Billions
of new IoT connections

With diversity comes many challenges

Consumer IOT

Transforming lifestyles through connectivity

- Business models

- Interoperability between technologies

- Data management

- Security & privacy

Industrial IOT

Transforming industries through digitization

- Cooperation between public & private sectors

- Use case creation

- Impact beyond the bottom line

Qualcomm is investing in key verticals

Smart cities

Networking

Smart homes

Wearables

Healthcare

Automotive

Mobile computing

Diversity of players around the globe

Smart cities   **Networking**   **Smart home**   **Wearables**

Healthcare   **Automotive**   **Mobile computing**

Qualcomm's view puts wireless connectivity at the core of IoT

2002
Mobile surpassed
fixed voice

2010
Mobile surpassed
fixed BB

Today

Redefined telephony
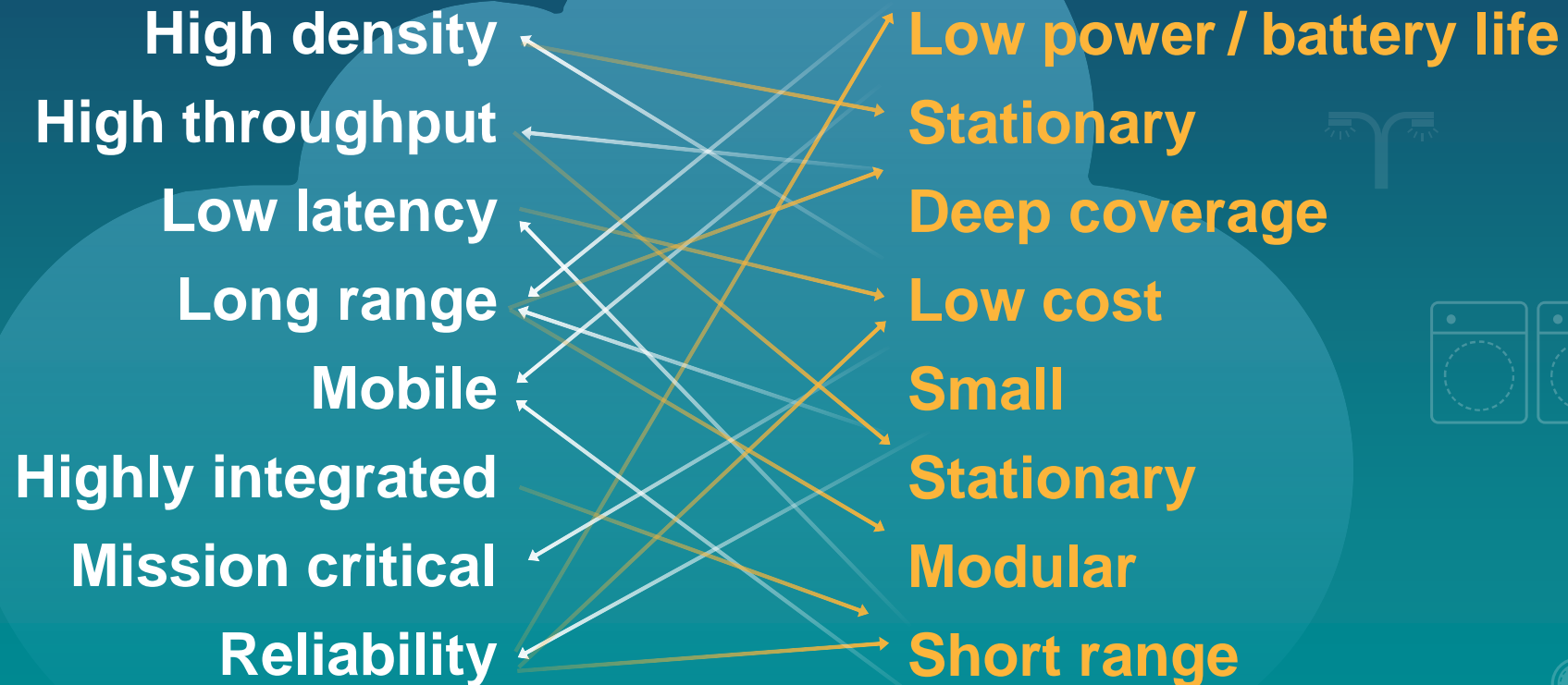by mobilizing
communications

