



Qorvo Investor Day

May 25, 2017



Qorvo

Doug DeLieto, Vice President of IR



Safe Harbor

Forward-looking statements

This presentation contains “forward-looking statements” within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, statements about our plans, objectives, representations and contentions and are not historical facts and typically are identified by use of terms such as “may,” “will,” “should,” “could,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “forecast,” “predict,” “potential,” “continue” and similar words, although some forward-looking statements are expressed differently. You should be aware that the forward-looking statements included herein represent management’s current judgment and expectations, but our actual results, events and performance could differ materially from those expressed or implied by forward-looking statements. We do not intend to update any of these forward-looking statements or publicly announce the results of any revisions to these forward-looking statements, other than as is required under U.S. federal securities laws. Qorvo’s business is subject to numerous risks and uncertainties, including those relating to fluctuations in our operating results, our dependence on a few large customers for a substantial portion of our revenue, a loss of revenue if contracts with the U.S. government or defense and aerospace contractors are canceled or delayed, our ability to implement innovative technologies, our ability to bring new products to market and achieve design wins, the efficient and successful operation of our wafer fabrication and other facilities, our ability to adjust production capacity in a timely fashion in response to changes in demand for our products, variability in manufacturing yields, industry overcapacity, inaccurate product forecasts and corresponding inventory and manufacturing costs, dependence on third parties, our dependence on international sales and operations, our ability to attract and retain skilled personnel and develop leaders, the possibility that future acquisitions may dilute our stockholders’ ownership and cause us to incur debt and assume contingent liabilities, fluctuations in the price of our common stock, our ability to protect our intellectual property, claims of intellectual property infringement and other lawsuits, security breaches and other similar disruptions compromising our information, and the impact of government and stringent environmental regulations. These and other risks and uncertainties, which are described in more detail in Qorvo’s most recent Annual Report on Form 10-K and in other reports and statements filed with the Securities and Exchange Commission, could cause actual results and developments to be materially different from those expressed or implied by any of these forward-looking statements.

For more information regarding non-GAAP financial measures, including reconciliations to the nearest GAAP measures, see the Supplemental Information on Non-GAAP Financial Measures included with this presentation and our earnings releases available on our website at www.qorvo.com.



Agenda

Bob Bruggeworth	Overview	8:30 am – 8:40 am
James Klein	Infrastructure & Defense	8:40 am – 9:25 am
	Break	9:25 am – 9:40 am
Eric Creviston	Mobile Products	9:40 am – 10:25 am
Steve Grant	Operations	10:25 am – 10:45 am
Mark Murphy	Financials	10:45 am – 11:00 am
	Q&A	11:00 am – 11:30 am





Qorvo

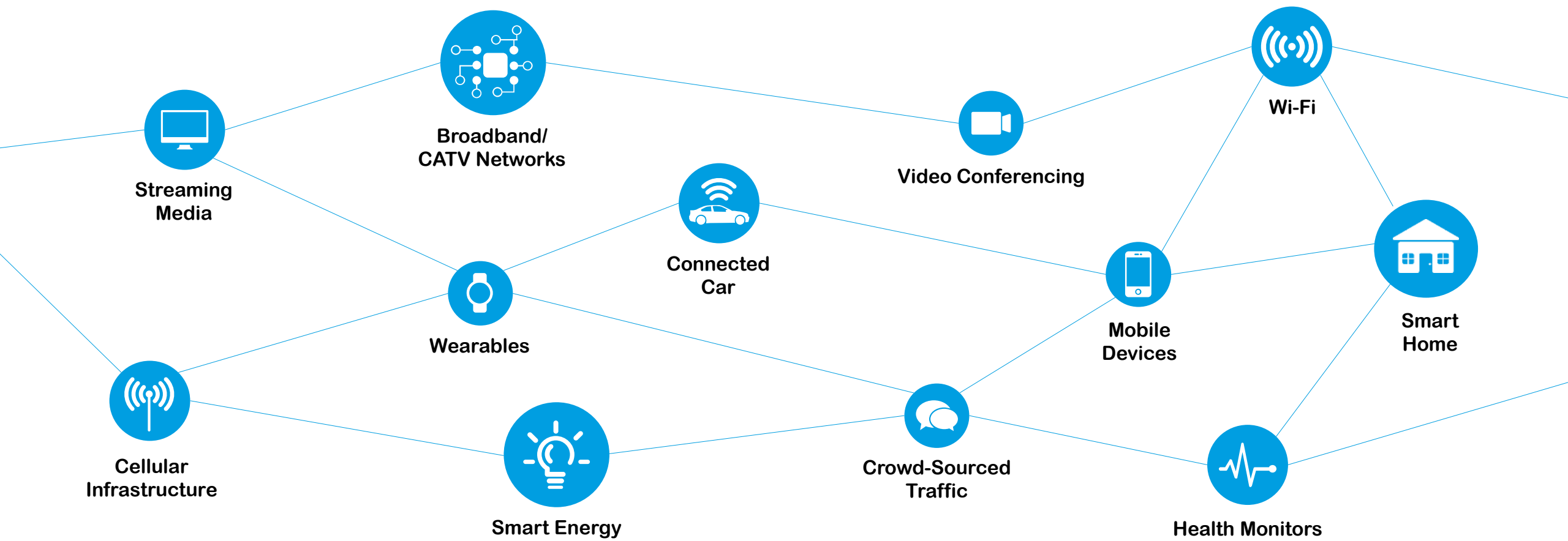
Bob Bruggeworth, President and CEO



Connectivity Is A Way Of Life

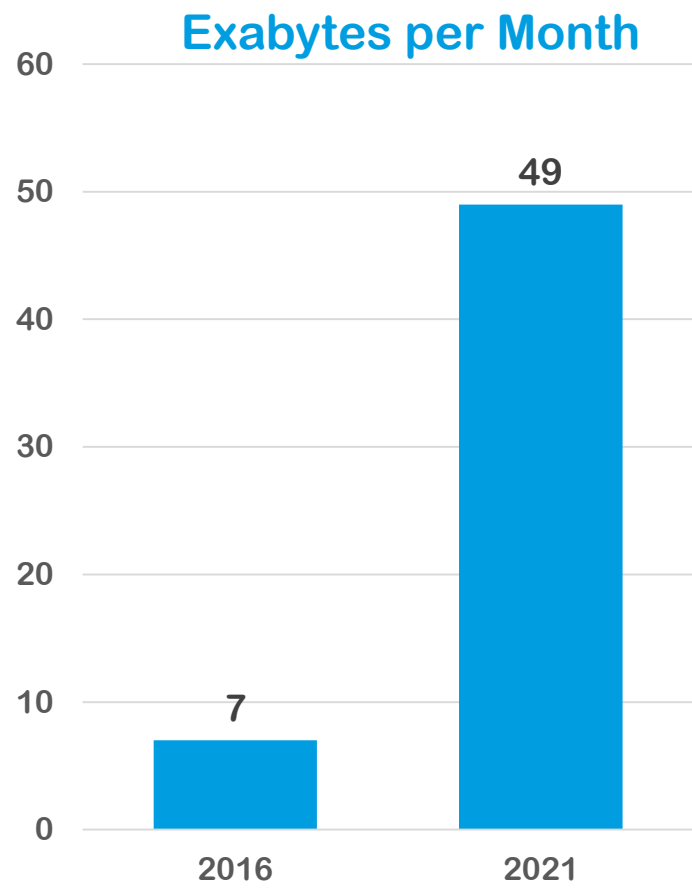
qorvo®

Qorvo Connects the World



Connecting People, Places and Things

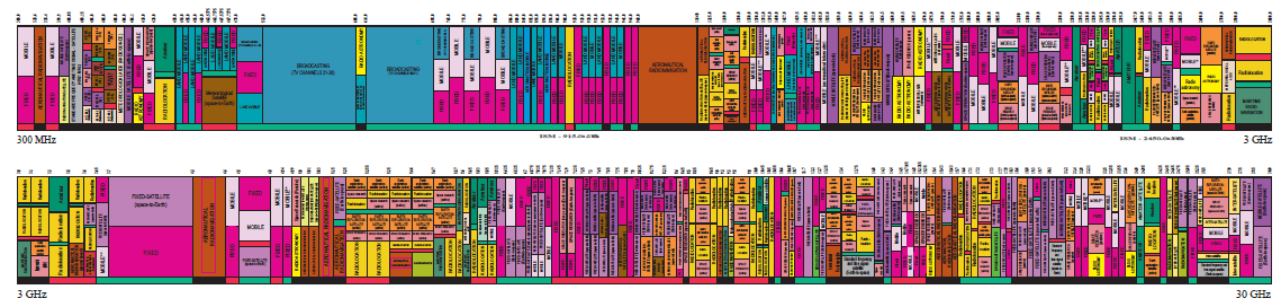
Limited RF Spectrum vs. Unlimited Demand



Source: Cisco Visual Networking Index (VNI) Forecast, 2/2017

Demand for mobile data will grow **7X** by 2021 ...

... while RF spectrum is becoming increasingly crowded



Source: U.S. Dept. of Commerce

Multiple Long-Term Growth Drivers

Technology leadership in era of increasing RF complexity

SEGMENTS

IDP

Mobile

DRIVERS



IoT



Content
Expansion

MARKETS



qorvo

Diversified and
Above-Market
Growth



Qorvo was built for this

Positioned to deliver long-term growth and improved financials





Infrastructure and Defense Products

James Klein, President



Driving Growth & Value

MISSION: Innovation ■ Product Leadership ■ Speed ■ Scale
Solving our customers' most difficult challenges



