Silicon Labs Corporate Overview

The leader in silicon, software and solutions for a smarter, more connected world.

Silicon Labs

A leading provider of silicon, software and solutions for a smarter, more connected world

- Core competencies in mixed-signal and RF integration

- A track record of multiple industry firsts, transforming and disrupting large markets

- Focus on high-quality, diversified markets positioning us well for sustainable growth

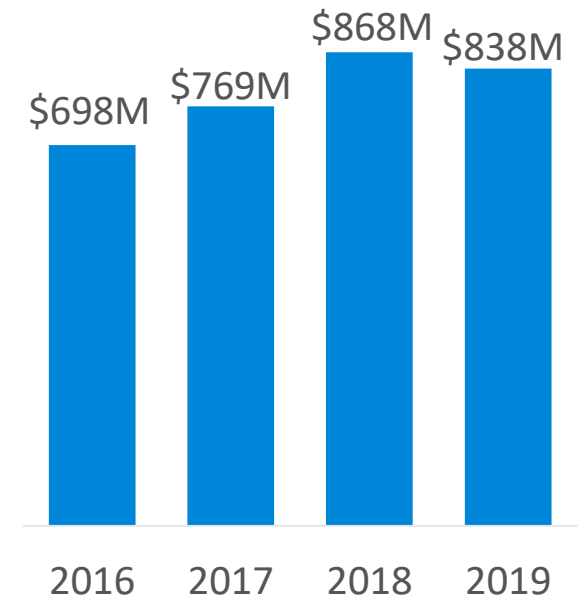- Scalable, fabless manufacturing model

FOUNDED IN 1996

Nasdaq

LISTED SLAB

~35,000 CUSTOMERS

>1,700 PATENTS

REVENUE

$698M — 2016
$769M — 2017
$868M — 2018
$838M — 2019

GSA
Global Semiconductor Alliance

2015, 2016, 2017, 2018, 2019 Most Respected Public Semiconductor Company Achieving $500 Million to $1 Billion in Annual Sales

A Global Company

~1700

EMPLOYEES WORLDWIDE

HEADQUARTERED IN AUSTIN

INTERNATIONAL HQ SINGAPORE

● R&D Centers ● Sales Offices

3

Leader in Silicon, Software and Solutions

MCUs | Wireless | Sensors

Secure wireless stacks
Embedded OS | OTA Updates

Modules | Reference designs
Cloud services | Tools

We provide significant advantages in performance, energy efficiency, connectivity and design simplicity.

- Diverse range of applications and customers

- Flexible hardware and software platform

We Believe in a More Connected World
Our technologies enable customers to transform industries and improve lives.
Together, we are creating a smarter, more connected world that benefits us all.

A More Connected World is…

SAFER	BRIGHTER	HEALTHIER

Allegion's door locks enable delivery service access without homeowners needing to be on-site.

Zigbee

Yeelight's LED lightbulbs allow you to control lights with just the touch of your phone.

Bluetooth Mesh

Propeller Health makes it possible for asthma and COPD patients to better manage their treatment.

Bluetooth SiP

A More Connected World is...

DATA-DRIVEN	GREENER	MORE INFORMED
Highly reliable clocks and crystal oscillators service the backbone of the Internet	Superior products reduce size and cost for electric vehicles and charging stations	Unrivaled, scalable approach for developing auto infotainment systems
Timing	**Isolation**	**Automotive Infotainment**
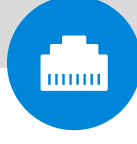
A Diversified Product Portfolio

