Connectivity & Audio

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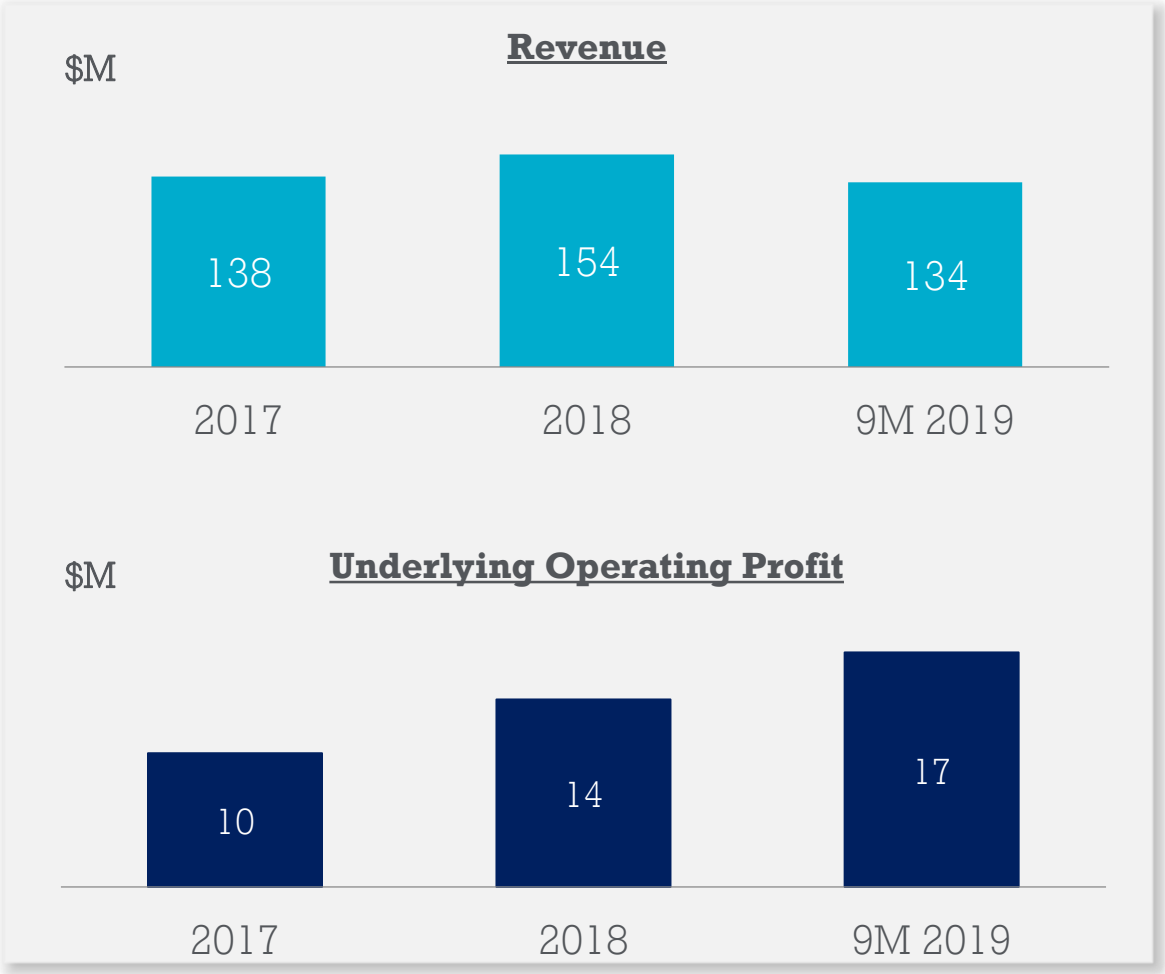
Connectivity & Audio Segment



- Leading market positions:
  - #2 Bluetooth® low energy ("BLE")
  - Top 2 DECT cordless phones
- Strong year-on-year revenue growth in FY2019
  - Shipped over 300 million BLE units since launch
  - BLE growth over 30% during 2015-2019
  - Digital Audio shows strong double digit growth
- Acquired IoT Wi-Fi for low power applications
- Growth vectors and financial performance will contribute towards **total Group long-term** financial targets:
  - Mid-teens % revenue growth (excluding revenue from legacy licensed business)
  - 20-25% underlying[1] operating margin

