

Maxim Integrated

Automotive

Automotive Innovation Day 2016

July 2016

Outline

1 About Maxim Integrated

2 Company Vision

3 Automotive Strategy

4 Maxim's Solution

Maxim Integrated Overview

- 30 Years of Innovation and Integration



Outline

1 About Maxim Integrated

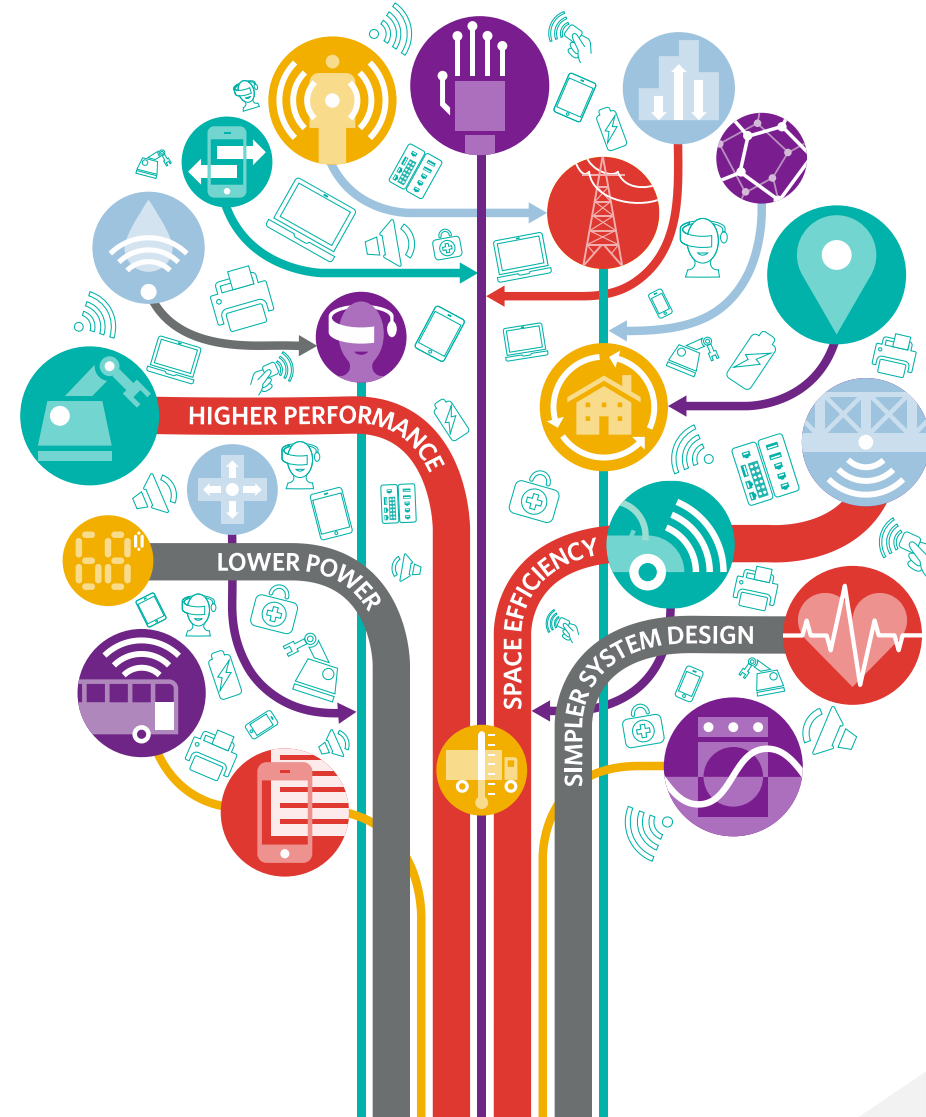
2 **Company Vision**

3 Automotive Strategy

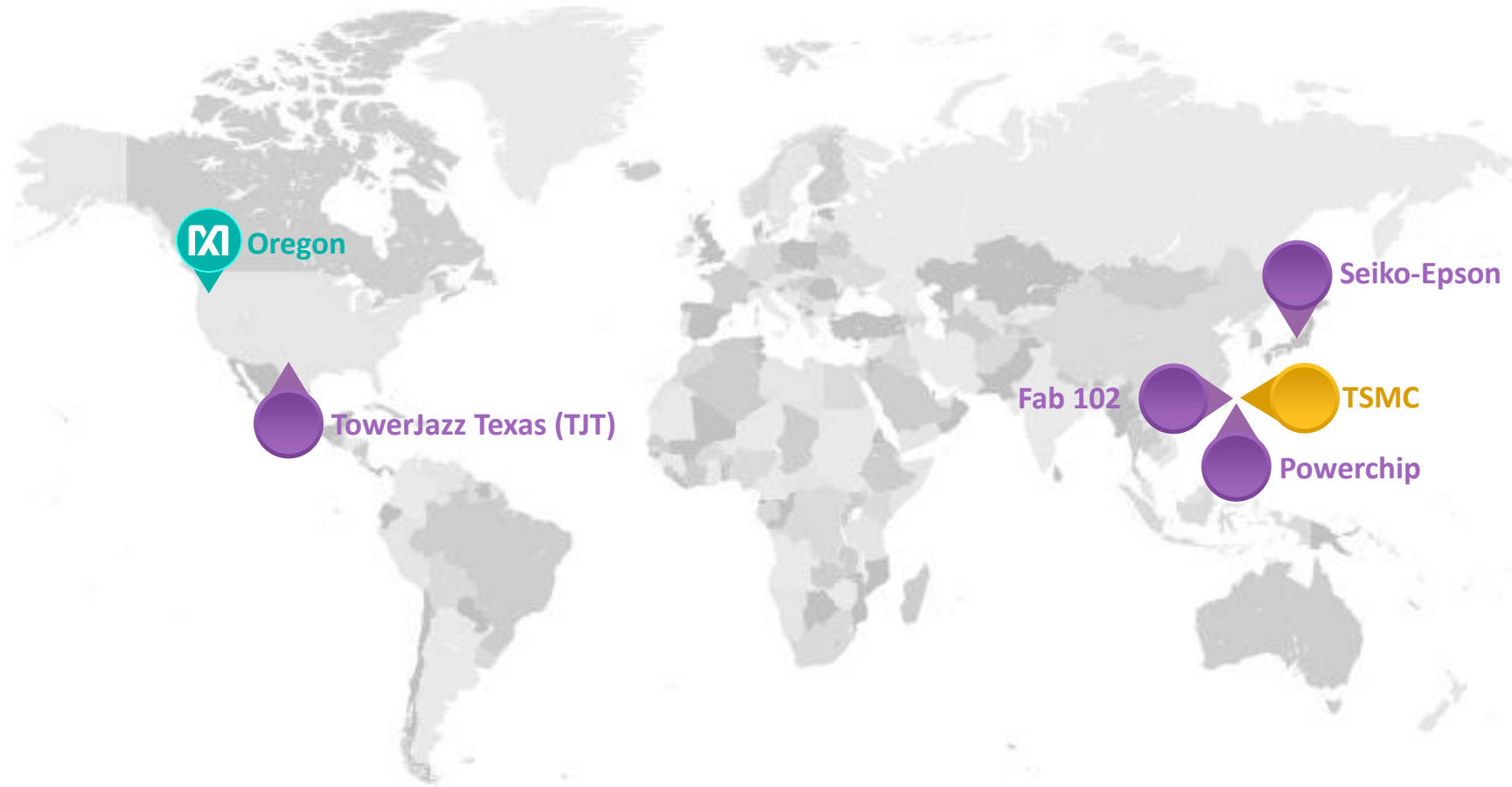
4 Maxim's Solution

Converging on Analog Integration

- Integration beyond mobility
- Broaden markets & customers
- Committed to growth