CONNECT & PROTECT™



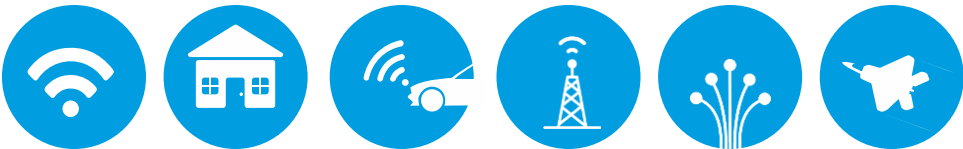
Optimized for Growth

Portfolio positioned for IoT, 5G and GaN trends

Strong Foundation



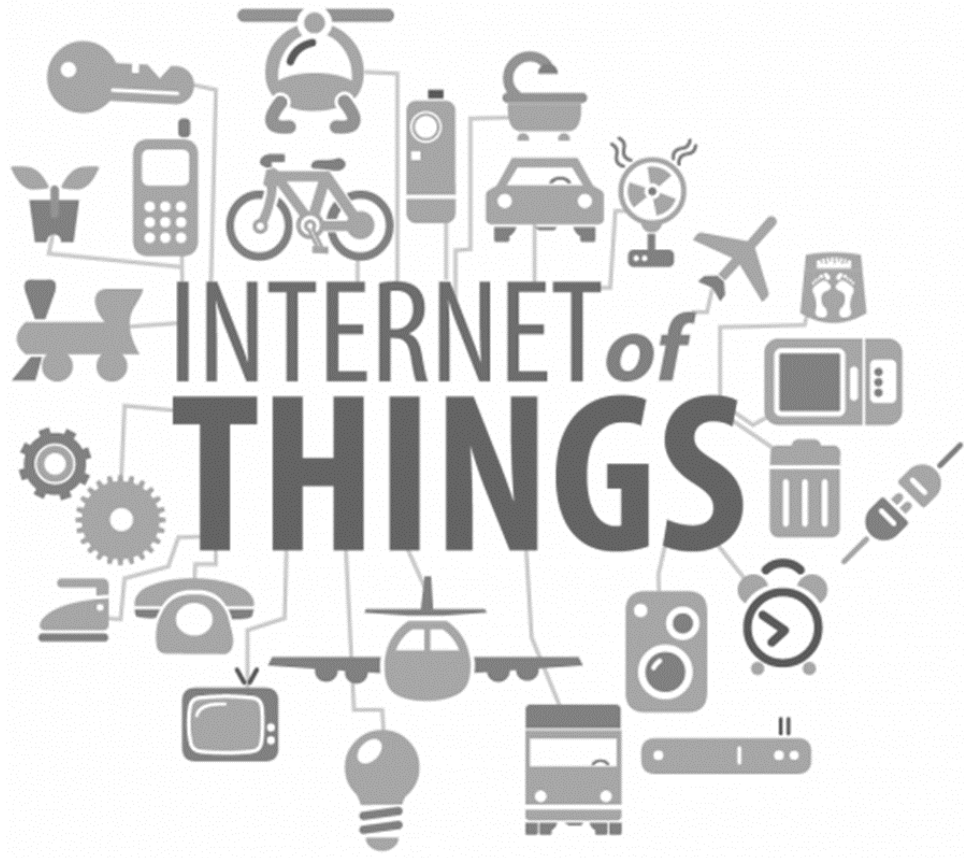
Optimized Growth Portfolio



Investing to Lead



Opportunities abound



Numerous Vertical Markets

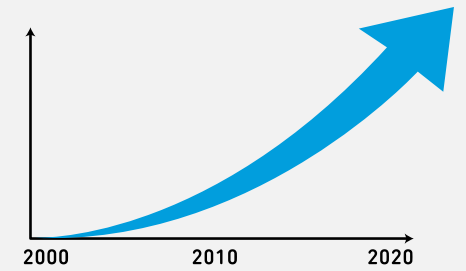


+100
more

Multiple Open & Proprietary Standards

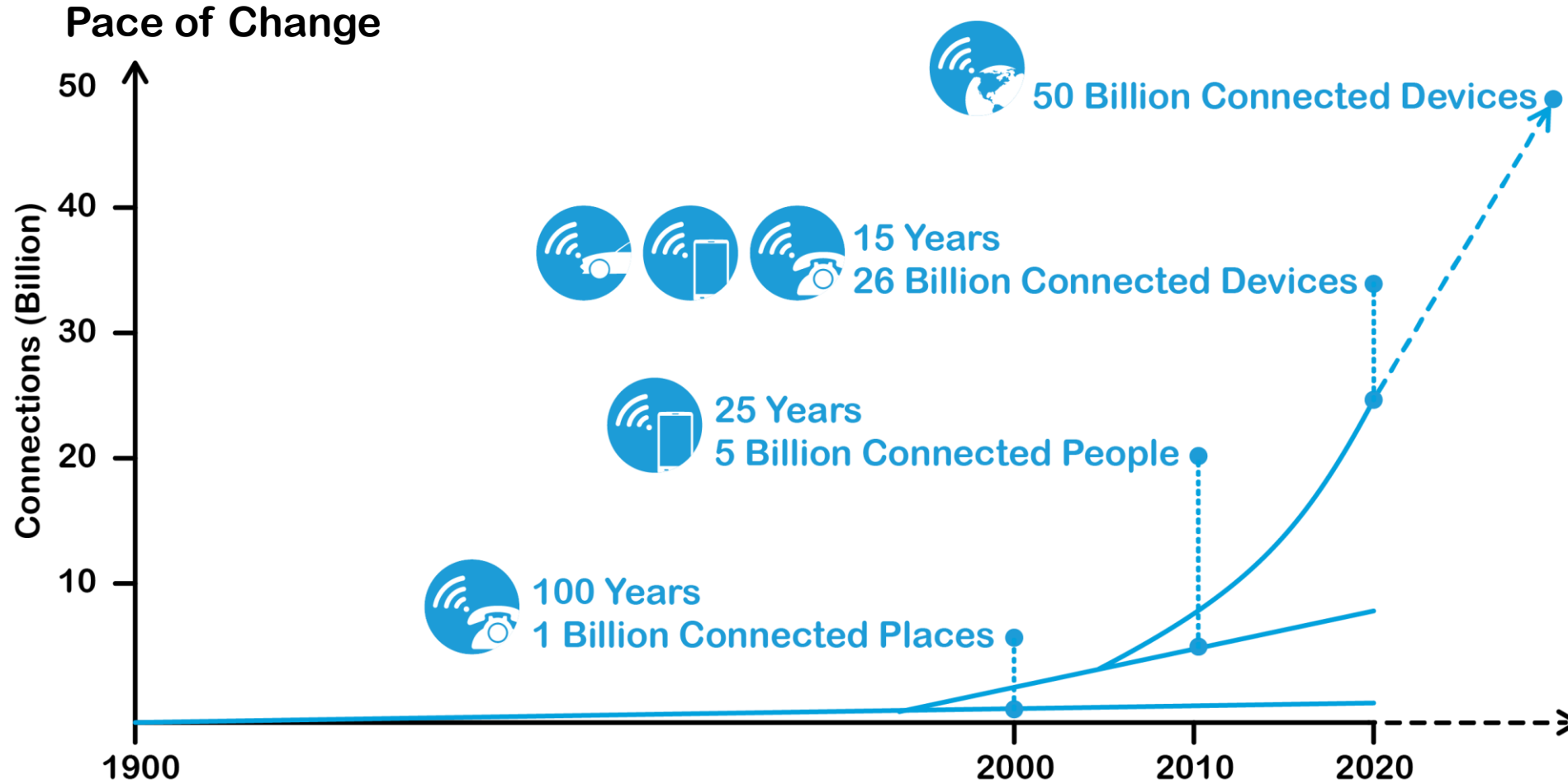


>25B Connected Devices by 2020



Internet of Things

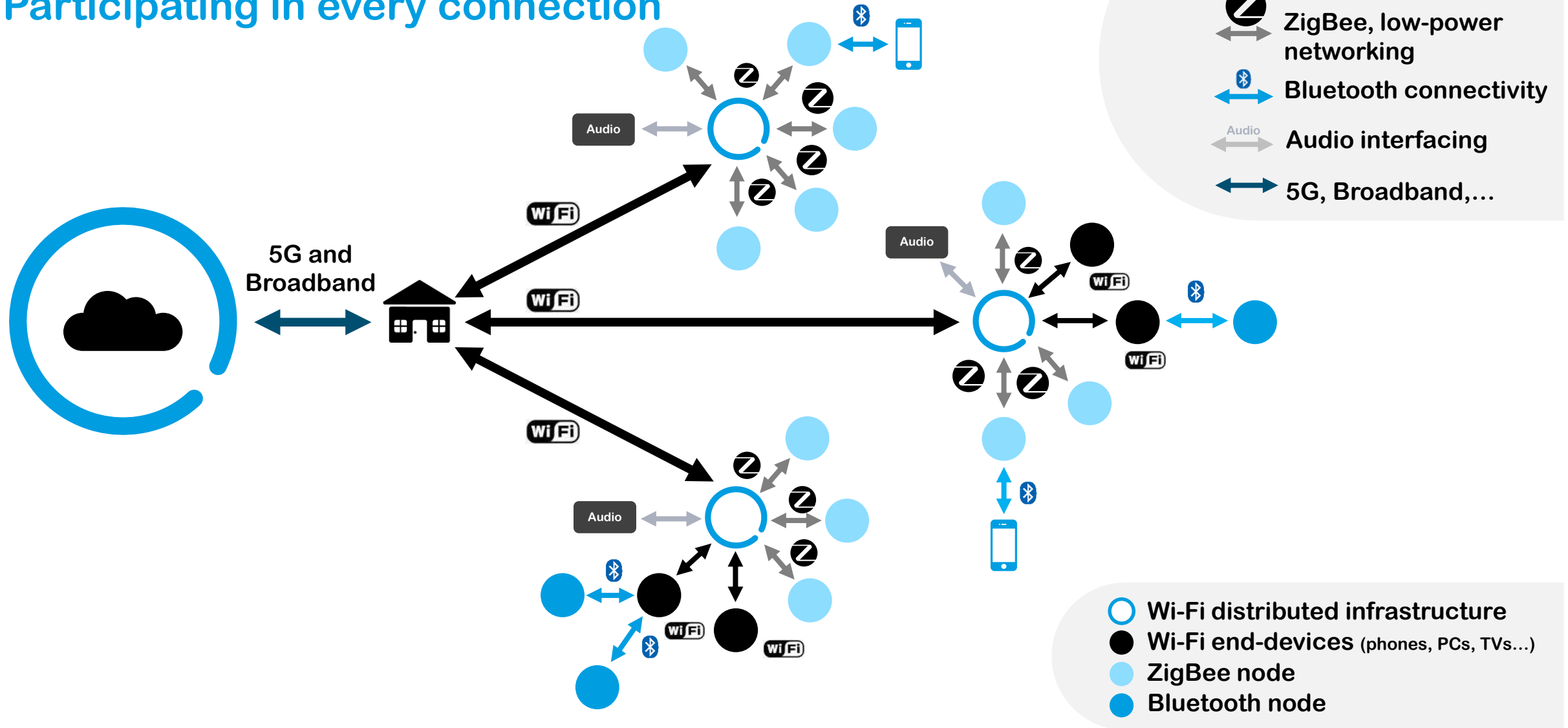
>25B connected devices by 2020



Source: Ericsson

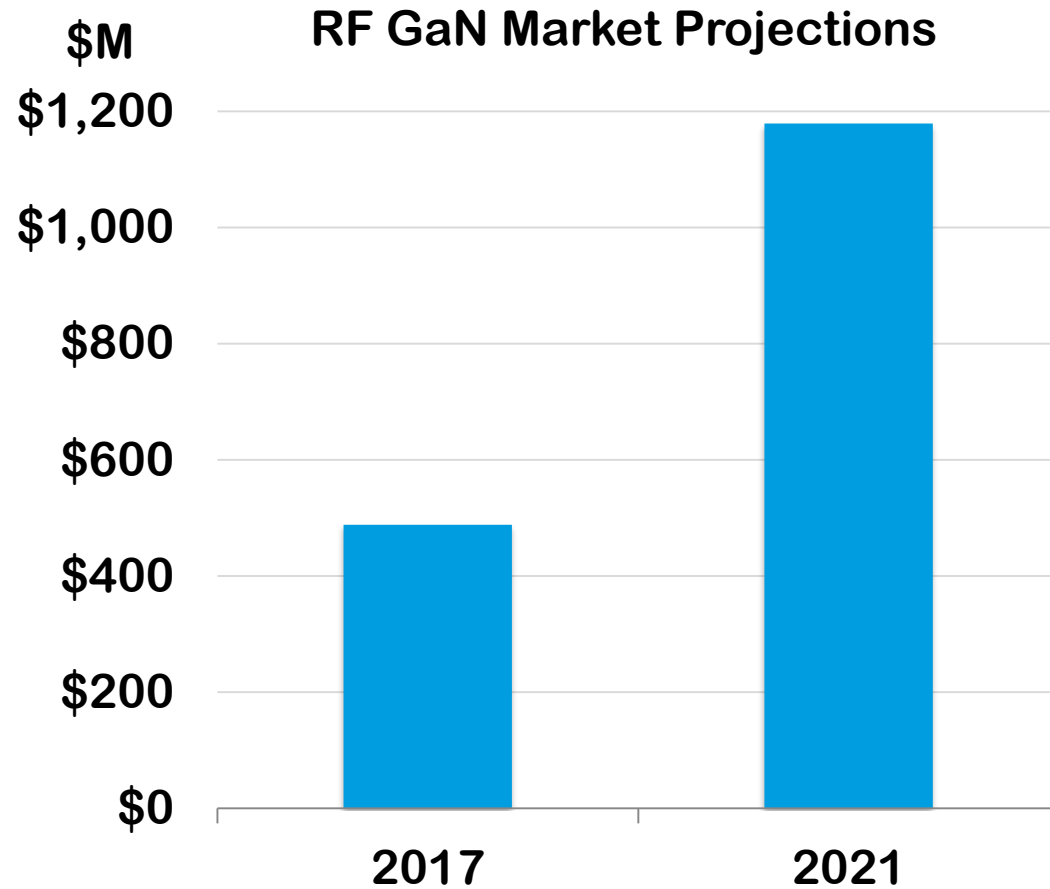
IoT Connectivity Architecture

Participating in every connection



GaN Adoption Accelerating

25% market CAGR



Driven by data traffic and advanced defense systems

Top 3 market segments experiencing rapid adoption



Performance and scale requirements favor established suppliers with technology maturity

Source: Strategy Analytics GaN Market Forecast 2016 and management estimates.

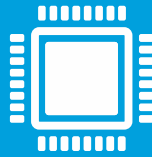
Why GaN?

Meeting the needs of advanced RF systems

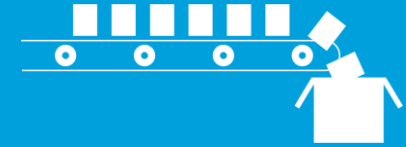
Efficiency Drives
Lower Total
Solution Costs



Higher Efficiency
Drives Smaller
Die Sizes and
Costs



Defense and
Commercial
Shipments Drive
Scale



Thermal
Performance
Drives Long
Term Reliability



200°C
10⁷ hrs.

Enables Broader
Spectrum Usage

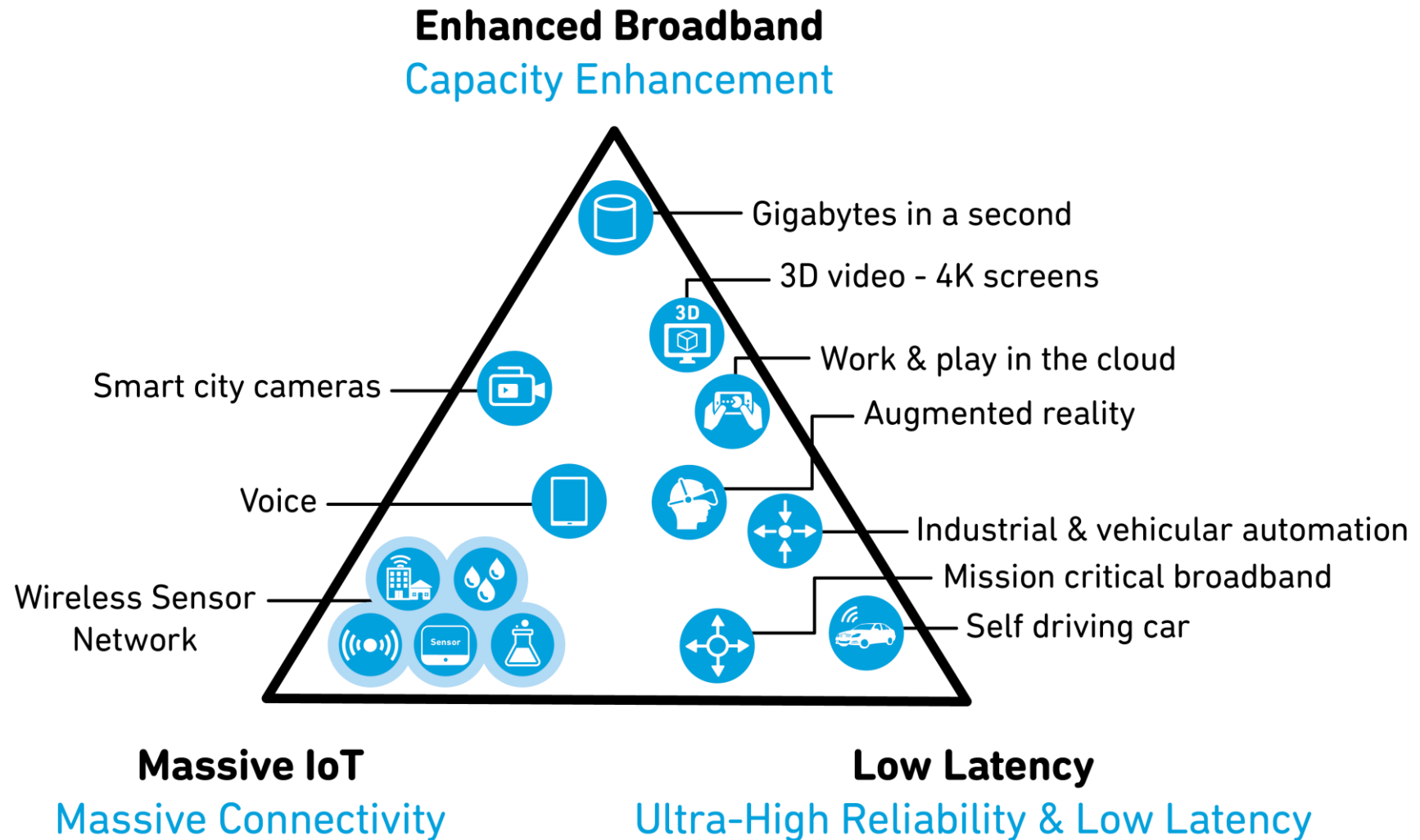
500 MHz ↔ 100 GHz

Efficiency and
Broadband
Coverage Enable 5G



5G is More Than Just Higher Speeds

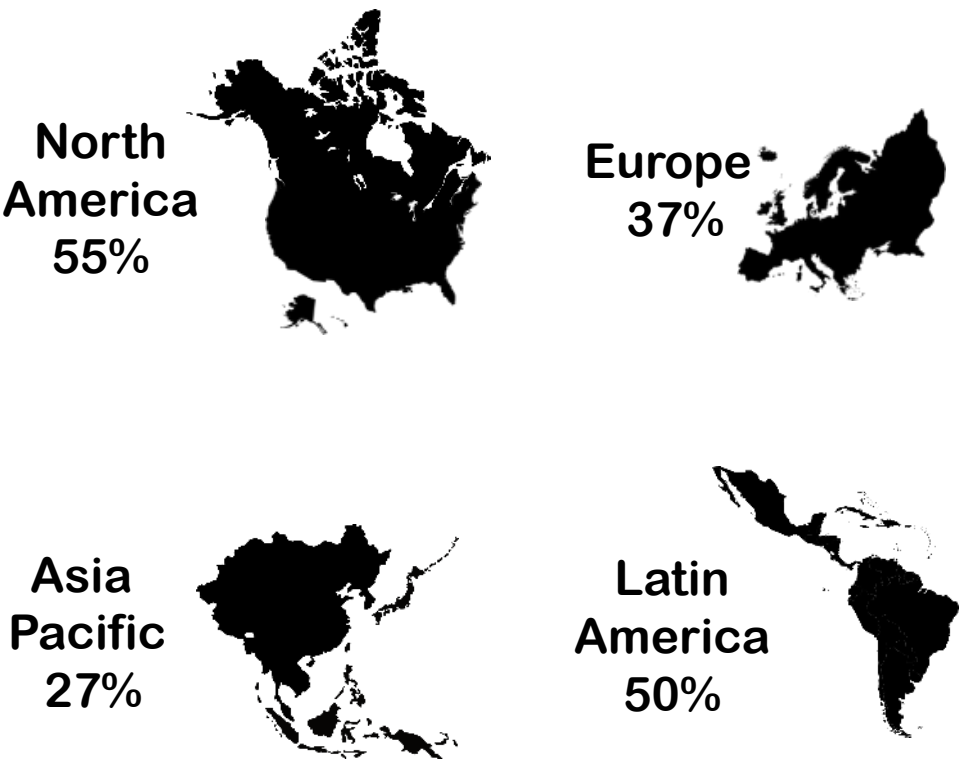
Connections are all around you



Source: 3GPP

The Path to 5G Networks

Telco 5G adoption over next 5 years



Source: Ericsson

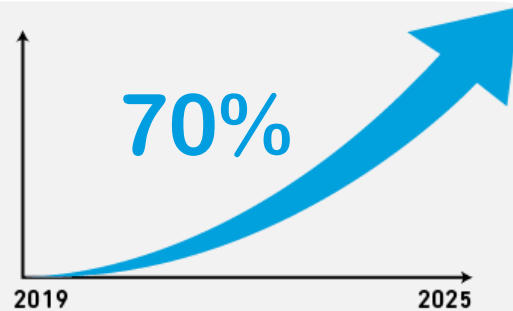
Field Trials Underway



Disruptive Technologies

- mmW system architectures
- Massive MIMO
- Integrated backhaul & cloud-based RAN

5G Network Infrastructure Market CAGR



5G Phased Arrays at 30 GHz

GaN PAs balance power consumption vs array complexity



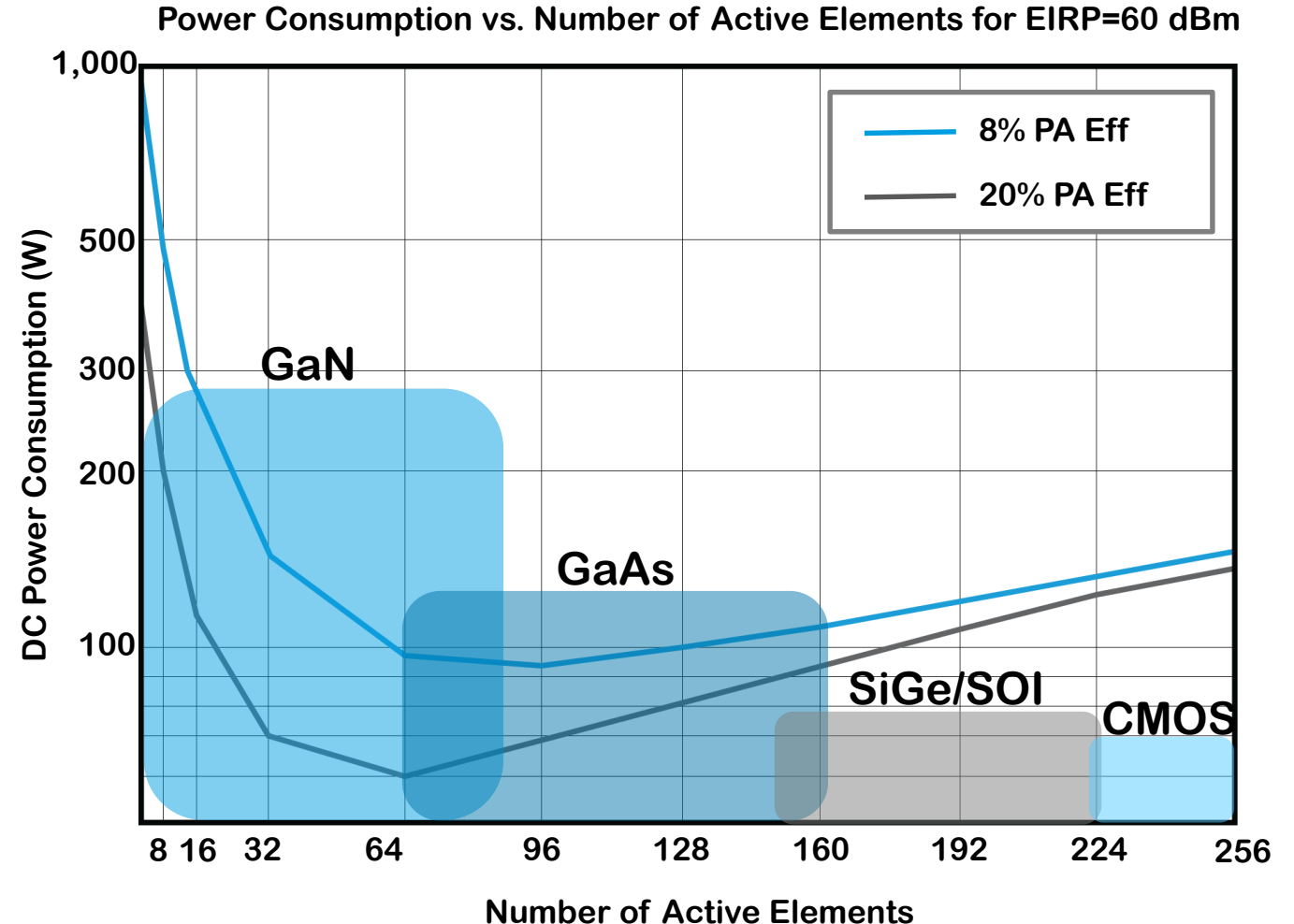
Effective Radiated Power (ERP)
drives range and coverage



Power consumption
drives operating cost



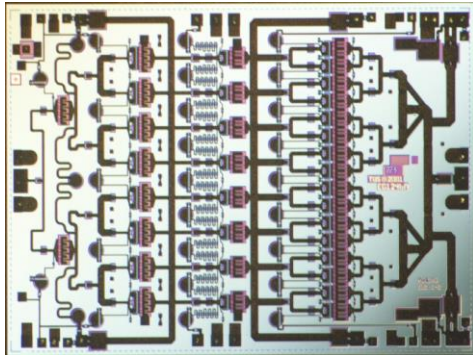
Fewer elements reduce
complexity and system costs



GaN Drives mmWave Integration

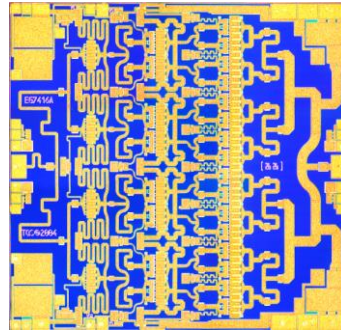
Power density and die size enable phased array applications