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Product Offerings

BLE

- Bluetooth® Low Energy ICs

End Markets

- Wearables
- Proximity sensing
- Human Interface Devices
- Smart Home
- Connected Health

Audio and Voice

- DECT technology leader
- Analog and DSP Audio
- DECT & 2.4GHz wireless audio

End Markets

- Unified Communications headsets
- Consumer headsets/hearables (True Wireless Stereo, Digital USB)
- Microphones/other

IoT Wi-Fi

- Wi-Fi
- Wi-Fi / BLE modules
- Lowest power for battery applications

End Markets

- Battery powered applications in:
  - Smart Home and Buildings
  - Industrial

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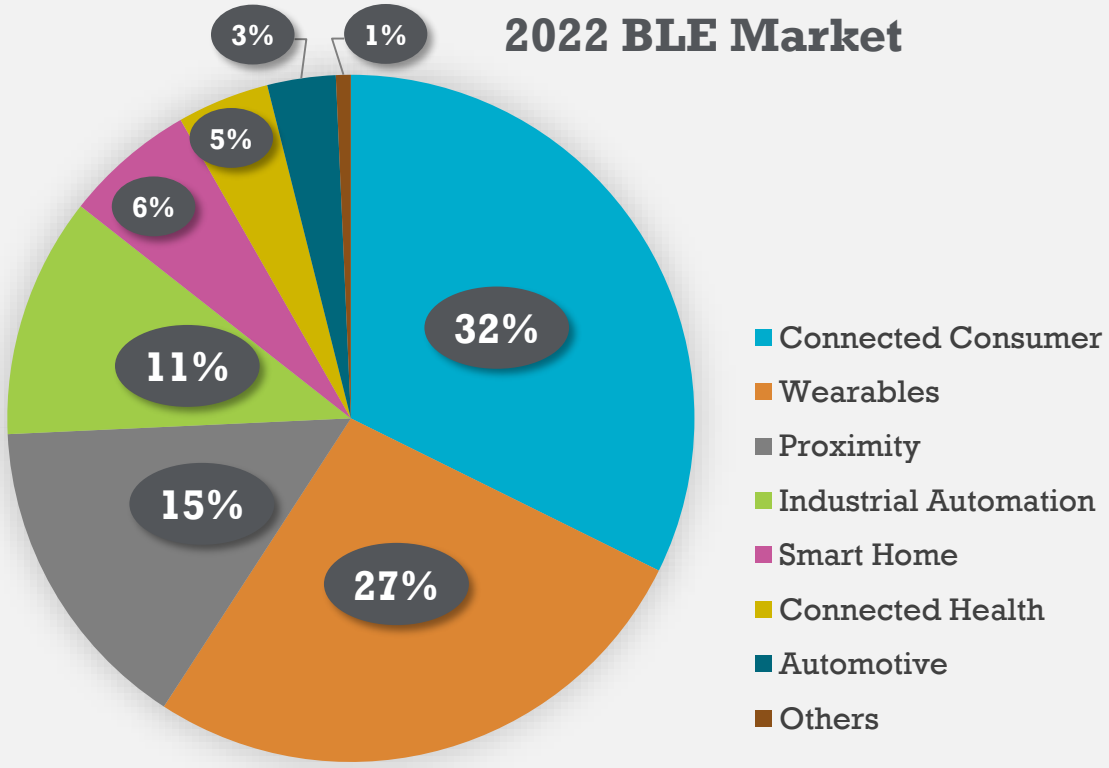
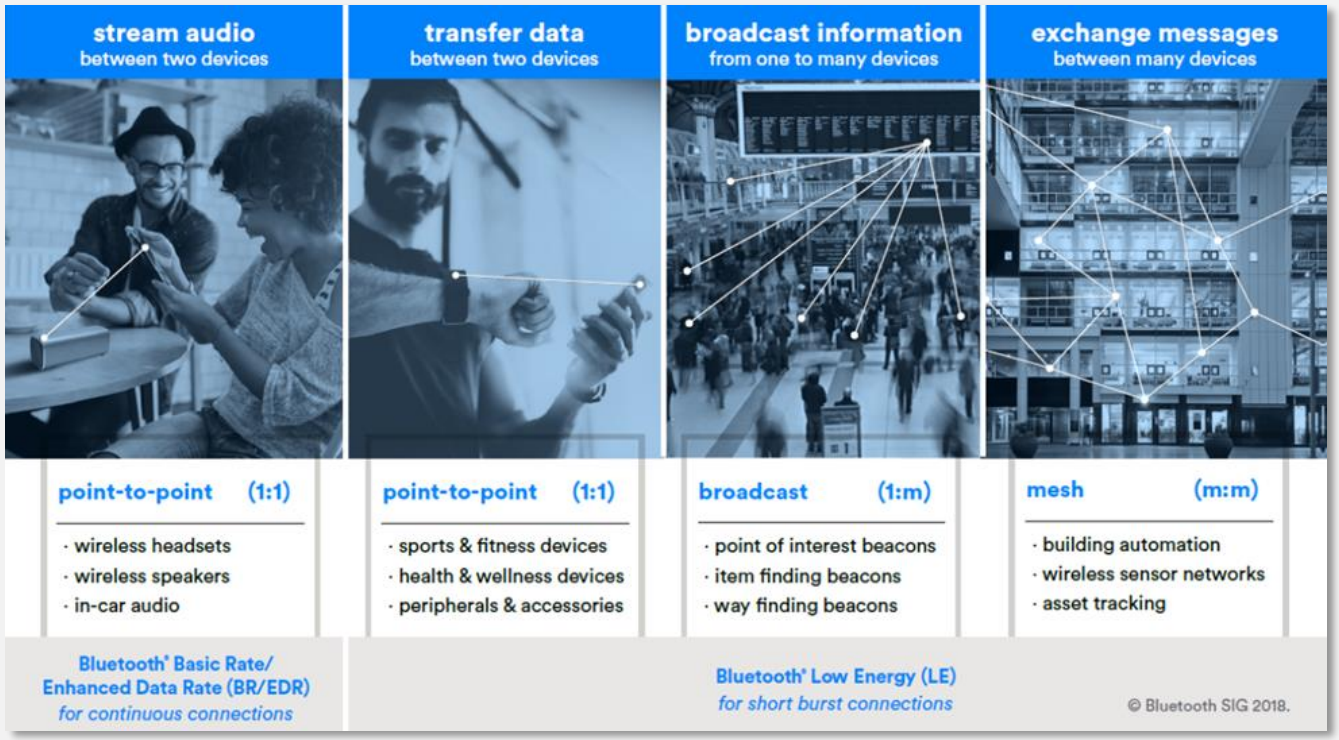
Bluetooth Low Energy Landscape