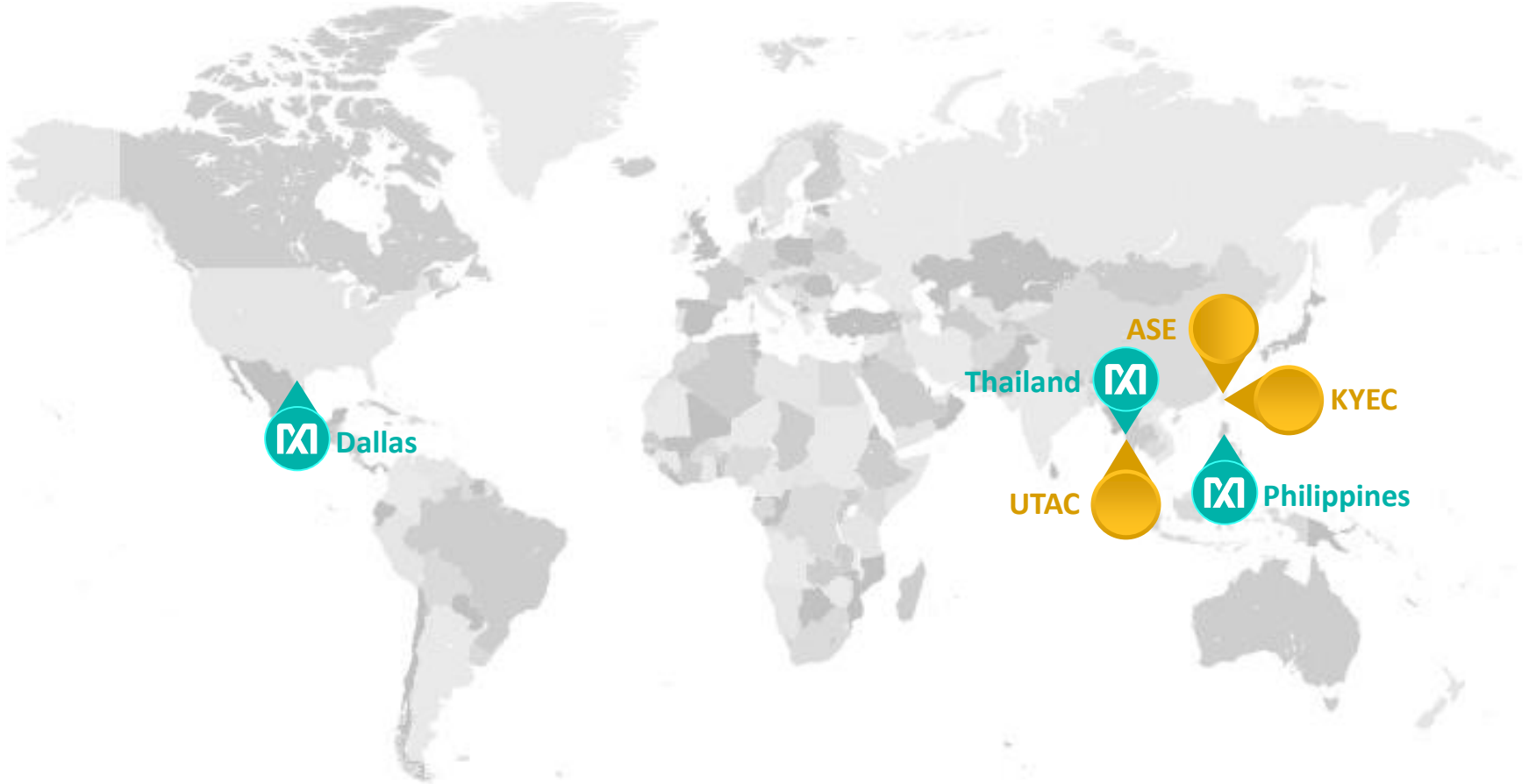


Flexible Manufacturing Capacity



■ Maxim Wafer Fabrication Facilities ■ Partner Foundries (Maxim process) ■ Merchant Partners

Assembly & Test Facilities



■ Maxim Assembly and Test Facilities

■ Partner Assembly and Test Houses

Quality and Support



World-Class Supply Chain

- Advanced planning systems
- Customer-centric inventory management
- Performance
 - 91% to customer request date
 - 95% of products deliverable in less than 6 weeks
- Current focus
 - Reducing time to new product manufacturability
 - Broadening channel effectiveness

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Designing the Car of the Future

Automotive Innovation Day 2016

What Is the Car of the Future?