INTERNET OF THINGS	INFRASTRUCTURE	BROADCAST	ACCESS

MCU | Wireless | Sensors

~60% REVENUE

Timing | Isolation

~20% REVENUE

Automotive Radio | TV Tuners

~15% REVENUE

Modems | SLICs | PoE

>5% REVENUE

HIGH GROWTH   MATURE

IoT Driving $12.1B Opportunity Pipeline

Market Opp

- IoT
- Other
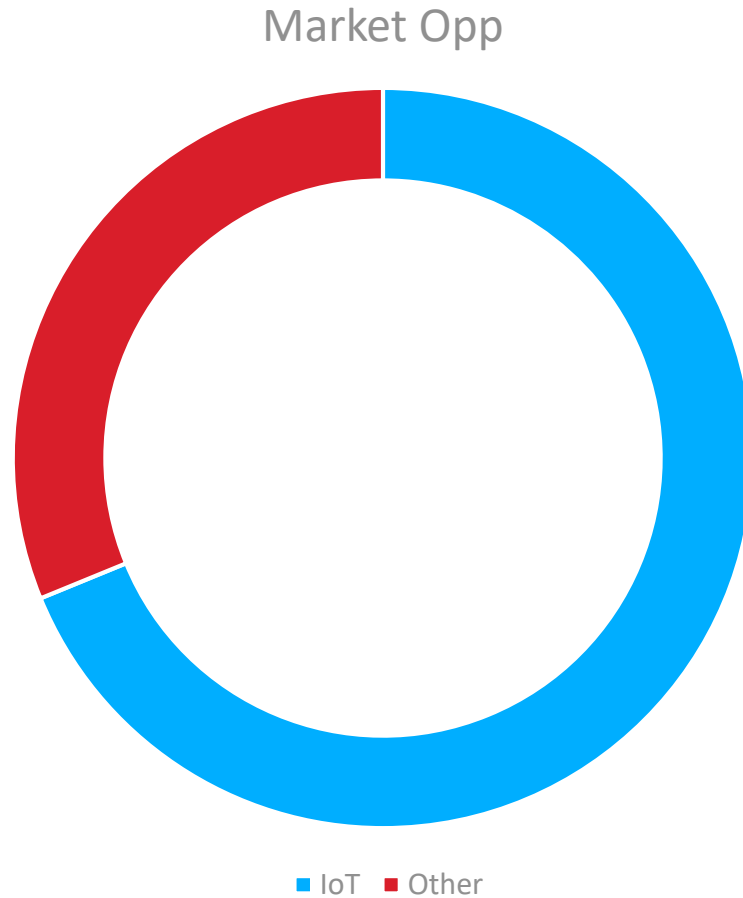
- Total SLAB
  - Design-win lifetime revenue up >30% y-y

- Wireless solutions driving growth
  - >65% 2019 IoT revenue
  - Grew 14% in FY19 vs WSTS down 16%

- IoT growth drivers
  - Smart home & security
  - High volume lighting
  - Smart metering
  - Broad industrial market