Today we will focus on wearables and connected health





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Wearables Update

Wearables

#1 in BLE for wearable applications

Dialog advantage

- Strong investment in targeted ICs
  - USB charging
  - Low power sensor hub management
  - Drive color screens and watch movements
  - Best in class power consumption and BOM
- Application resources for fast time to market

- ✓ Strong new product launch of DA1469x family
- ✓ Fastest product ramp to date for Dialog BLE
- ✓ Maintain thought leadership for Wearables system integration
- ✓ Design Wins at Xiaomi and Samsung

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Connected Health Update

Connected Health

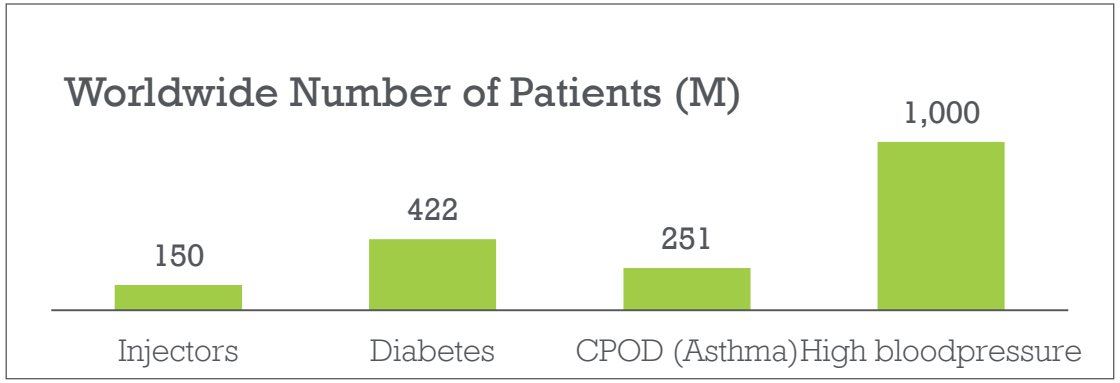
BLE is the optimal solution for Connected Health (cost, power consumption, phone/tablet connectivity)

