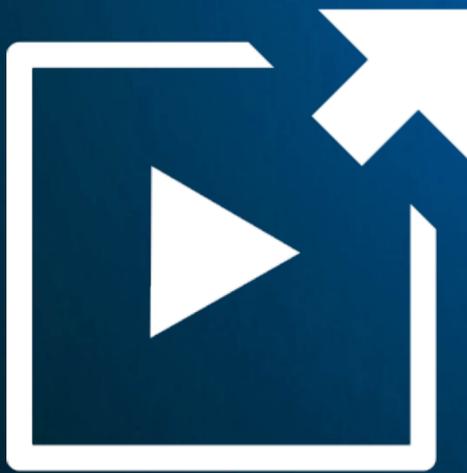




AHEAD OF WHAT'S POSSIBLE™

A graphic element consisting of a white square frame with a play button icon inside, and an arrow pointing upwards and to the right from the top-right corner of the frame.

# ADI UNCOVERED

## Automotive BMS

**Dr. Patrick Morgan**  
VP & GM, Automotive

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# Forward-looking Statements

This presentation contains forward-looking statements, which address a variety of subjects including, for example, our statements regarding expected financial results, expected product development and technical advances, anticipated market trends and opportunities, market share gains and expected customer demand and order rates for our products, and ADI's financial goals and long-term financial model. Statements that are not historical facts, including statements about our beliefs, plans and expectations, are forward-looking statements. Such statements are based on our current expectations and are subject to a number of factors and uncertainties, which could cause actual results to differ materially from those described in the forward-looking statements. The following important factors and uncertainties, among others, could cause actual results to differ materially from those described in these forward-looking statements: the uncertainty as to the extent of the duration, scope and impacts of the COVID-19 pandemic, political and economic uncertainty, including any faltering in global economic conditions or the stability of credit and financial markets, erosion of consumer confidence and declines in customer spending, unavailability of raw materials, services, supplies or manufacturing capacity, changes in geographic, product or customer mix; changes in export classifications, import and export regulations or duties and tariffs; changes in our estimates of our expected tax rate based on current tax law; our ability to successfully integrate acquired businesses and technologies; the risk that expected benefits, synergies and growth prospects of acquisitions may not be fully achieved in a timely manner, or at all; adverse results in litigation matters; and the risk that we will be unable to retain and hire key personnel. For additional information about factors that could cause actual results to differ materially from those described in the forward-looking statements, please refer to our filings with the Securities and Exchange Commission ("SEC"), including the risk factors contained in our most recent Quarterly Report on Form 10-Q and Annual Report on Form 10-K. Forward-looking statements represent management's current expectations and are inherently uncertain. Except as required by law, we do not undertake any obligation to update forward-looking statements made by us to reflect subsequent events or circumstances.

### Business Overview



Innovation focused to create a more sustainable, safe, & immersive vehicle experience



Market leader in battery management systems (BMS) for electric vehicles (EVs), and audio processing & connectivity platforms for infotainment systems



Highest accuracy BMS delivers the most miles per charge, and enables safe & sustainable battery chemistries