0.25 μm GaAs Die
PD: $\sim 650 \text{ mW/mm}$



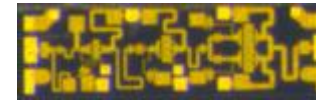
12.9 mm^2

0.15 μm GaAs Die
PD: $\sim 800 \text{ mW/mm}$



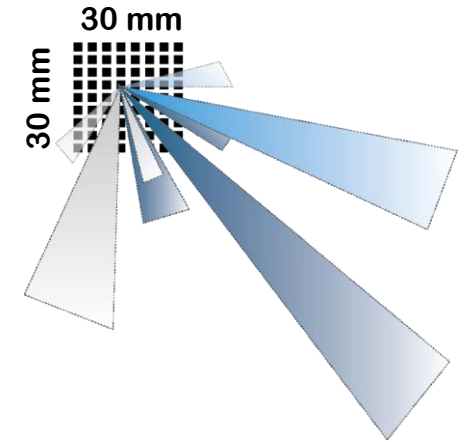
8.7 mm^2

0.15 μm GaN Die
PD: $\sim 2,800 \text{ mW/mm}$



1.56 mm^2

Multiple GaN Die
Massive MIMO Arrays



2002

2005

2014

2017+

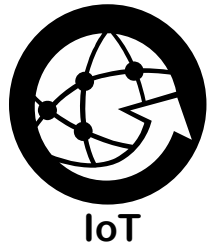
88% Die Size Reduction @ 4x Power Density

64 Supported Antennas

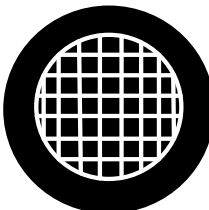
Key markets aggregate annual growth of >20%

Key markets aggregate annual growth of >20%

Macro Trends

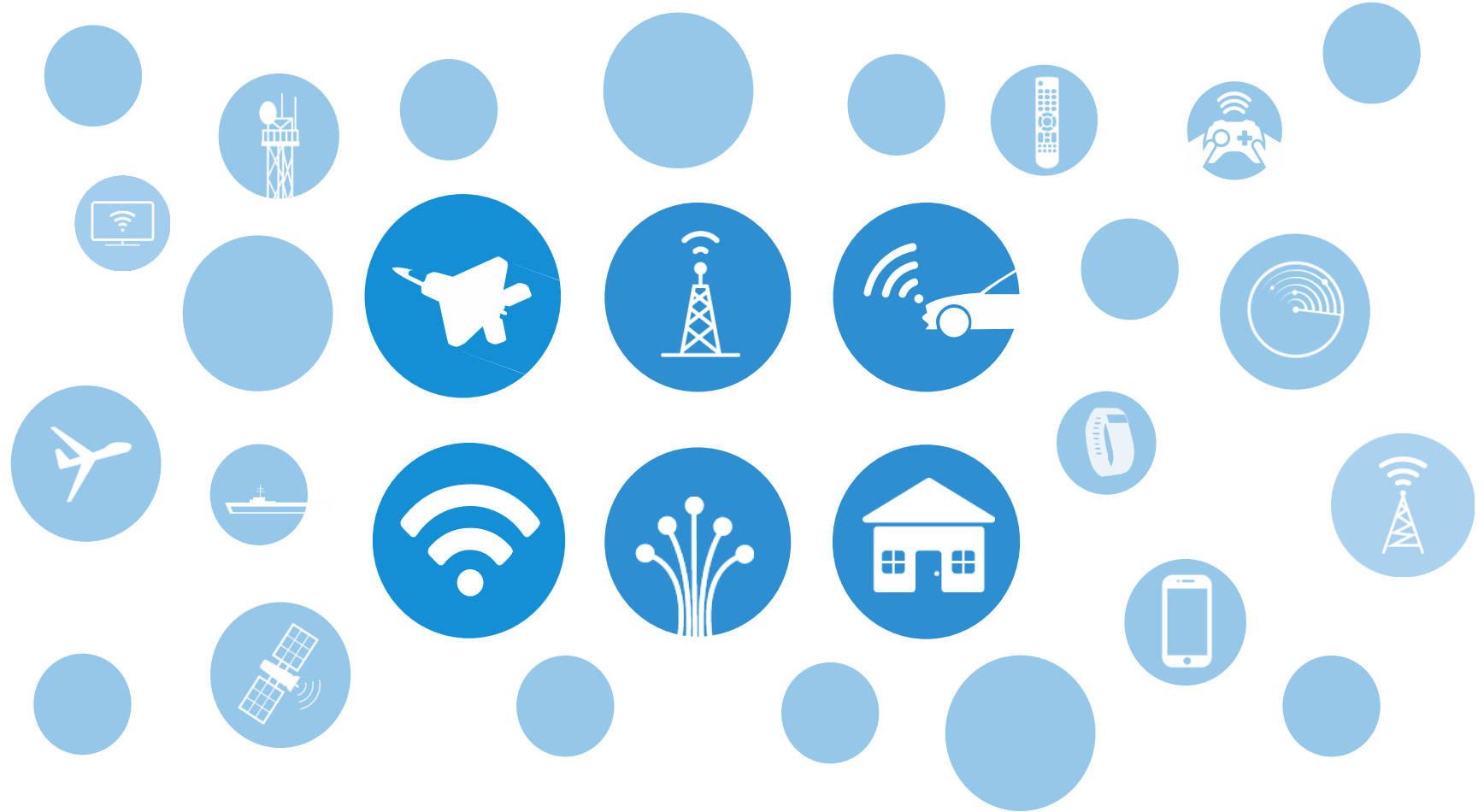


IoT



GaN

Today's Markets & Future Opportunities



Defense Growth

GaN fueling above-market growth



- Driven by phased array radar and electronic warfare
- 2017-2021 CAGR: 8% (GaN >25%)



- DoD Category 1A Trusted Source
- Industry's broadest RF capabilities
- 1-100 GHz frequency coverage
- Higher levels of integration

Source: Industry reports and management estimates



Base Station Growth

GaN and 5G driving long-term growth



- GaN displacing LDMOS
- Massive MIMO 10x higher content
- 5G field trials underway
- 2017-2021 CAGR: 6% (GaN >25%)



- Rapidly expanding GaN portfolio
- Participant in all major 5G trials
- Higher levels of integration

Source: Industry reports and management estimates



Optical Growth

Leveraging our telecom leadership into Data Center Interconnect (DCI)



- Driven by increased data demand
- Systems driving to 800 Gbps
- 2017-2021 CAGR: 14%



- Expanding technology and product portfolio targeting DCI
- Higher levels of integration

Source: Industry reports and management estimates



Smart Home IoT Growth

Open standards accelerating adoption



- IoT adoption begins in the home
- 2017-2021 CAGR: 47%



- Broad RF and low power SoC portfolio
- Industry's first multi-protocol platform
- Leveraging Wi-Fi experience

Source: Industry reports and management estimates



Wi-Fi Customer Premises Equipment (CPE) Growth

High-performance products enable system capacity



- Distributed Wi-Fi nodes
- Consumer and enterprise requirements converging
- Multi-user streaming media
- 802.11ax adoption
- 2017-2021 CAGR: 10%



- Best in class PAs and LNAs
- Integrated FEMs with premium filters

Source: Industry reports and management estimates



Automotive Connectivity Growth

Moving telecom products to the car



- 69M connected cars by 2020
- Consumer demand and regulations driving safety and connectivity
- 2017-2021 CAGR: 29%



- AECQ-100 qualified portfolio of active & premium filter products
- Five ISO TS-16949 certified factories
- Focused on SDARS, Wi-Fi, LTE

Source: Industry reports and management estimates



Delivering a Highly Profitable Model

High-value innovation in diverse growth markets

Strongly positioned to address IoT, 5G, GaN macro trends

Winning in \$4B diversified market with broad technology capability

Market portfolio growing at 10-15%





Break until 9:40am



Mobile Products

Eric Creviston, President

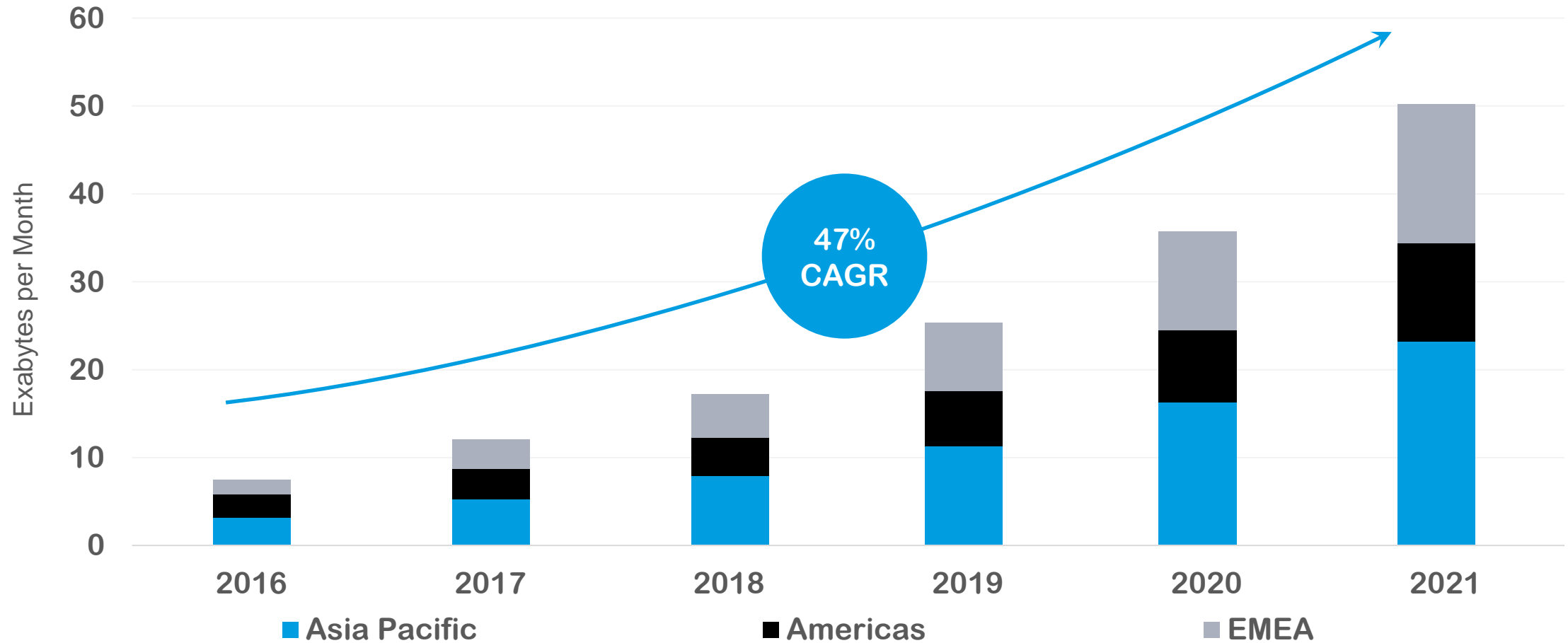


Connectivity Is Changing Lives



Demand for Mobile Data is Accelerating

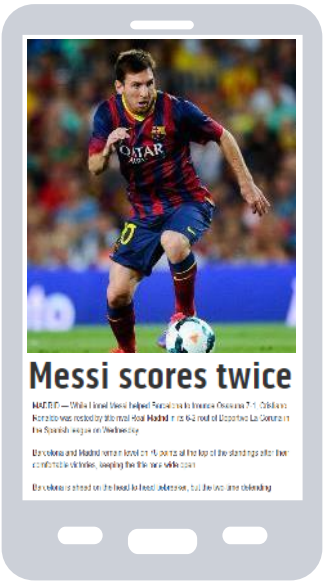
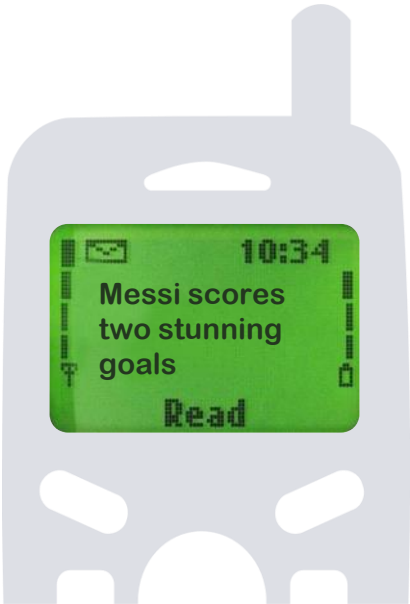
Global mobile traffic forecast



Source: Cisco Mobile VNI Study, 2017

Streaming Video: The New Baseline

Generational shift in how information is consumed

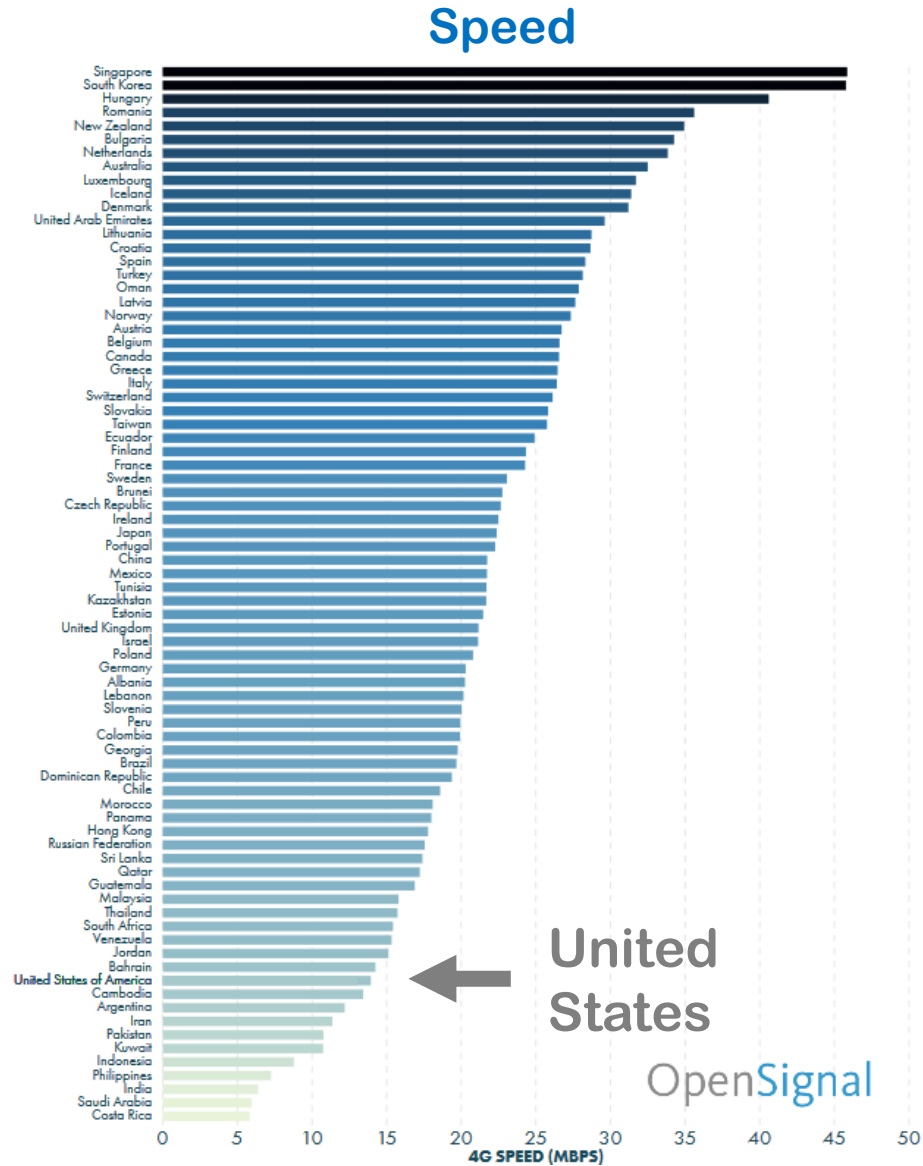
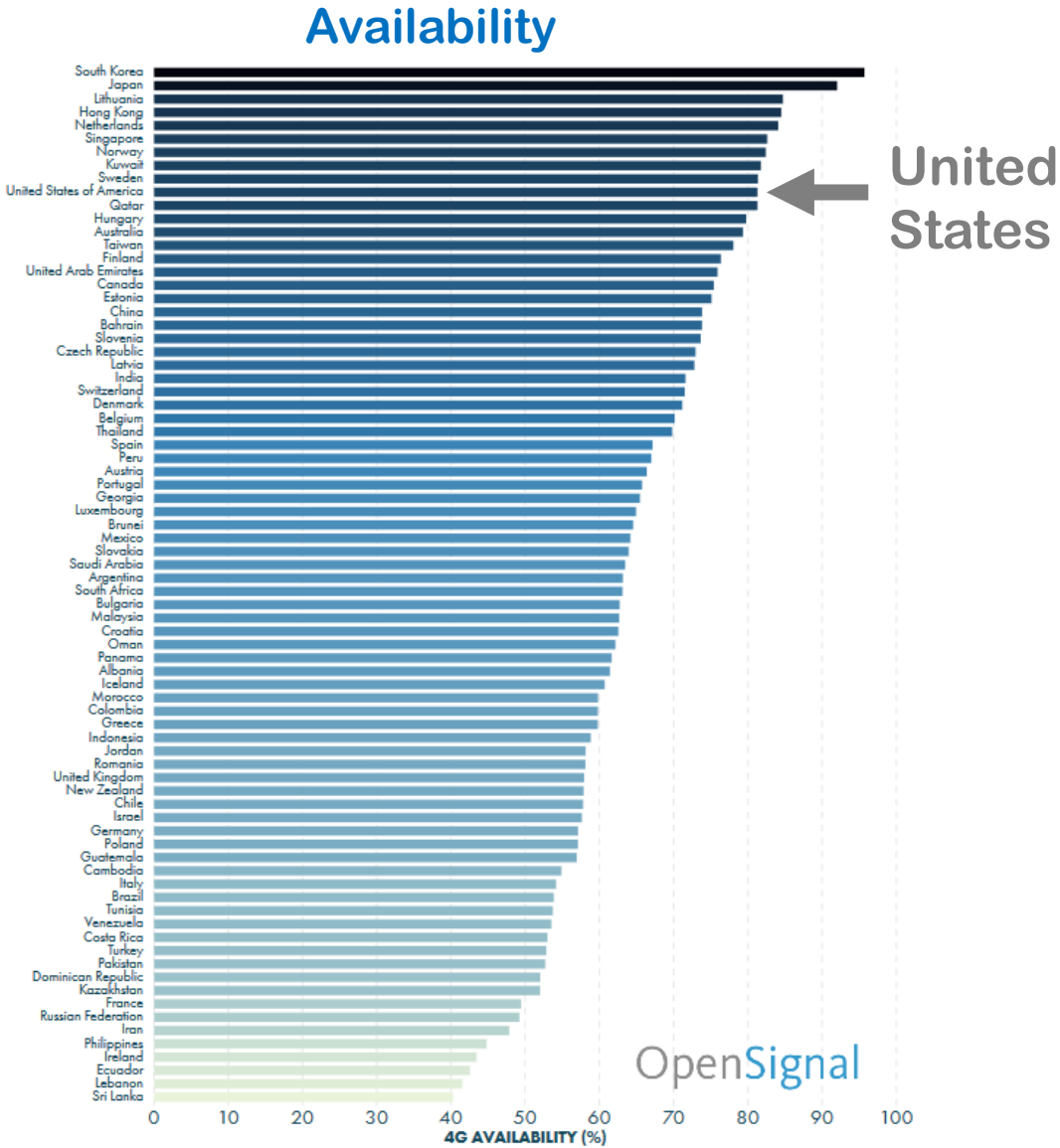


