



## Industrial: Instrumentation & Test

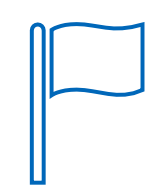
**Karim Hamed**  
GM, Instrumentation



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, the proposed acquisition of Maxim Integrated Products, Inc., 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.

# ADI Instrumentation: Diverse, High Growth, & Margin Accretive

## Business Overview



Market leader in high performance signal chains across precision, high-speed, micromodules, power, & RF



Performance driven market requires ADI's most advanced technology & solutions



Comprehensive portfolio of components, application specific products & system solutions enhanced by Hittite & LTC acquisitions



Thousands of customers & SKUs sold into a diverse set of applications across all regions



Double-digit 5-year revenue CAGR with above corporate average gross margin

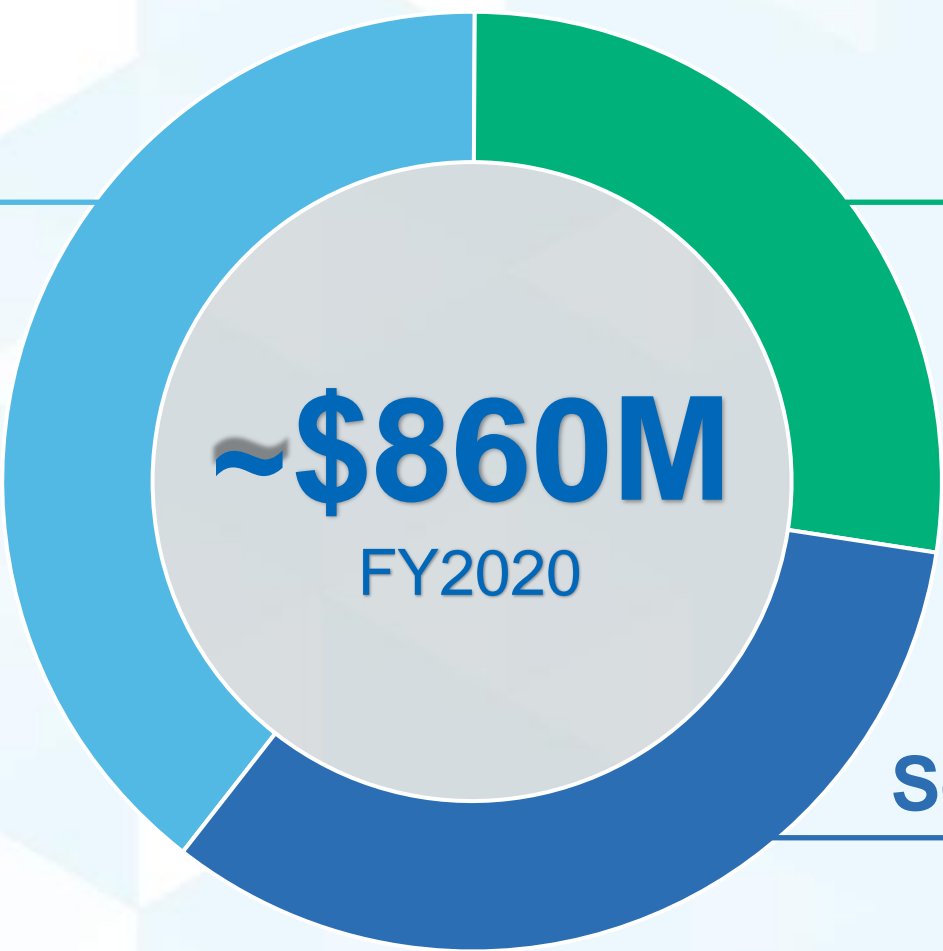
## Revenue Profile

### Automated Test Equipment

Semiconductor  
Portable Devices  
System Level Test

### Electronic Test & Measurement

Wireless & Optical  
Battery Formation  
Automotive



### Scientific Instruments

Life Sciences  
Environmental Monitoring  
Geological Exploration

## Growth Drivers

- ▶ All leading secular trends driving demand for new test applications
- ▶ Increasingly complex electronics require advanced test equipment enabling additional content per tester
- ▶ Global semi re-shoring driving increased demand for capital equipment