Diversified customer base across regions & applications

### Revenue Profile

#### Electrification

Battery management system  
Power conversion  
Isolation  
Electric powertrain



#### Infotainment

Immersive audio processing  
Noise cancellation  
Multichannel audio

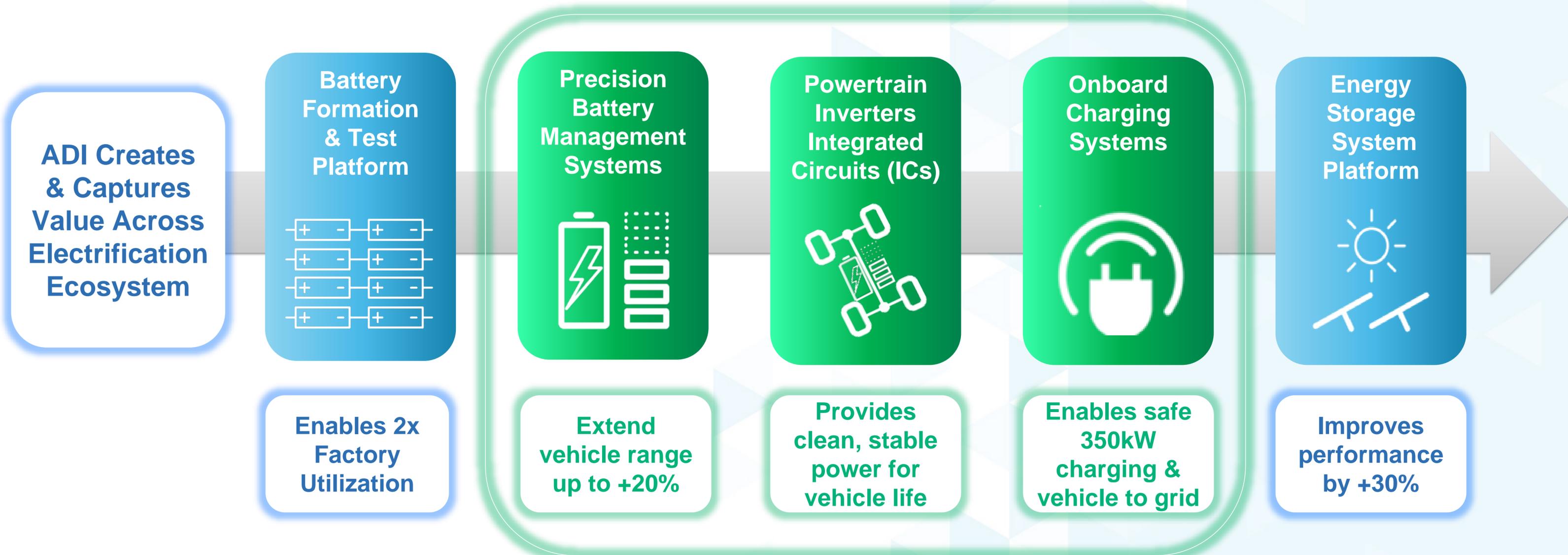
#### Autonomous Mobility

Navigation  
Perception  
Safety

### Growth Drivers

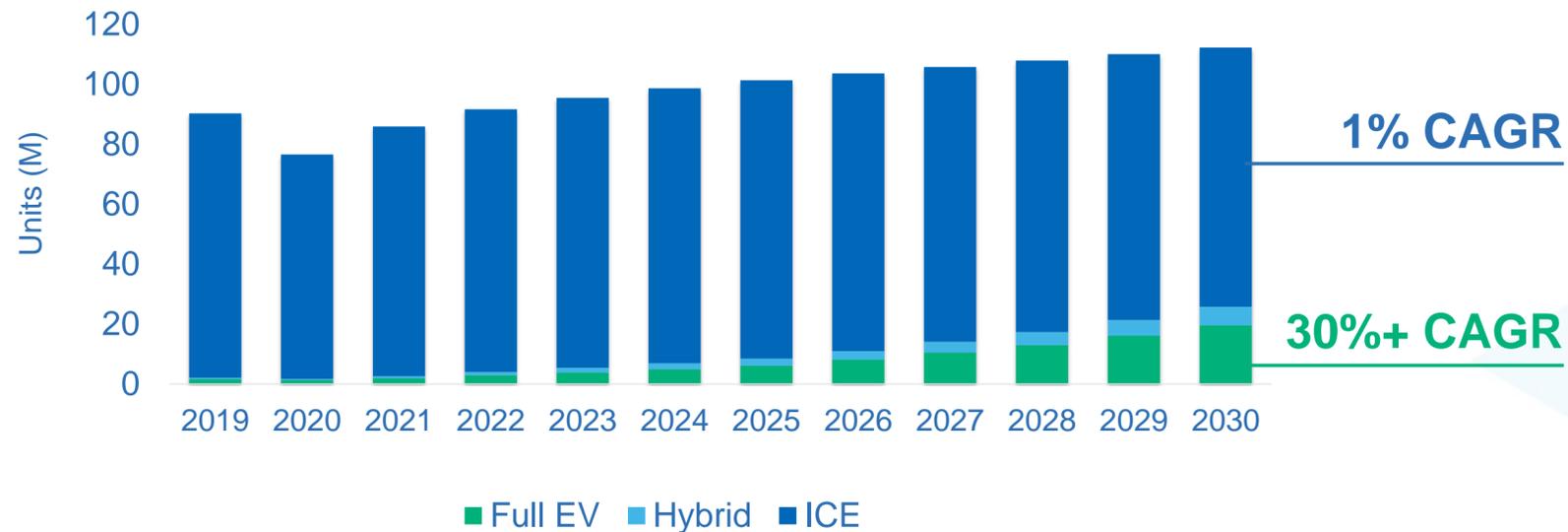
- ▶ More audio processing & channels (e.g. all-digital road noise cancellation)
- ▶ Increasing adoption of electrified transportation
- ▶ Additional diversity of EV types, additional content opportunities
- ▶ Ecosystem complexity with battery makers drives new supply chain business models
- ▶ Power attach strategy delivers more complete systems