Live Stream Goes Mainstream

New business models rely on improved uplink capabilities



Network Performance is Lagging Demand



The Race to Gigabit Performance and Beyond



Carrier Aggregation (CA)
simultaneous data streams



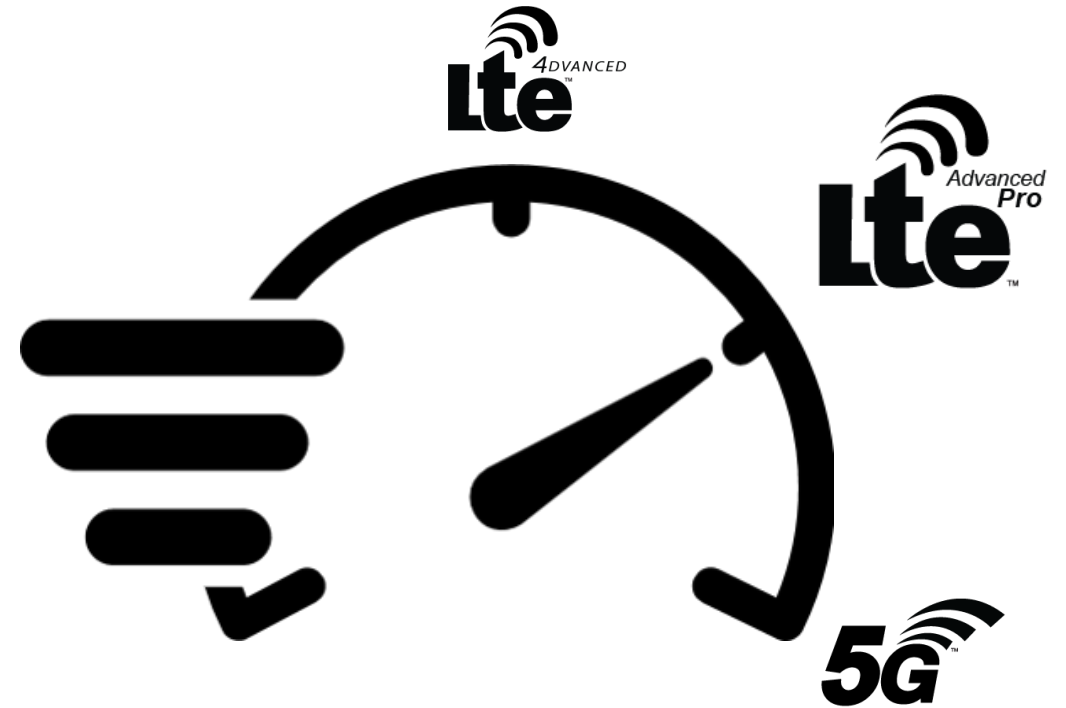
LTE over unlicensed spectrum
more available bandwidth



**Higher Order Modulation
(256 QAM)**
faster throughput



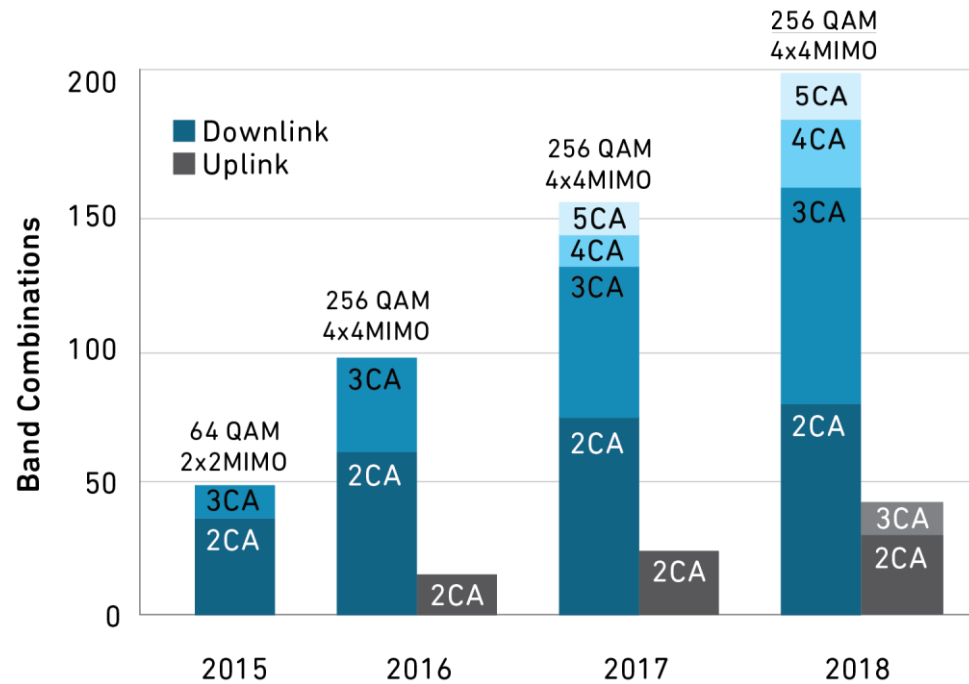
4x4 MIMO
multiple data paths



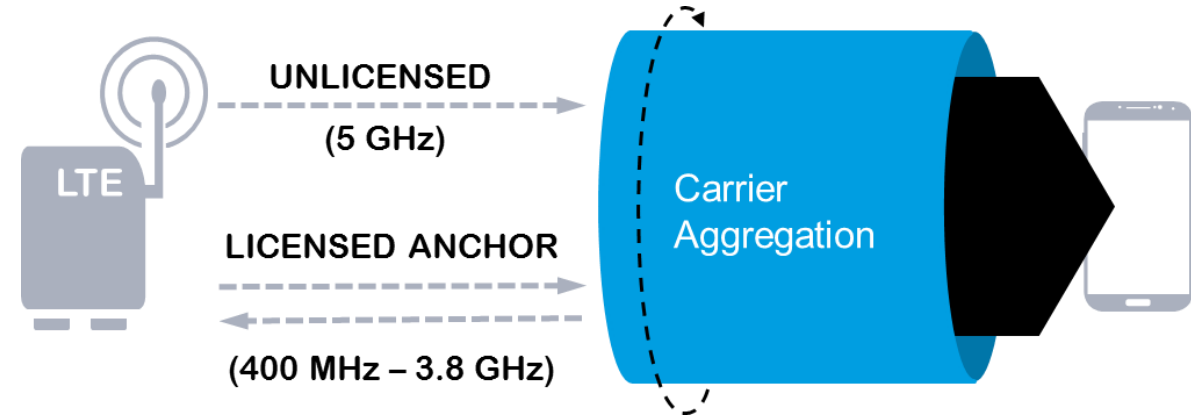
Global Delivery of Gigabit Performance

Advanced architectures drive continuous growth in RF complexity

CA Band Combinations and Advanced Modulation Drive RF Complexity

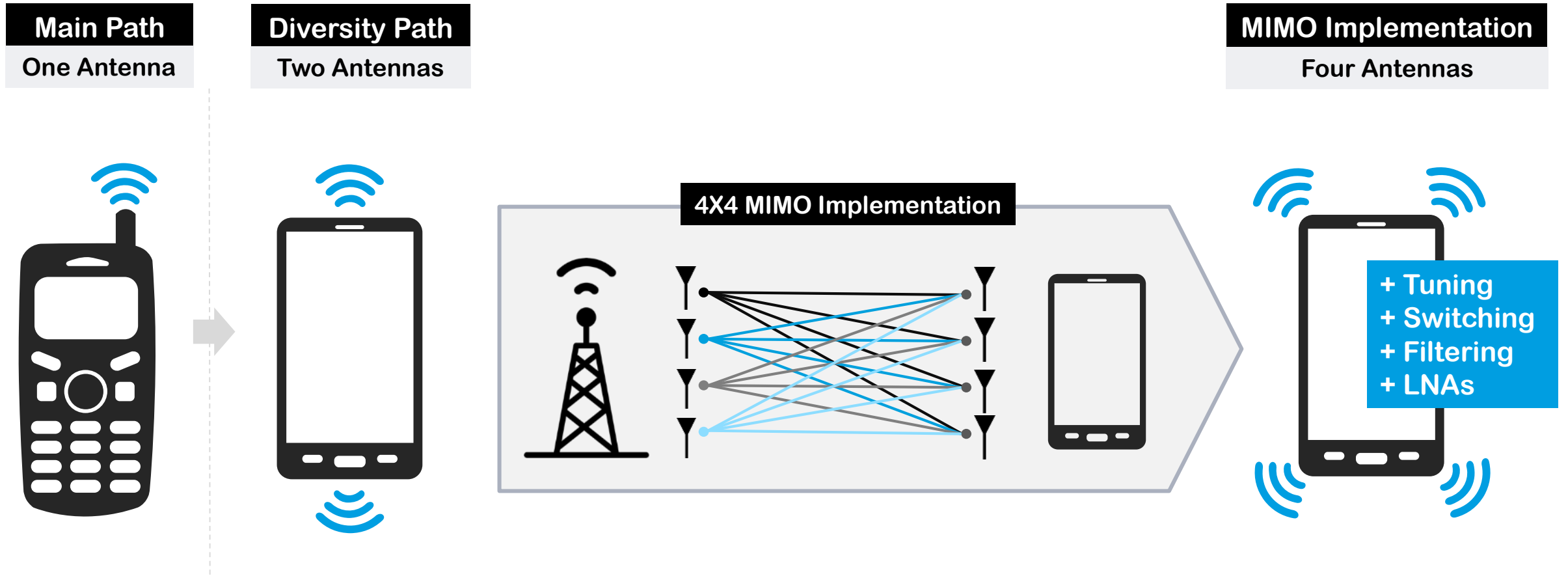


Unlicensed LAA Joins Licensed LTE to Help Achieve Gbps Speeds



Advanced Antenna Solutions Required

Transitioning to a 4X4 MIMO implementation for higher data throughput

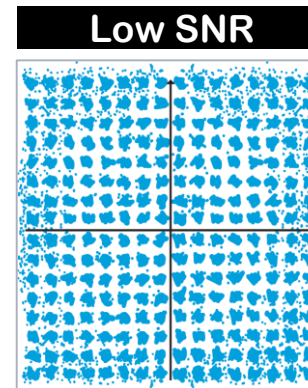
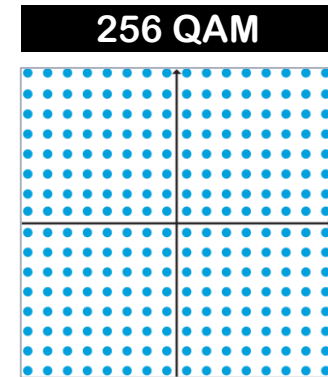
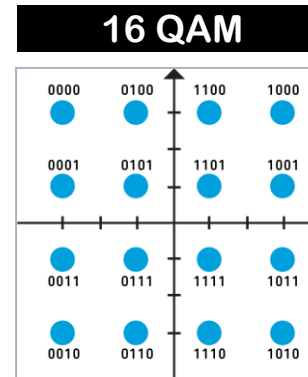


Advanced Modulation Required for Higher Throughput

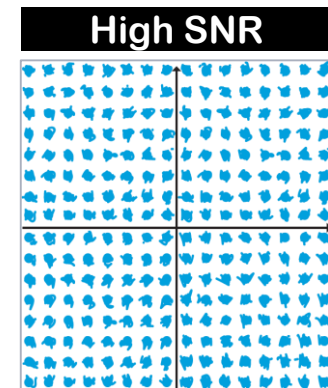
Transition to 256 QAM drives need for higher quality RF

Higher order modulation **adds more communication resolution** increasing signal density

The RF challenge is to **keep the signals distinct** with a high signal to noise ratio (SNR)



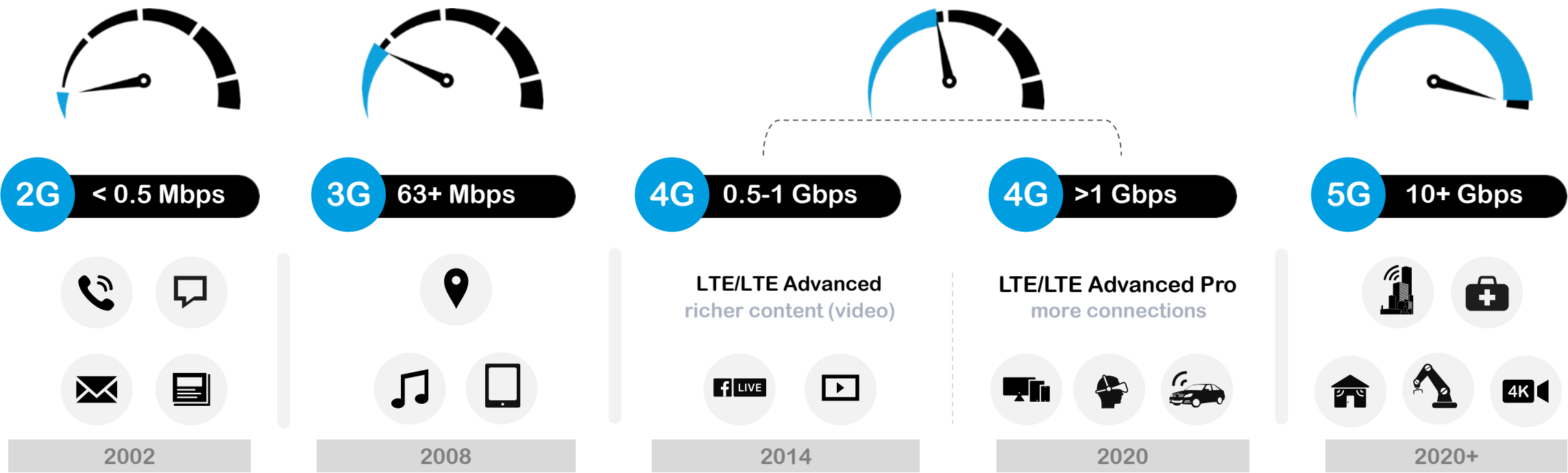
Vs.



Achieved with better RF filters, amplifiers, switches, tuning and module design

Strong History of Advancing Industry Standards

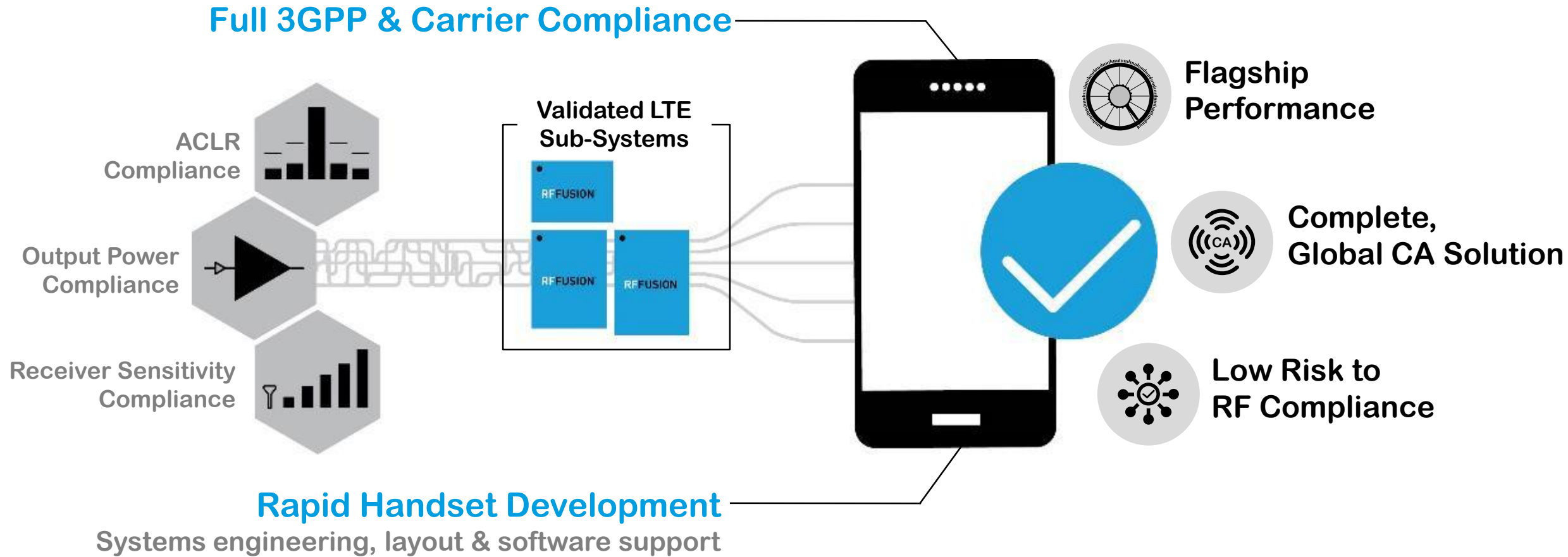
Enabled through successive generations of RF technology



GaAs HBT PA	pHEMT Antenna Switch	Module with Filter Integration	Integrated Shielding	Antenna Tuning	Envelope Tracking	Total Front End Modules
Integrated Power Control	TC SAW Duplexers	BAW Duplexers	SOI Switch for Linearity	BAW Multiplexing	UL CA Ultra Linear Switch	Phased Array Systems