Redefined computing
by mobilizing
the Internet

Redefining everything
by providing the connectivity
fabric for everything
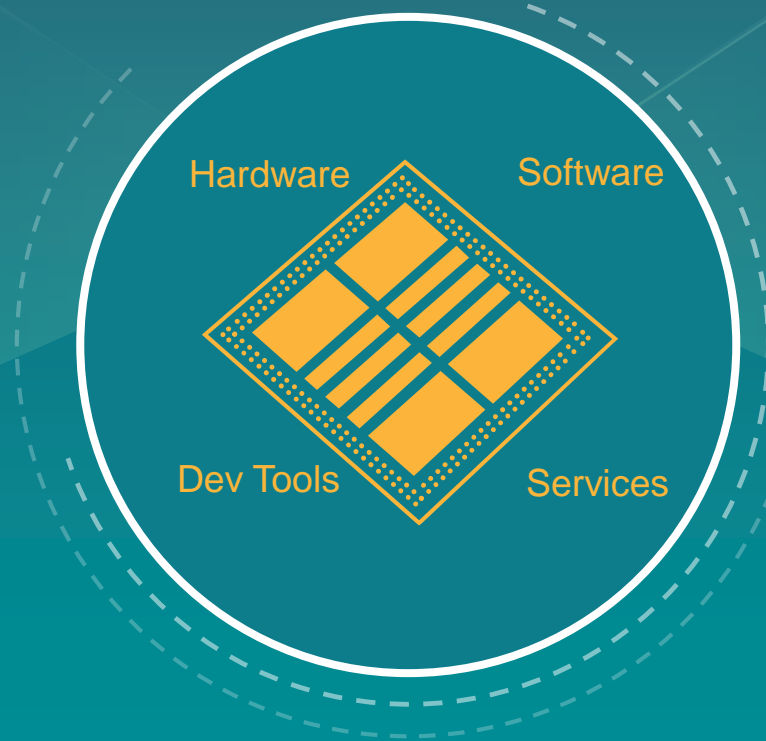
Complex and competing connectivity requirements

High density   Low power / battery life

High throughput   Stationary

Low latency   Deep coverage

Long range   Low cost

Mobile   Small

Highly integrated   Stationary

Mission critical   Modular

Reliability   Short range

Broad technology portfolio to drive the IoT

Connectivity portfolio

Intelligence portfolio

Smart city

Smart body

Smart home

Hardware   Software

Dev Tools   Services

Smart body

Wearables
Cameras
Portable audio

Serving the wearables ecosystem with optimized platforms

It starts with the popular Qualcomm® Snapdragon™ 400 processor

Optimized and enhanced for wearables

- Package and memory size

- Power optimizations

- End-to-end sensor optimizations

- Feature & performance enhancements

- Full reference designs to accelerate development

- Supports wearable software

6:20
THUR DEC 06 | 66°F
Inbox
5:34 | Alex Smith
Ashley James

Smart homes

Video and music systems
Temperature control
Home automation
Lighting
Drones
Appliances
Security cameras