IoT: Market Opportunity

25B INSTALLED BASE 2019

Communication · Automotive · Computing · Consumer · Industrial

13% CAGR

53B INSTALLED BASE 2025e

Communication · Automotive · Computing · Consumer · Industrial
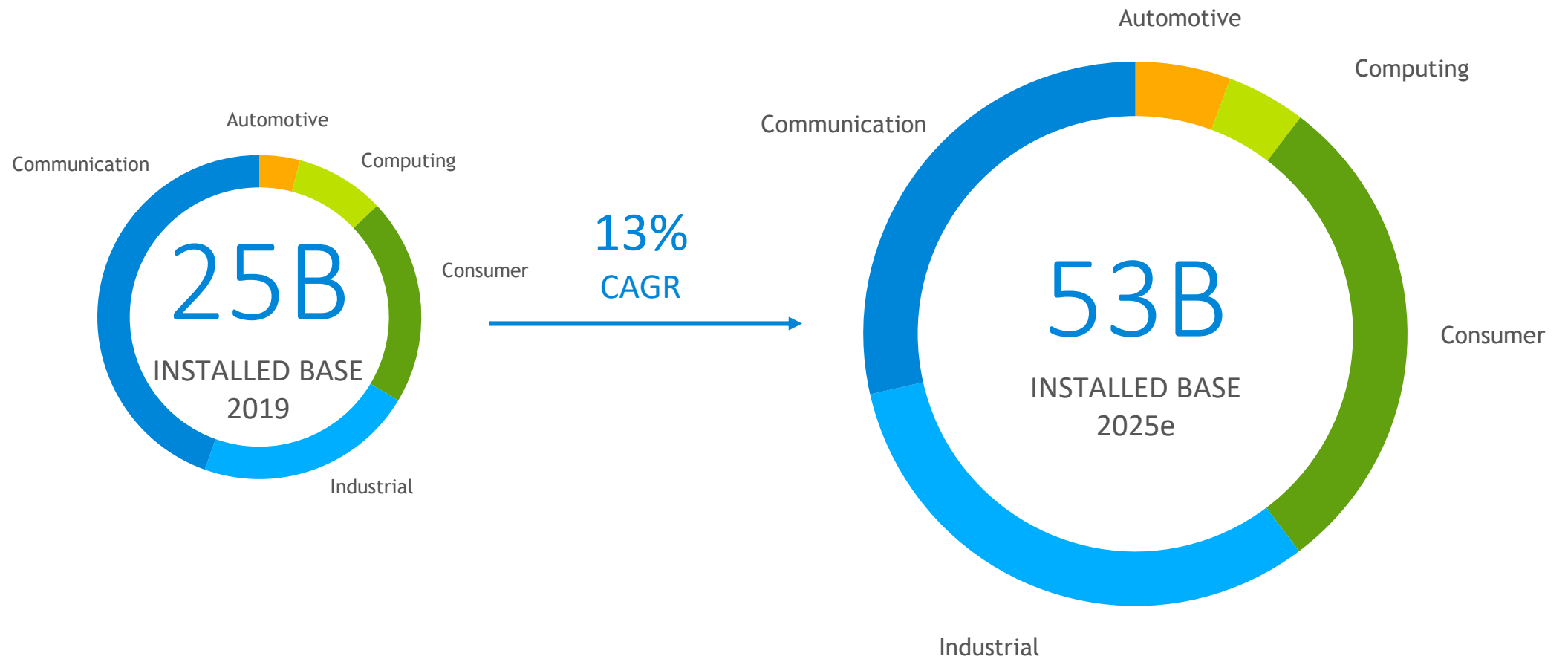
Source: IHSM 2019 Q3

IoT: Leadership in Wireless Silicon, Software and Solutions

STRATEGIC GROWTH TARGET 20%

- Scalable hardware and software platform
- Provide complete solution from silicon to cloud
- Enable market-leading integrated security
- Broad offering of low-power SoCs
- Extensive wireless protocols including Bluetooth, mesh, proprietary, and Wi-Fi
- Simplicity to drive support leverage
- 1,000's of applications and 10,000's of customers

Wireless
MCUs
Sensors

Secure wireless stacks
Embedded OS
Device management

Modules
Simplicity Studio
Application examples

IoT: Executing a Platform Strategy

CUSTOMER REQUIREMENTS

High performance, reliable, maintainable

Easy to develop and deploy

Long life solution

WHY WE WIN

Best connectivity—RF SoCs and modules

Robust SW framework simplifies development

Upgradeable, cloud connected

We Address all Facets of the IoT

| DEVICES AND SOFTWARE | DEVELOPMENT TOOLS | SOLUTION |

Wireless SoCs and Modules

Superior RF performance
Multiprotocol | Robust stacks | Security

Leading Tools

Fast time-to-market | Simplicity Studio IDE
Connectivity kits | Network optimization
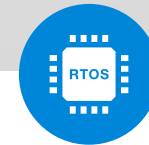
Silicon-to-Cloud

Complete solution | RTOS
Cloud connectivity

IoT: Solutions to Shorten the Path to Connectivity

STARTER KITS	WIRELESS MODULES AND SIPS	APPLICATION EXAMPLES
Rapid prototyping	Pre-certified, small footprint	Examples with source code for both SoC and mobile applications