Best Positioned to Deliver Complete RF Solutions

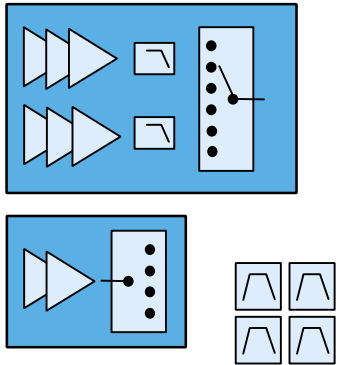
Solving customer problems at the system level



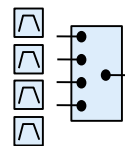
Evolution of the RF Front End

Single Carrier, 3G
One Antenna

Main Path

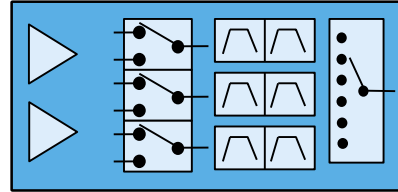


Diversity Path

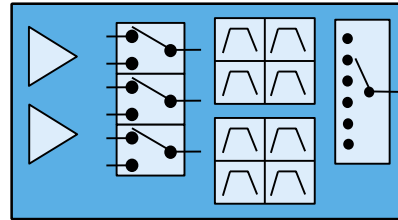


4G, DL CA
Two Antennas

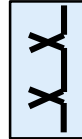
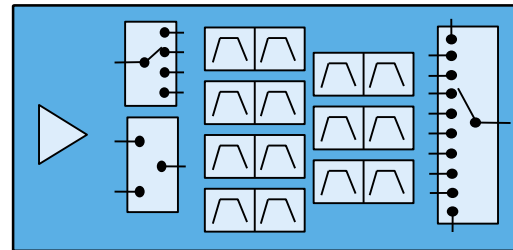
High Band



Mid Band



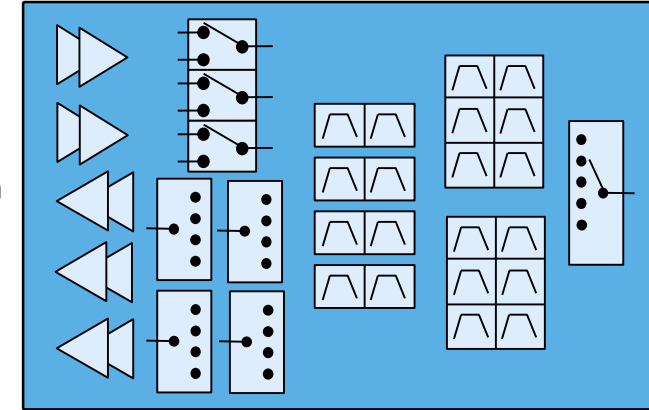
Low Band



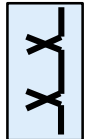
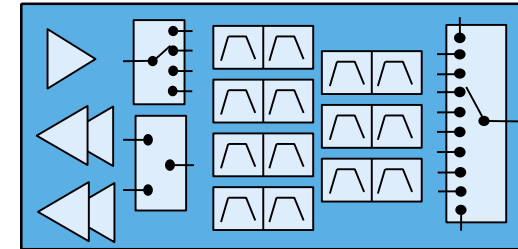
ANT
MUX

LTE Advanced / Pro (Pre-5G), 5 Carrier CA
Four Antennas

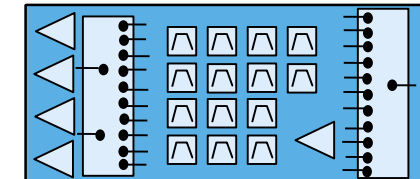
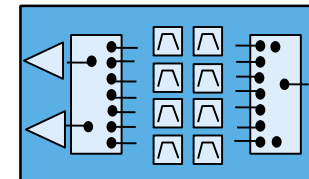
Mid / High Band



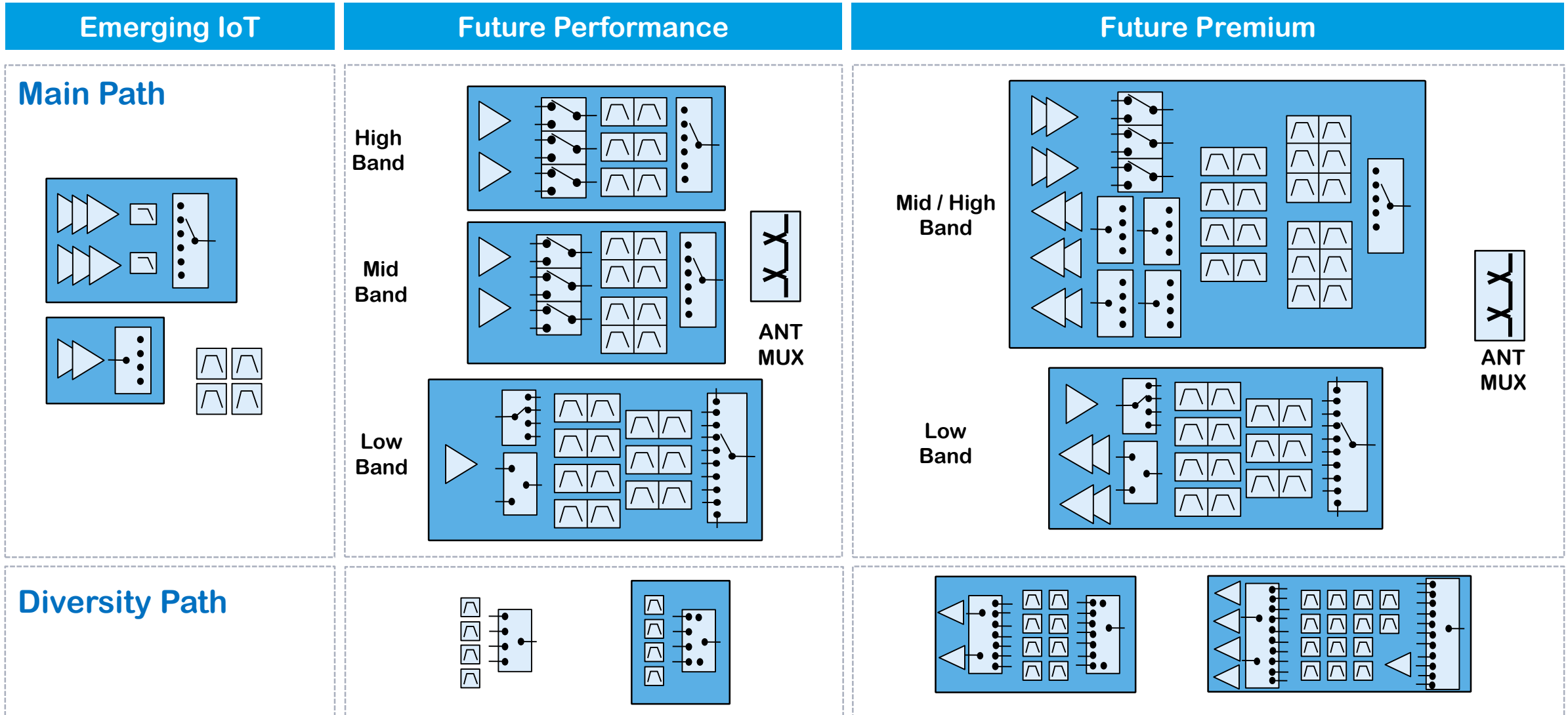
Low Band



ANT
MUX



Distinct Architectures for Each Business Model



Requirements for advanced filtering continue to grow

The diagram illustrates the frequency spectrum from 300 MHz to 3 GHz. It is divided into several main sections, each with a specific color and labeled with its primary use:

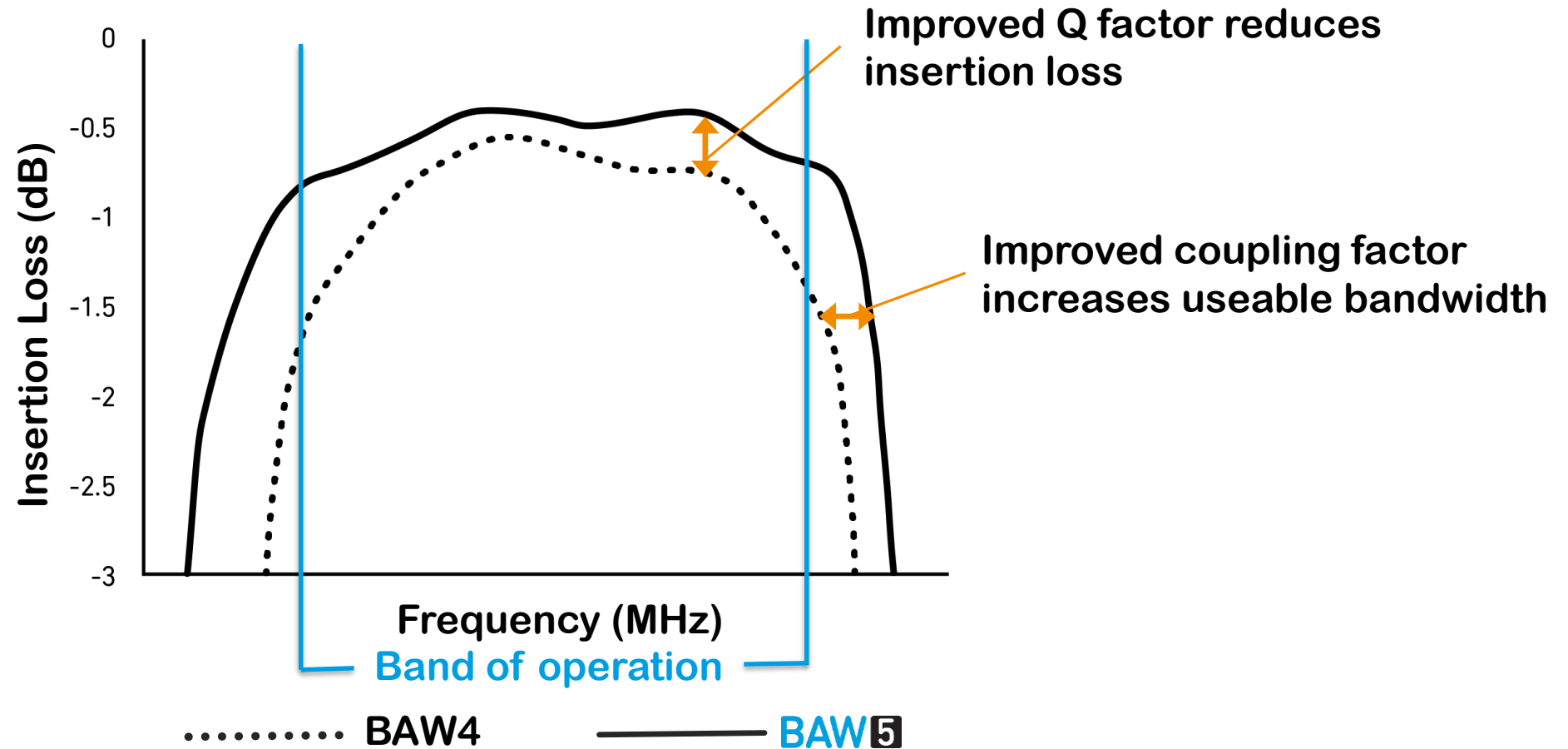
- Fixed (Blue):** Includes frequencies from 300 MHz to approximately 1.5 GHz, used for fixed communications.
- Mobile (Green):** Includes frequencies from approximately 1.5 GHz to 2.5 GHz, used for mobile communications.
- Aeronautical (Yellow):** Includes frequencies from approximately 2.5 GHz to 3 GHz, used for aeronautical communications.
- Broadcasting (Red):** Includes frequencies from approximately 0.5 GHz to 1.5 GHz, used for broadcasting.
- Land Mobile (Orange):** Includes frequencies from approximately 0.1 GHz to 0.5 GHz, used for land mobile communications.
- Aeronautical (Purple):** Includes frequencies from approximately 0.1 GHz to 0.5 GHz, used for aeronautical communications.

Each section contains detailed sub-labels for specific frequency ranges and their corresponding uses, such as "Fixed", "Mobile", "Aeronautical", "Broadcasting", "Land Mobile", and "Aeronautical".

[illegible]

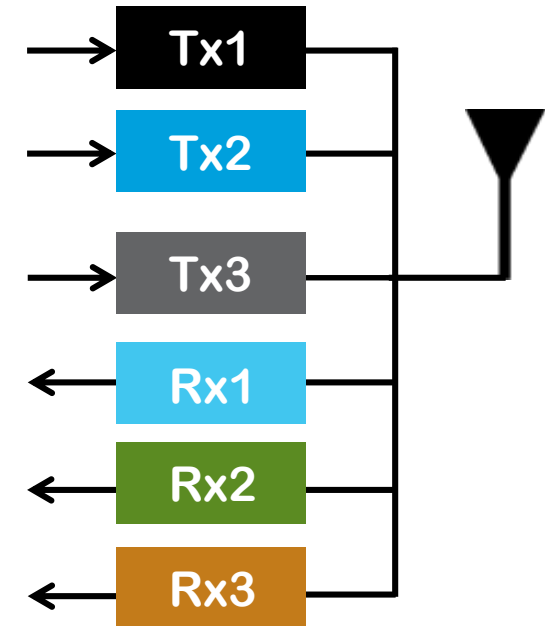
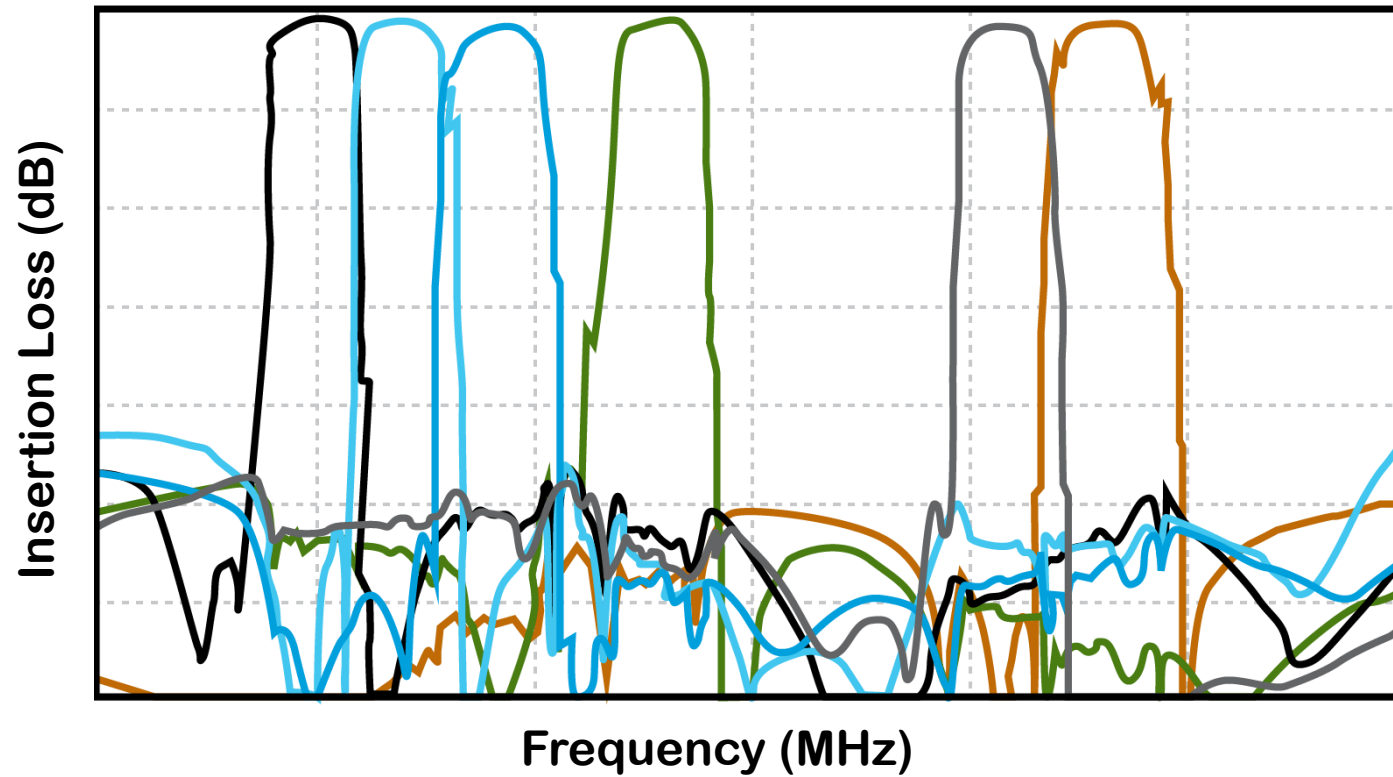
Qorvo BAW5: World-Class Filter Performance

Enabling broad band, low loss operation



Enabling Advanced CA with Higher Order Multiplexers

Connect multiple transmit & receive signal paths through a single node



Leveraging Technology to Solve RF Challenges

Filter Technology

BAW 5

Significant bandwidth and IL improvements

Switch Technology

Next-Generation SOI

Significant improvement in IL and digital density

Power Management

Envelope Tracking

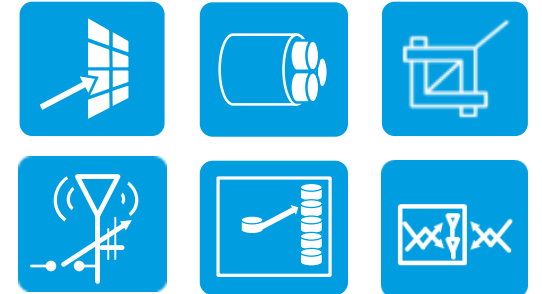
New high-efficiency ET tracker supporting Power Class 2 and uplink carrier aggregation

