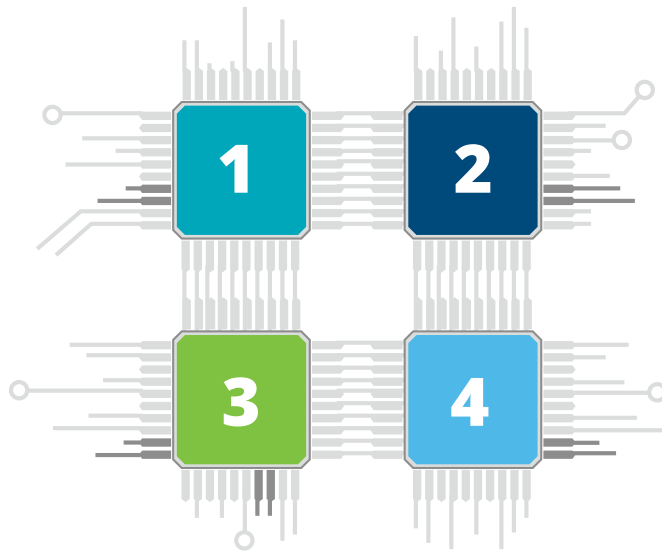
The nature of the IoT market calls for an ecosystem of companies that share a vision and have complementary assets and skills. Semiconductor companies are well positioned to forge such an ecosystem and strive to be the control point of the ecosystem, as they architect and help catalyze, enable, and manage the whole solution jointly developed by the ecosystem partners. Semiconductor companies also need to build an integrated digital sales platform, which will bring the ecosystem partners together to jointly sell to a broad and fragmented market. Finally, it takes time to realize the financial benefits of going into the IoT market, so it's advisable to measure success KPIs similar to a start-up.

Want more? Think like an entrepreneur

The IoT market presents a huge opportunity, but it comes with great challenges in both product development and go-to-market approach. Semiconductor companies with a comprehensive approach to address these challenges are well positioned to capture this growth opportunity. Our full report provides deeper insights on IoT strategy for semiconductor technology, product, and business strategy leaders by:

Assessing the landscape and opportunity size of five major IoT markets: Industrial, Automotive, Smart City, Health care, and Consumer

Uncovering potential opportunity in each of the markets beyond semiconductor device sales



Providing the sample applications and additional product and capability requirements in each market

Outlining go-to-market strategy for the IoT market, including industry-specific recommendations

IoT certainly has the potential to create the type of growth semiconductor companies have been craving. To learn more about the right strategy for winning in the IoT markets, download the full report.

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