Smart home

Public cloud — **Network** — **Home cloud**

Control and automation

Home entertainment

Voice and music
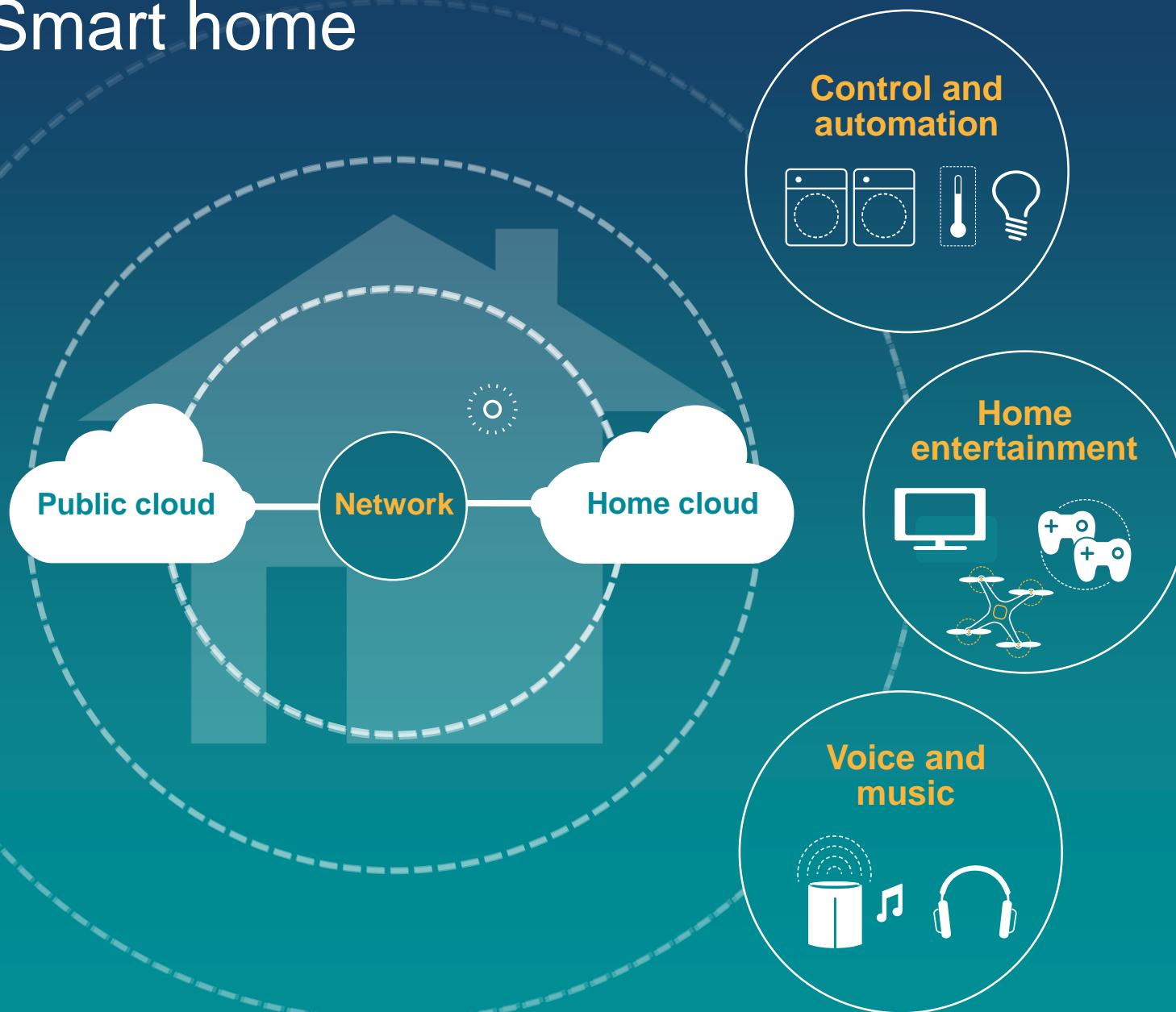
End-to-end approach

Expertise spanning networks to devices creates opportunities to optimize home connectivity

Comprehensive platforms

Integrating broad portfolio of hardware, software and services, plus tools to accelerate time-to-market
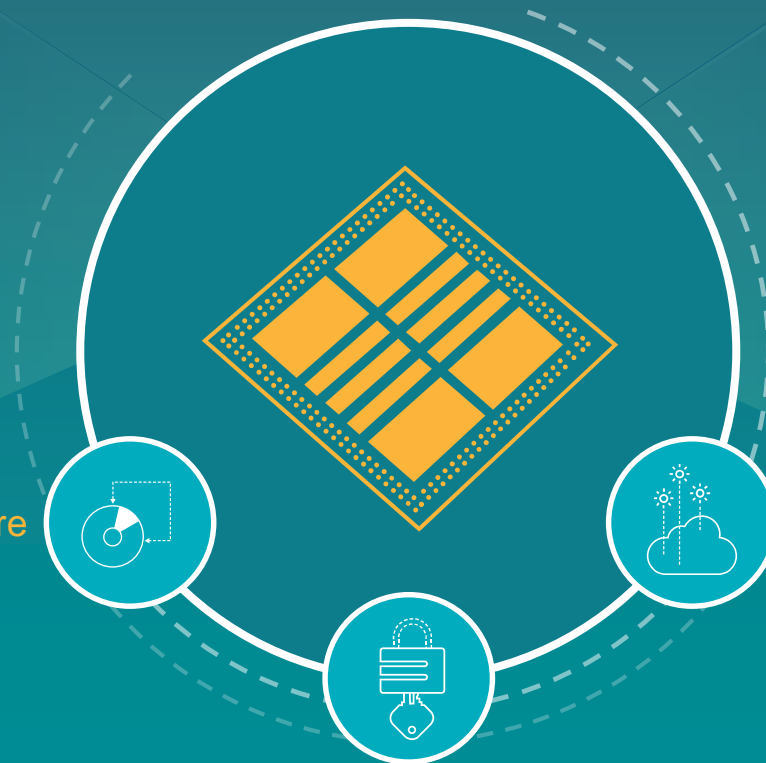
Uniting Diverse IoT Ecosystems