Depends on who you ask



New Challenges in Automotive

Integrate new
functions

Control
platform costs

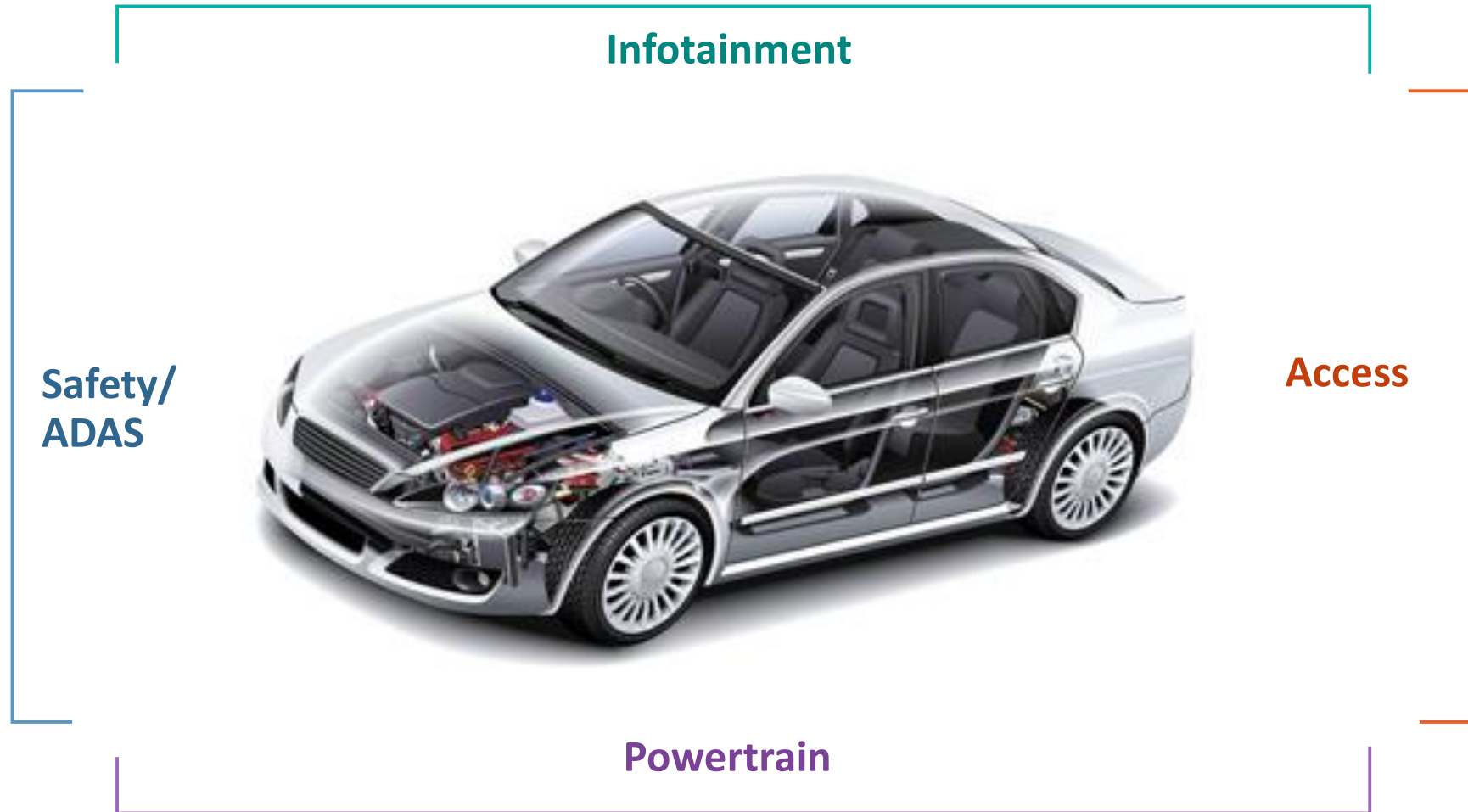
Free up space
and power

Increase the
speed of data

Meet new safety
standards

Reduce system
complexity

Common Technology Needs Across Applications





Safety/Advanced Driver Assistance Systems (ADAS) & Infotainment

High Speed Serial Links