Dialog advantage

- Investment in new ICs to target this market
- Cooperation with leading players in the industry
- Ability to meet the low-cost targets for disposable medical products
- Enabling new ways to meet market needs
  - Glucose monitoring
  - Timestamping and dose of drug delivery

DA1453x for disposable Connected Health

- ✓ Lowest cost and power solution available today
- ✓ Shipping in volume to lead customers
- ✓ Pipeline status for Connected Health applications:
  - ✓ Tens of products in production, from monitoring to delivery devices
  - ✓ Total pipeline LNR > $200M, more than half from the DA1453x family



Source: Statistia and Dialog analysis

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Audio Update – Key Differentiators by Application

Unified Communication (UC) Headsets

- Highest density resulting in 3x number of users
- Highest security, engage FIPS algorithms
- Platform supplier – USB, DECT, Bluetooth (co-processor)
- Digital active noise cancellation

CE Headsets / Hearables (True Wireless Stereo Digital USB)

- DSP audio supplier
- Voice assistance
  - Voice activity detection
  - Beamforming mic's
  - AI always-on hot-word detect
- Digital ANC at 2mW

Microphones and Other

- DECT 1.9GHz using interference free URLLC(*)
- IDH partner network
- Low latency using sample-based codecs
- Modules giving fast time to market

(*) URLLC = Ultra Reliable Low Latency Communication. New 1.9GHz DECT ETSI standard approved in 2H2019

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Portfolio Expansion Drives Double Digit Growth

Unified Communication Headsets DA14495/DA7217 or DA7401/2

Unique Features

- USB-C, BLT Co-processor or DECT interface
- Open 32bit audio DSP processor
- Ultra low power HiFi CODEC's
- Hybrid Active Noise Cancellation
- Development tools and reference designs

USB-C Headsets DA14195/DA7217 or DA7401

Low Latency Gaming DA14195/DA7217 or DA7402

Digital Microphones DA14195 or DA14495

TWS Headsets DA14195/DA7217 or DA7401

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IoT Wi-Fi – Acquisition of FCI