Packaging/Assembly

Integration

Expanded capacity for next-gen integrated front end modules

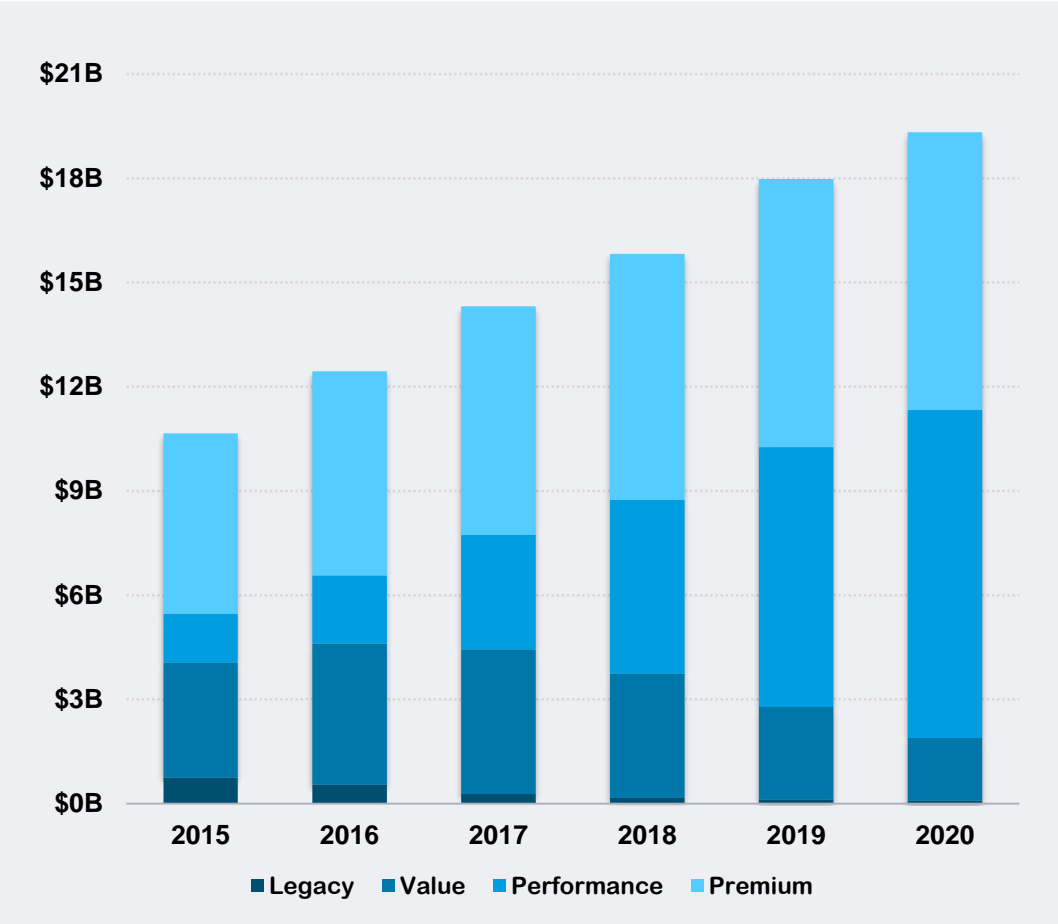
Targeted investments aligned to portfolio strategy and future customer needs



Increasing Value of RF Solutions

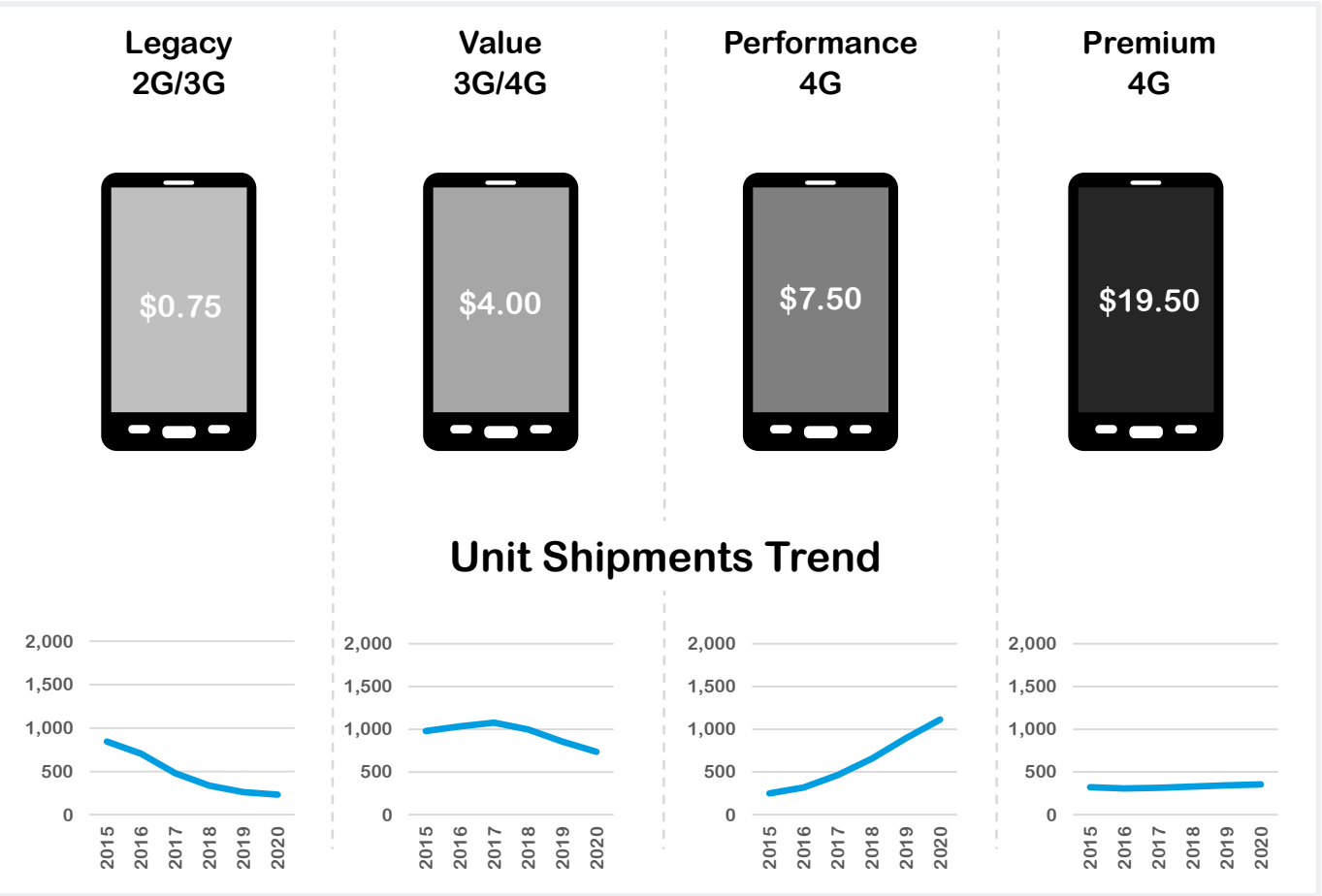
TAM driven by content growth and mix shift to performance tier

\$ Content by Segment



Source: Management Estimates

Average RF Content/Device



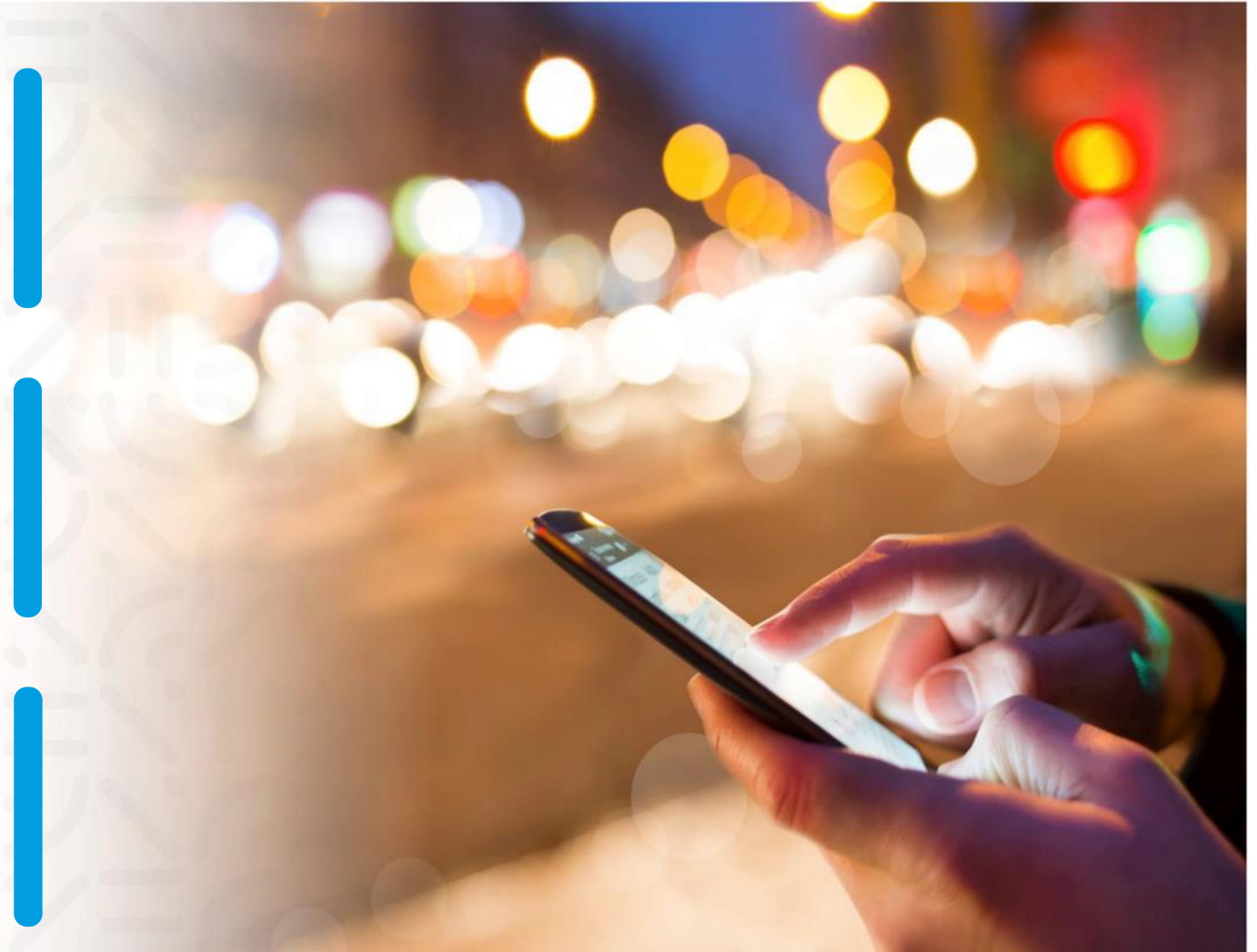
Building the World's Best RF Partner

Qorvo Mobile positioned for continued growth

Solve customers' RF challenges
with **innovative portfolio** of
core RF solutions

Capitalize on **global presence** and
scale in R&D, sales & marketing

Lead the transition to **5G and IoT**





Operations

Steve Grant, VP Technology & Manufacturing



Qorvo Operations Strategy

Industry-leading technology portfolio

Manufacturing scale and positioned for growth

Cost reduction and learning rates

Operational excellence



Operations Leadership Team

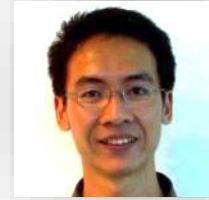
World-class research, development & manufacturing team



Adv. Technology Development
Infineon, 30+ years industry
PhD



GM Beijing Manufacturing
Chartered Semi, 20+ years industry



GM Dezhou Manufacturing
Intel, 20+ years industry



Foundry Engineering
IBM, 20+ years industry



Texas Fab Manager
TI, 25+ years industry
PhD



Texas Fab Manager
ST Micro, 25+ years industry
PhD



Florida Fab Manager
TI, ST Micro, 20 years industry



North Carolina Fab Manager
20 years industry
PhD



Oregon Fab Manager
Intel, 25+ years industry
PhD



RF Technology Portfolio

RF technology integration

Bulk Acoustic Wave (BAW) Filters

Surface Acoustic Wave (SAW) Filters

GaAs Power Amplifiers

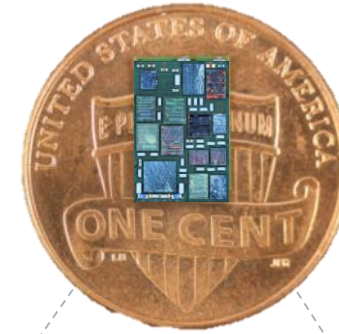
SiGe Power Amplifiers

GaN Power Amplifiers

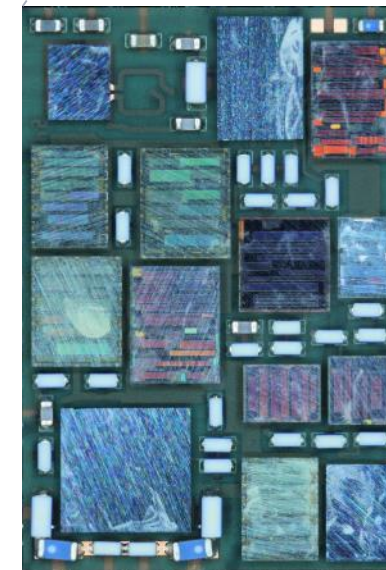
SOI Switches

CMOS Controllers

Flip Chip Assembly Technology






















Shown to scale



Low Band S-PAD

Comprehensive Product & Technology Portfolio

Filters			Power Amplifiers			ET PMIC	Tuners	Switches
SAW	TC-SAW	BAW	GaN	GaAs	Silicon	CMOS	SOI	SOI
								
								
								

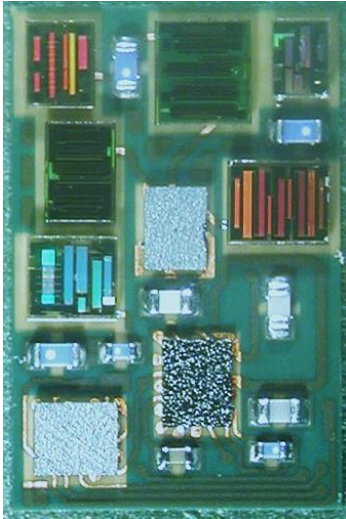
Uniquely positioned to deliver a diverse suite of solutions