Enables evolution of ADAS & Infotainment



Before

Single function,
low-res display



Now

Rear-facing camera,
high-res displays

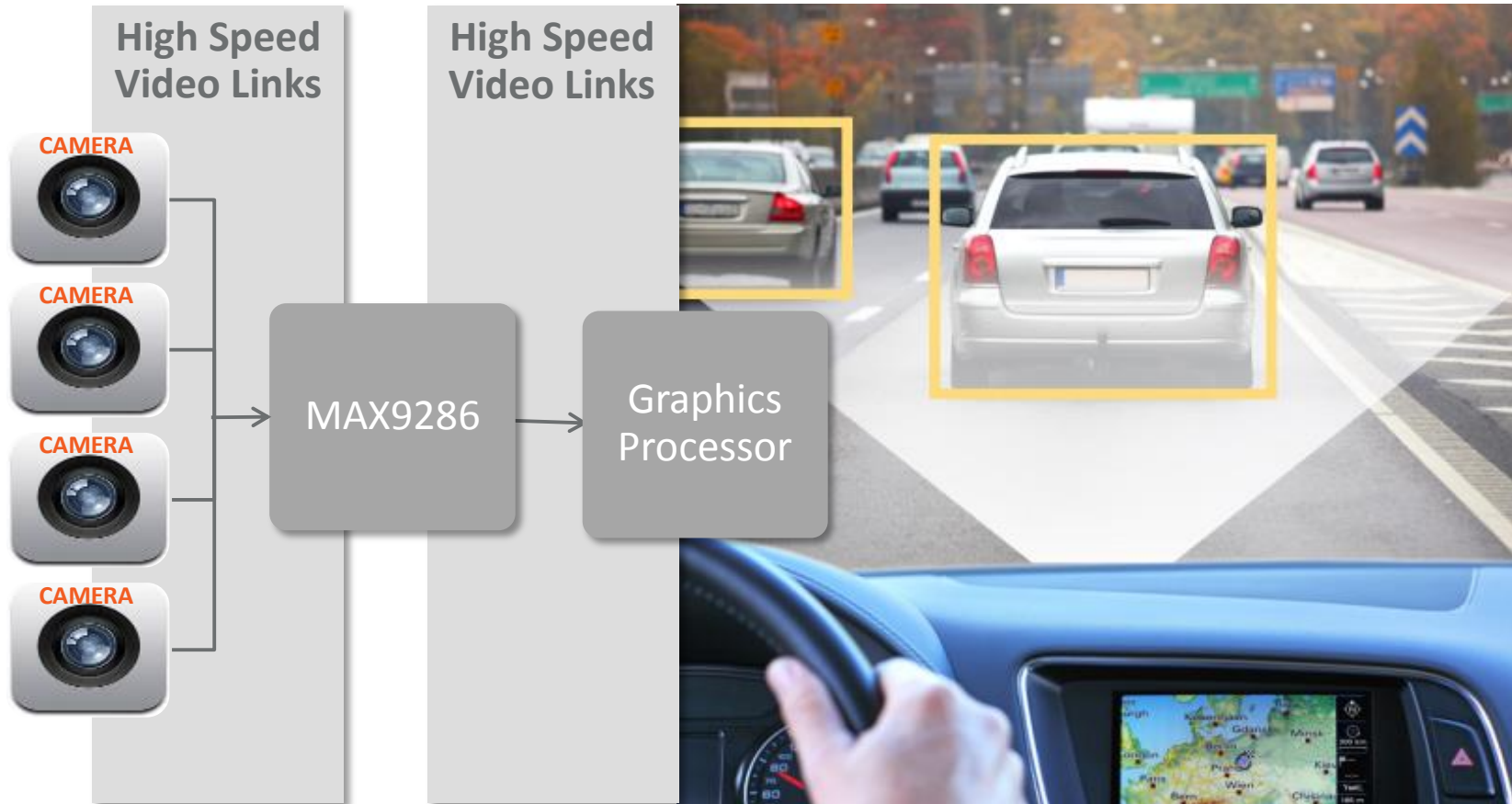


Next

6+ cameras, 19 links,
ADAS, 4 + UHD displays

Hi-Speed Serial Links

Enables real-time driver assist and safety functions



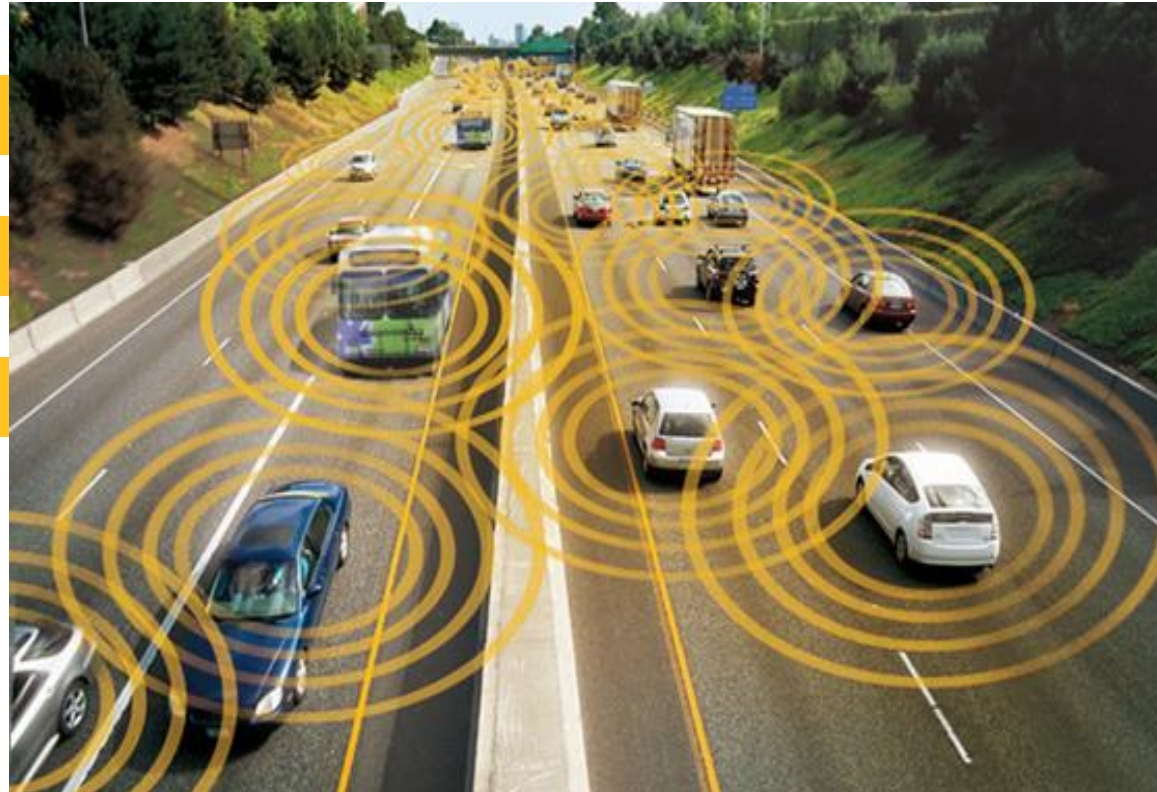
Future of Navigation

Creates a safer driving experience