# Capturing Opportunity Presented by Increased Complexity

## Aligned with Secular Growth Markets



EVs & autonomous mobility



Ubiquitous connectivity



Immersive experience

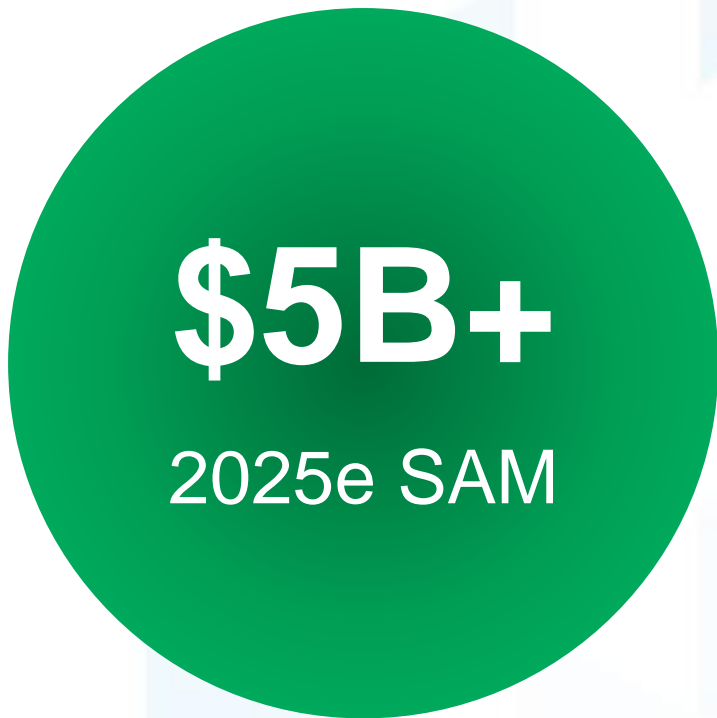


Sustainability



AI & machine learning

## Compelling SAM Opportunity



High-single digit CAGR across a broad & growing customer base

## Increasing Technology Complexity

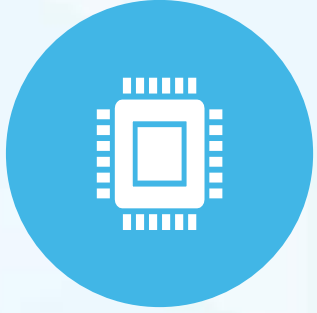
Accelerating technological advances



Move toward finer node geometries



Advanced packaging technology



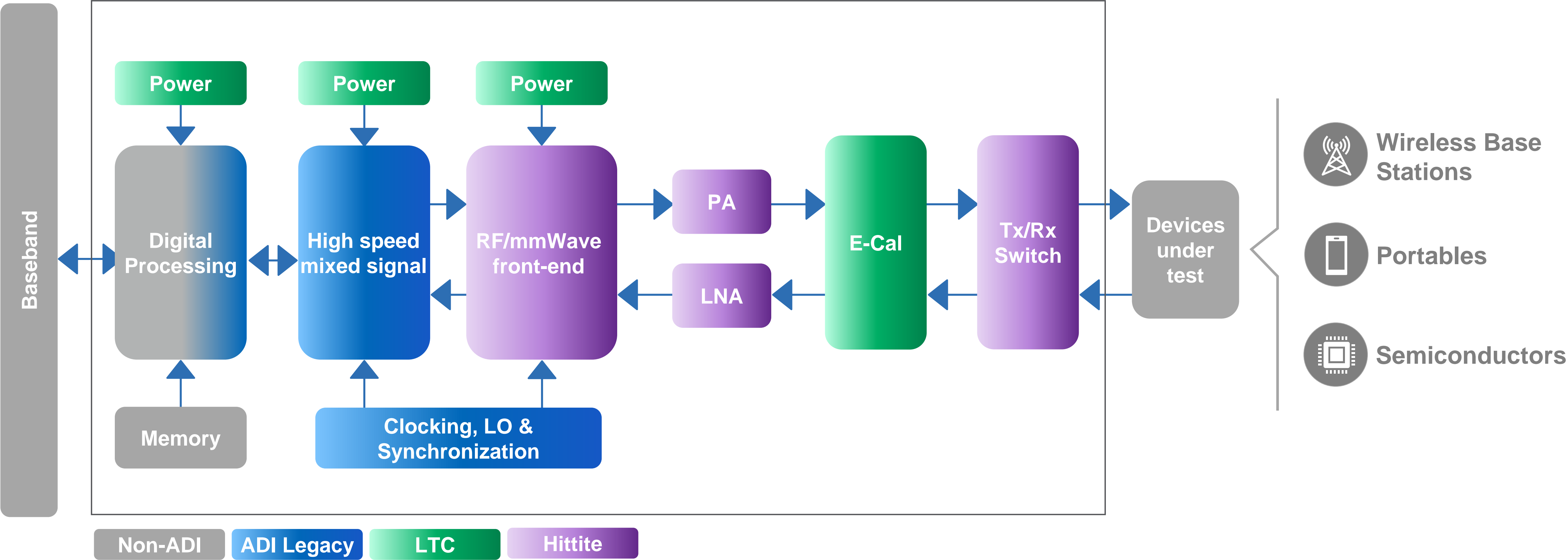
Increasing test times driving volume demand