SAW-Based Modules

Increasing levels of complexity

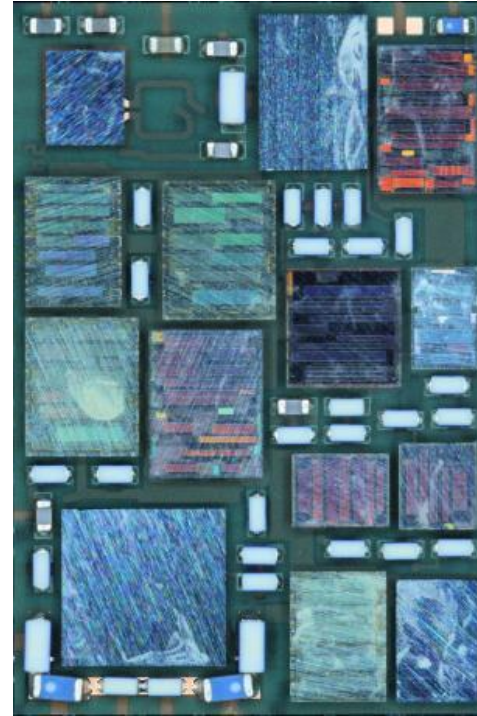
2014



6 SAW filters

9 Die Placements
Module Footprint – 26 mm²

2016



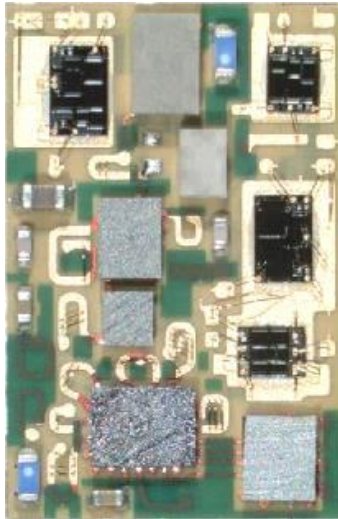
16 SAW filters

14 Die Placements
Module Footprint – 45 mm²

BAW-Based Modules

Increasing levels of complexity

2014



4 BAW filters

10 Die Placements
Module Footprint – 27 mm²

2016

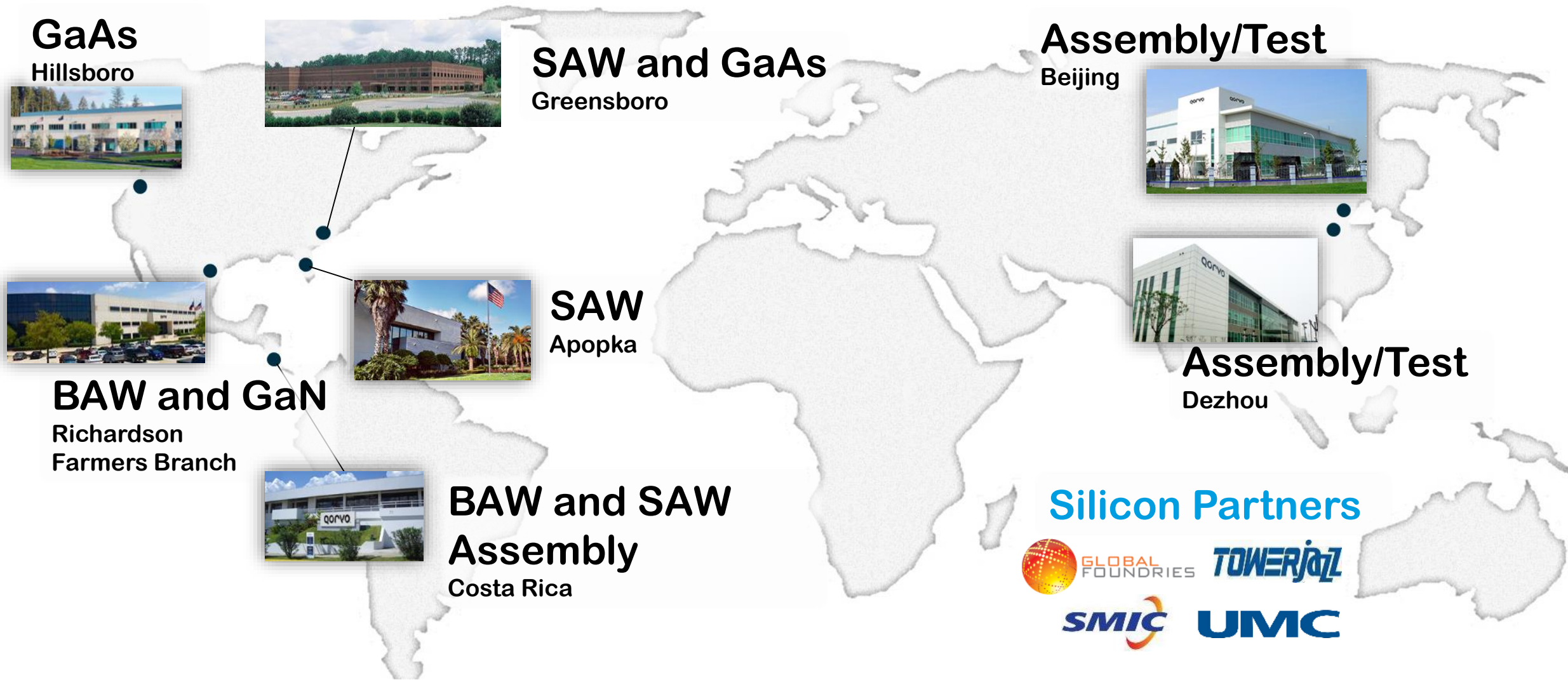


12 BAW filters

17 Die Placements
Module Footprint – 45 mm²

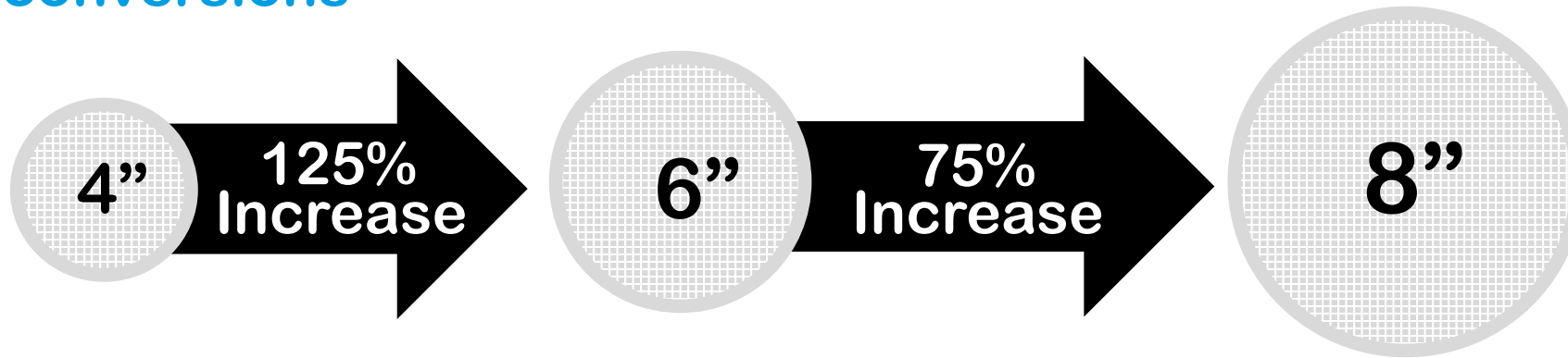
Manufacturing Scale

Scale to support industry-leading revenue growth



Cost Reduction Initiatives

Wafer size conversions

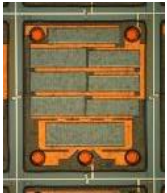


Cost-effective way to expand with little capital investment

>90% of existing install tool sets are upgradeable

Within 5% of line and die yields for larger-sized wafers

SAW



4" to 6" wafer size conversion
First 6" TC-SAW production
Produced in Greensboro and Apopka

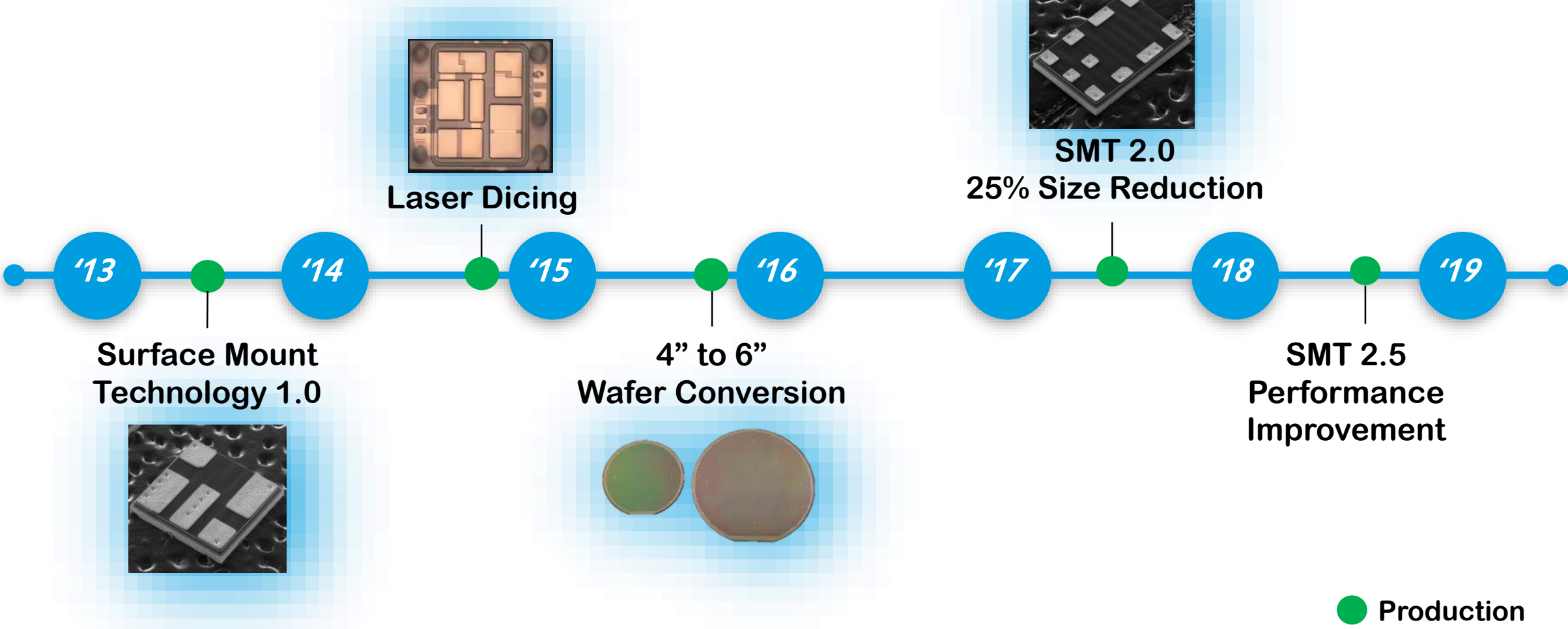
BAW



6" to 8" wafer size conversion
Richardson 8" shipments in summer
Farmers Branch qualification

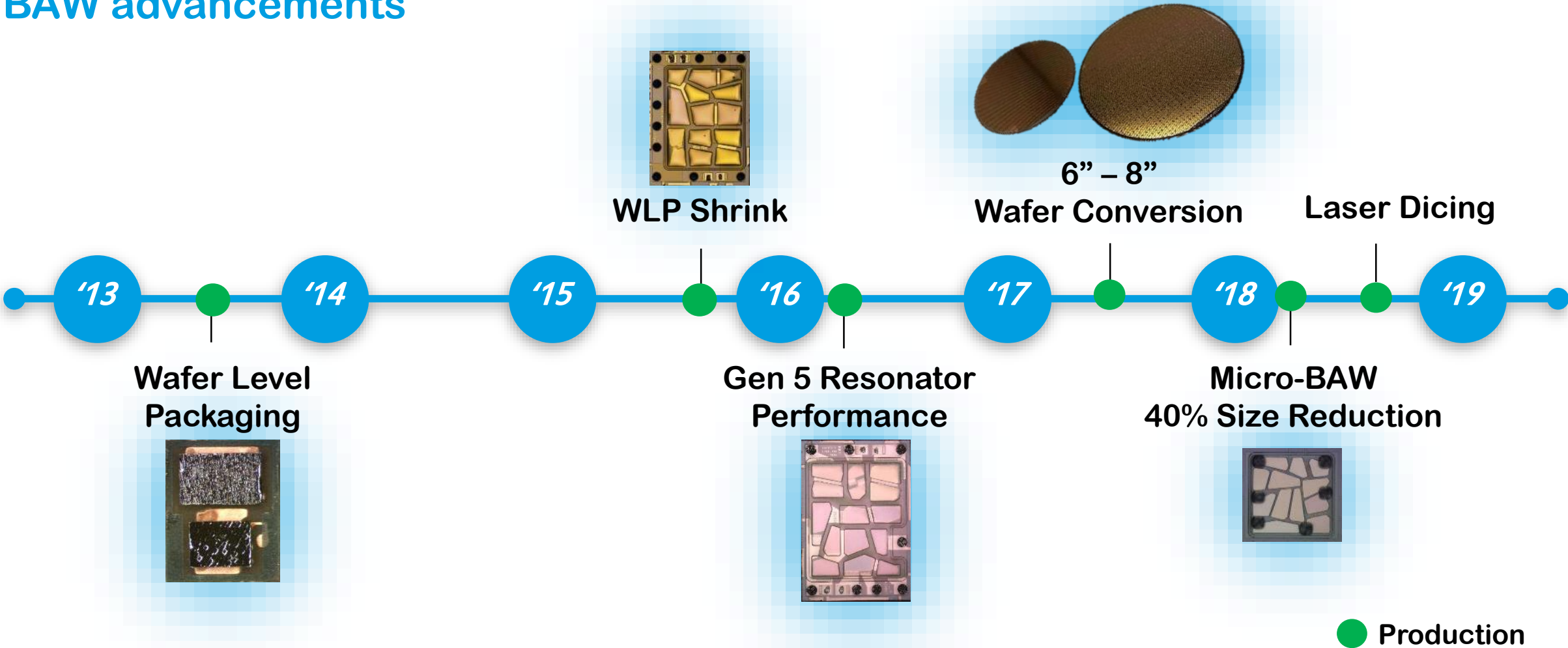
Technology Initiatives

SAW advancements



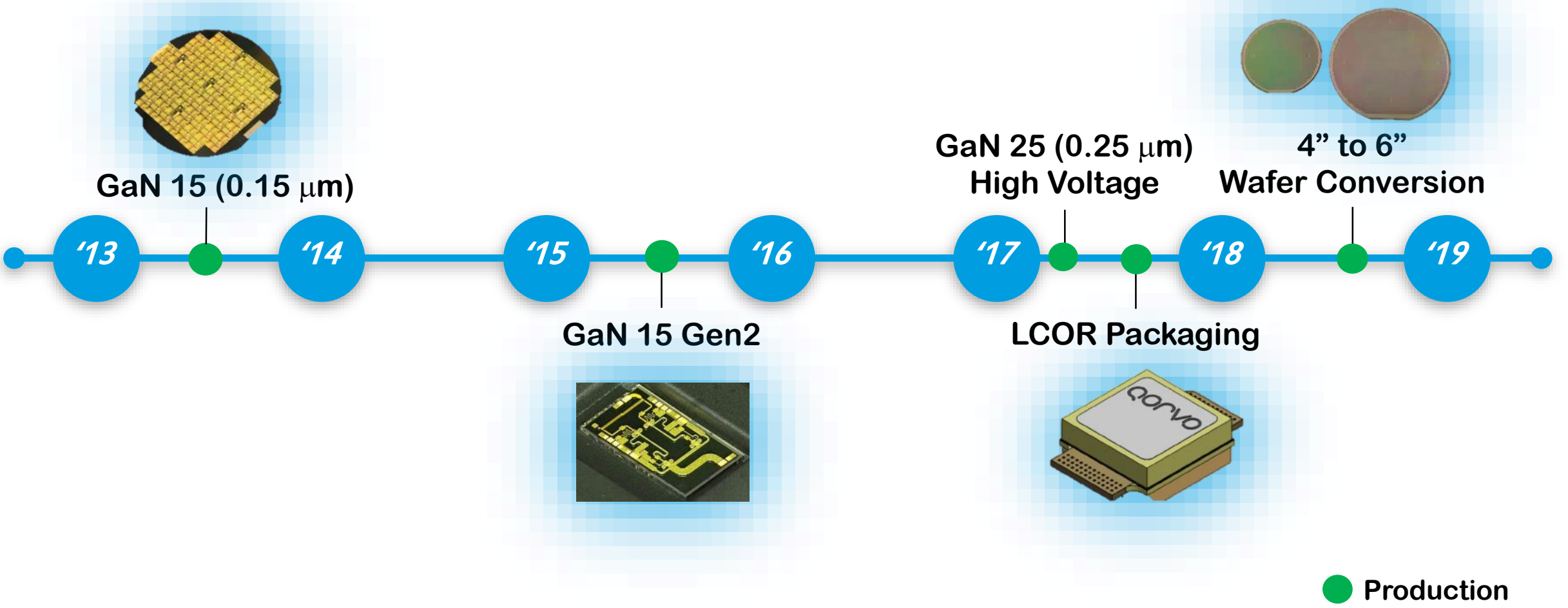
Technology Initiatives

BAW advancements



Technology Initiatives

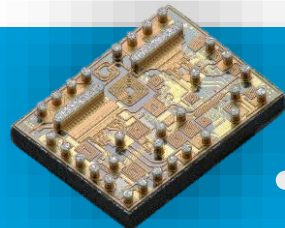
GaN advancements



Operational Excellence

Technology development

- **Process innovation and development engine**
 - Wide and deep technology moat
 - Organic development capabilities
 - Development speed and complexity
- **Development execution**
 - One year technology cadence
 - Effective handoff between development and manufacturing



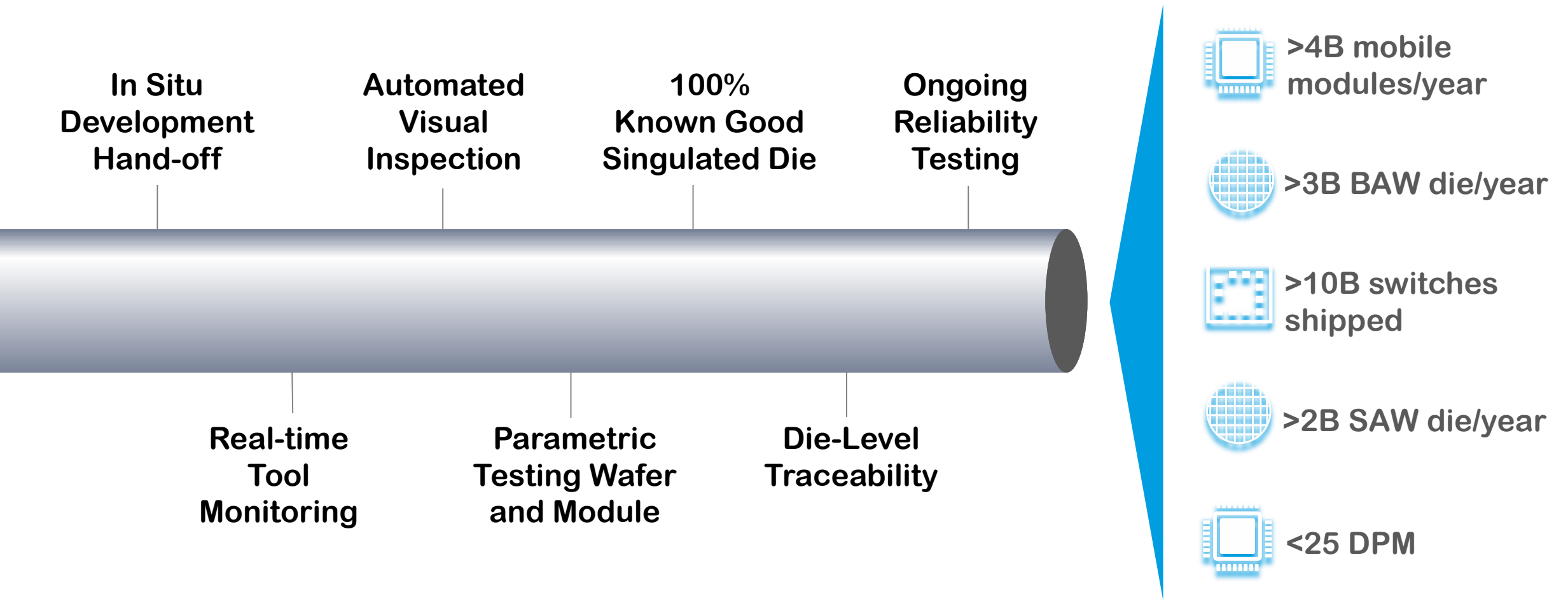
Qorvo R&D Wins:

- 6" TC SAW • SAW SMT • 8" BAW • BAW Gen 5
- HBT5 PAs • GaN PAs • Flip Chip • SOI Switches • ET Controllers



Operational Excellence Pipeline

Clean launch and production excellence



Qorvo Operations Summary



A solid foundation of innovation

- Technology leadership from transceiver to antenna
- **Centers of Excellence** for GaN, GaAs, SiGe, Si, BAW/SAW filters, assembly & test

Built to win today and in the future

- Proven industry “athletes”
- Adding filter capability/capacity – wafer conversions and fab expansion
- Driving down costs while advancing the industry’s broadest technology portfolio





Financials

Mark Murphy, Chief Financial Officer



Profitable Growth

Discipline, consistency and predictability

Above-Market Revenue Growth

- Broad-based IDP growth driven by GaN, IoT and 5G
- Increasingly complex content-driven Mobile growth

Market CAGR
of 10-15%
FY17 – FY20

Expanding Margins

- Improving mix and higher utilization rates
- Manufacturing, R&D and SG&A productivity

~ 1,000 bps
higher OM%
FY17 – FY20

Increasing Free Cash Flow

- Revenue growth with operating leverage
- Lower capital intensity

100% FCF
growth FY18

Create
Shareholder
Value

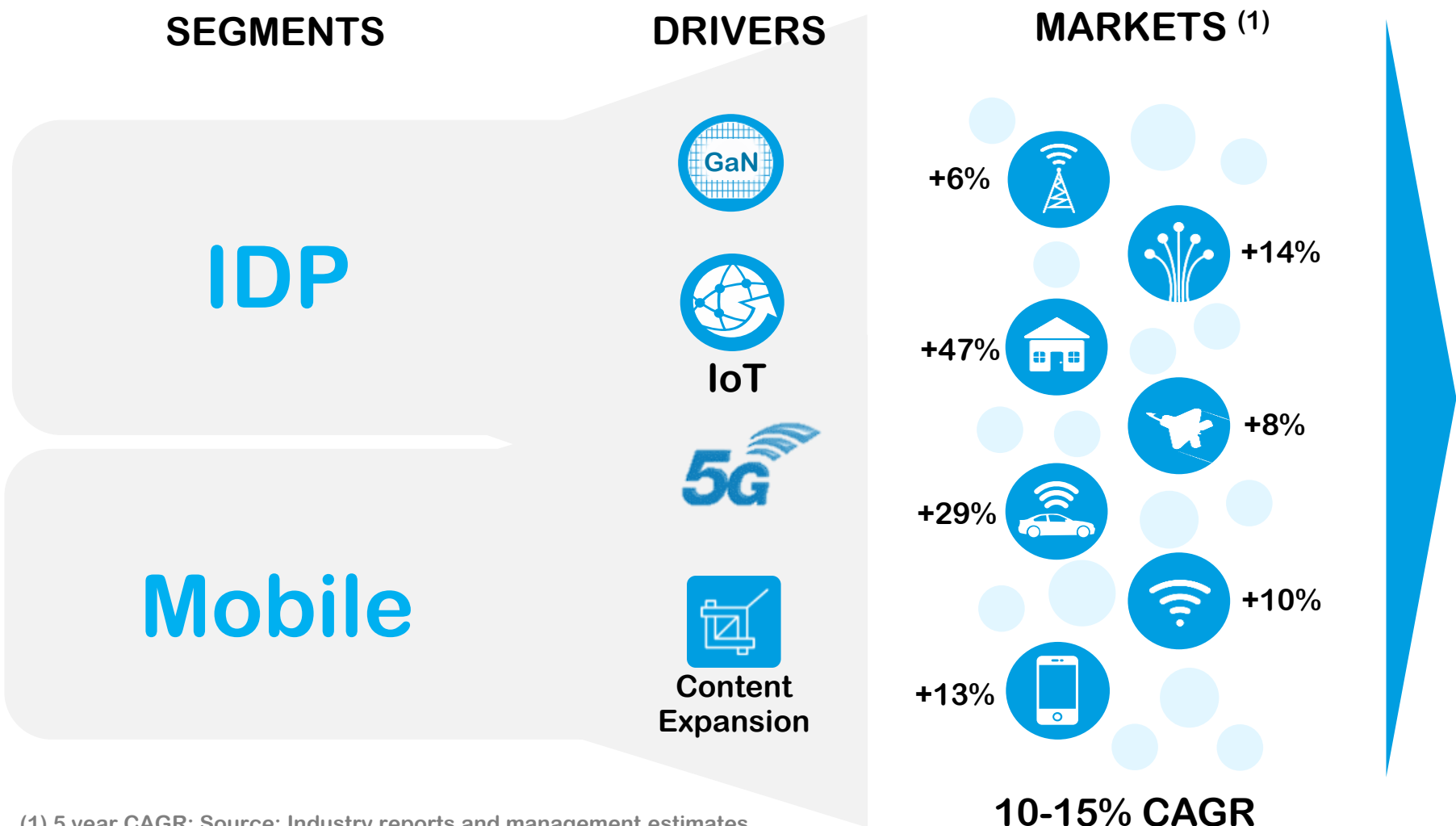
Source: Industry reports and management estimates

Non-GAAP. For more information regarding non-GAAP financial measures, including reconciliations to the nearest GAAP measures, see the Supplemental Information on Non-GAAP Financial Measures included with this presentation and our earnings releases available on our website at www.qorvo.com.