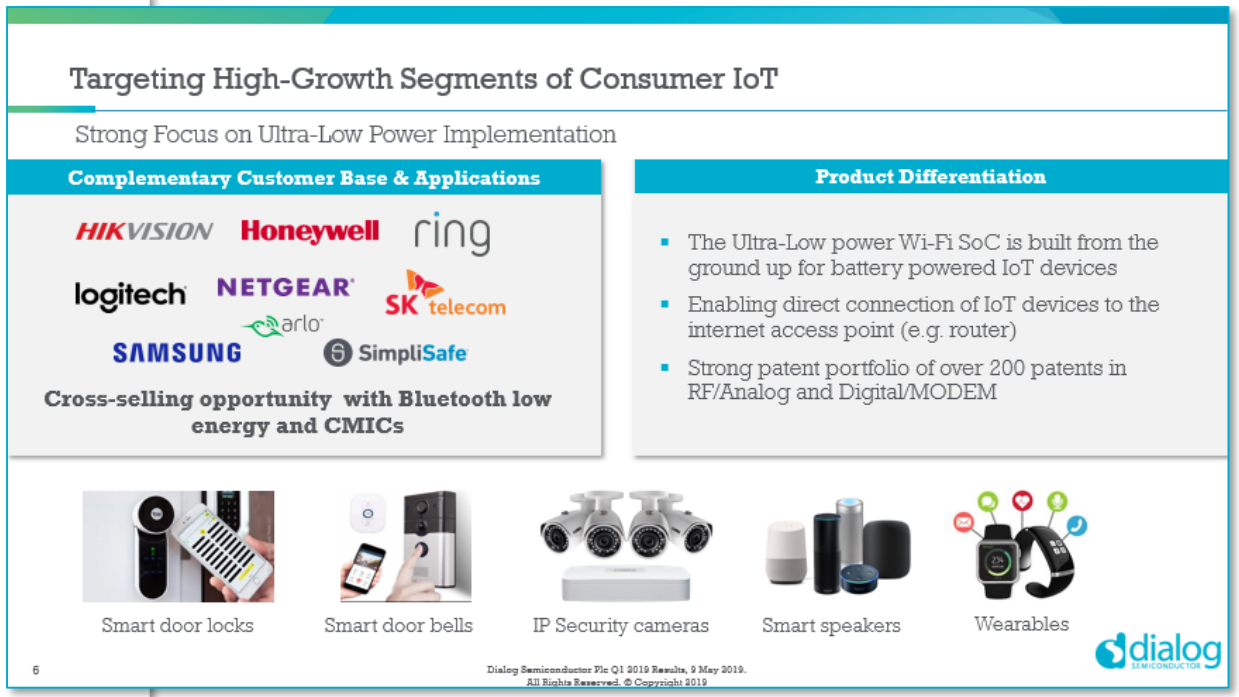
Corporate news

Dialog Semiconductor to Acquire Silicon Motion's Mobile Communications Business Including Ultra-Low-Power Wi-Fi, Extending its Position in IoT Connectivity

Expands Dialog's low-power IoT product offerings with complementary Ultra-Low-Power Wi-Fi enabling battery powered devices connection to the cloud

London, United Kingdom – March 7, 2019 – Dialog Semiconductor plc (XETRA:DLG), a provider of custom and configurable power management, AC/DC power conversion, charging and Bluetooth® low energy technology, today announced that it has signed a definitive agreement to acquire Silicon Motion Technology Corporation's Mobile Communications product line, branded as FCI.

FCI is the global leader in Mobile TV SoCs in T-DMB and ISDB-T, with RF tuner-demodulator SoC solutions for smartphones, tablets and automotive Portable Navigation Devices (PNDs). The acquisition provides Dialog with a rich portfolio of complementary Connectivity-based products that includes Ultra-Low-Power Wi-Fi System-on-Chip (SoCs) and Modules, Mobile TV SoCs and Mobile Communication transceiver Integrated Circuits (ICs).



IoT Wi-Fi For Battery Operated Edge Nodes

- Smart door locks
- Thermostats, HVAC systems
- Wi-Fi video cameras
- Sensors of all kinds (leak, smoke, temp)

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Acquisition Rationale – Low Power Connectivity

- Strong focus on lowest power Wi-Fi fits with Dialog's Connectivity strategy
- Customers value combination solutions of Wi-Fi with Bluetooth low energy
- Significant overlap of target customer and application space

- Good initial product validation proof points:
  - Venstar: a leader in Commercial building automation
  - Samsung for Smart Home door locks

- Releasing second generation products
  - Wi-Fi chip, module, and Wi-Fi/BLE module

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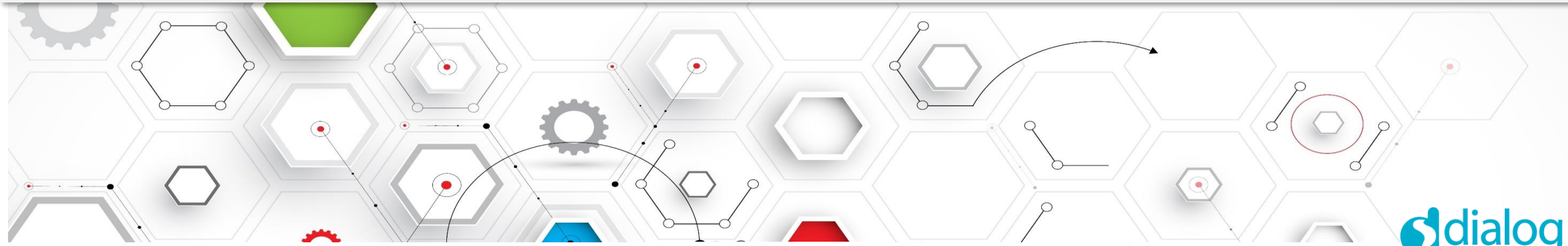
Key Takeaways

- Connectivity & Audio segment delivered double digit revenue growth in 2019
  - Investments in low energy Bluetooth® and digital audio are paying off
- #1 position in Wearables driving low energy Bluetooth® business faster than the overall market
  - Connected Health opportunity pipeline a promising start to new growth driver for low energy Bluetooth
- Digital audio growth driven by portfolio expansion and innovation in digital sound processing
- IoT Wi-Fi acquisition has significant synergies in customer base and application requirements
  - IoT Wi-Fi products recognized in the market as leading for battery applications



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Q & A