Collision warning

Lane assistance

Blind-spot detection





Infotainment

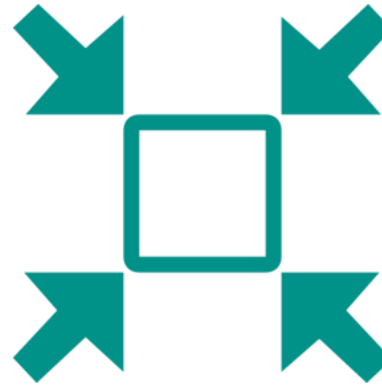
High Performance Power



High functional
integration



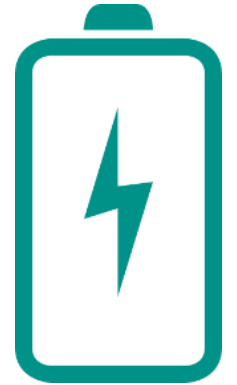
High current
integration



Small
Size



High
Efficiency

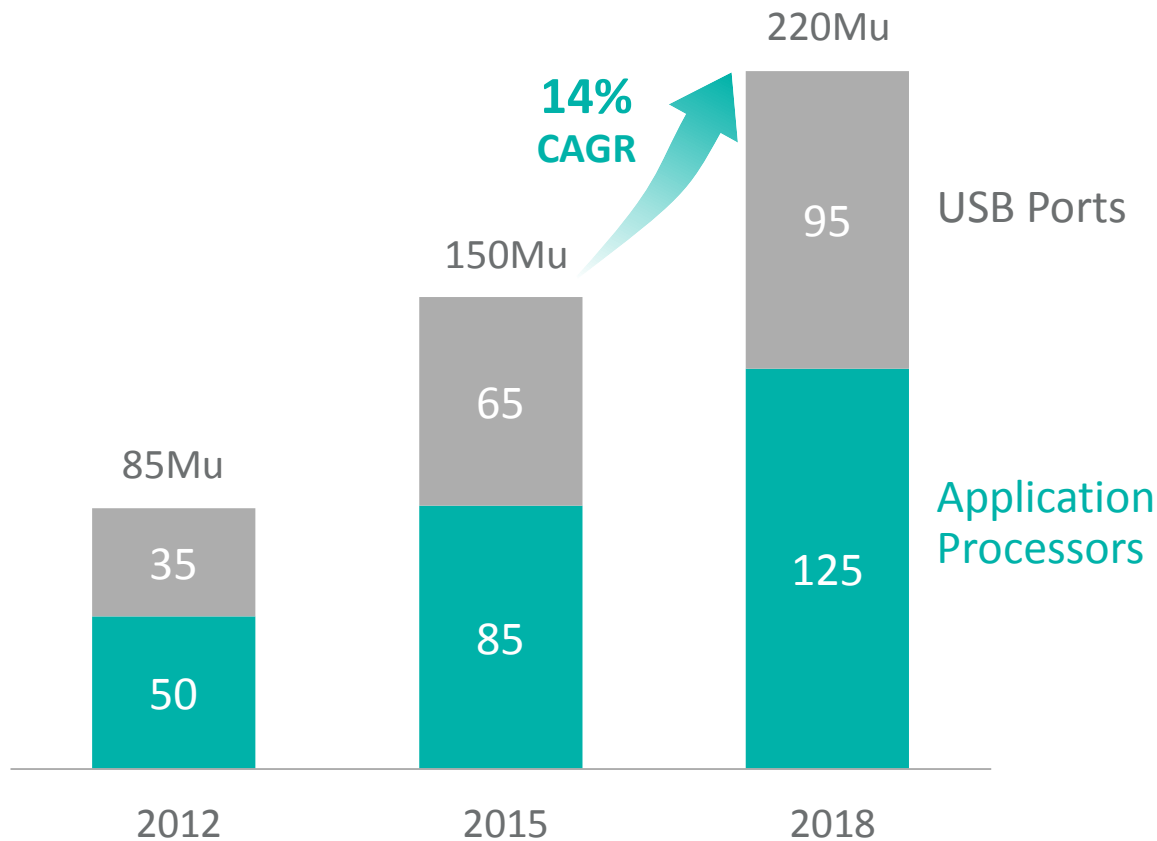


Low standby
Power

New Features Require Efficient Power Management

Automotive IC Units [M]