Multiple Long-Term Growth Drivers

Technology leadership in era of increasing RF complexity



QORVO
Diversified and
Above Market
Growth

(1) 5 year CAGR; Source: Industry reports and management estimates.

Expanding Margins

Enterprise-wide efforts on productivity



GM%

Higher BAW Volumes
Larger Wafers
Die Shrink
“Sweating the Assets”
Sourcing Initiatives

~ 40% BAW-based Mobile revenue FY19
6” SAW = +125% and 8” BAW = +75%
SAW (25%) and BAW (40%) die shrink
> 90% tools upgradable / extendable
Filter insourcing, joint productivity

R&D

Portfolio Management
Design Efficiency

Targeted spend
Design reuse and less prototyping

SG&A

ERP Consolidation
Qorvo Lean

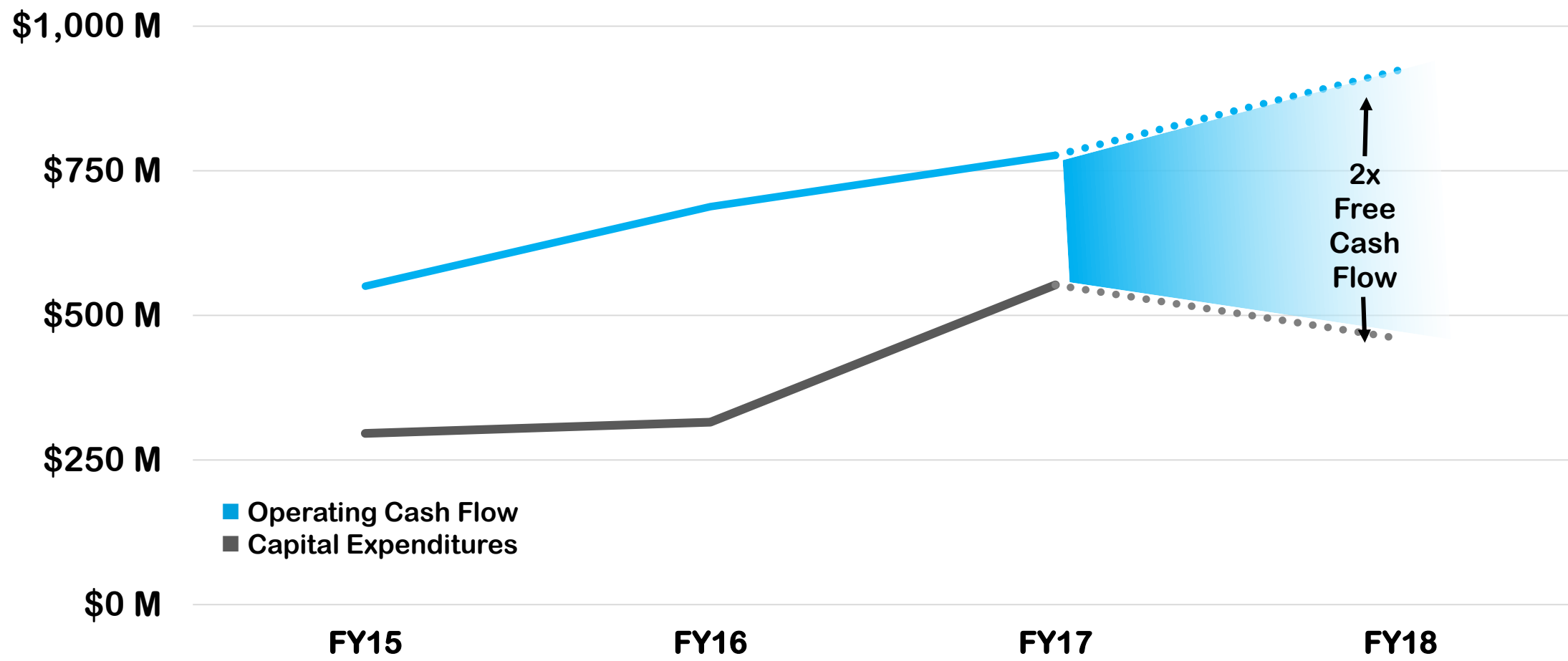
Standardize, consolidate, automate
SG&A growth < ½ rate of sales growth

Operating
Leverage



Focused on Free Cash Flow

FY18 FCF growth ~2x year over year



Non-GAAP. For more information regarding non-GAAP financial measures, including reconciliations to the nearest GAAP measures, see the Supplemental Information on Non-GAAP Financial Measures included with this presentation and our earnings releases available on our website at www.qorvo.com.

Capital Allocation

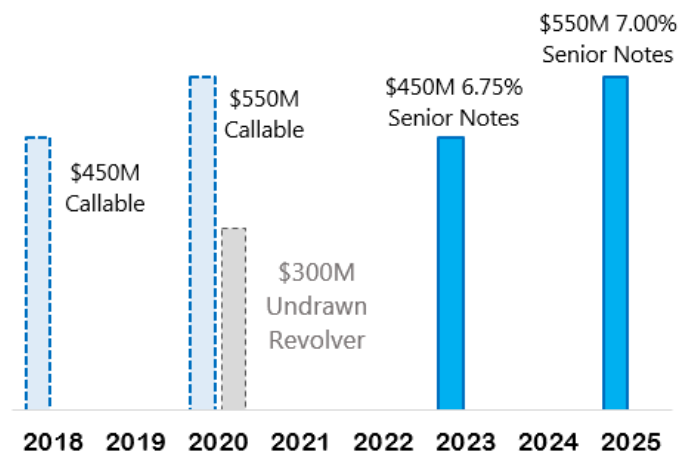
Balanced and disciplined approach

\$1.6B in share repurchases at \$53.58 per share average

FY17 (\$M)	Q2	Q3	Q4
FCF	\$130	\$84	\$81
Repurchase	\$91	\$67	\$51
% of FCF	70%	80%	63%

FY 2017 (\$M)	
Cash	\$545
Debt	\$989
Debt / EBITDA	1.1x
Net Debt / EBITDA	0.5x

Debt Maturity Profile



Capital Priorities:

- Reinvest for growth
- Targeted acquisitions
- Return cash to shareholders

Capacity for Additional Leverage:

- Long-term target ~1.5X Debt/EBITDA
- Notes callable in 2018 and 2020

Non-GAAP. For more information regarding non-GAAP financial measures, including reconciliations to the nearest GAAP measures, see the Supplemental Information on Non-GAAP Financial Measures included with this presentation and our earnings releases available on our website at www.qorvo.com.

Target Operating Model Beyond FY18

Strong revenue growth and higher margins

Metric		IDP	Mobile	Qorvo
Revenue Growth ⁽¹⁾		Greater than Market		
Non-GAAP Target Model ⁽²⁾ (% Sales)	Gross Margin	> 60%	> 48%	> 50%
	Operating Expenses	< 30%	< 18%	< 20%
	Operating Margin	> 30%	> 30%	30% - 35%

⁽¹⁾ Aggregate market CAGR projected to be 10%-15% through 2021.

⁽²⁾ Non-GAAP. For more information regarding non-GAAP financial measures, including reconciliations to the nearest GAAP measures, see the Supplemental Information on Non-GAAP Financial Measures included with this presentation and our earnings releases available on our website at www.qorvo.com.

NOTES:

- Non-GAAP tax rate forecasted < 10% in FY18 with rate expected to increase to 11-13% by FY2020.
- June quarter guidance unchanged as provided 5/3/17.



Connectivity Is A Way Of Life

Thank You

qorvo

qorvo®

all around you

Q&A

qorvo®

all around you

Thank you



Important Supplemental Information

Qorvo Investor Day Presentation

Supplemental information on Non-GAAP financial measures

In addition to disclosing financial results calculated in accordance with United States (U.S.) generally accepted accounting principles (GAAP), this presentation contains the following non-GAAP financial measures: (i) non-GAAP gross margin, (ii) non-GAAP operating margin, (iii) free cash flow, (iv) EBITDA, , and (v) net debt. Each of these non-GAAP financial measures is either adjusted from GAAP results to exclude certain expenses or derived from multiple GAAP measures as described below.

In managing Qorvo's business on a consolidated basis, management develops an annual operating plan, which is approved by our Board of Directors, using non-GAAP financial measures. In developing and monitoring performance against this plan, management considers the actual or potential impacts on these non-GAAP financial measures from actions taken to reduce costs with the goal of increasing gross margin and operating margin. In addition, management relies upon these non-GAAP financial measures to assess whether research and development efforts are at an appropriate level, and when making decisions about product spending, administrative budgets, and other operating expenses. Also, we believe that non-GAAP financial measures provide useful supplemental information to investors and enable investors to analyze the results of operations in the same way as management. We have chosen to provide this supplemental information to enable investors to perform additional comparisons of our operating results, to assess our liquidity and capital position and to analyze financial performance excluding the effect of expenses unrelated to operations, certain non-cash expenses and stock-based compensation expense, which may obscure trends in Qorvo's underlying performance.

We believe that these non-GAAP financial measures offer an additional view of Qorvo's operations that, when coupled with the GAAP results and the reconciliations to corresponding GAAP financial measures where necessary, provide a more complete understanding of Qorvo's results of operations and the factors and trends affecting Qorvo's business. However, these non-GAAP financial measures should be considered as a supplement to, and not as a substitute for, or superior to, the corresponding measures calculated in accordance with GAAP.



Qorvo Investor Day Presentation

Supplemental information on Non-GAAP financial measures (continued)

Our rationale for using these non-GAAP financial measures, as well as their impact on the presentation of Qorvo's operations, are outlined below:

Non-GAAP gross margin. Non-GAAP gross margin excludes stock-based compensation expense, amortization of intangible assets, non-cash deferred royalty revenue, non-cash prepaid royalty amortization, and certain non-cash expenses. We believe that exclusion of these costs in presenting non-GAAP gross margin gives management and investors a more effective means of evaluating Qorvo's historical performance and projected costs and the potential for realizing cost efficiencies. We believe that the majority of Qorvo's purchased intangibles are not relevant to analyzing current operations because they generally represent costs incurred by the acquired company to build value prior to acquisition, and thus are effectively part of transaction costs rather than ongoing costs of operating Qorvo's business. In this regard, we note that (i) once the intangibles are fully amortized, the intangibles will not be replaced with cash costs and therefore, the exclusion of these costs provides management and investors with better visibility into the actual costs required to generate revenues over time, and (ii) although we set the amortization expense based on useful life of the various assets at the time of the transaction, we cannot influence the timing and amount of the future amortization expense recognition once the lives are established. Similarly, we believe that presentation of non-GAAP gross margin and other non-GAAP financial measures that exclude the impact of stock-based compensation expense assists management and investors in evaluating the period-over-period performance of Qorvo's ongoing operations because (i) the expenses are non-cash in nature, and (ii) although the size of the grants is within our control, the amount of expense varies depending on factors such as short-term fluctuations in stock price volatility and prevailing interest rates, which can be unrelated to the operational performance of Qorvo during the period in which the expense is incurred and generally are outside the control of management. Moreover, we believe that the exclusion of stock-based compensation expense in presenting non-GAAP gross margin and other non-GAAP financial measures is useful to investors to understand the impact of the expensing of stock-based compensation to Qorvo's gross margin and other financial measures in comparison to both prior periods as well as to its competitors. We also believe that the adjustments to margin related to non-cash deferred royalty revenue, non-cash prepaid royalty amortization, restructuring and disposal costs and certain non-cash expenses do not constitute part of Qorvo's ongoing operations and therefore the exclusion of these items provides management and investors with better visibility into the actual revenue and actual costs required to generate revenues over time and gives management and investors a more effective means of evaluating our historical and projected performance. We believe disclosure of non-GAAP gross margin has economic substance because the excluded expenses do not represent continuing cash expenditures and, as described above, we have little control over the timing and amount of the expenses in question.



Qorvo Investor Day Presentation

Supplemental information on Non-GAAP financial measures (continued)

Non-GAAP operating margin. Non-GAAP operating margin excludes stock-based compensation expense, amortization of intangible assets, restructuring and disposal costs, acquisition and integration related costs, intellectual property rights (IPR) litigation costs, loss (gain) on assets, start-up costs and certain non-cash expenses. We believe that presentation of a measure of operating margin that excludes amortization of intangible assets and stock-based compensation expense is useful to both management and investors for the same reasons as described above with respect to our use of non-GAAP gross margin. We believe that restructuring and disposal costs, acquisition and integration related costs, IPR litigation costs, loss (gain) on assets, start-up costs and certain non-cash expenses do not constitute part of Qorvo's ongoing operations and therefore, the exclusion of these costs provides management and investors with better visibility into the actual costs required to generate revenues over time and gives management and investors a more effective means of evaluating our historical and projected performance. We believe disclosure of non-GAAP operating margin has economic substance because the excluded expenses are either unrelated to ongoing operations or do not represent current cash expenditures.

Free cash flow. Qorvo defines free cash flow as net cash provided by operating activities during the period minus property and equipment expenditures made during the period. We use free cash flow as a supplemental financial measure in our evaluation of liquidity and financial strength. Management believes that this measure is useful as an indicator of our ability to service our debt, meet other payment obligations and make strategic investments. Free cash flow should be considered in addition to, rather than as a substitute for, net income as a measure of our performance and net cash provided by operating activities as a measure of our liquidity. Additionally, our definition of free cash flow is limited, in that it does not represent residual cash flows available for discretionary expenditures due to the fact that the measure does not deduct the payments required for debt service and other contractual obligations. Therefore, we believe it is important to view free cash flow as a measure that provides supplemental information to our entire statement of cash flows.

EBITDA. Qorvo defines EBITDA as earnings before interest expense and interest income, income tax expense (benefit), depreciation and intangible amortization. Management believes that this measure is useful to evaluate our ongoing operations and as a general indicator of our operating cash flow (in conjunction with a cash flow statement which also includes among other items, changes in working capital and the effect of non-cash charges).



Qorvo Investor Day Presentation

Supplemental information on Non-GAAP financial measures (continued)

Net debt. Net debt is defined as unrestricted cash, cash equivalents and short-term investments minus any borrowings under our credit facility and the principal balance of our senior unsecured notes. Management believes that net debt provides useful information regarding the level of Qorvo's indebtedness by reflecting cash and investments that could be used to repay debt.

Forward-looking non-GAAP measures. This presentation contains forward-looking non-GAAP measures including free cash flow, gross margin, operating expenses and operating margin. We provide these non-GAAP measures to investors on a prospective basis for the same reasons (set forth above) that we provide them to investors on a historical basis. We are unable to provide a reconciliation of these forward-looking non-GAAP financial measures to the most directly comparable forward-looking GAAP financial measures because due to variability and difficulty in making accurate projections for items such as stock-based compensation, integration related costs, restructuring charges and the provision for income taxes, we are unable to quantify certain amounts that would be required to be included in the GAAP measures without unreasonable effort. We believe such reconciliations would imply a degree of precision that would be confusing or misleading to investors.

Limitations of non-GAAP financial measures. The primary material limitations associated with the use of non-GAAP gross margin, non-GAAP operating margin, free cash flow, EBITDA, and net debt, as an analytical tool compared to the most directly comparable GAAP financial measures of gross margin, , operating income, net income, and net cash provided by operating activities are (i) they may not be comparable to similarly titled measures used by other companies in our industry, and (ii) they exclude financial information that some may consider important in evaluating our performance, thus limiting their usefulness as a comparative tool. We compensate for these limitations by providing full disclosure of the differences between these non-GAAP financial measures and the corresponding GAAP financial measures, including a reconciliation of the non-GAAP financial measures to the corresponding GAAP financial measures where necessary, to enable investors to perform their own analysis of our gross profit and gross margin, operating expenses, operating income, net income, net income per diluted share and net cash provided by operating activities. We further compensate for the limitations of our use of non-GAAP financial measures by presenting the corresponding GAAP measures more prominently.