Platform-based Edge Node Architecture

Home Automation & Control **Lighting** **Industrial Automation** **Smart Metering** **Retail & Commercial**

Developer Tools

Host Environment			Toolchains	Other		
Energy Profiler	Hardware Config	App Builder	IAR	Sample Applications	Precertification	MISRA, Static Analysis
Network Analyzer	Radio Config	Secure Programming	GCC	Mobile Apps	Large Network Testing	Documentation Application Notes

Connectivity Software

SEMICONDUCTOR PROVIDED	CUSTOMER IMPLEMENTED	Other	
zigbee THREAD Z-WAVE Bluetooth Wi-Fi Proprietary wireless	Clear Connect Wireless STARFISH io homecontrol WIREPAS Wi-SUN M-Bus wireless energyaxis LoWPAN	Coexistence	BR / Gateway
		Multiprotocol	Test Harness

RADIO ABSTRACTION LAYER

Platform Software

RTOS	Core Platform			Drivers	Security	Utilities	Middleware		
KAL	Sleep	IPC	Memory	Micrium POSIX	Security Libraries	C-Lib, Diag, Stats, Error Codes, Assert	FS, IO	NCP, CLI	Cap Sense
Micrium Kernel	Timers	Events	System	EmLib	Secure Element		Bootloader	NVM	Graphics Lib

Hardware

Chips			Modules		Development Boards	
Secure MCU	Multi-protocol radio	Secure Element	Antenna Match	Certifications	Starter Kits	Reference Designs
eFlash/RAM	I/O, Interfaces	Power/Energy Management	PCB, SiP	Shield	Radio/Expansion Cards	Evaluation Boards

Infrastructure: Leadership in Performance and Integration

STRATEGIC GROWTH TARGET 10%

- Breakthrough architectures leading industry

- Timing: leading in core/metro and expanding into data center, wireless and industrial applications

- Isolation: replacing traditional optocouplers in power supplies, motor controls and green energy applications

- Long life, highly profitable revenue

Timing: Clocks & Oscillators

Digital Isolation

Low Touch Easy to Design-in

Timing Portfolio

- Leading in core/metro and expanding into data center, wireless, industrial and automotive applications

- Patented technologies yield performance advantage

- Flexibility, programmability simplify design

- Oscillators deliver time to market advantage

- 9 of the top 10 telecom equipment providers rely on our timing solutions

XO/VCXO   Jitter Attenuating Clocks   Clock Buffers

Synchronization   Clock Generators   Wireless Clocks

Timing Opportunity

TELECOM	DATA CENTERS	WIRELESS

Increasing amount of data being transferred within / between cities, countries

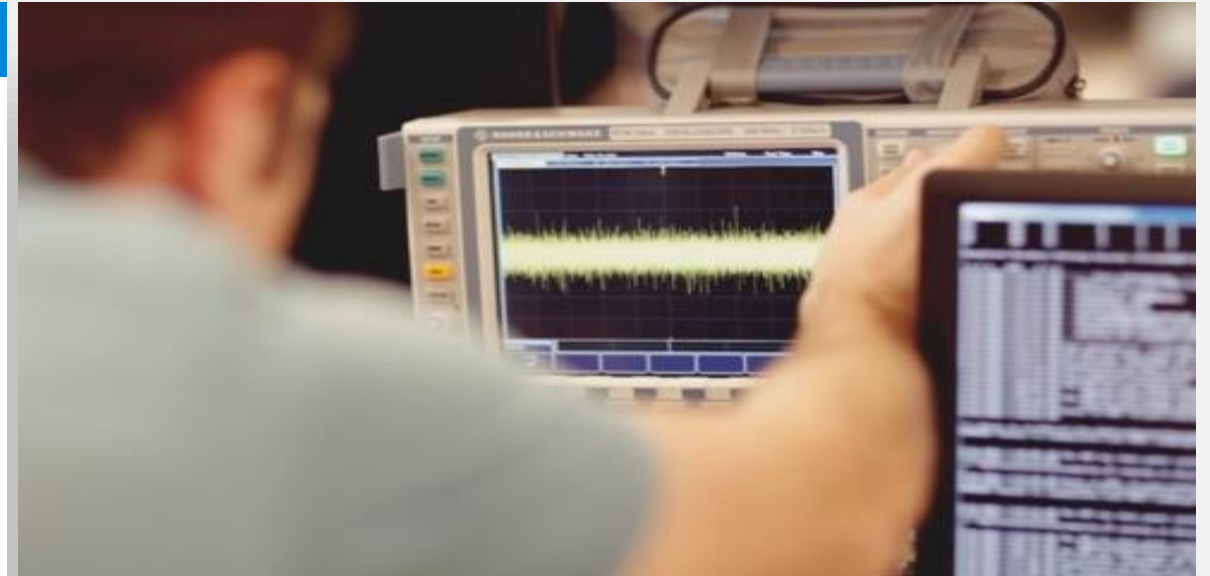Pictures/video social media, cloud storage driving huge connected data centers