- More ports
- More processors
- More power



Source: Strategy Analytics

Smartphone Integration is Coming

Automotive grade USB
charging required



Continuous Improvement in Automotive Quality

Standard Process

Product Proposal

IOS/Cost Analysis

Design Review

PG (TapeOut)

Process Dev./Fab

Assembly

Customer Sample

Test Development

EC/GBD

App/Road Test

Test Release

QA Buy Off

Introduction

Qual w/in 90 days

Production

Additional Steps



Battery Management Systems (BMS) for EVs and Hybrid EVs

World-Class BMS Technology

Monitoring & fuel gauge solutions to beat next-gen range & safety requirements

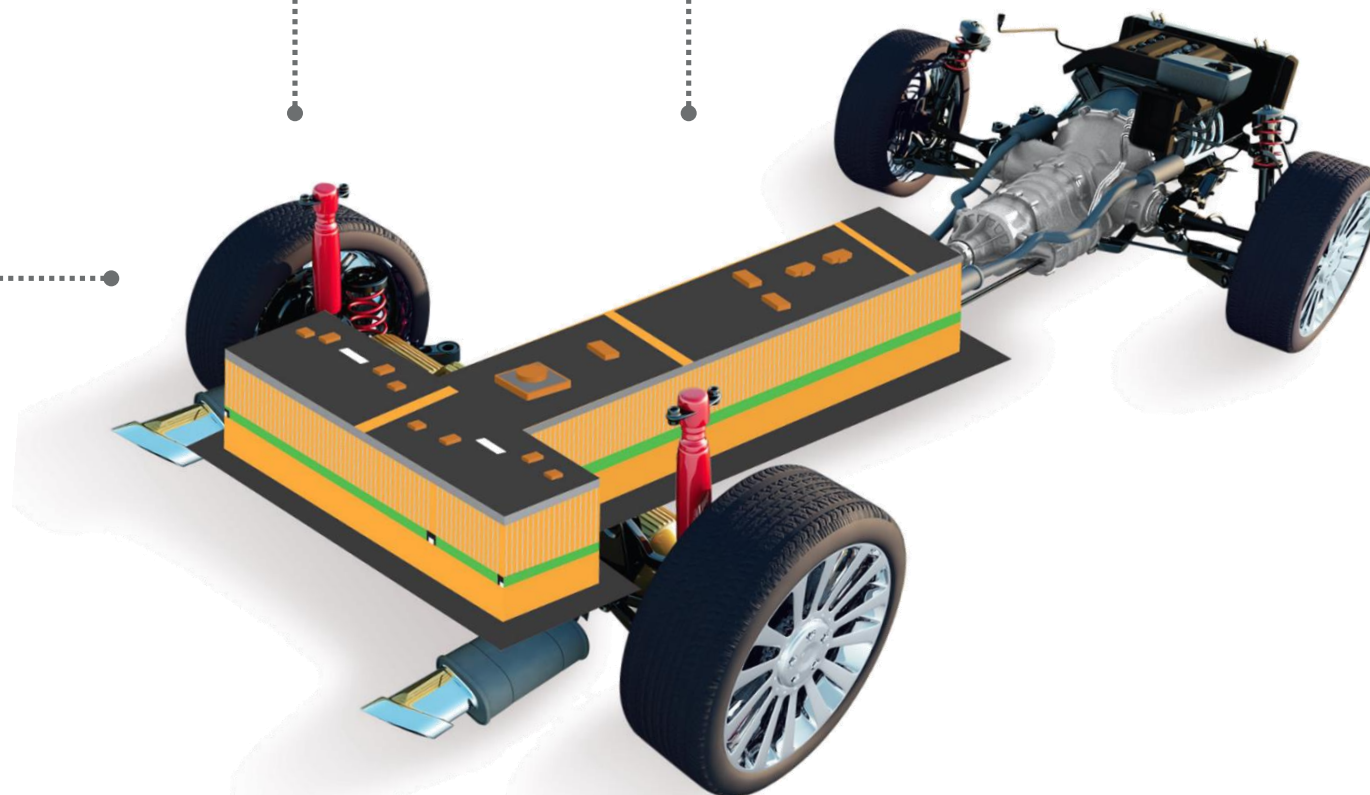
System expertise

IP portfolio

ASIL-D safety compliance

Accurate & fast measurements

High EMC performance





Car of the Future

- In constant evolution
- Common needs across multiple segments
- Enabled by Maxim's high performance analog