## Electric Vehicle Opportunities

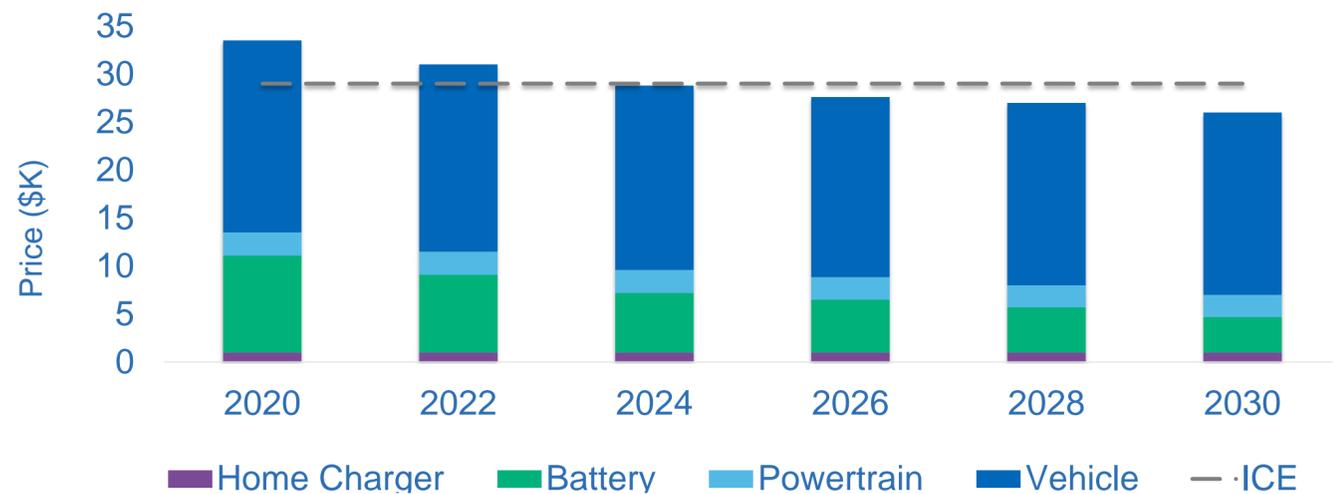


# Electric Vehicle Demand Forecasted to Surge Over Next Decade

## EV Forecasted to Represent ~25% of Vehicles in 2030



## EV vs. ICE Price Parity Expected by 2024



## Global Trends Accelerating EV Adoption



### China

- ▶ Renewed incentives for EV purchases
- ▶ Established global benchmark for safety standards



### Europe

- ▶ EU fleet-wide average emission target for new cars of 95 g/km CO<sub>2</sub>
- ▶ Promoting sustainable & ethical battery production
- ▶ Germany recently ~2x incentives to €9K for full EV purchases