Support multiple frameworks

ALLSEEN ALLIANCE

Weave®

Apple HomeKit

THREAD GROUP

Leading cloud service partners

TEMBOO

EXOSITE

xively by LogMeIn   Kii

JD.京东

PROXIMETRY

Ayla Networks

2lemetry

Alibaba Group 阿里巴巴集团

Tencent 腾讯

Microsoft Azure

Software

Services

Security

Smart cities

Smart energy
Industrial automation
Security
Asset tracking
Retail point-of-sale
Transportation

3-pronged approach to enabling smart cities

Reuse

Reimagine

Single-purpose to multi-purpose

Example: Smart street lighting

Repurpose existing street lighting infrastructure with intelligent connectivity solutions

Smart street lighting

Smarter street lighting

Driving LTE into the Internet of Things

Reliability over a long lifecycle

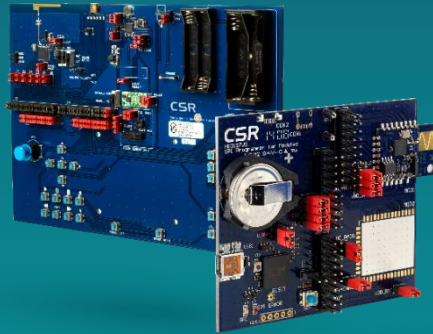Scalability of mature infrastructure

Optimized for power efficiency

Cost-effective for many applications

Less prone to interference

Enabling expansion through developers

The hardware options to support a breadth of IoT use-cases

Bluetooth

Wi-Fi

Cellular

Embedded

Big opportunities lie ahead in IoT

1 **Delivering** the intelligently connected platforms that serve as the foundation for this massively connected world

2 **Collaborating** to unite ecosystems and meet the diverse needs of many key segments

3 **Accelerating** the ecosystem by embracing new paths to market and addressing industry requirements

About us

Qualcomm's Corporate Venture Group

At the core

- Actively investing >15 years
- Global reach
- 130+ active investments
- 22 investment managers

Key benefits

- Wireless technology expertise
- Access to leading tech industry execs
- Strong VC syndicate partners
- Internal R&D resources

San Francisco, CA

San Diego, CA

Boston, MA

London, UK

Haifa, Israel

Beijing, China

Seoul, Korea

Bangalore, India

Sao Paulo, Brazil

#1 Corporate VC in Mobile & Telecom in 2015

CB INSIGHTS

+3 Top 3 VC investor in Frontier Technologies 2015

CB INSIGHTS

#3 Most active Corporate VC in 2014

Global Corporate Venturing

We are interested in all things wireless

And passionate about these technologies today
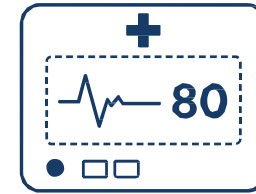
Internet of Everything   **Robotics and Drones**   **AR and VR**   **Healthcare**   **Data Center**

Internet of Everything

Internet of Everything is inclusive of:

- Connected car
- Smart home
- Energy efficiency
- Enterprise systems

From the portfolio

Emerging trends

Emergence of scalable cloud technology network and dropping component prices (processors, sensors, etc.) have made the IoE a reality

Masses of data being generated need to have attributed value – analytics become very important

Connected car efforts are on the rise with companies such as Uber, Google and Tesla all building prototypes

The smart home market is extremely fragmented – traction will be dependent on the establishment of standards

Enterprise applications highly dependent on cost, particularly in the case of smart commercial buildings

Robotics and Drones

Robotics and Drones is inclusive of:

- UAVs
- Consumer robots
- Industrial automation
- Enabling platforms

From the portfolio

Emerging trends

Robotics market is at an inflection point in growth upswing

There have been major strides forward in enabling technology, vastly reducing costs and increasing capabilities

Compelling use cases are expanding out from the historic foundation of industrial automation

Consumer UAVs have seen enormous growth with an estimated CAGR of 167% from 2013-2015*

Lines between robotics and other innovative autonomous technology is blurring (connected car, internet of everything, etc.)

QUALCOMM VENTURES

* Kleiner Perkins Caufield & Byers 2015 Internet Trends Report

AR and VR

AR and VR is inclusive of:

- Headsets (platform hardware)
- Content creation and capture
- Controls
- Peripherals

From the portfolio

blippAR   **matterport**

magic leap   **LYTRO**

Emerging trends

No clear platform winner exists yet, though numerous big brands are pushing for a leadership position (Oculus/Facebook, Sony, Samsung, HTC)

Next-gen, VR gaming applications will likely be adopted first, though other use cases (real estate, education, marketing) are gaining traction

AR has huge potential but will need seamless user interface and immediate utility in order to succeed - *remember Google Glass*?

Microsoft's Hololens and Magic Leap are the two major platform players in the AR space currently

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Thank you

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