Implementation of small cells, distributed antenna systems to increase coverage

Timing Performance Wins

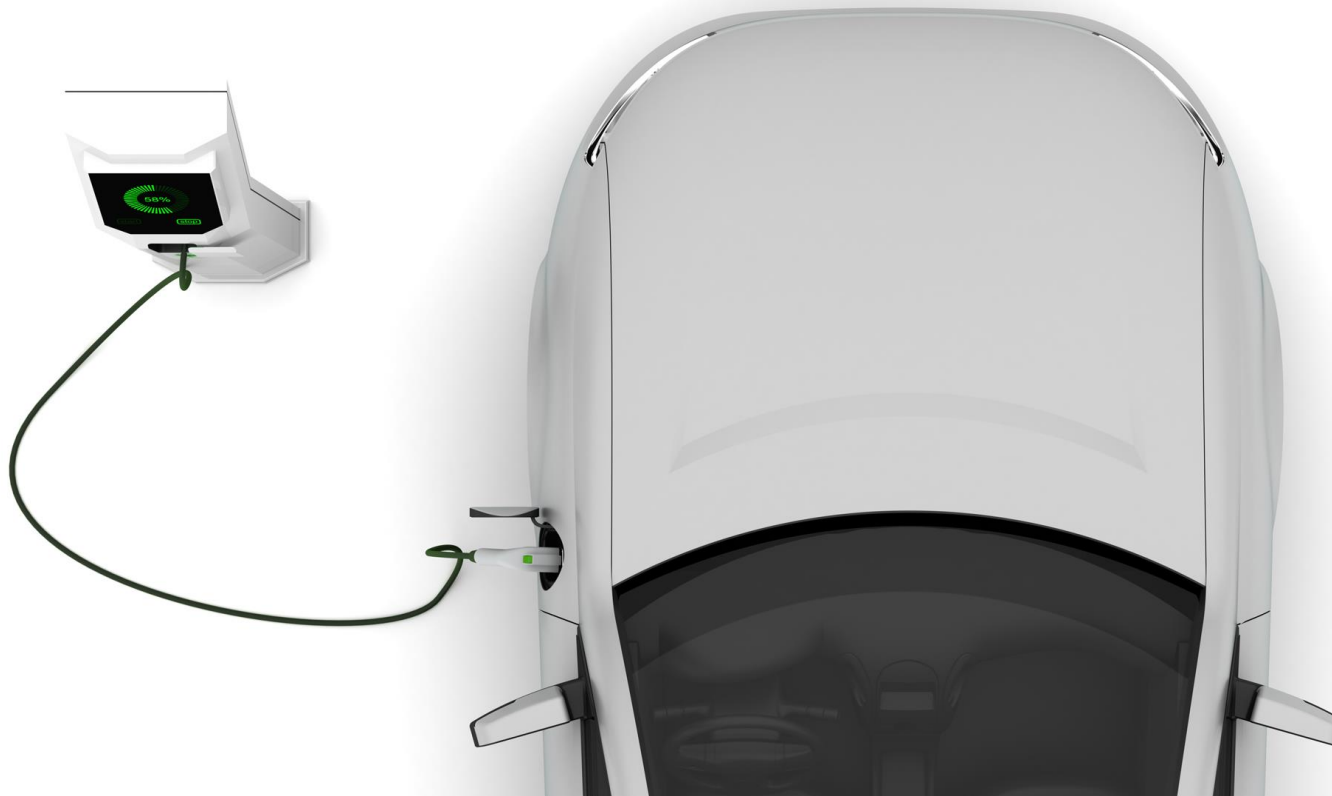Faster data rates require higher performance