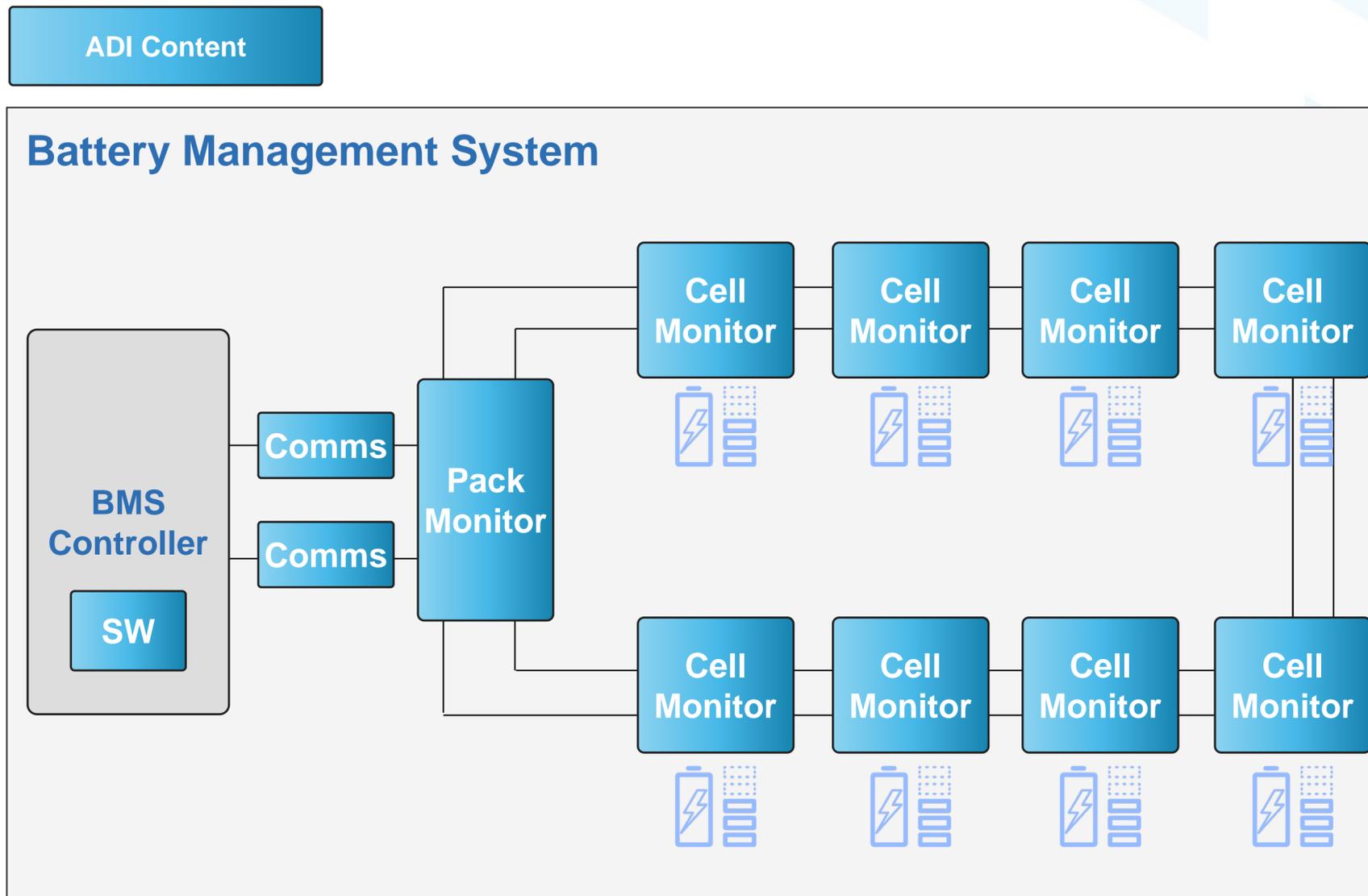


### U.S.

- ▶ All major OEMs pledged commitment to electrified future
- ▶ California committed to 15% of new car sales to be EV by 2025
- ▶ Tesla is the clear leader & expanding globally