Higher content per tester



# Increasing ADI Content with Diverse Portfolio



Leveraging diverse product portfolio... Hittite & LTC increases SAM opportunity by 50%



# Communications Test: Established Leader

## Production Testing



Semiconductor test

## Field & Lab Testing



Data center test solutions



Portable test



Wireless test solutions

## ADI's Edge & Opportunity



### Market Leader

Established & trusted partner to our customers for many decades



### Technological Prowess

Complete solutions with growing software, digital, & algorithm capabilities



### Domain Expertise

System level expertise to unlock performance & faster time to market



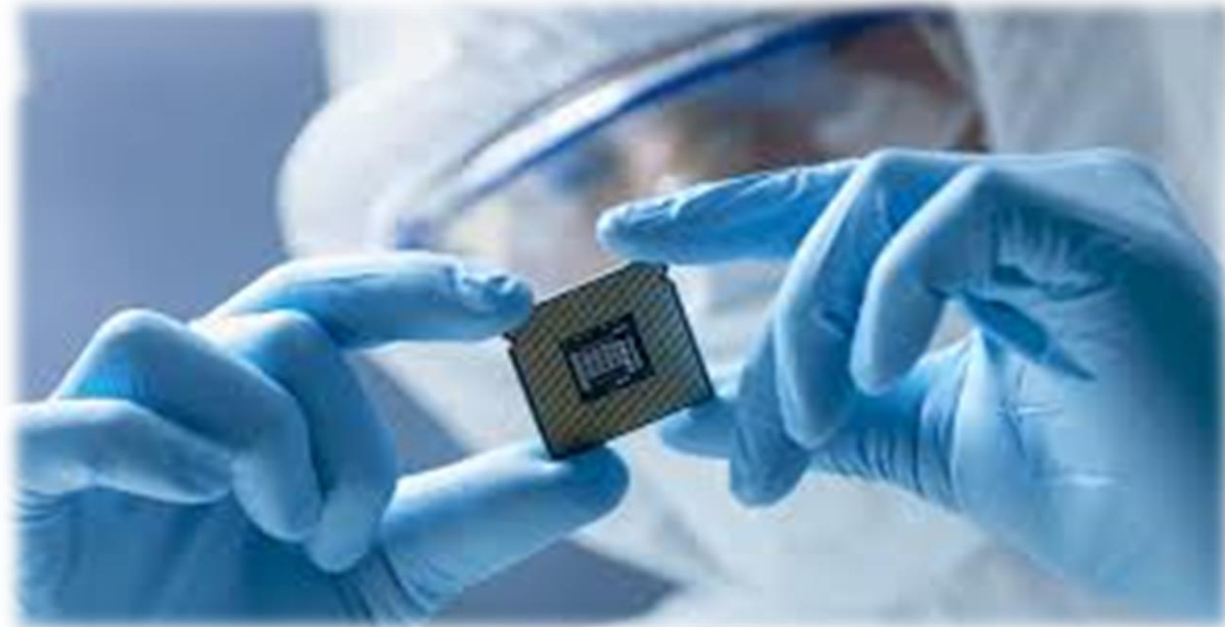
### Volume & Content Upside

Increasingly complex testing equipment requiring more testers with more semi content