More features in a smaller form factor

Industry-leading performance and flexibility

Provide complete clock solutions with highest level of integration

Isolation Portfolio

- Replacing traditional optocouplers in power supplies, motor controls and green energy applications

- Patented RF, capacitive isolation technology

- Field proven, more than 1B channels shipped

- Best emissions, immunity performance

- Compact size supports shrinking electronics

- High-speed and tight timing improve efficiency

- #1 in digital isolation for electric vehicles, cloud and telecom power supplies

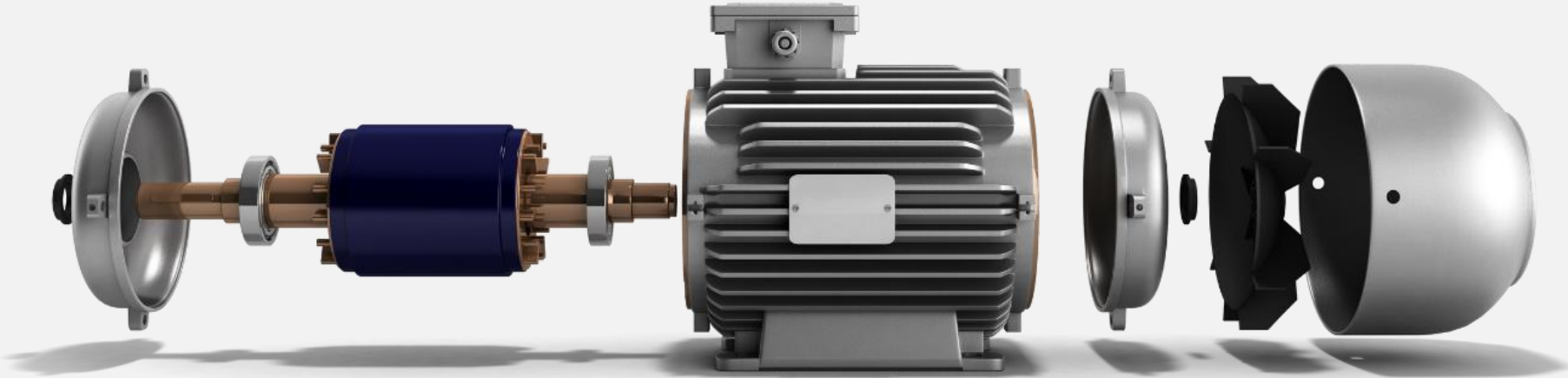Digital Isolator   Isolated Driver   Isolated ADC   Isolated Analog