## BMS Solution



### Early Leadership Position

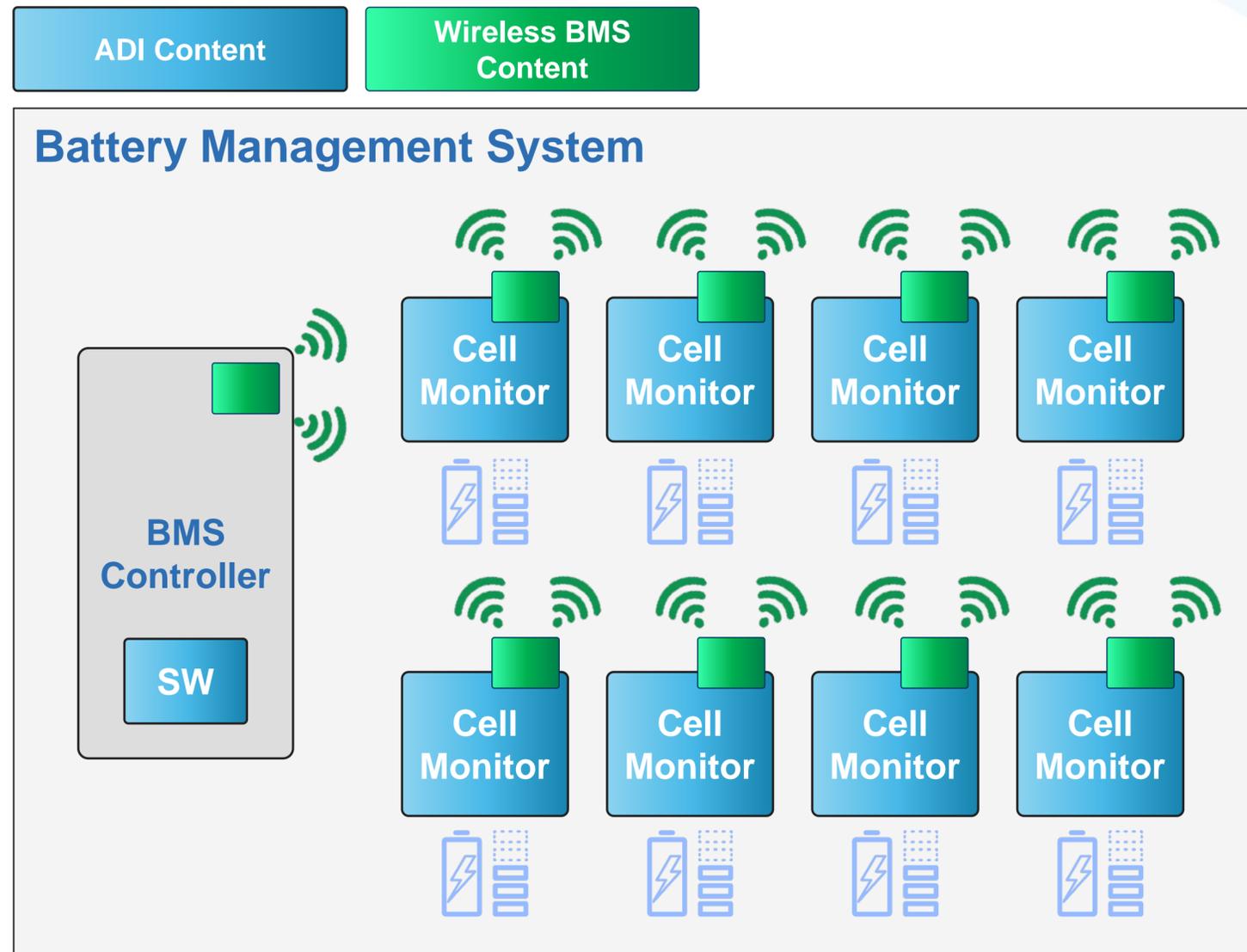
- ▶ 5<sup>th</sup> generation, shipped first BMS chip in 2009
- ▶ Now shipping in more than half of top 10 selling EVs
- ▶ Key partnerships with leading battery makers

### Highest Performance

- ▶ Scalable from 48V to more than 800V
- ▶ Best-in-class accuracy enables up to 20% more miles per charge
- ▶ Accuracy guaranteed over lifetime (~2 mV)

### Safe & Sustainable Solution

- ▶ Solutions meet highest global safety & security standards
- ▶ Scalable across multiple battery chemistries, including zero-cobalt Lithium Iron Phosphate (LFP)



## Wireless BMS Solution

### Wire Harness Removal

- ▶ Reduces wiring up to 80%
- ▶ Simplifies production & manufacturing challenges

### Modular and Scalable Battery Pack Design

- ▶ Each battery module is designed & connected wirelessly to other modules throughout the pack
- ▶ Fully scalable & configurable across vehicle fleets

### Battery 2<sup>nd</sup> Life

- ▶ Each module measures & reports their own battery data
- ▶ Data is collected from cell formation throughout the battery life
- ▶ Enables 2<sup>nd</sup> life for the battery, reducing costs

## Key Takeaways



### Customer

- ▶ Automotive industry is differentiating through innovation
- ▶ ADI recognized as the performance leader
- ▶ Market leader in BMS, shipping in over half of top 10 selling EVs

### Content

- ▶ Growing system content in Electrification, Infotainment & Autonomy
- ▶ Introducing disruptive wireless BMS technology that creates unmatched customer value

### Deployment

- ▶ EV sales more resilient through the COVID-19 pandemic
- ▶ Growing ESG awareness accelerates consumer & government EV adoption
- ▶ All major OEMs committed to electrify their vehicle fleets



## VP & GM, Automotive

Dr. Patrick Morgan is the Vice President & General Manager of Automotive at Analog Devices, a leader in analog/mixed-signal ICs, software, and systems. Patrick has more than 25 years of experience successfully developing, growing, and managing businesses in the automotive, consumer, and industrial markets. His prior experience includes NXP and Freescale Semiconductor, where he established and grew its position in Advanced Driver Assistance Systems (ADAS). Prior to Freescale, Patrick was Vice President at Javelin Semiconductor, a power amplifier startup company, leading its growth from inception to successful acquisition by Avago in 4 years. Patrick also led wireless products at Silicon Labs, growing from zero to \$1B+ in mobile handsets in the early 2000s. Patrick holds 7 patents and a Ph.D. in Electrical Engineering from Stanford University.