# Automotive & Battery Test: Emerging Opportunity

## Production Testing

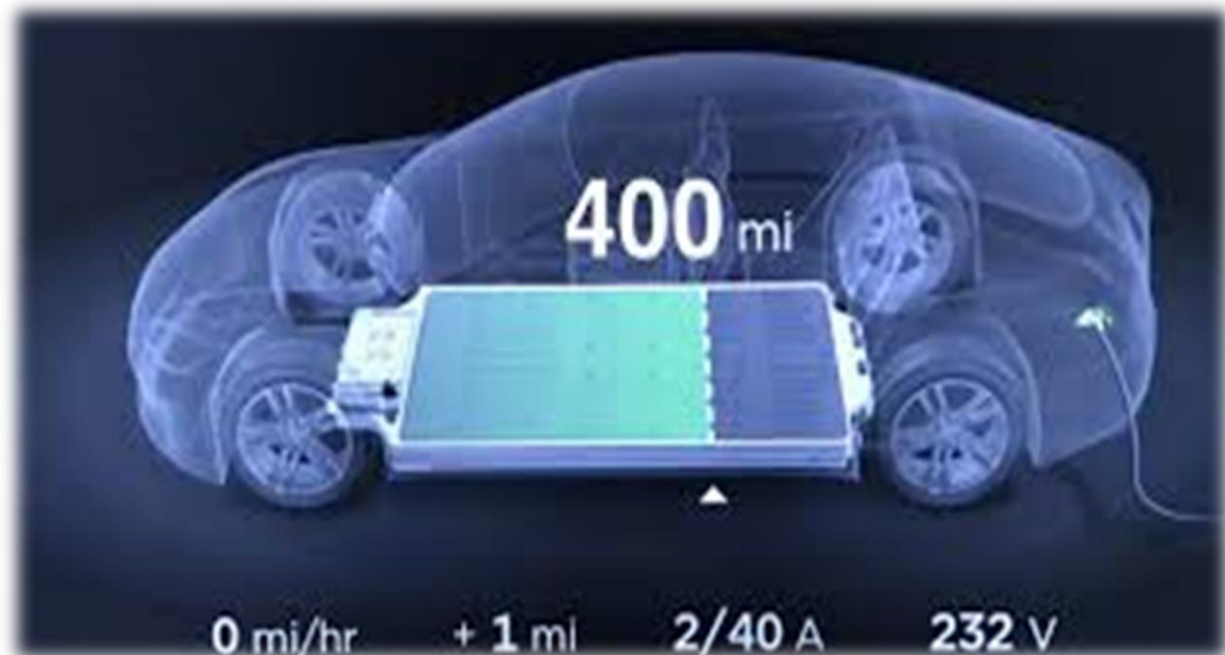


Semiconductor test

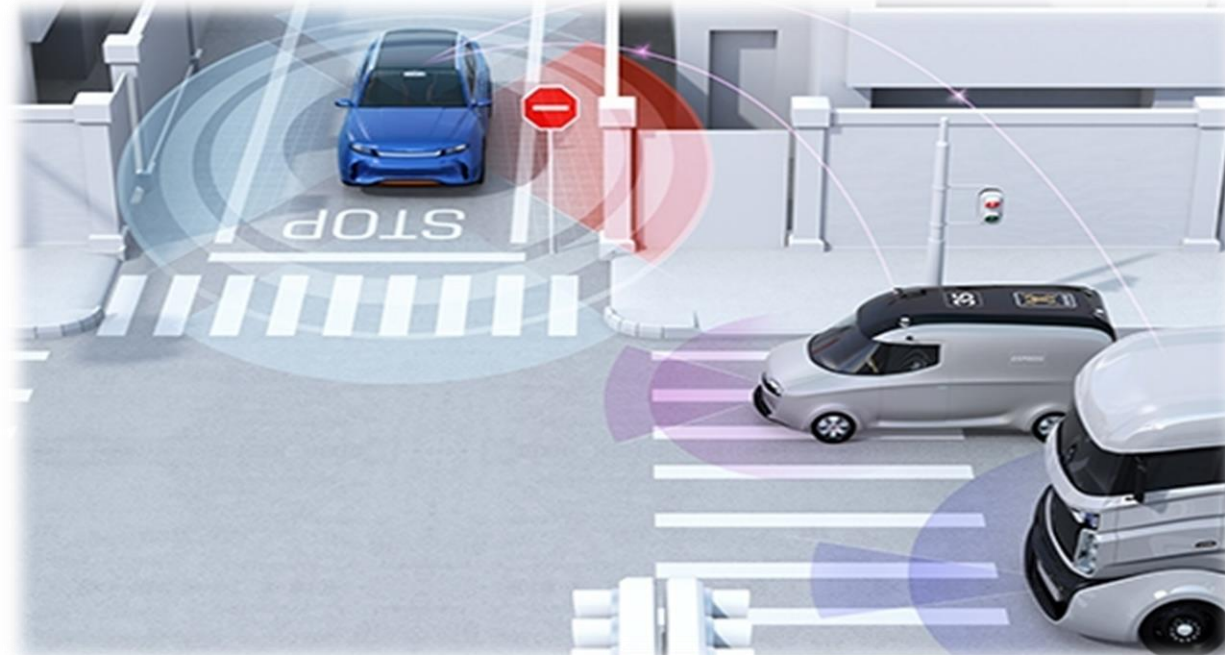
## Field & Lab Testing



Electric vehicle testing



Battery formation & test



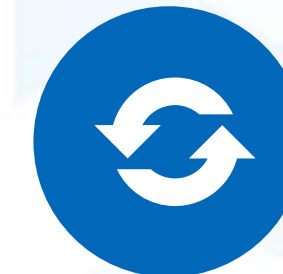
Autonomous test solutions

## ADI's Edge & Opportunity



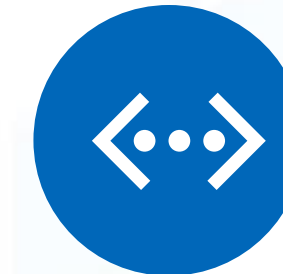
### Leading Portfolio

Core franchises of precision & power



### Organizational Synergy

Leveraging ADI's leadership in battery management system solutions



### Emerging Content Opportunities

New SAM related to inverters, batteries, isolation, SiC switches & ADAS



### Rapidly Evolving Market

EVs & autonomous becoming mainstream



# Instrumentation Positioned for Long-term Profitable Growth



## Key Takeaways

### Customer

- ▶ Trusted supplier across a diversified, growing customer base
- ▶ Comprehensive portfolio with unrivaled breadth & performance

### Content

- ▶ Increasingly complex test equipment & applications requiring more semi content
- ▶ Acquisitions, along with organic efforts, to expand software, digital & algorithm capabilities driving SAM

### Deployment

- ▶ Secular growth trends (e.g., EV, connectivity, biologics) all still in early stages
- ▶ Growing demand for semiconductor manufacturing driving significant investments in capital equipment



## GM, Instrumentation

Dr. Karim Hamed is the General Manager of the Instrumentation business unit at Analog Devices, where he is responsible for managing and setting strategic directions for the full suite of ADI's technologies and solutions serving the test and measurements market. Previously, Dr. Hamed was the General Manager of the Microwave Communication technology group, where he was responsible for ADI RF and Microwave Product portfolios. During his tenure, the group experienced a period of tremendous growth in this core ADI franchise.

Dr. Hamed has over 20 years of experience in the semiconductor industry where he has held various management and engineering roles. Prior to joining ADI, he was a Product Line Director at Hittite Microwave, responsible for the complete microwave product portfolio where he helped establish and grow Hittite's position as the market leader in microwave and millimeter wave products across multiple market segments. Dr. Hamed also served in design engineering management roles at TriQuint Semiconductor and Mimix Broadband where he was responsible for developing a variety of RF and microwave products for mobile handset and communications infrastructure applications.

Dr. Hamed holds a M.Sc. and Ph.D. in Electrical Engineering from Queen's University and has published over 20 conference and journal papers.