Isolation: Global Trends Driving Growth

GREEN ENERGY

- Electric & hybrid-electric vehicles
- Solar inverters & wind turbines

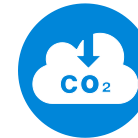## EFFICIENCY

- Server, storage, networking power supplies
- 300M industrial electric motors installed
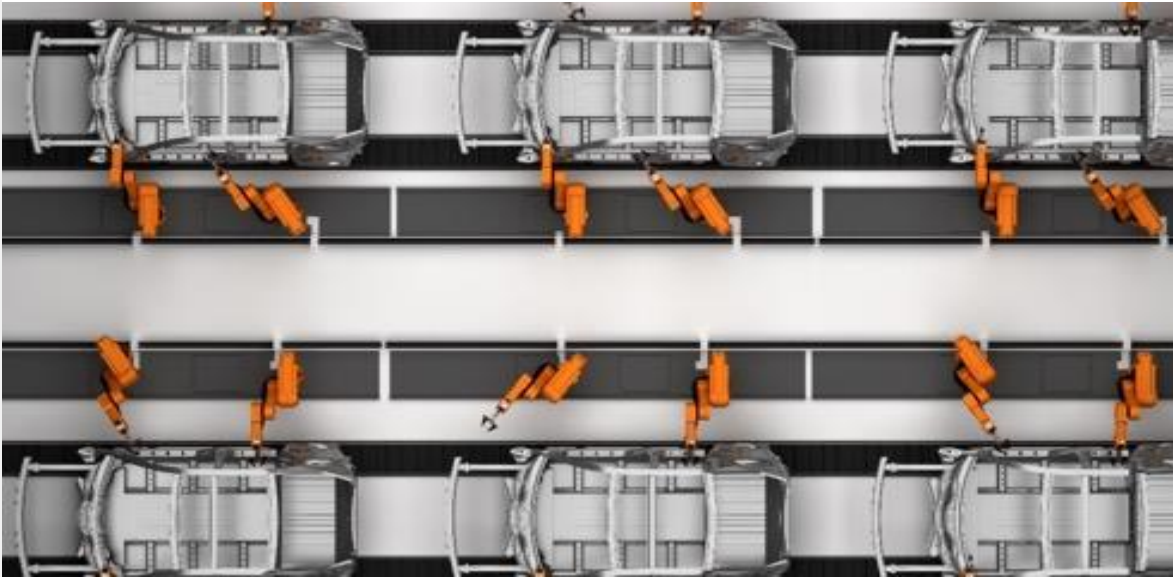
REGULATION

- Governments issuing efficiency standards
- Reduction in greenhouse emissions

Isolation Performance Wins

Improve efficiency

Robust operation in noisy environments

Smaller PCB footprints

Delivers faster switching times

Best-in-class noise immunity

Higher density and more integrated features

A Broad Range of Customers and Application Areas

We've shipped **more than 150 million** mesh networking devices

30 million hours saved yearly with smart metering applications

Boosted energy capacity by 6.8 MW in **13.8 million solar inverters**

We're in more than **1M EV/HEV cars**

We help coordinate **90% of Internet traffic**

On board 100% of cherry red electric roadsters currently **orbiting the sun**

High Quality, Agile Supply Chain

Partnering with world-class suppliers to manage products from development to customer delivery

- Reliable, responsive, high volume supply

- Support unexpected surges in demand

- Quality-centered assembly and test, dual sourced

- ISO9001/14001 certified and ISO/TS16949 compliant

tsmc

SPIL

SMIC

ASE GROUP

20+ YEARS
OF PROVIDING SILICON, SOFTWARE, AND SOLUTIONS

15 YEAR
TIER 1 FOUNDRY/ ASSEMBLY PARTNERSHIP

Innovation in Testing and Performance

Modular design so we can be responsive to changing requirements

Custom design allows for rapid scaling and deployment

A typical ATE is about the size of a car; ours is smaller than a shoe box

Key Take Aways

- **Well positioned for leadership in IoT**
  - Large, growing and diverse market
  - Leading hardware and software platform
  - Advanced capabilities in connectivity and security

- **High quality Infrastructure opportunity**
  - Addressing trends in data and green energy
  - Focus on communications, industrial & auto markets
  - Expanding SAM and portfolio

- **Addressing a $12.1B opportunity pipeline**
  - >$8B IoT opportunity
  - Double digit growth opportunity for IoT & Infrastructure
  - Total DW LTR up >30% y/y

Thank you