Outline

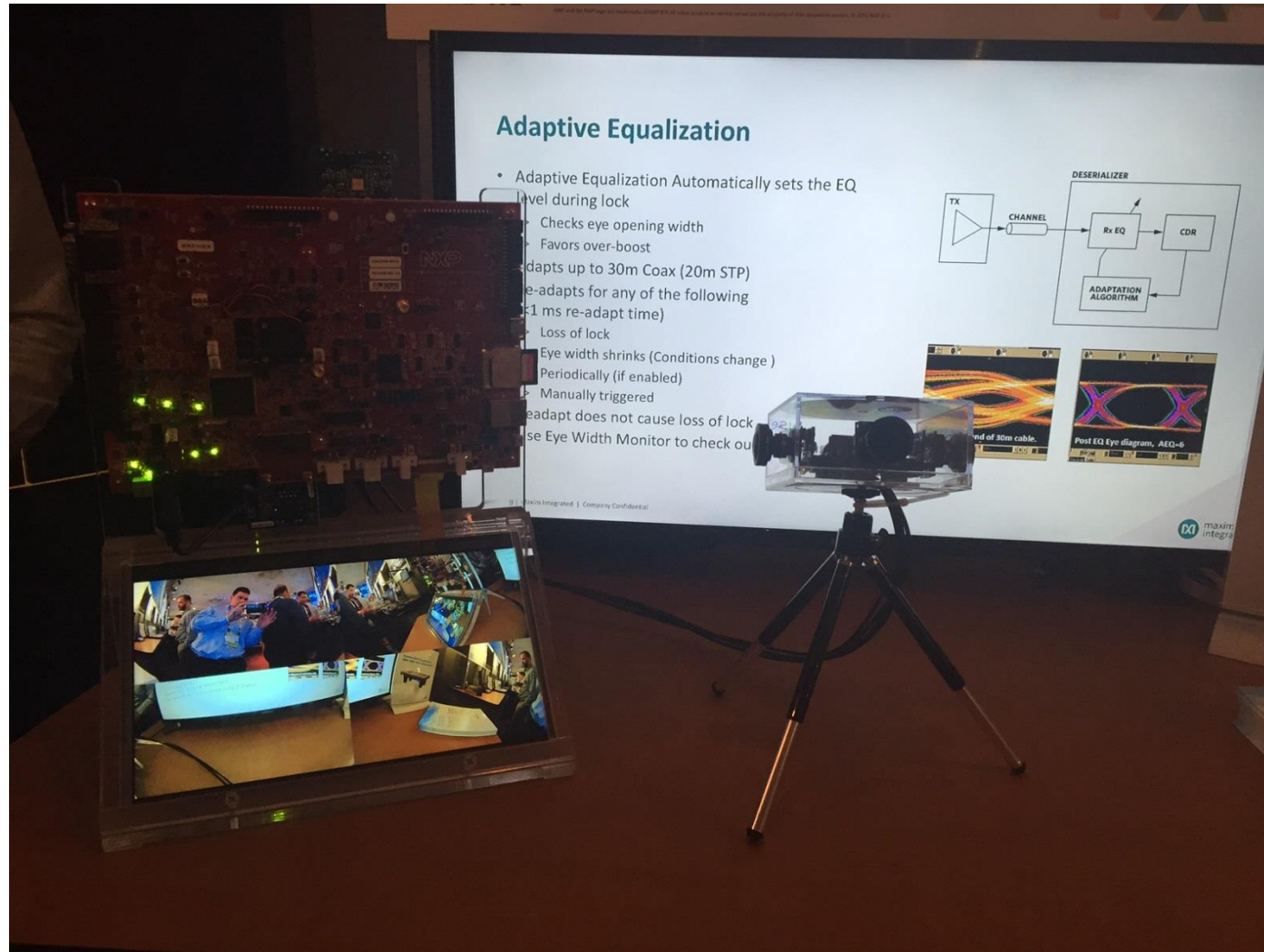
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MAX9286 Daughter Board



The background is a teal color with a subtle grid pattern. On the left side, there is a vertical line of circular punch holes. From the right side, several bright light rays emanate outwards, creating a sense of depth and movement.

Thank you



maxim
integrated™